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OCCUPATIONAL RESILIENCE: PROTECTIVE FACTORS AMONG CLINICAL SOCIAL WORKERS

By

Andrew N. Greifer

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
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ABSTRACT

OCCUPATIONAL RESILIENCE: PROTECTIVE FACTORS AMONG CLINICAL SOCIAL WORKERS

By

Andrew N. Greifer

This study delineates psychosocial determinants of job engagement and job burnout among a sample of clinical social workers. Multiple regression analyses are presented that explore two models of job engagement, the opposite polarity of job burnout. Model 1 replicates Maslach's model of job engagement, and demonstrates moderate support for her framework. Specifically, the following independent variables all predict job engagement: workload, job process, community and fairness. Model 2 elaborates upon Maslach's model by introducing coping styles as mediating variables. Hierarchical regression testing of Model 2 demonstrated only mild support. However, the findings suggested that the development of mediated models is worthy of future research, given the slight evidence for mediation and the conceptual richness of adding personal factors. Additionally, the findings for Model 2 show that social support seeking directly predicted job engagement. Fundamentally, these quantitative findings suggested that both organizational and personal variables were related to job engagement, but need to be elaborated further in future research that examines the interplay between these variables.

Additionally, qualitative findings are presented based on interviews of job engaged workers. These qualitative findings reveal that job engaged workers moderately affirm Maslach's determinants of job engagement, but conflate these determinants with economic variables. Additionally, these workers attribute their

engagement to other variables, including problem-focused coping, optimism, conscientiousness, internal locus of control, humor, spirituality and job-meaning, skill match, job variety, gender, age, maturity and relaxation coping. Additionally, interviews suggest numerous caveats regarding Model 1 and 2. In particular, the linear nature of Model 1 and 2 is challenged by respondents, who view themselves as acting on their job environment, consistent with ecological and cybernetic models of job engagement and resilience.

Additionally, the qualitative interviews reveal personal resilience among a subgroup of engaged workers, insomuch as this subgroup reports transcendence of severe adversity in their personal lives. Similarly, engaged workers' exposure to substantial occupational stressors demonstrates an ability to transcend adversity, consistent with notions of resilience. Accordingly, all of the engaged workers who were interviewed may be labeled as vocationally resilient. Taken together, the quantitative and qualitative findings suggest the importance of organizational, personality and coping factors that enhance job engagement and constitute occupational resilience.

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1. INTRODUCTION

In common usage, resilience is defined as "the act of rebounding, or springing back after being stretched or pressed, or recovering strength, spirit or good humor" (Webster's New Collegiate Dictionary, 1981). This definition, though very general, roughly approximates academic definitions of the phenomenon, which essentially posit resilience as personal transcendence of psychosocial adversity, and elaborate upon this transcendence in various ways. This line of research on psychosocial resilience is the initial focus of this paper, which serves as my dissertation for the interdisciplinary Ph.D. in social psychology and social work.

More specifically, the dissertation begins by addressing the following conceptual and theoretical issues. It introduces the construct of resilience by exploring its historical context in social science literature. It then elaborates on definitions and dimensions of the construct. Thereafter, theoretical approaches to the study of resilience are delineated. Subsequently, the resilience construct is contextualized by viewing it relative to psychosocial adversity found in the world of work, that is, a context of occupational stress.

After these initial conceptual and theoretical considerations are addressed in the first part of the dissertation, the dissertation research, itself, is addressed. Specifically, the purpose and goals of the research study are addressed, as well as its significance, methodology and findings. Finally, the research findings are discussed in broad theoretical terms and implications for future research are suggested. In general, the dissertation addresses resiliency factors found among clinical social workers at a large university health system. Ultimately, this dissertation research is intended to contribute

to a better understanding of resilience in the context of work and to have applied relevance to human services staff, including social workers.

A. The Historical Context of Resiliency Research

As indicated above, resilience generally refers to various forms of personal transcendence of psychosocial adversity that result in positive outcomes. This notion of positive outcome despite risk was developed in an academic zeitgeist in which risk was strongly associated with negative outcomes. That is, historically, social scientific literature addressing psychosocial risk predominantly viewed such risk as inexorably causing negative psychosocial outcomes without regard to adaptive, positive outcomes among the people deemed at risk. More specifically, until the 1970s, a preponderance of social research suggested that psychosocial risk inevitably causes psychosocial problems among at risk populations, the only question being to what degree do these problems occur (Luthar, 1999). This was a relatively simple, linear model of causation in which an increase of risk causes an increase in problematic personal outcomes, without consideration given to positive trajectories or outcomes. For instance, research on persons in poverty has historically focused on psychosocial pathology and problems. Specifically, poverty has been viewed as an independent variable that has heightened the statistical risk for an assortment of negative outcomes such as depression, anxiety, poor prenatal care, poor physical health status, school dropout, limited job opportunities, poor maternal health and nutrition, lack of family planning, and infant morbidity (Garmezy, 1991).

Consistent with this deterministic paradigm, the theoretical understanding of what constitutes resilience emerged, in large part, from such research of children at risk (Bogenshneider, 1996). Long interested in understanding what factors contribute to or prevent problem behaviors, developmental theorists conducted longitudinal studies to examine how children face high-risk situations, such as child abuse, poverty substance abuse, and teenage pregnancy (Greene, 2002). These research projects were undertaken in numerous U.S. cities and internationally. The studies attempted to identify what percentage of a particular child population at risk would experience problems in the future. Studies identified potential causative agents, the distribution of problems, and possible preventative, control and treatment measures (Nash & Fraser, 1998).

However, beginning in the late 1970s, continuing in the 1980s, and accelerating in the 1990s, there has been a focus on positive factors that help a subgroup of psychosocially at-risk persons transcend their risk status. Following Emmy Werner's groundbreaking studies of children in Hawaii (Werner et al., 1971), research on resilience expanded to include multiple adverse conditions such as socioeconomic disadvantage and associated risks, parental mental illness, child maltreatment, urban poverty and community violence, chronic illness, and catastrophic life events (Luthar et al., 2000). The thrust of this research was a systematic search for protective forces, that is, those that differentiated children with healthy adaptation profiles from those who were comparatively less well adjusted.

In addition to examining risk factors, these authors studied protective factors, or those conditions that buffer, interrupt, or prevent problems from occurring. Many of

these studies have shown that although children at risk have adverse reactions, negative or traumatic experiences do not inevitably lead to adult pathology. This finding has led researchers to investigate what distinguishes children who are beating the odds from those who have problematic psychosocial outcomes. In addition to identifying distinguishing characteristics of resilient persons, such investigators have attempted to delineate the process of resilience (Werner & Smith, 1992). In other words, they have attempted to answer the question, how do many children at risk become confident, competent and caring adults?

Additionally, the concept of resiliency also grew out of the field of developmental psychopathology (Cicchetti & Garmezy, 1993). In particular, the empirical literature on psychopathology, and schizophrenia in particular, constituted a salient founding base (Masten et al., 1990). Before the 1970s, these early investigations of severely disordered patients were focused primarily on understanding maladaptive behavior. Meanwhile, the subset of patients who showed relatively adaptive patterns were considered atypical and were largely ignored. By the 1970s, however, researchers had discovered that schizophrenic patients with the least severe courses of illness were characterized by a premorbid history of relative competence at work, social relations, marriage, and capacity to fulfill responsibility (Garmezy, 1970).

In sum, research on both at-risk children and psychiatric patients began to demonstrate that subgroups of these populations experienced positive outcomes. These findings have, in turn, generated great interest in the phenomenon of psychosocial resiliency among social scientists, behavioral health professionals, as well as the lay

public (Glantz & Johnson, 1999). Having briefly described this historical context of resiliency research, we now turn our attention to the construct of resilience itself.

2. THE CONSTRUCT OF RESILIENCE

By way of introduction, we examine the construct of resilience in this section of the dissertation. In particular, definitions of resilience are explored, as well as variability of such definitions. Additionally, commonly postulated dimensions are elucidated. Finally in this section, various notions regarding the underlying concept of psychosocial risk are reviewed.

A. Definitions of Resilience

Many academicians have suggested that there is general consensus about important elements of the resiliency construct. To begin with, some researchers suggest that the locus of resiliency is within the individual. For instance, Egeland et al. (1993) and Masten et al. (1990) suggest that resilient individuals have the ability to successfully adapt or maintain competent psychosocial functioning despite trauma, risk status, or stress. This is quite consistent with Fraser et al.'s (1999) definition, which states that resilience refers to "unpredicted or markedly successful adaptations to negative life events, trauma, stress, and other forms of risk." Both definitions suggest that that the individual faces, and adapts to, negative social forces, and does so with successful psychosocial outcomes.

In a similar vein, Luthar's (1991) definition of resiliency is primarily a psychological one, which places protective factors mainly within the individual. Specifically, Luthar suggests that "resiliency is the tendency of persons to maintain a positive frame of mind, which acts as a buffer from negative experience." More recent

is Luther et al.'s (2000) definition that "resilience is a dynamic process encompassing positive adaptation within the context of significant adversity." Implicit within these definitions are two conditions: (1) exposure to significant threat or severe adversity; and (2) the achievement of positive adaptation despite major assaults on the developmental process. Clearly, in these definitions, the locus of resilience is at the individual level, not within the social environment, nor across individual-environmental transactions.

Other authors put forth much more inclusive, contextual definitions of the construct. For instance, Rutter (1985) posits that resilient individuals have both dispositional attributes and environmental factors that serve protective functions against stress and lead to psychological adjustment, while individuals who develop psychopathology have vulnerability factors that increase susceptibility to stressors. This early definition includes personal and environmental strengths in the context of adversity. That is, protective factors are seen to occur within the individual and within the social environment.

Additionally, and much more broadly, Mangham (1995) argues that commonalities among definitions include social factors. These commonalities include: (a) competence and coping in the face of significant adversity and risk; (b) development and growth over time; (c) the match between characteristics of the individual or groups of individuals such as family and community and the external environment; (d) the role of protective factors within the individual or group; and (e) the impact of social, economic, political, and cultural factors on the resiliency of individuals or groups. There are five major components of this definition: human systems, optimum health

and functioning, risk, protective factors and time. In this way, resilience is transformed into a more complex, more fully contextualized concept. Utilizing these common themes, Mangham et al. (1995) put forth the following definition of resilience:

> *Resilience is the capability of individuals and systems (families, groups, and communities) to cope successfully in the face of significant adversity or risk. This capability develops and changes over time, is enhanced by protective factors within the individual/system and the environment, and contributes to the maintenance or enhancement of health.*

This more fully refined and contextual definition is rather consistent with themes within the fields of social work and social psychology. For instance, the inclusion of social forces such as family, groups and communities and the reference to systems as a construct shows consistency with traditional themes within these fields. These themes illustrate the more social, contextualized version of resiliency definitions. I embrace it here in this paper, given (a) its consistency with paradigms within social work and social psychology, (b) its theoretical refinement, and (c) its relatively compelling view of human behavior in social contexts.

B. Variability of Definitions

As suggested above, definitions of resiliency are often seen as being diverse, varying across disciplines and time (Glantz & Johnson, 1999), even though commonalties among definitions have been identified. Indeed, Luthar et al. (2000) argue that, without question, resilience is variously defined in the existing theoretical literature, and these authors acknowledge that criticisms have been leveled in this regard.

Interestingly, the variability has been traced to four main sources (Glantz & Johnson, 1999). The first source is the distinction between resiliency as an outcome versus a process. According to outcome definitions, resiliency is related to the outcome of having survived in the face of adversity. That is, resilience refers to the fact of maintaining adaptive functioning in spite of serious risk hazards. The main interest, here, is in resilient persons who are still psychologically healthy despite high multiple exposure to stressful life events and circumstances (Losel et al., 1989). On the other hand, process definitions of resilience put forth that specific characteristics and mechanisms moderate the relationship between risk and outcome variables. For instance, Richardson et al. (1990) argue that resilience is the

> *"process of coping with disruptive, stressful, or challenging life events in a way that provides the individual with additional protective and coping skills than prior to the disruption that results from the event"*

Another illustration of the process-oriented definition is Rauh's (1989) suggestion that resilience is characterized by the ability to draw on personal or social resources, the ability to detect contingencies and predictability in complex situations, and the ability to react flexibly. Resiliency is enhanced, for example by self-efficacy beliefs, a positive self-concept and self-esteem. In these examples, the focus of attention is on the moderating role of variables. Put differently, the unit of analysis from this perspective is resilience as an intervening variable, which moderates the relationship between independent variables, or risk, and the dependent variables, or outcomes.

It is noteworthy that both process and outcome definitions have been critiqued as being inexact. For instance, Glantz and Johnson (1999) have argued that process and outcome definitions may be so imprecise that it is easy to misinterpret the intent of the investigator regarding which meaning is applicable. Some authors choose to circumvent this choice between outcome and process by using both within their definitions. For instance, Masten, Best and Garmazy (1990) indicate that "resilience is the process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances." By using this more inclusive definition, the concept is widened, allowing for greater diversity of approaches and methods to studying the construct.

The second source of variability in definitions regards differences in the dimensions of resilient outcomes. In other words, the subject may manifest resiliency according to one criterion, but not according to another. For example, Spencer and her associates (1993) conceptualizing resilience as adaptive coping, tested a model of risk and resilience to examine coping methods and competence outcomes as measured by academic performance and academic self-esteem. These individuals may be judged to be resilient by these criteria but not according to criteria representing competence in other spheres, such as peer and family relationships. As Cicchetti and Garmazy (1993) have pointed out, various definitions of resilience can range from the absence of psychopathology in the child of a mentally ill parent to the recovery of function in a brain-injured patient. These authors point out that definitional diversity results in sometimes disparate profiles of competent adaptation as well as in different estimates of rates of resilience among risk groups.

Another varying way in which outcomes are considered is the degree to which they focus on wellbeing. Some authors use a higher standard, and suggest that resilience is reflected in clear positive developmental outcomes that distinguish these persons from most others at risk (Rutter, 1990). These persons are seen as being exceptional cases, a minority of all persons at risk. In contrast, others define resilience as the mere absence of negative developmental outcomes, a lower standard. For example, Radke-Yarrow and Brown (1993) argue that "resilience is defined as having no diagnoses and not being on the borderline of reaching criteria for diagnosis."

The third source of variability in definitions is the variation in protective factors that influence outcomes. In other words, the intervening variables or mediators may vary, depending on the adversity under analysis. Most notably, the protective factors may exist within the person, the family, social networks, and at the community level. For example, Luthar's 1991 definition that addresses the maintenance of a positive frame of mind reflects a intra-psychic definition of resilience. Meanwhile, some authors suggest this focus on a positive frame of mind focuses too narrowly on psychological variables, while ignoring extra-personal characteristics such as family support and cohesion (Walsh, 1998). Another reason for variation in protective factors is that such protective factors depend on the nature of the risk under analysis. For instance, factors that protect against childhood maltreatment may be different than those that protect against neighborhood violence.

The fourth source of variability in definitions is caused by the differences in the putative causes or risk factors that give rise to resilience. Definitions of resilience are tied to the nature of the risks experienced by the individual; therefore, the nature of the

at-risk person's response will vary accordingly. Additionally, the number and intensity of the risk factors may vary. As the adversity increases, the characteristics required to transcend the adversity necessarily increases as well. As Werner (1989) pointed out, as the cumulative number of stressful life events increased, more protective factors in children and their care-giving environments were needed to counterbalance the negative aspects of their lives.

As indicated, above, definitions of resilience vary widely, complicating the literature. Indeed, the variability in definitions has been leveled as a criticism of the resilience literature (Luthar, 2000). However, some defenders of the construct have answered with constructive solutions to these concerns. For instance, Kaufman et al, (1994) stressed the importance of researchers detailing methodology, interpreting results with caution, and comparing scores on outcome measures used to classify children as resilient to establish clinical thresholds (Kaufman et al, 1994). Others have suggested that resiliency research should be contextualized; it should be seen in light of the risk at hand, e.g., resilience in response to parental substance abuse as a rather separate line of inquiry from others (Luthar, 2000).

C. The Multidimensionality of Resilience

While definitions of resilience have varied widely, perhaps even more variety has characterized existing dimensions of the construct. That is, a strikingly wide variety of dimensions have been used to operationalize the construct of resilience. For instance, Conrad et al. (1993), identified the following dimensions: self-esteem, academic performance, social competence, supportive friendships/contacts, positive perceptions

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of mother and maternal social competence (Conrad et al, 1993). Further, Mangham (1995) identified the following indicators: academic achievement, positive social relations, mental health, physical health, and psychosocial adjustment. Additionally, Luthar and Zigler (1991) identified the following resiliency attributes: temperment, intellectual ability, humor, internal locus of control, family cohesion and warmth, network of informal relationships; formal and informal support; positive school experience, availability of supports from parents (Luthar & Zigler, 1991). This listing, although not comprehensive, demonstrates the extensive compilation of resilience dimensions in the literature.

Interpreting this wide range of dimensions, Benard et al. (1991) identified five major categories of traits within individuals that help make them resilient: First, *social competencies* or the exhibition of pro-social behaviors. These traits are thought to increase children's ability to find and keep healthy relationships with others. These traits include personal responsiveness, and the ability to generate positive responses from others, flexibility, empathy and caring, good communication skills, sense of humor. A second category is well-developed *problem-solving skills*. This refers to the ability to recognize social influences in the environment and make choices about those influences. Traits include planning, imagination, resourcefulness and initiative. A third category is *autonomy*. These traits include a strong sense of identity and worth; self-esteem; self-discipline; the ability to act independently; the ability to separate, or distance oneself from dysfunctional environments and situations; resistance. The fourth category is *religious/spiritual commitment*. Such traits include a stable belief system, a sense of usefulness/belonging to a community. The fifth and last category is a sense of

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purpose, which includes traits such as special interest, goal-directedness, achievement motivation, educational aspirations, healthy expectations, persistence, hopefulness, belief in a compelling, attainable future (Benard, 1991).

Addressing this multidimensional view of resiliency, a multiplicity of resiliency dimensions has been identified across studies and across literature reviews. For instance, Werner and Johnson (1999) suggest that these dimensions vary according to the contexts in which they occur, such as the subjects' age, birth order, age spacing and gender. Notwithstanding this contextual variability, these authors distill these findings into more general statements about resilient individuals, as follows. First are dispositional attributes of the individual that elicit predominantly positive responses from the environment, such as physical robustness and vigor, an engaging easy temperament, good problem-solving and communication skills, and an area of competence valued by the person or society. Second, socialization practices within the family that encourage trust, autonomy, initiative, and affectional ties to a stable, caring competent adult, whether a parent, grandparent, or other kin. Third, external support systems in the neighborhood, school, church or community that reinforce self-esteem and self-efficacy and provide the individual with a set of positive values. These factors transcend geographical, historical, and social class boundaries and have been replicated in samples of Asian, Black, Caucasion and Hispanic Youth, according to Werner and Smith. However, it should be noted that these observations are limited to at risk children and youth, which raises the question of whether this applies to adults.

This multiplicity of resiliency dimensions has provided support for the view that resilience is not a unidimensional, monolithic phenomenon. For instance, Luthar

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(1993) suggests that differences across spheres of adjustment must be carefully appraised, and accordingly, discussions on resilience should be presented in terms of the specific spheres of successful adaptation. Substantiating this view, studies on childhood resilience have focused on multiple behavioral indices of social competence, such as school grades, and ratings by parents, peers, and teachers (Luthar, 1993). These studies have shown that high-risk children can show differing success levels across different domains of adjustment (Luthar, 1993 in Mangham, 1995). More specifically, at risk-children who are labeled as resilient on the basis of particular competence criteria can reflect considerable heterogeneity of functioning across other adjustment domains. For instance, among children with histories of maltreatment, Kaufman et al (1994) found that almost two thirds were academically resilient, yet only 21% manifested resilience in the domain of social competence.

Zigler (1993) goes further and argues that not only do dimensions of resilience vary, they may actually include spheres of substandard functioning. Given this inclusion of substandard functioning, Luthar and Zigler (1993) argue that researchers should focus on difficulties that frequently coexist with high functioning in some spheres, as well as positive adaptation.

Other researchers disagree with the allowance of substandard functioning and use a more restrictive standard. That is to say, they suggest that resilience is achieved only with demonstration of excellence in one salient sphere with at least average functioning in other areas (Luthar, Doernberger, & Zigler, 1993). In a similarly restrictive way, some researchers use the term resilient only for individuals who maintain their competency or positive adjustment over extended periods of time and

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across all areas adjustment (Egeland, Carlson, & and Sroufe, 1993). Meanwhile, other researchers have stipulated that to qualify for labels of resilience, at-risk children must excel in multiple adjustment domains (Tolans, 1996).

However, opponents of these restrictive approaches argue against it on multiple grounds. First, they suggest that it is implausible that individuals who have faced significant adversity in their lives will emerge almost completely unscathed. Second, changes in risk and/or protective factors over time may alter adjustment and thereby change the status of previously resilient individuals (Mangham, 1995). Third, longitudinal studies have indicated that phenomena associated with resilience show considerable variability over different points on the developmental continuum (Luthar & Zigler, 1991).

On the other hand, disparate functioning across dimensions of resilience has also led to critiques. For example, it has led some social scientists to question the validity of the construct (Luthar et al., 2000). Similarly, such variability complicates the construct of resilience because it begs operational questions such as the following. How many dimensions of positive adjustment are necessary in order to deem a person resilient? How long must one demonstrate resilience in order to be deemed resilient? In short, there is a range of epistemological questions raised by the ambiguity found in the current state of this literature.

D. Psychosocial Risk Factors

Defining and elaborating notions about resilience suggests the need to also specify terms regarding psychosocial risk. Psychosocial risk is, after all, the condition that

triggers or elicits resilient responses, suggesting that the two concepts are interconnected. Meanwhile, there are varying, even disparate, notions of psycho-social risk. However, in basic terms, risk factors are often seen as variables that are linked to the later development of pathology or maladjustment (Garmezy, 1993). Or, if one prefers a somewhat less pathologizing perspective, risk factors may be seen as factors that are associated with later psychosocial challenges, as opposed to later pathology or maladjustment, per se.

As with the concept of resiliency, risk status exists at the individual and extra-individual level (Mangham, 1995). Individual risk factors include anti-social behavior, minority racial status, stressful life experiences, male gender for certain outcomes, female for others, difficult temperament and medical condition. Meanwhile, extra-individual risk factors include parental pathology or illness, exposure to violence, separation from parents, high parental stress, young mother, large family size, low socioeconomic status, poverty, violent neighborhood, deviant peer group and malnutrition (Manham, 1995) and involvement in deviant peer groups and poverty.

Another way that risk variables diverge is that risk status and risk processes occurs on a continuum. For instance, Luthar (1993) suggests that given "the complex web of factors influencing children's psychosocial development, it cannot be assumed that any environmental risk factor carries equivalent levels of risk to all children exposed (Luthar, 1993). Also suggesting a continuum of risk status are commonly employed strategies used for defining risk, including: (1) Life events or daily hassles approaches that involve computing the number of negative events experienced by a child; (2) individual stressful experiences such as parental divorce; and (3) consideration of

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multiple familial and socio-demographic indices such as impaired maternal psychological functioning, and low parental occupation and income (Luthar, 1993). The first of these above factors, being based on quantitative measurement, by definition connotes a continuum. And the second and third factors also hint at variability in risk status, which too suggest a continuum, though perhaps in an ordinal rather than interval sense.

A further distinction when examining risk is the difference between a risk variable and the actual risk or vulnerability process. Some authors refer to this as the difference between distal and proximal risk (Baldwin, Baldwin & Cole, 1990; Luthar, 1993) or statistical and individual risk (Richters & Weinthaub, 1990). Distal or statistical risk refers to markers of risk status such as low socioeconomic status or being the child of a schizophrenic parent. These risk variables yield a statistical index of risk, but say nothing about the actual risk process.

In contrast, proximal risk variables are directly experienced by the at-risk individual and thus mediate the relation between distal risk variables and maladaptive outcomes. For example, Brown, Harris and Bifulco found that death of a parent had a negative effect only if it was associated with a lack of affectionate parental care (Rutter, 1990). Thus, in this case death of a parent is a risk factor, but the risk process is a lack of affectionate parenting. This notion is consistent with practice wisdom that family process may be more salient than family structure, for instance, as when divorce is not a risk factor unless it impacts family process in a deleterious manner.

Not surprisingly, criticisms have been made about the ways in which risk factors are conceptualized. Such criticisms include the concern that there are no definite

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criteria by which a particular variable may be defined as a risk factor. Judgment is often made after the fact and is based on the assignment of risk to particular conditions (Kaplan, 1999). Additionally, criticism has also been leveled that the relationship between risk variables and outcomes may be specious and correlational rather than causal (Glantz & Johnson, 1999). For instance, children who are deemed at risk on the bases of maternal depression may not be at risk if the depression is sub-clinical or situational and of short duration. In this scenario, the child may not be truly at risk, since the maternal parenting may actually be healthy, not problematic. Accordingly, risk should not be assumed merely in response to the presumed presence of a stressor (Ciccetti & Garmezy, 1993).

In sum, the presumptive construct of risk, which underlies the study of resilience, is also subject to critique. Concerns include the challenge of defining, operationalizing and measuring the construct. A rather agnostic interpretation of these criticisms may be that they are important considerations that need to be taken into account as the literature advances, but they do not invalidate this line of inquiry. After all, such concerns are common, if not ubiquitous, to social science, generally. As such, it seems that they must be dealt with as inherent ambiguities and problems that may be mitigated, if not overcome entirely.

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3. RESILIENCE THEORY

Now that we have addressed the construct of resilience by reviewing its various definitions and dimensions, we turn our attention to theoretical concerns. We begin by exploring various models found within the resilience literature. As can easily be seen, there are a numerous models of resilience found in the literature. Various authors classify the models in a variety of ways, with the classifications overlapping to some degree. The following models represent the prevailing ways of classifying these frameworks, beginning with the most widely utilized models.

A. Psychological Models

Historically, the predominant model utilized in resiliency research focuses on the individual as the primary unit of analysis, while de-emphasizing broader, social factors. This appears to be due at least in part to the fact that resiliency research began in the field of developmental psychology (Garmezy, 1991), which primarily addresses individual behavior. Not surprisingly, psychological models tend to address constitutional factors such as gender, temperament and intelligence, which are often conceptualized to moderate stress. More specifically, some of the most widely accepted and researched personality traits of resilient individuals have been identified as the ability to elicit positive regard from others (Werner, 1990), self-efficacy and self-esteem (Rutter, 1985), internal locus of control (Luthar, 1991), and ego-resilience (Block & Block, 1990). Additionally, the ability to cognitively reframe difficult events as challenges with opportunities for growth, and commitment to activities in one's life

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are identified as constitutional factors (Kobasa, 1985). And according to McCubbin et al. (1997), individual personality traits of resilient individuals include ego strength, problem-solving skills, social skills, social competence, internal locus of control and positive response to others. As these findings demonstrate, there are thought to be a very wide range of resiliency traits and qualities found among resilient individuals.

B. Psychosocial Models

Although work on resiliency has historically focused almost solely on individuals, some researchers have begun to view resiliency in broader social contexts such as families, groups, communities, culture (McCubbin & McCubbin, 1993; Mangham et al, 1995). Psychosocial resilience of the family is particularly common among these models, relative to broader notions of groups, communities, culture, etc. Examples of family resiliency factors, according to McCubbin et al. (1993) include communication, cohesion/emotional connection, adaptability, presence of a caring adult, spiritual wellness, mutual respect/appreciation, problem solving skills, family time and routines and family heartiness. Similarly, among resilient urban children who have experienced major life stress, parents report positive, consistent discipline practices, more optimistic views of the child's future, and adequate personal resources (Wyman, Cowen, Work & Parker, 1991).

Also in this vein of family resilience, Walsh advances a systemic view of resilience in ecological and developmental contexts. In particular, she presents the concept of family resilience, attending to interactional processes over time that strengthen both individual and family hardiness. She suggests that extending our

understanding of normal daily functioning, the concept of family resilience offers a useful framework to identify and fortify key processes that enable families to surmount crises and persistent stresses. She argues that there are many pathways in relational resilience, varying to fit diverse family forms, psychosocial challenges, resources, and constraints. And she suggests that shared beliefs and narratives foster a sense of coherence, collaboration, competence and confidence, which are vital to coping and mastery (Walsh, 1996).

Additionally, Rutter and Garmezy have also been instrumental in expanding models beyond individual attributes to include family factors. They have expanded the framework in the context of resiliency of children. A child's ability to cope, according to these authors, is strongly influenced by a number of extra-personal factors. These factors include external sources of support, family cohesion, stability of attachment over time, emotional accessibility of the parent (Rutter, 1985) and a sense of warmth and acceptance found within the family (Garmezy, 1985).

Although attention to broader environmental factors such as macroeconomic and sociological variables have been less common, literature does exist regarding these influences on at risk populations. For instance, community resilience factors, according to McCubbin et al. (1997) include social support, connection to models, connection to aspects of the community such as involvement in religious organizations, and cultural relevance/respect. Similarly, early research by Long and Vaillant (1984) pointed to several protective cultural factors that may have served to overcome the risk potential present in childhood. That is, they identified high employment levels, national wealth,

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accessibility of mid-level occupational jobs and the GI Bill as factors that facilitated upward mobility for urban males in poverty.

C. Interactive Models

Interactive models comprise one of the most common perspectives utilized in resiliency research (Luthar, 1993). According to this perspective, resilience must be seen as a complex, dynamic interplay between certain characteristics of human systems, which may be individuals, families, neighborhoods, or communities, and the broader environment that surround the human system which changes over time (Mangham et al., 1995). While some authors such as Luthar define this category of research as interactive models, it clearly overlaps greatly with notions of ecological theory, which will be explored further below. For example, this model's reference to families, neighborhoods and communities is consistent with ecological variables such microsystems, mesosystems and macrosystems. Furthermore, the attention to transacting systems, here, also parallels ecological theory.

An example of an interactive model, provided by McCubbin et al., is termed the T-Double ABCX model. The T-Double ABCX model views the family's experience of stress, crises, and adaptation as a dynamic and ongoing process. Emphasis is placed on the family's efforts to manage the demands of various stressors with the resources and capabilities the family members possess. This process is mediated by the family's appraisal of the situation and the available coping strategies. The objective of these family efforts is to achieve a balance in family adaptation and functioning (McCubbin, et al., 2000). In this model, the letters ABCX represent the stressor event (A), the

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family's crisis-meeting resources (B), the family's definition or interpretation of the crisis event (C), and the family crisis itself (X). McCubbin and Patterson's 1981 model addressed the issue that no event occurs in isolation and introduced the concept of "pile-up" stressors. Thus, the ABCX model allows the professional worker to consider both the presence and impact of these variables on family adaptation.

Another example of this interactive model is found in the literature on resilience and poverty. According to Garmezy, (1991) the modification of poverty stressors is brought about by temperament, such as activity level, reflectiveness in meeting new situations, cognitive skills, and positive responsiveness to others. That is, temperament buffers the effects of such stressors. Another set of protective variables to be found in poor families – those marked by marital discord or parental unresponsiveness -- is the presence of a nurturing and caring adult figure such as a grandparent. A third variable is the presence of external support, as exemplified by a strong maternal substitute or a concerned teacher, or the presence of an institutional structure, such as a caring agency or church that foster ties to a larger community. These varying levels of protective factors, according to Garmezy, interact with one another insomuch as they compensate for one another. The absence of one increases the absence of another, a transaction that is reflective of systems theory.

D. Main Effect Models

Another category of models is the main effects models (Luthar, 1993). The main effect models emerged because of the complexity of interaction effects posed by the interaction models. That is, the complexities of interaction effects have led some

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investigators to use more parsimonious approaches in predicting resilience, and these models have been termed the main effect models. In essence, the main effect models ask, "Among high-risk children, what distinguishes those who do well from those who do poorly?" (Luthar, 1993). This approach may be seen by some critics as more of a research and statistical method than a theoretical model, in the sense that it derives from the former. However, even if developed in this way, it has influenced ways in which resilience has been studied and understood, and accordingly, represents a salient model.

E. Protective Models

An example of this protective model is also found in the literature on resilience and poverty. Research on childhood poverty conceptualizes positive resources within the child, family and community as buffers that protect against the potentially negative effects of poverty. For example, in urban African American families, numerous factors have been found to buffer youth against the negative effects of violence exposure that is prevalent among the urban poor. These factors include strong kinship bonds, the elasticity and adaptability of households and family roles, high achievement orientation, the central role of spirituality and religion, racial bi-culturalism, positive self-esteem, and development of ethnic awareness (Little, Blake & Darling, 1993).

In a similar vein, research by Emory Cowen and his colleagues (Cowen et al., 1997) attests to the protective value that parents' psychological well-being has for disadvantaged children. Parent strengths according to this work include a sense of parenting efficacy, overall life satisfaction, and optimistic views of the child's future. There is also evidence of protective effects associated with mothers' internal locus of

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control as well as high levels of self-esteem (Luster & McAdoo, 1994). Additional protective factors include cognitive skills, positive responsiveness to others, reflectiveness in meeting new situations, as well as families marked by warmth and cohesion, and the presence of some caring adult in the absence of responsive parents or in the presence of marked marital discord (Garmezy, 1991). These findings are consistent with others that indicate that inner-city mothers with high levels of perceived support tend to display relatively few depressive symptoms, experience less negativity about the parental role, and use less punishment (Luthar, 1999). Similarly, according to Black (1998), African American families are thought to possess numerous strengths that buffer youth against urban violence. These may include strong kinship bonds, the elasticity and adaptability of households and family roles, high achievement orientation, the central role of spirituality and religion, racial bi-culturalism, positive self-esteem, and development of ethnic awareness (Hill & Black in Black, 1998).

Involvement in religion and church membership can also serve important protective functions for poor parent's child-rearing behaviors and for positive outcomes among their children (Garmezy, 1991). Religious beliefs can facilitate positive adjustment by providing a support network of others in the church community, by enhancing positive beliefs of the self, and by leading to the use of prayer rather than maladaptive coping strategies for negotiating life crises and everyday stressors. However, according to some authors, strong beliefs in the supernatural may become counterproductive if they take the form of fatalism (Luthar, 1999).

Taken together, these findings focus on the protective nature of numerous variables. In this way, they shed light on specific factors and pathways that contribute

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to resilience, a strength of such studies. However, this approach represents a somewhat static picture of resilience, in which external stressors are seen as inherently and generally negative, without the possibility of producing general positive effects. In other words, a curvilinear effect of stressors on adaptation is not allowed; stressors are seen as generally problematic.

In sum, the above discussion of resilience models provides an outline of various perspectives used in the study of resilience. Not surprisingly, these models actually overlap to a degree within the resilience literature. For instance, interactive models are akin to protective models in some respects, e.g., their multivariate nature and their reference to mediating variables. Accordingly, the typology presented above is arguably reified, subject to debate, and open to re-conceptualization. However, it suffices as a general description of the literature, i.e., as a heuristic in conceptualizing the varying approaches in this research area. As such, it serves as a point of departure for characterizing the theoretical thought within resiliency research. Having done this, we now apply these resiliency notions to a context of occupational stress.

F. Epistemological Critiques

Much of the current literature on resiliency is based on the prevailing contemporary methods in social science, which is to say positivist research. In particular, much of this work has been based on quantitative methods. This characterization is consistent with Tyson's (1995) definition of positivism, which includes (but is not limited to) the notion that theoretical conceptualization is done in quantifiable, observable terms, i.e., operationalism.

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Another positivist characteristic is also evident in the tendency of resiliency researchers to study people in "the simplest, most discrete and least interactive manner" (Tyson, 1995). That is, studies have posited resiliency as an intervening variable between risk and psychosocial outcomes. In other words, resiliency has generally been conceptualized as a buffer between psychosocial risk factors and psychosocial outcomes. For instance, an extensive amount of research on the relationship between child sexual abuse and mental health has empirically demonstrated that subsets of people are resilient to the effects of child sexual abuse. Similarly, research on the effects of urban violence on children has identified various psychosocial factors that buffer the effects of such violence, thus rendering positive outcomes for such children (Luthar, 1993). What is missing from these conceptualizations is a dynamic, interactive and complex perspective of human behavior that might be better generated from qualitative approaches. In this sense, this positivist research appears to be open to criticisms of reductionism.

Most resiliency research has been cross-sectional, insomuch as studies typically use one-wave evaluations rather than tracking research participants over time. However, there are newly emerging efforts to utilize longitudinal methods, which is discussed further below. In addition to the preponderance of cross-sectional methods, current studies are largely based on survey research methods. That is, studies typically survey populations of research subjects, as well as their family members, especially parents, and teachers, in order to gain information about the characteristics of the research subjects. It also bears mentioning that although current studies tend to be positivist, they are not so in the experimental or quasi-experimental sense, i.e., control groups are not utilized.

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Rather, statistical procedures are used, in order to demonstrate causality between the purported resiliency traits of individuals and their resilient outcomes.

In addition to positivistic analyses, there is also a growing body of qualitative publications on the subject. Much of this work has been published by a variety of mental health clinicians who write for a lay audience. The nature of this knowledge is primarily based on clinical case analysis. Accordingly, this stream of research appears to be predicated on practice wisdom -- that is, knowledge that is based on mental health practitioners' experience with their clients. This method of knowledge generation tends to be qualitative, descriptive and anecdotal. Accordingly, much of this work possess some the strengths and limitations of qualitative methods. Strengths include clarity, depth and descriptiveness. Limitations include a likelihood of unrepresentative sampling, a higher level of researcher interaction with research subjects that may "contaminate research finding" (according to a positivist critique) among other methodological limitations. Another significant limitation of this clinically-based work is that it appears to be class-biased, inasmuch as it is often based on at least middle income clientele, thus ignoring risk factors of persons in poverty. For instance, unemployment, homelessness, and crime are not addressed, while reactive depression and adjustment problems are highlighted.

There are a number of critiques that could be leveled at the current state of resiliency research, and these criticisms could be made from both positivist and post-positivist perspectives (though these critiques can be contradictory). From a positivist frame of reference, the following criticisms could be made. First is the critique that resiliency theory, though improved, is still rather rudimentary. That is, resiliency theory

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can be seen to possess a very limited degree of interrelated concepts. Generally, resiliency publications merely put forth only the concepts of psychosocial risk, psychosocial buffers and strengths. While these concepts might be defended on the basis of providing some basic heuristic purposes of guiding resiliency research, they are not highly elaborated in the sense of a more compelling theory, according to a positivist point of view. For example, they do not seem to hold up to Robert Merton's definition of theory:

> *It is only when concepts are interrelated in the form of a scheme that a theory begins to emerge. Concepts, then, constitute the definitions (or prescriptions) of what is to be observed; they are the variables between which empirical generalizations are to be sought. When propositions are logically interrelated, a theory has been instituted (Merton in Saleebey, 1993).*

Although resiliency theory does possess some of these interrelated concepts, they are again generally very limited in number and complexity.

Second, resiliency concepts do not meet this definition's standard for prescribing what is to be observed; mere common sense seems to suggest what is to be observed as adequately as does the theory. For instance, common sense seems to suggest that certain social supports such as family cohesion and positive peer culture will help protect against psychosocial risk. (Admittedly, a post-positivist perspective would undercut this critique by suggesting that prescription is not necessary to social science anyway -- that prescription is merely a dogmatic tenet of positivism. However, for the sake of discussion, this critique is made from within the positivist perspective.)

Third, even if resiliency theory did comport with standards found in Merton's definition, the concepts are arguably not original, since they are already accounted for by the ecological framework. In fact, ecological theory much more thoroughly defines and

elaborates these concepts in an overarching, elaborated and relatively rich framework (Germain & Bloom, 1999).

In addition to positivist critiques of resiliency research, numerous post-positivist critiques could also be put forth concerning the current state of this literature. To begin with, since most resiliency research is positivist in its approach, it generally does not critically examine its own truth claims in a rigorous and self-critical manner; it does not deconstruct its assumptions (Roseneau, 1992). For instance, this research generally does not delineate for the reader details about the researcher's thought process, as Tyson suggests. In particular, it does not detail the researcher's thoughts about the metatheory of research and the ontological and epistemological assumptions they are making, issues often undertaken in a post-positivist approach (Tyson,1995). By not addressing these issues that serve to equivocate research findings, resiliency researchers imply a sort of false definitiveness in their findings. In other words, since resiliency research tends to be positivistic, it does not critically examine or deconstruct it its own truth claims in this way, suggesting to the reader that a unidimensional, absolute truth has been achieved.

A related post-positivist objection is that much of the current resiliency research is reductionistic. That is, much of the positivist research treats resiliency as a discrete concept, an independent variable, which can be disentangled from other factors in the social world and can be causally related to personal outcomes. From a heuristic perspective, this approach is untenable, since heuristics suggest "that real life problems are too complex, interactive and perceiver-dependent to lend themselves to...exact solutions (Tyson, 1995)." Further, statistical controls are seen to be imperfect, since they

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only control for factors presupposed and visible to the researcher (Tyson, 1995). They do not control for alternative explanations that are unforeseen.

Another post-positivist critique is that this research falsely draws environment-system boundaries. That is to say, resiliency researchers generally treat themselves as outside the parameters of what is being studied, outside the unit of analysis, as if he/she does not influence the research participants. By assuming that he/she does not impact the behavior being studied, he/she misunderstands the phenomenon under analysis. The impact of the researcher on the research participant's behavior is inherent and inescapable, given the realities of interpersonal dynamics (Tyson, 1995). This situation is akin to a mental health clinician denying the existence of counter-transference, and thereby misunderstanding his/her client's behavior.

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4. RESILIENCE IN AN OCCUPATIONAL CONTEXT

Having explored definitions and models of resilience, we now apply the construct to an occupational context. Specifically, we will relate resilience to literature on occupational stress. This is done for two reasons. First, the job stress literature demonstrates that workers, particularly human service workers, conduct their work in environments of substantial stress, which is a necessary precondition for studying resilience. That is, the resilience construct presupposes that substantial stress exists and necessitates a resilient response. Indeed, the occupational stress literature meets this burden by providing evidence of the widespread nature of work stress and heightened stress for human service workers. Secondly, we explore constructs in the occupational stress literature, in order to gain divergent perspectives on resilience. This will help broaden our discussion of resilience, taking into account an interdisciplinary perspective. Third, we explore the occupational stress literature because it provides a specific context for examining resilience. As mentioned earlier, resilience factors may vary according to context; therefore, it is important to describe such context.

A. Definitional Issues

Before describing the extent of occupational stress, we need to briefly define the terms under consideration: stress, stressors and strain. To begin with, definitions of stress have varied greatly. Stress has been defined as both an independent and dependent variable (Cox, 1985) and as a process. In other words, stress has been defined as a stimulus, a response, or the result of an interaction between the two, with the

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interaction described in terms of some imbalance between the person and the environment. This confusion over terminology is compounded by the broad application of the stress construct in medical, behavioral, and social science research for the past sixty years (Cooper, Dewe & O'Driscoll, 2001). There has been considerable debate and discussion as to what is meant by the term stress.

Contemporary views on stress suggest that stress should be defined as relational, the result of the interaction between the individual and the environment (Lazarus, 1990). Transactional definitions are more concerned with the dynamics of the psychological mechanisms of cognitive appraisal and coping that underpin a stressful encounter. There are two types of appraisal, according to Lazarus' highly influential definition. First, there is the person's realization that something is at stake, called primary appraisal. In this primary appraisal process, the person gives meaning to an encounter. The meanings that best express this appraisal process are those involving harm, the threat of harm, or challenge. Once the encounter is viewed as being a threat to the person's well being, then the secondary appraisal process begins. This process is concerned with the identification and availability of coping resources to deal with the threat, harm, or challenge (Lazarus, 1991). According to this definition, stress is not a factor that resides in the

individual or the environment. It is embedded in an ongoing process that involves individuals transacting with their environments, making appraisals of those encounters, and attempting to cope with issues that arise. It is a dynamic cognitive state and a disruption in homeostasis or an imbalance that requires a resolution (Cooper, Dewe & O'Driscoll, 2001).

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Although there are other definitions of stress, I will use Lazarus' above definition for the following reasons. First, Lazarus' definition is consistent with the transactional models used in this dissertation and addressed in the methods section. Second, the transactional model is consistent with social psychological themes that are compelling, since it considers both personal differences and environmental factors.

Stressors have generally been defined as the events or stimuli that are encountered by individuals. Typically, stressors are conceived as independent variables located in the work environment such as job demands, poor social support, and poor organizational climate. Stressors generally implies negative consequences for the individual that experiences such stress. However, some conceptions of stress include both negative and positive consequences for the individual. For instance, stressors that are manageable and stimulate individuals have been labeled eustress, whereas stress that is excessive has been seen by some to generate negative consequences. This distinction is consistent with notions that stress has a curvilinear relationship with personal outcomes: moderate stressors result in positive outcomes such as performance motivation and stimulation and severe stressors result in negative outcomes such as depression or high blood pressure.

Whereas there is divergence in the literature regarding definitions of stress, there is general consensus about definitions of strain. Strains generally refer to the psychological, physical and behavioral responses to stressors. Most occupational stress research emphasizes the psychological and behavioral dimensions of stress.

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B. The Widespread Problem of Occupational Strain

Having defined these basic concepts of stress, stressors and strain, we can now turn our attention to the problem of job stress. In order to show that a subpopulation is resilient, we must first provide evidence that the overall study population is in fact faced with psychosocial adversity or stress. Research on occupational strain is suggestive of such adversity. For instance, research has demonstrated that occupational stress is associated with various health and occupational problems such as depression, anxiety and burnout (Dunham, 2001); cardiovascular disease and cancer (Dunham, 2001); job satisfaction and performance (Cooper & Roden, 1985); job turnover (Hendrix, Ovalle, & Troxler, 1985); compromised immune system and attendant viral and bacterial infections (Leiter & Maslach, 2001). Researchers have also posited that job stress can result in increasing incidents of aggressive behaviors, accidents, and theft in the workplace (Chen & Spector, 1992), as well as in violence and substance abuse (Dunham, 2001). Similarly, work stress has also been linked to the following personal outcomes: loss of self-esteem, loss of professional-esteem, new or exacerbated physical symptoms, loss of physical stamina, disruption to intimate life, lost hours of professional development, increased psychological distress (Dollard, Winefield & Winefield, 2001), and reduced capacity for complex physical skills by impairing cognitive functioning (Leiter & Maslach, 2001). Further, Addley (1997) has identified workplace stress as an exacerbating factor in the following diseases and health problems: (1) disorders of the cardiovascular system, including coronary artery disease, hypertension and stroke; (2) disorders of the musculoskeletal system, including backache, tension headache and rheumatoid arthritis; (3) gastrointestinal problems,

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such as peptic ulcer, irritable bowel syndrome and ulcerative colitis; (4) asthma; and (5) miscellaneous problems such as hay fever, eczema, fatigue and lethargy.

As another social indicator of job stress, the National Institute for Occupational Safety and Health (NIOSH) has documented high rates of job stress as perceived by American workers. For instance, NIOSH reports that that one-fourth of American employees view their jobs as the number one stressor in their lives. Additionally, NIOSH data suggests that problems at work are more strongly associated with health complaints than any other life stress – more so than even financial problems or family problems. Moreover, NIOSH (2003) published the following findings, which further indicate the seriousness and widespread nature of occupational stress:

- Forty percent of workers report that their job is "very or extremely stressful."
- Twenty-six percent of workers report they are "often or very often burned out or stressed by their work."
- Twenty nine percent of workers feel "quite a bit or extremely stressed at work."

Such statistics are consistent with Addley's (1996) estimate that approximately 20% of American work-related disease claims are now for stress at work. Interestingly, this statistic may deflate the extent of actual occupational stress, since it does not capture premorbid forms of stress, that is, stress that has not resulted in disease states. In any event, taken together, these data suggest that a substantial portion of U.S. workers suffer from severe forms of stress.

Additionally, some authors argue that work place stress has trended upward in recent years. For instance, Lardner (1999) found that between 1977 and 1997 more

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Americans are working 50 or more hours per week; specifically, percentages increased from 24% to 37% of workers over this time frame. Such claims are supported by NIOSH data that show three fourths of employees believe the workers have more on the job stress than a generation ago. Minimally, this suggests that workers subjectively perceive job stress to be increasing, a salient finding given the importance of people's subjective appraisal of stress. Accepting this premise that job stress is actually trending upward, Levinson (1996) attributes such increased job stress to macro-economic and organization changes in recent years. For instance, Levinson (1996) argues that the 1990s was a decade in which feelings of stress were pervasive and growing worse due to corporate warfare, downsizing, re-engineering and restructuring. Previous implicit contracts between employees and their organizations in which the organization was seen as a source of security and psychological safety now seem outdated (Dunham, 2001). On the most extreme end of the stress continuum, suicide is on the increase within all sectors of employment (Spiers, 1996). Although suicide may be multiply determined by factors such as substance abuse and availability of fire arms, the context of heightened job stress may act as another causal factor. This conjecture is strengthened by the previously mentioned relationship between job stress and depression.

Furthermore, against a background of mounting research evidence, Cartwright and Cooper (1998) argue that there can be little dispute that work related stress is responsible for immense human and financial costs. The annual cost of stress-related absence and sickness, reduced productivity and associated health and compensation costs in the United States is estimated to be more than $150 billion per year (Karaseck

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& Theorell, 1990). The indirect costs of stress are also reflected in the increasing level of substance abuse, rising divorce rates, and death from lung cancer (Cartwright & Cooper, 1998).

This evidence suggests that occupational stress is quite prevalent and constitutes a serious social, public health and economic problem. However, skeptics may reasonably counter that such global measurement of occupational stress ignores specific job contexts, and that many jobs and industries may actually be relatively low in stress. Further, human services work perhaps could represent a low stress job context. This seems to be a logical and compelling criticism. Therefore, it is important to demonstrate that human services work, as an occupational context, faces heightened adversity. In fact, the literature on job burnout provides evidence in this regard, and thus it follows next.

C. Occupational Strain in the Human Services: Job Burnout

For approximately thirty years, occupational strain has been considered particularly problematic in the human services professions, including in social work. Indeed, job strain has been considered to be so problematic within human services fields that it has spawned a literature devoted to the study of the phenomenon. In particular, a literature on a severe form of job strain has emerged – a literature on job burnout. What is job burnout? Most often, burnout has been defined as a syndrome of psychological reactions to work, including such signs and symptoms as exhaustion, cynicism, loss of enthusiasm, and professional disengagement; as such, it has been viewed essentially as a form of psychological strain (Beehr, 1995). As already suggested, burnout is recognized as a particular occupational hazard for various people-oriented professions, such as social

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work, education, and health care. In fact these professions account for 67% of all burnout studies (Schaufeli & Enzmann, 1998).

- **Early Definitions of Burnout**

The initial work on burnout did not begin with a clearly-defined phenomenon or a particular theoretical model. However, there were concepts in the medical field that were rudimentary notions of burnout. One of these was "detached concern" (Cooper, 1998) which referred to the medical profession's ideal of blending compassion with emotional distance. Another related concept was "dehumanization in self defense" (Zimbardo, 1970), which referred to protecting oneself from overwhelming emotions by responding to people as objects instead of as people. Both of these notions focused on emotional detachment, which evolved into a key dimension of burnout, after years of psychometric development (Maslach, 1998). Most importantly, these concepts provided indirect evidence that many medical and human services workers were emotionally overwhelmed by their work, suggesting that these industries were quite stressful.

Further evidence of the stressful nature of human services jobs is reflected by the early studies of burnout, which focused on the symptoms of burnout. These symptoms demonstrated significant impact in a wide range of behavioral, emotional and cognitive domains. Many of these identified symptoms were based on clinical observations or from interview studies with an impressionistic or unspecified analysis of data. These studies have been criticized as not being rigorously designed or thoroughly conducted quantitative studies (Schaufeli & Enzmann, 1996). Of course, this criticism is itself subject to debate, e.g., postmodernist critiques of positivism. In any event, the symptoms

provide further evidence of the substantial psychosocial adversity considered to be problematic among many human services jobs. These symptoms are as follows, according to Schaufeli and Enzmann (1996):

1. *Affective Symptoms:* Depressed mood, tearfulness, emotional exhaustion, changing moods, decreased emotional control, undefined fears, increased tension, anxiety.

2. *Cognitive Symptoms:* Helplessness, loss of meaning/hope, fear of going crazy, feelings of powerlessness and impotence, feelings of being trapped, sense of failure, poor self-esteem, self-preoccupation, guilt, suicidal ideas, inability to concentrate, forgetfulness, difficulty with complex tasks, rigidity and schematic thinking, difficulty making decisions, day dreaming/fantasizing, intellectualization, loneliness, diminished frustration tolerance.

3. *Physical Symptoms:* Headaches, nausea, dizziness, restlessness, nervous tics, muscle pains, sexual problems, sleep disturbance (insomnia, nightmares, excessive sleeping), sudden loss or gains of weight, loss of appetite, shortness of breath, increased pre-menstrual tension, missed menstrual cycles, chronic fatigue, physical exhaustion, hyperventilation, bodily weakness, ulcers, gastric-intestinal disorders, coronary diseases, frequent and prolonged cold, flare-ups of pre-existing disorders (asthma, diabetes), injuries from risk-taking behavior, increased heart rate, high blood pressure, high level of serum cholesterol.

4. *Behavioral Symptoms:* Hyperactivity, impulsivity, procrastination, increased consumption of caffeine, tobacco, alcohol, tranquilizers, illicit drugs, over- and under-eating, high risk-taking behaviors, increased accidents, discontinuation of recreational activities, compulsive complaining.

5. *Motivational Symptoms:* Loss of zeal, loss of idealism, disillusionment, resignation, disappointment, boredom, and demoralization.

As suggested by these symptom definitions, the consequences of burnout are both numerous and sometimes severe. For instance, burnout has been correlated to depression, psychosomatic complaints, substance abuse, job satisfaction, organizational commitment, and job performance (Shaufeli & Enzman, 1998). Additionally, burnout is

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also correlated with absenteeism, low morale, impaired physical and mental health, substance abuse and marital and family conflicts, according to Leiter and Maslach (2001).

Additionally, burnout has been linked specifically to job turnover and intent to leave one's job among human services professionals (Schaufeli & Enzman, 1998). Interestingly, the effect of burnout on actual turnover was deemed to not be strong, while the effect on intention to leave one's job was much stronger. This suggests that a large percentage of burned out professionals stayed in their jobs involuntarily, which may have negative consequences for the employee, the organization and clients (Schaufeli & Enzman, 1998).

In sum, research on burnout among human services workers has demonstrated that the phenomenon is considered a serious form of occupational stress. However, as a cautionary note, some authors have argued that the relationship of burnout to other forms of occupational strain may be bi-directional, i.e., that the correlates of burnout may be both determinants and consequences of burnout. For instance, depression has been found to be both a cause and effect of burnout, not merely one or the other (Schafeli & Enzman, 1998). Notwithstanding such bi-directionality, this research still seems to suggest that burnout is a substantial adversity for many human services workers. That is, whether it is construed as an independent variable or a correlate of other forms of strain, it is nevertheless seen as a factor in job strain. In this sense, its importance as both a serious applied problem and a social science topic is supported.

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- **Modern Definitions of Burnout**

Subsequent to the development of symptom-based definitions of burnout came more theoretically and empirically based definitions. By far the most cited of these comes from Maslach and Jackson (1986) who state that:

> *Burnout is a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who do "people work" of some kind.*

This definition's popularity is due to the fact that the most widely used and well validated self-report questionnaire, the Maslach Burnout Inventory (MBI), includes the three dimensions of this definition, as follows: First, emotional exhaustion refers to the depletion or draining of emotional resources. Professionals feel that they are no longer able to give of themselves emotionally. Second, depersonalization points to the development of negative, callous, and cynical attitudes toward the recipients of one's services. For instance, they may be labeled in derogatory ways and treated accordingly. The term depersonalization does not refer to meanings found in psychiatry concerning extreme alienation from the self and others. In Maslach and Jackson's definition, depersonalization refers to an impersonal and dehumanized perception of recipients, rather than an impersonal view of the self. Third, lack of personal accomplishment is the tendency to evaluate one's work with recipients negatively (Beehr, 1995). Elaboration on these three dimensions of burnout are as follows (Cooper, 1998):

- *Emotional exhaustion* refers to feelings of being emotionally overextended and depleted of one's emotional resources. The major sources of this exhaustion are work overload and personal conflict at work. Workers feed drained and used up, with out any source of replenishment. They lack enough

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energy to face another day or another persona in need. The emotional exhaustion component represents the basic individual stress dimension of burnout.

- *Depersonalization* refers to a negative, cynical, or excessively detached response to other people, which often includes a loss of idealism. It usually develops in response to the overload of emotional exhaustion, and is self-protective at first – an emotional buffer of detached concern. But the risk is that the detachment can turn into dehumanization. The depersonalization component represents the interpersonal dimension of burnout.

- *Reduced personal accomplishment* refers to a decline in feelings of competence and productivity at work. This lowered sense of self-efficacy has been liked to depression and an inability to cope with the demands of the job. It can be exacerbated by a lack of social support and of opportunities to develop professionally. Workers experience a growing sense of inadequacy about their inability to help clients, and this may result in a self-imposed judgement of failure. The personal accomplishment component represents the self-evaluation dimension of burnout.

- **The Duration of Burnout**

The duration of burnout has been described as including acute, chronic (Golembiewski & Munzenrider, 1988) and episodic courses (Hobfall & Shirom, 1993). However, most definitions define burnout as generally a chronic condition (Cooper, et al., 2001). For instance, Leiter and Malach (2001), describe burnout as involving "a prolonged response to chronic interpersonal stressors on the job." The authors do not define their meaning of "prolonged" or "chronic" in this elaboration. However, they elaborate that it is a "cumulative stress reaction to ongoing occupational stressors" (Leiter & Maslach, 2001). While the duration of the phenomenon is rather vague, as defined by these authors, its long term nature implies that it is a significant occupational and personal problem, rather than a fleeting disruption of personal and social functioning. Chronic burnout, according to Cooper et al. (2001), results from progressively worsening

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conditions at work, such as might be experienced with an increasingly heavy client caseload or having to deal with incessant and unremitting client problems. Most conceptualizations of the construct refer to burnout as a reaction to chronic or ongoing demands from the job (Hoball & Shirom, 1993), involving the progressive development of emotional exhaustion (and perhaps other responses) as a result of ongoing, and seemingly insurmountable, job-related problems or demands. The issue of chronicity and severity is very pertinent to our purposes, here, since it comports most closely with adversity underlying resilience. In other words, it is necessary to show that burnout is often chronic and severe, otherwise it would not need to be transcended or overcome; it would be irrelevant to this study of resilience.

- **The Process of Burnout**

Having discussed symptoms and definitions of burnout, it bears addressing why it seems to be prevalent in the human services. Two of the most prolific authors of burnout studies explain this as follows. Leiter and Maslach (2001) argue that the therapeutic relationships that such providers develop with their service recipients can be quite stressful because they demand an ongoing and intense level of personal, emotional contact. Within such occupations, the norms are clear, if not always stated explicitly: to be selfless and put others' needs first, to work long hours, to do whatever it takes to serve a client, to go the extra mile and to give ones' all. When such norms are combined with work settings that are high in demands and low in resources, then the risk for burnout is high (Leiter and Maslach, 2001). Leiter and Maslach elaborate as follows:

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> *The caregiving relationship between health workers and patient involves significant emotional experiences. Some of these experiences are emotionally stressful for the health practitioner, such as working with difficult or unpleasant patients, having to give "bad news" to patients or their families, dealing with patient deaths, or having conflicts with coworkers or supervisors. These emotional strains are sometimes overwhelming and lead to exhaustion*

Some authors have suggested that the process of burnout may be related to characteristics of the individual. For example, burnout has been linked to early professional experience among human services workers. Some authors have attributed burnout among this population to their idealism. That is, since idealistic expectations of new human services professionals are not met by their daily job realities, new workers are prone to burnout. However, few studies have observed a consistent link between age and burnout (Leiter & Harvie, 1996). However, younger human services professionals may be more prone to burnout than older ones (Schaufeli & Bunk, 1996). However, results have to be interpreted with caution because older workers who have become burned out may have quit their job for something less strain inducing (Cooper, Dewe & O'Driscoll, 2001), skewing comparisons of new versus seasoned workers.

While some have argued that burnout is due to characteristics of individuals, other explanations have included both individual and environmental factors (Cooper et al., 2001). For instance, Cherniss suggested that aspects of the work environment and individual factors can both function as sources of strain: for example, by creating doubts in the person's mind about his or her competence, bureaucratic interference with task completion or goal achievement, and lack of collegial coworker relationships. Individuals endeavor to cope with these stressors in a variety of ways, some of which may entail negative attitude changes, including reducing work goals, taking less

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responsibility for work outcomes, becoming less idealistic in one's approach to the job, and becoming detached from clients or the job itself.

Together, these negative attitude changes constitute Cherniss's definition of the burnout phenomenon. A number of studies have explored Cherniss's view of burnout and have provided some support for this conceptualization. For instance, Burke and Greenglass (1995) found that work setting characteristics such as lack of autonomy, work overload, poor leadership and supervision contributed to negative attitude changes among a sample of teachers and other school personnel.

In sum, we have established that human services workers are considered by many occupational stress researchers to face substantially heightened forms of occupational stress. Again, this meets the first burden of resilience research by showing that the study population does in fact face heightened psychosocial adversity. Having done this, we now turn our attention to resilient workers, a category of individuals who transcend such job risk. Specifically, we address resilient human services workers.

D. The Opposite Polarity of Burnout: Job Engagement

Again, the resilience literature has not addressed the phenomenon of resilience within an occupational context. This application of resilience to the world of work is novel and can be construed as a gap in the literature. Given this gap, we will borrow from a relevant construct found in social and organizational psychology: job engagement. Interest in job engagement has developed recently as an outgrowth of previous work on burnout theory. That is, the positive conceptualization of job engagement has developed in response to past work on job burnout, and has been conceptualized as the opposite state of burnout

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(Leiter & Maslach, 1998). In this way, burnout is seen as one end of a continuum in the relationship people establish with their jobs and engagement is posited at the other end of the continuum (Leiter & Maslach, 1998). Opposite ends of the bipolar continua could be described as not merely the absence of burnout, but rather the presence of psychological wellbeing at work. It has also been defined as a state of fulfillment at work (Maslach, 1998). More specifically, engagement is defined in terms of the same three dimensions of burnout indicated above -- but the positive end of these dimensions rather than the negative. Specifically, engagement consists of the following dimensions:

1. *Physical and psychological energy*, rather than exhaustion,
2. *Strong involvement and commitment to one's job*, rather than cynicism or depersonalization,
3. *Self-Efficacy,* rather than a reduced sense of perceived and actual accomplishment or effectiveness (Maslach, 1998).

While job engagement is similar to constructs found in literature of organizational psychology, it is distinct. For instance, job engagement is distinct from established constructs in organizational psychology such as organizational commitment, job satisfaction, or job involvement (Cooper, 1998). The first of these, organizational commitment, focuses on an employee's allegiance to the organization that provides employment, while engagement focuses on the work itself. The second, job satisfaction, is the extent to which the job is a source of need fulfillment and contentment, or a means of freeing employee's from hassles or "dissatisfiers"; it does not encompass the person's relationship with the work itself. The last of these constructs, job involvement, is similar to the involvement aspect of engagement with work, but does not include the energy and

effectiveness dimensions. Engagement with work provides a more complex and thorough perspective on an individual's relationship with work (Cooper, 1998).

The extensive research on burnout has consistently found linear relationships of workplace conditions across the full range of the MBI subscales. Just as high levels of personal conflict are associated with high levels of emotional exhaustion, low levels of conflict are strong predictors of low exhaustion. Conversely, high personal accomplishment is associated with supportive personal relationships, the enhancement of sophisticated work skills and active participation in shared decision making. These patterns indicate that the opposite of burnout is not a neutral state, but a definite state of mental health and social functioning within the occupational domain. While the burnout concept describes a syndrome of distress that may arise from enduring problems with work, engagement describes a positive state of fulfillment (Cooper, 1998).

In recent elaboration of Maslach's earlier work, Maslach and Leiter (1997) emphasize the need for match between the job and the worker in determining occupational stress. According to this elaboration, job-person fit results in an outcome that rests on a continuum, with job engagement on the one pole and job burnout on the other. The level of burnout or engagement depends on the extent of the match. The six areas of job-person fit stated in the positive end of the continuum are as follows (Cooper, 1998):

1. *Workload:* A sustainable workload provides opportunities to use and refine existing skills, as well as to become effective in new areas of activity. It builds involvement by opening new opportunities, and by removing concern about work overwhelming personal capacities. A sustainable workload stops the cycle of exhaustion that is a driving force in the experience of burnout for many people.

2. *Latitude:* Control over work occurs when workers have the opportunity to make choices and decisions about the processes of conducting their work. People are more committed to, and derive satisfaction from, actions that they have freely chosen...Active participation in organizational decision making has been consistently found to be associated with higher levels of personal accomplishment and lower levels of cynicism.

3. *Reward:* Rewards are an important part of a congruent workplace. Rewards include social dimensions such as social recognition and other forms of positive reinforcement. Economic rewards such as salary, benefits and health insurance form another way in which employees are rewarded for their work. Such social and economic rewards constitute forms of positive reinforcement that impact workers' vocational behavior.

4. *Process:* Intrinsic rewards such as pride in doing something of importance and doing it well, can also be a critical part of this area of work life. What keeps work involving for most people is the pleasure they experience with the day-to-day flow of work that is going well. When things are going well, people experience intrinsic satisfaction continuously in their day to day work. An enjoyable workflow supports overall psychological well-being, and physical health as well.

5. *Community:* People thrive in community and function best when they share praise, comfort, happiness, and humor with people they like and respect. Community is evident in social support that can take many forms at work. Generally, support from colleagues is more strongly related with effectiveness, whereas support from supervisors, especially instrumental support that assists people in managing their workload, is more closely associated with lower levels of exhaustion. Regardless of its specific form, social support has been found to be associated with greater engagement.

6. *Fairness:* Fairness in personal contacts with people at work and with the formal decision making and evaluation processes of an organization are critical to maintaining engagement with work. Fairness indicates that individuals and the organization have a common perspective on the work of the organization and the contributions of employees to its mission. Fairness builds trust that is necessary to support productive involvement with work.

7. *Values.* The sixth and last area of person-environmental fit pertains to the match between the worker's and organization's personal principles...Congruence between individual and organizational values build engagement by justifying the energy people put into highly demanding jobs, encouraging involvement, and building effectiveness. Contributing to a meaningful personal goal is a powerful incentive for individuals. When this work contributes as well to the organizational mission, people may be rewarded with additional opportunities for meaningful work. As such, value

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congruence produces a self-perpetuating dynamic that supports engagement with work.

Again, the above is stated in its positive form based on congruence between worker and environment, which is suggestive of job engagement. However, the six factors are also conceptualized to have negative polarities, or mismatches, as well. That is, mismatches in the above domains are thought to lead to job burnout.

Indirect support for Maslach's model can be found in research on organizational correlates of burnout. To begin with, numerous studies have supported the salience of Maslach's independent variable: job latitude/control. For example, Schulz et al (1995) suggested that management processes play a vital role in either creating or alleviating burnout among employees. Where staff were engaged in decision making related to their job and can determine their work processes, burnout may be less likely to occur. On the other hand, inflexible and rigid organizational rules and policies may exacerbate burnout levels (Gaines & Jermier, 1983). Similarly, O'Driscoll and Schubert (1988) found that lack of communication between organizational levels and influence processes used by managers were strongly related to burnout among social workers, whereas participation in decision making was associated with reduced levels of burnout. Schulz et al. (1995) observed that in organizations characterized by teamwork, participation, and autonomy, employees displayed less burnout because they functioned in favorable work conditions. In a similar vein, work by Savacki (2002) indicates that increases in the opportunity for workers to take control of their work and to learn and apply new ideas at work seem to be related to lower levels of burnout. Hackman & Oldham (1980) also found that a lack of worker autonomy led to lowered satisfaction with work and decreased performance.

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Carver (1998) also found that autonomy and innovation show clear relationships to the ability for worker to thrive and grow in their careers. However, such independent activity requires boundaries. Workers, when faced with unlimited possibilities, can only take advantage of those possibilities when they have guidance either in the form of supervision and feedback or in the form of clear work structures and parameters

The role of workload in causing burnout has also received empirical support. For instance, having to work under time pressure to meet deadlines has been found to be a major source of quantitative overload (Cooper, 2001). Savacki (2002) indicated that both the intensity of the workload and its organization have been related to exhaustion; higher work pressure especially was related to emotional exhaustion, and both work pressure and chaotic organization were related to depersonalization. Work overload has been a prime explanatory construct for burnout both in research findings and in theory. Lazarus' (1999) cognitive mediational framework lends support to the role of workload in the sense that having too much to do and not enough time or resources to do it can overwhelm a worker's resources and lead to the experience of threat. On the other hand, some research suggests that successful achievement in the presence of high workload is related to feelings of personal accomplishment (Riolli-Saltzman & Savick, 2001). The key seems to be not only the level of perceived pressure to work, but also the extent to which workers feel that they have the resources necessary to accomplish the work. Adequate resources may allow workers to perceive that the workload is a challenge rather than a threat. In addition, work pressure may compress time available for workers. Thus, work structures may both erode worker resources and prevent them from developing new resources.

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Interestingly, both overload and underload can generate psychological and physical strain. Underload has also been identified as a stressor, with boredom and lack of challenge from monotonous, routine work predicting anxiety, depression and job dissatisfaction (Kelly & Cooper, 1981). As early as 1908, Yerkes and Dodson proposed their now well-known Yerkes-Dodson law, which states that there is a curvilinear relationship between work load and health and job performance (Cooper et al., 2001). Each individual therefore has an optimal band of workload, substantial deviations from which lead to job strain.

Taken together, these findings illustrate that environmental determinants are important in causing burnout, the opposite of job engagement. To the extent that job burnout and job engagement exist on a continuum, these same environmental factors that cause burnout may be associated with job engagement as well. The testing of whether such environmental correlates predict job engagement is a primary undertaking in this study.

E. Theoretical Underpinnings: Person-Environment Fit Theory

In order to more fully understand Maslach's job engagement theory, it is important to describe the broader theoretical framework from which Maslach's theory stems -- that is to say, Person-Environment fit theory. Job engagement theory is actually a version of Person-Environment Fit Theory. The P-E fit model of stress is perhaps the one that has been most widely discussed in the literature (Edwards, 1991). Most fundamentally, this model proposes that strain occurs when the relationship between the person and the environment is out of equilibrium. That is, a lack of fit between the characteristics of the

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person (e.g., abilities and values) and the environment (e.g., demands) can lead to unmet individual needs or unmet job demands. These unmet needs or demands can in turn result in strain. The main point is that when individuals perceive that the encounter is not meeting their needs, strain will occur. Implicit in the notion of misfit is the individuals' ability to manage an encounter, and elements like values, supplies, demands, and abilities, all of which help to determine the perceived misfit, could be described as representing aspects of a transactional process.

The core premise of P-E fit theory is that stress arises not from the person or environment separately, but rather by their fit or congruence with one another. Stress arises from misfit between the person and the environment. The core elements of the theory are centered on the following distinctions. The first and most basic distinction is between the person and the environment. This distinction is a prerequisite for the conceptualization of P-E fit and provides the basis for examining reciprocal causation between the person and environment (Cooper, 1998).

The second distinction is between the objective and subjective representations of the person and the environment. The objective person refers to the attributes of the person as they actually exist, whereas the subjective person signifies the person's perceptions of his or her own attributes. The objective environment includes physical and social situations as they exist independent of the person's perceptions, whereas the subjective environment refers to the perceptions as perceived by the person.

The third distinction differentiates two types of P-E fit. The first involves the fit between the demands of the environment and the abilities of the person. Demands include quantitative and qualitative job requirements, role expectations, and group and

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organizational norms. Abilities include the aptitudes, skills, training, time and energy the person must muster to meet demands. The second type of P-E fit entails the match between the needs of the person and the supplies in the environment that pertain to the person's needs. These needs are defined generally, encompassing innate biological and psychological requirements, values acquired through learning and socialization, and motives to achieve desired ends (French & Kahn, 1962). Supplies refers to intrinsic and extrinsic rewards and resources that may fulfill the person's needs, such as food, shelter, money, social involvement, and the opportunity to achieve (Harrison, 1978).

Based on the above factors, stress arises when: (1) the environment does not provide adequate supplies to meet the person's needs; or (2) the abilities of the person fall short of the demands that are needed to receive supplies. In this way, stress is defined not by either the person or the environment independently, but rather as the degree of misfit between the two.

The P-E fit conceptualization of stress is at the core of many approaches to work stress research and represents an important advance in our thinking because it provides a structural framework for understanding the stress-coping process. Unfortunately, however, this framework does not explicitly describe the processes through which the person and the environment are linked. A number of limitations can be identified. The fist is that it does little to clarify the complexity of the relationship between the person and the environment. Application of the P-E fit model is limited because it presupposed that most factors can be easily classified as either person or environment and does not give full recognition to the role of the social context within which an encounter takes place. As a result, there is little guidance from this approach on how to fully explore the

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tangled influences of each of these factors on one another. Aside from such strengths and limitations, however, the model does provide the broader theoretical context within which Maslach's theory is located. In this way, we see that Maslach's theory of job engagement is a version of P-E fit model.

Summary

In summary, the resilience literature has not addressed the construct of resilience in an occupational context. Likewise, the organizational and social psychology literatures have not utilized resilience as a construct in the study of occupational stress. Therefore, I propose to borrow the construct of job engagement from social psychology and organizational psychology to use as a dimension, and proxy, of resilience. Job engagement has been conceptualized as the polar opposite of job burnout, characterized by physical and psychological energy, strong involvement and commitment to one's job, and self-efficacy. As such, it represents a positive outcome in the context of occupational stress found in the human services. Because it is a positive outcome found in an environment characterized as stressful, adverse or high risk for burn-out, it is consistent with the construct of resilience. Having described the construct of job engagement, we will now address how this construct was utilized in the dissertation. Much more broadly, we will now address the research methods.

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5. RESEARCH METHODS

To review, we began by exploring the construct and theories of psychosocial resilience, then described the problem of occupational stress and burnout. We then explored job engagement as a way in which to conceptualize resilience in an occupational context. We now turn our attention to the dissertation research itself. In particular, the next section addresses (a) the aims of the dissertation; (b) the theoretical model utilized in the study; and (c) description of the research methods, (d) ethical considerations and (e) resources needed to conduct the dissertation.

A. Central Aims of the Dissertation

The central aim of this dissertation research was to identify the protective characteristics of resilient social workers at a large university health system. In particular, I assessed the level of resiliency, operationalized through a prominent job engagement scale (Maslach Burnout Inventory), among the social workers of the University of Michigan Health System. This procedure was intended to identify those workers who are most resilient, as operationalized through job engagement (the opposite of burnout). Once identified, this subgroup of resilient social workers underwent individual, qualitative interviews, in order to gain their appraisals of their protective factors. In particular, these interviews assessed protective factors, including both personal and environmental variables. In general, then, the central purpose of the study was to identify protective factors that contribute to resilience, or job engagement, among a sample of clinical social workers. Contextual-

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situational protective factors, as delineated by Maslach's job engagement theory, was given special consideration, as was social support and coping factors. These issues will be elaborated upon further below in the section on theoretical frameworks.

Secondarily, the study's purpose was that of a formative analysis, since it furnished information that guides program development (Rossi, Freeman & Lipsey, 1999). Specifically, it aimed to assist the staff of the social work department by providing the department with feedback about job satisfaction, job engagement and burn-out. To the degree that line staff and managers are aware of these aspects of work morale, they are in a position to address these issues. Assessment is the first step to staff development, so to speak. The formative, applied nature of the study is in keeping with traditional social work values and aims, since it attempted to be socially relevant by aiding a public service organization. Ultimately, it was hoped that the study would enhance the delivery of services to clients.

B. Theoretical Model Used in Study

The theoretical model utilized in this study elaborated upon Maslach's theory of job engagement. The model is depicted in the table directly below. As shown in the table, there are in a sense two related pathways tested in the study. In both cases, the study uses the same independent variables and dependent variables; the only difference is that the second pathway introduces a mediating variable. More specifically, the study used all of Maslach's independent variables: work load, job latitude, reward, job process, community, fairness and values. According to Maslach's formulation, which is adhered to in this study, these independent variables are postulated to affect the dependent

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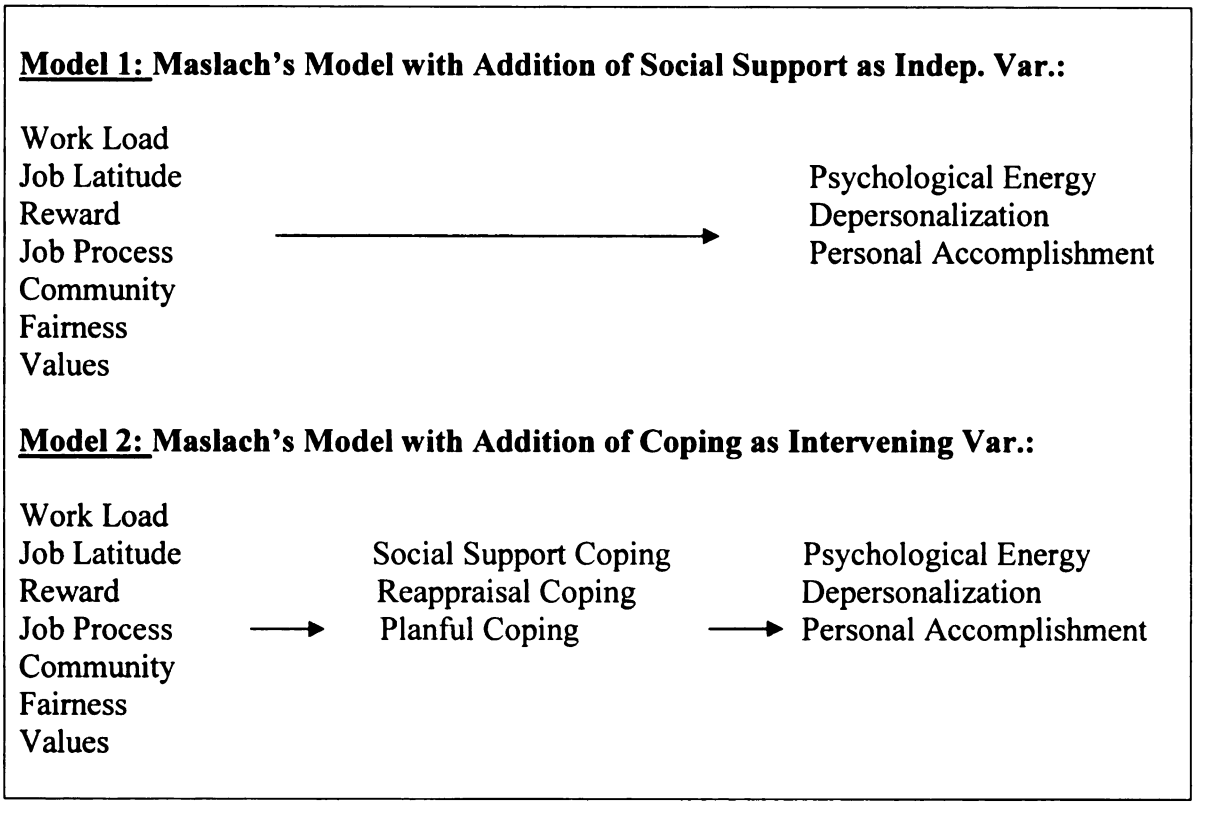
variable, job engagement, which is comprised of energy, involvement and effectiveness. In other words, there are two pathways by which the independent variables effect job engagement: one is a direct effect, without the influence of other factors, as shown by Model 1; the other is via the mediating variable, coping style, which has three dimensions (social support seeking, reappraisal and planful coping), as depicted in Model 2.

FIGURE 5.A.: Theoretical Models Utilized in Study



- **Model 1: Maslach's Job Engagement Theory**

Within the general area of occupational stress, Maslach's theory of job engagement was given most prominent attention. Specifically, Maslach's notion that job engagement is a function of fit between the worker and the seven occupational factors -- workload, job control, reward, process, community, fairness and values – was explored.

As discussed above, Maslach and Leiter (1997) proposed that the greater the gap, or mismatch, between the person and the job, the greater the likelihood of burnout (Cooper, 1998). Conversely, the greater the fit, or match, the greater the degree of job engagement. Accordingly, these seven person-environment matches provided the majority of the independent variables used in this dissertation's research model, i.e., they comprised seven of the eight independent variables.

- **Model 2: The Addition of Coping as a Mediating Variable**

Again, Model 2 elaborates upon Maslach's model of job engagement by adding coping style as a mediator of Maslach's job-situation and job engagement variables. Coping is a construct widely used in the resiliency and job stress literatures. Various definitions of coping have been proposed, including coping as a personality trait, state, style, disposition, strategy and process (Cooper, Dewe & O'Driscoll, 2001). Within this study, coping is defined in a manner consistent with Folkman's (1984) transactional definition of coping. In this view, coping is a variety of "cognitive and behavioral efforts to master, reduce or tolerate the internal or external demands that are created by the stressful transaction." Within this general definition offered by Folkman, a slightly more specific definition is employed in our study, as follows:

> *Coping is a variety of cognitive and behavioral efforts to master and reduce the internal and external demands that are created by stressful work transactions.*

This definition excludes the toleration of stressors portion of Folkman's definition. The omission is done since transcendence of stressors, not mere tolerance of them, is

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suggested by our resilience and job engagement constructs. Additionally, the addition of stressful work transactions is specified, given the vocational context of our focus.

Having defined our term, coping, we can explore how such coping comports with resilience and job stress. Within regard to the former, effective coping skills have generally been viewed as a protective factors that helps buffer the effects of stressors, thus leading to resilient outcomes. As mentioned earlier, Richardson et al. (1990) argued that coping with challenging life events in ways that provide the person with consequent protection is the essence of resilience. In this view, coping is thus a central part of the resilience process. In general, coping definitions and constructs have emphasized individual differences and intra-psychic functioning, rather than social phenomenon. A broader approach is adhered to here, in which personal and social functioning are addressed. Specifically, coping in this study is seen as a way in which individual functioning is effected by job-person fit variables, while at the same time individual coping acts on the environment through mechanisms such as seeking social support. As such, coping represents an individual-situation transaction that elaborates Maslach's organizationally oriented model.

More specifically, in this study, three dimensions of coping are addressed, that is, social support seeking, planful coping and positive reappraisal. The first of these, support seeking, has been identified within the resilience literature as an important resiliency characteristic. For instance, Werner and Johnson (1999) suggested the salience of social support in the neighborhood, school, church or community that reinforce self-esteem and self-efficacy and provide the individual with a set of positive values. Additionally, social support as a salient independent variable is also found in the literature on job stress. In

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fact, the job stress literature is replete with studies of the effects that support from others has on an individual's level of well-being and psychological strain (Cooper, 2001). For example, in their meta-analysis of 61 burnout studies reported in the research literature, Lee and Ashforth (1996) obtained significant negative correlations of social support (from various sources) with the frequency of emotional exhaustion and of supervisory support with emotional exhaustion and depersonalization. (However, no significant relationships were obtained between support and personal accomplishment.) Savacki (2002) likewise has noted this correlation between low supervisory support and emotional exhaustion and depersonalization. Similarly, several studies have obtained evidence for a negative relationship between social support from colleagues and supervisors and levels of burnout among employees.

The second of these, planful coping, can also be viewed as an adaptive form of coping. Planful coping contrasts with problematic dimensions such as escapist and defensive coping. Planful coping involves the attempt to resolve stressors, thereby diminishing them at the root level. In this way, planful coping is similar to problem-focused coping. Because of this adaptive affect of planful coping, it is included as a dimension of coping in this study that leads to job engagement. That is, it is put forth as an adaptive response that leads to resilience and job engagement.

The third dimension of coping used in this study is reappraisal coping. Reappraisal coping has been found to be associated with positive employment outcomes such as job satisfaction. It is also consistent with other predictors of positive employment outcomes such as optimism. Furthermore, reappraisal coping is consistent with cognitive-behavioral interventions, which similarly utilize positive thought content – which is akin

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to positive reappraisal -- to improve mood and behavior. In these ways, reappraisal coping is also hypothesized as one of our coping variables that leads to job engagement.

In sum, coping styles form an enduring approach to appraising and dealing with stressors (Lazarus, 1999). They are of course related to specific coping strategies that workers may employ in a given situation, but coping styles tend to be more pervasive and characteristic of the individual rather than the specific situation, according to Latack (1986). The style or strategy-based definition of coping employed in this study is contrasted with trait definitions of coping, which view coping as relatively stable personality characteristics that are not situationally determined. The style definition is employed in part because it has applied relevance. Specifically, it constitutes responses that are changeable and subject to intervention, rather than stable personality traits that are by definition resistant to change. In other words, by choosing a construct that is perhaps more responsive to change efforts, the research findings may be more socially relevant and actionable.

- **Qualitative Theory Building**

In addition to utilizing theory in a traditional, deductive manner to inform this study, qualitative approaches were also used. In particular, inductive, exploratory interviews were conducted that focused on a sample of social workers who were engaged in their jobs. The intent was to utilize more than one source of data, in the tradition of examining research subjects from as many perspectives as possible, termed triangulation (Snow & Anderson, 1993). This use of triangulation was intended to provide increased reliability and conceptual richness (Strauss, 1987). With regard to increasing conceptual richness, by not exclusively making a priori assumptions about protective factors and coping

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strategies, I hoped to glean data missing by the use of established scales. Support for this notion is provided by occupational stress authors who have argued that causes of work stress are not generalizable across contexts. For instance, Cooper, advocates using job-specific models of stress as a way of developing a better understanding of the relationship between the workplace and stress. According to this view, general models of workplace stress are not helpful in identifying the predictors of stress and job satisfaction in specific job contexts. Instead, the authors suggest identifying salient workplace dimensions rather than a broad-brush approach when seeking workplace associations with stress (Fairbrother & Warner, 2003). The qualitative interviews are intended to be explanatory as such, since they are meant to allow research participants to speak for themselves and their work experiences. Ultimately, the qualitative findings will be integrated with the quantitative findings, in order to utilize a fuller, multi-method approach to this study. Further description of these qualitative approaches is provided below, in the qualitative procedures section.

It also bears mentioning that an effort was made to maximize the input, influence, and "voice" of research participants. The reason for doing so was the assumption that, in many respects, the staff members, themselves, have expertise regarding their circumstances and lives, and therefore their standpoints should be highlighted. This is consistent with the Chicago School tradition of grasping the actors' viewpoints for understanding social process, interaction and social change (Strauss, 1987). In this case, the notion is that social workers, themselves, have insight and expertise in understanding their own resilience/engagement relative to the difficulties presented by their work lives.

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Cooper et al. (2001) suggest that the ability of conventional methods to adequately unravel the stress process has been intensely debated, and the case for exploring alternative methods is gathering momentum. If understanding the stress process is best advanced by exploring individual meanings and appraisal, then researchers must consider methods that capture the richness of the process and the idiographic nature of the experience. Qualitative techniques, according to this view, may represent the primary method of analysis when exploring the subtlety and richness of the stress-coping process. Thoits (1995) has argued that researcher should develop alternative techniques that are more faithful to the dynamic, unfolding nature of the phenomena under investigation. These alternative techniques include critical-incident interviewing, in which interviews focus specific stressful events, semi-structured interviewing that in certain respect parallels the diagnostic approach of a therapist building a model of the client's problem, open–ended questions using content analysis, and daily diary of panel survey methods (Cooper et al., 2001).

- **Summary**

In sum, there are two models that are being tested in this study. First, Maslach's model of job engagement is replicated, in which seven job-situation variables predict job engagement and job burnout. The seven predictors are work load, job latitude, reward, job process, community, fairness and values. Meanwhile, the three dimensions of the outcome variable are emotional exhaustion, depersonalization and personal accomplishment. The second model tested simply adds a mediating variable to the analysis. The mediating variable, coping style, is added as an elaboration to Maslach's

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formulation. Coping offers an important personal characteristic that has been empirically associated with burnout. Finally, in the qualitative interviews, an attempt was made to use an inductive approach to theory-building that minimizes the presumption of theoretical explanation prior to data gathering. Rather, research participants will be encouraged to speak more freely for themselves, with less imposition of my own theoretical explanations. In short, an attempt was made to use both quantitative and qualitative research methods.

C. Research Procedures

Again, the study's design blends both quantitative and qualitative approaches in a cross-sectional analysis. This latter, one-point-in-time perspective is consistent with much research on occupational stress (Cooper, Dewe and O'Driscoll, 2001). Although longitudinal research would clearly provide important causal insights, this study is not designed as such due to numerous pragmatic considerations, e.g., time constraints among staff and program intrusiveness.

The data collection occurred in two steps. The first step, which is quantitative, entailed the surveying of all department social workers in order to identify a resilient subgroup. The second procedure, which is qualitative, involves the interviewing of a subgroup of these social workers who have been deemed to be resilient in the job engagement domain. As such, the steps serve to bifurcate the study population into two samples – all social workers within the unit in step one and a sample of resilient social workers in step two. Further description of these steps and their samples are as follows

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- **Procedure I: Survey Research**

Procedure 1 assesses the general sample of all social workers at the Department of Social Work at University of Michigan Health System, totaling approximately 105 staff. All social workers have a graduate degree in social work (Master's in Social Work). Social workers are ranked at a variety of classifications, including Social Worker I, II, III and IV, based largely on years of experience. Workers at the first three of these rankings were included in the study, with those ranked Social Worker IV omitted due to the managerial nature of their work. A decision was made to include staff at the least experienced classifications level, Social Worker I, because Maslach's burnout theory suggests that relatively new human services workers are also susceptible to burnout and stress, not only experienced workers.

All departmental social workers referenced above were asked to participate (i.e., I, IIs and IIIs). The workers were then presented with the following surveys:

1. Maslach Burnout Inventory (MBI): The MBI is the pre-eminent scale of job burnout, a severe form of job strain. Meanwhile, it is also a scale of job engagement, which is posited as the opposite of job burnout. As mentioned earlier, the job engagement dimensions are physical and psychological energy, involvement and commitment to one's job, and self-efficacy (Maslach, 1998).

   Exploratory factor analyses of the MBI scales have tended to support the construct validity of the instrument, as well as its convergent and discriminant validity (Burke& Richardson, 1993), although Walkey and Green (1992) observed that emotional exhaustion and depersonalization merged into a single factor.

   Completion Time: The time needed to complete the scale typically ranges between 10-15 minutes, according to it's publishers.

2. Ways of Coping Scale: This scale was administered in order to measure the coping processes that staff utilize in order to manage their stress. This scale is the most widely used scale to measure the coping process. The scale includes

the following subscales used in the study: positive reappraisal, social support seeking and planful problem-solving.

Completion time: The time required to complete the scale is approximately 10 minutes, according to its authors.

3. Questionnaire Based on Maslach's Theory of Job Engagement: Maslach's theory of job engagement posits that such engagement is a function of seven areas of worker-job fit. Closely following this explanatory framework, I constructed a close-ended questionnaire. All seven aspects of job-person fit are included. Response alternatives were structured with Lickert scales, ranging as follows: 1 (strongly disagree), 2 (disagree), 3 (agree), 4 (strongly agree). The specific questionnaire items included, but were not limited to, the following:

   - The emotional support I receive from my supervisor reduces my work stress.
   - The practical support (such as advise) that I get from my supervisor reduces my work stress.
   - The emotional support that I receive from my work team reduces my work stress.
   - My work load is sustainable/doable
   - The support that I get from family reduces my work stress.
   - I can control my choices and decisions about how I conduct my work.
   - I enjoy doing my work.
   - I feel pride in doing my work.
   - My work place gives me a sense of community.
   - At work, I share praise, comfort, happiness and humor with people I like and respect.
   - Formal decision making is done fairly by my supervisors.
   - Performance evaluations are done fairly.
   - People in general are fair at work.
   - My values and principles are consistent with the values of my employer.

   Completion time: I am projecting that the time needed to complete the scale may be approximately 8-10 minutes. This time element will be more clear when I field test the questionnaire with a small group of social workers prior to the actual data collection phase.

- **Procedure II: Qualitative Interviews**

The second data collection procedure entailed the completion of qualitative interviews.

A sub-sample of social workers were selected for individual interviews, based on their

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high level of occupational resilience. That is, respondents who scored in the top 25% of the Maslach Burnout Inventory were defined as highly engaged in their jobs – the study's proxy for occupational resilience. Drawing from this top quartile of the population, a random sample of ten social workers were interviewed in order to further explore their perceptions of the protective factors and strategies that enhance their job engagement. More simply, a group of ten highly engaged social workers were randomly selected for qualitative interviews. As suggested earlier, these interviews were intended to be inductive, open-ended and exploratory, in keeping with traditional qualitative research methods. A sample of salient questions asked during these interviews is listed below.

- What factors most help you feel energized, involved and effective in your work?
- What factors most help you feel *satisfied with your job*?
- What *strategies* do you use to cope with job stress?
- What *personal qualities* do you have that help protect you from job stress?
- What *organizational factors* at work help protect you from job stress?
- What *factors outside of work* help protect you from job stress?
- What *additional factors* help protect you from job stress?
- What are the three biggest *stressors* in your job?
- Think of a time that you felt especially engaged in your job during the past six months. Why caused you to feel this way?
- Think of a time that you felt especially stressed in your job during the past six months. How did you cope? What

Due to the open-ended and exploratory nature of these questions, there were many follow-up questions that were difficult to project in advance. These follow-up questions were intended to provide further refinement to the initial responses offered by the participants. That is, such follow-up questioning were meant to generate the "thick description" that is often a goal of qualitative work. Interviews were taped and then transcribed into written notes, which were then analyzed in order to identify themes and commonalities across the participants' use of protective factors.

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Again, a multi-method approach was utilized in the study. That is, quantitative scales were administered to the overall study population of approximately 105 social workers, while qualitative, inductive interviews were used with a sub-sample of social workers deemed resilient. This multi-method approach is consistent with research recommendations in the occupational stress literature. For instance, Cooper, Dewe and O'Driscoll (2001) urged the use of qualitative research methods, in order to capture relevant data that are sometimes missed with the exclusive use of quantitative measures. These authors suggest that a combination of both quantitative and qualitative approaches enhances reliability and validity, and should therefore be utilized in combination. Accordingly, in this study, it seems that the use of quantitative, standardized scales did enhance the valid identification of staff persons who are engaged in their jobs. Additionally, it aided in the comparison of coping strategies used by resilient versus non-resilient social workers, insomuch as the standardized Ways of Coping questionnaire was administered to all social work staff. However, these quantitative scales intrinsically presume the categories of coping, which may not validly capture all coping strategies used by the staff. Consequently, the open-ended questions are included, in order to capture additional coping strategies and protective factors that are missing in standardized instruments.

The interviews typically took approximately an hour to complete. The interviews were semi-structured. Participants were asked to discuss their general strategies, strengths, coping mechanisms and abilities in dealing with job stress. Respondents were allowed to respond to these open-ended questions as they wished, and an effort was made to not influence their responses. After exhausting the subjects' own notions about these

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topics, they were asked to respond to more specific, close-ended questions about protective factors, such as identifying their own coping styles in the work place. Participants were repeatedly asked to add material that they viewed as relevant. An effort was made to allow respondents to explore issues as they spoke, without my being highly directive. In order to assure that my preconceived conceptualizations did not influence the respondents feedback, they were asked to think about their protective factors in their own terms.

Again steps were undertaken in order to identify themes, concepts and patterns in an inductive manner, which is characteristic of qualitative work (Strauss, 1987). More specifically, aspects of grounded theory were utilized in the interpretation of field notes and documents (Strauss, 1987). That is, the interview material was reviewed in order to identify salient factors and patterns that were relevant to job engagement and resiliency. In this way, it was intended that the data would generate job engagement and resiliency concepts, inductively, from the ground up so to speak.

The selection of the sample for these qualitative interviews was influenced by my employment at the research site. As an employee of the University of Michigan Health System's Department of Social Work, I needed to be particularly sensitive to potential staff concerns about confidentiality. Indeed, largely for this reason, I decided not to qualitatively interview respondents who are burned-out in their jobs. Such subjects may have felt threatened by interviews that define them as burned-out, since they may worry about being seen as less effective, less competent employees. This could negatively impact their sense of job security, thereby worsening their job stress. Because of this potential damaging effect, I chose to forego the use of a burned-out comparison group for

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my qualitative interviews. This decision is consistent with the notion that organizational operations should be left undamaged by applied researchers. From an applied perspective, this ethical consideration seems to outweigh the benefit of gathering qualitative data on the comparison group.

D. Access to Sample

Approval to conduct the study was granted by the Director of the Department of Social Work, Dr. Kathleen Wade. Per recommendation of Dr. Wade, I initially provided an overview of this research project to the departmental administrators at a management meeting, in order to optimize their support of the project prior to meeting with their respective work units. This was intended to maximize both project legitimacy, as well as response rate. Subsequently, I attended approximately ten separate social work team meetings, in order to administer the scales. Separate meetings were held with the following social work teams: medical/surgery, adult outpatient psychiatry, adult inpatient psychiatry, child outpatient psychiatry, child inpatient psychiatry, hemotology/oncology, transplant, emergency department, among others. At these meetings, I provided a general overview of the research project, discussed privacy and other protections set forth by the Institutional Review Board, and entertained questions.

Because attendance is never perfect at such team meetings, it was necessary to develop a follow-up strategy, in order to contact the entire population of social workers in the department. Accordingly, I telephoned all staff who were not present at the staff meetings, in order to request their participation in the study.

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E. Resources Utilized

Resources required to conduct the study included the following: First, were the time demands of data collection. One hundred and four surveys were distributed for Procedure 1 and 10 interviews were conducted for Procedure 2, totaling approximately 30 hours of meeting time with study participants. Secondly, there were costs associated with interpretation of the data; in particular, statistical consulting services. Third, the cost of the scales (Maslach Burnout Inventory and the Ways of Coping) totaled approximately $90. Fourth, there were costs associated with the transcription of audiotapes, which were generously funded in part by the Michigan State University School of Social Work. Fifth, and most substantially, were the time requirements of writing drafts of the dissertation, subsequent to the data collection phase. Meanwhile, travel time and costs were not extensive because the data collection occurred in my home community.

F. Analyses Performed

Quantitative analyses were conducted for the survey research portion of the study. In this domain, a number of analyses were undertaken. First, descriptive statistics were obtained for the independent, intervening and dependent variables. In particular, mean scores on the three dimensions of job engagement were obtained for the sample. Additionally, alpha coefficients were secured for the subscales, in order to assure internal consistency of the subscale items. Further, correlations between the dimensions of the variables were obtained. Subsequently, the core portion of the analysis was performed, as follows. First, a multiple regression test of Maslach's model was performed (Model 1). Second, a path analysis and hierarchical analysis of the mediated model was performed (Model 2),

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including the following steps. First, multiple regression analyses were performed for the relationship between the independent and dependent variables, that is, between Maslach's job-person fit variables and the dimensions of job engagement. Subsequently, multiple regression analyses were performed on the relationship between the independent variables and the intervening variables (coping styles). Thereafter, multiple regression analyses were performed on the relationship between the intervening variables (coping styles) on job engagement. Finally, a hierarchical regression analysis was performed in order to further assess the level of mediation by the proposed mediating variables, coping styles. In sum, these analyses provide a test of the elaboration of Maslach's job engagement model.

G. Demographic Description of Sample

To provide a general introduction to our sample, we will now review its demographic profile, including statistics on age, marital status, race, and gender, as follows.

- **Age**

Age statistics for the sample are indicated in the table below. The mean age is 44.4, with the youngest worker being 23 and the oldest being 67 years old. The median is 47.5 years old. The mode is 37 years. The standard deviation was 11.83 years, meaning that 68% of the population is clustered between 32 and 56 years of age (assuming a normal distribution). On whole, these figures suggest that the sample is a relatively seasoned group of social workers. This finding is important relative to the level of job engagement in this sample, insomuch as job burnout has been found to diminish with years of job experience. There are at least two reasons for this association: first, staff who experience

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job burnout often leave their profession, self-selecting out of the field. Second, seasoned staff may better manage job stress than younger workers due to factors such as increased maturity, enhanced coping skills, lowered idealism and other psychosocial factors. As such, age offers an explanation for the high level of job engagement in this sample. However, an extensive analysis of this issue is not pursued in this study, since it not germane to the focus on our model testing: it does not pertain to the person-job fit analysis addressed here.

TABLE 5.A.: Age Statistics

N	Valid	70
	Missing	3
Mean Age		44.4000
Median		47.5000
Mode		37.00
Std. Deviation		11.8363
Variance		140.099
Range		44.00
Minimum		23.00
Maximum		67.00

- **Marital Status**

As indicated in the table below, the majority of staff among the sample is married. That is, 45 of the 73 sampled staff are married, roughly 62%. Meanwhile, 13 or roughly 18% of the sample is widowed. This percentage of widowed staff appears relatively high. To the degree that it is unrepresentatively high compared to wider populations, it may heighten the extent of job engagement in this sample. For example, insomuch as increased years of experience has been associated with a reduction in burnout, as discussed above, this high percentage of widowed staff may explain part of the reason for high job engagement among this sample (assuming that these widows are, on balance,

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highly experienced.) On another front, only 1 or 1% of the sample is divorced or separated. This low percentage of separated and divorced staff may also explain a high rate of job engagement, since our sample is less impacted by socio-economic stressors associated with divorce/separation, e.g., increased poverty and role strain. This again is germane to the high level of job engagement, since it offers an alternative explanation for the high level of job engagement among social workers in this sample. That is to say, since economic security is relatively high among married women, economic stress may be a diminished variable within this sample. Interestingly, social workers selected for qualitative interviews comment on this very point, speculating that social workers with partners may experience lowered levels of job stress.

TABLE 5.B.: Marital Status of Staff

		Frequency	Percent	Valid Percent	Cumulative Percent
	Single	11	15.1	15.7	15.7
	Married	45	61.6	64.3	80.0
	Widowed	13	17.8	18.6	98.6
	Separated/Divorc.	1	1.4	1.4	100.0
	Total	70	95.9	100.0	
Missing	System	3	4.1		
Total		73	100.0		

- **Race**

Another demographic characteristic that may have significance for the outcome variable is race. In this sample, 61or 83.6% of the study sample is white; 5 or 7% is black; 4 or 6% is Asian; 1 or 1.4% is Hispanic and 2 or 3% is defined as "other." This may have

implications for the outcome variable, job engagement. Furthermore, to the extent that race is associated with marital status, this may represent a relatively economically stable sample. If so, variable may be confounded with the independent variables in Maslach's framework. It also raises questions as to whether the framework is applicable across ethnic and racial cultures, across cultural categories.

TABLE 5.C.: Racial Composition of Sample

	Frequency	Percent
White	61	83.6
Black	5	6.8
Hispanic	1	1.4
Asian	4	5.5
Other	2	2.7
Total	73	100.0

- **Number of Children:**

As indicated below, the largest percentage of UMHS social workers had no children, that is 38.1% of the respondents. There was, however, a moderate degree of missing data for this item, i.e., 6 of 73 items were not completed. (This was due to research subjects not responding to a follow-up question on the form.) Therefore, the reliability of these data is reduced to some degree, suggesting that a degree of caution is required in interpreting this variable. In any event, it is possible that this high percentage of staff without children impacted the high degree of job engagement in this sample, as this reduces family-work role conflict and so called "daily hassles" for this sample. Additionally,

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from an economic perspective, this high percentage of staff with no children suggests that economic hardship and its attendant stress may be diminished within his sample.

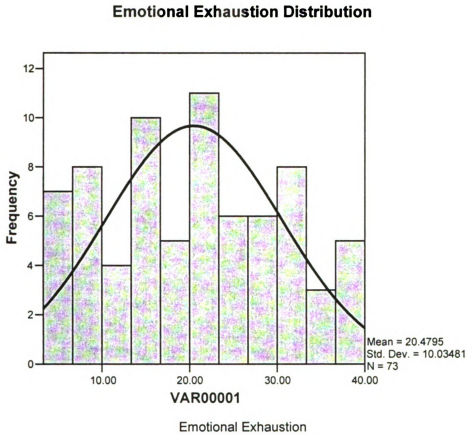
TABLE 5.D.: Number of Children by Staff

	Frequency	Percent
0 Child	28	38.4
1 Child	13	17.8
2 Children	17	23.3
3 Children	6	8.2
4 Children	2	2.7
5 Children	1	1.4
Total	67	91.8
Missing	6	8.2

E. Distribution of Scores for Outcome Variable

At this juncture, the degree of normality of the frequency distributions is presented, given that such normality is a prerequisite of statistical tests undertaken in the analysis. The distributions of scores for each dimension are presented separately below in graphical form in the tables below, beginning with a table regarding emotional exhaustion. As can be seen by these scores, skewness approaches normalcy, as neither tail of the distribution deviates strongly from symmetry. Similarly, kurtosis approaches normalcy as well, since the shape of the curve does not strongly deviate from the bell curve, i.e., it is not highly peaked or flat.

FIGURE 5.B.: Distribution of Emotional Exhaustion



The distribution of responses for the depersonalization scale are illustrated on the below graph. As the graph shows, the distribution of scores is positively skewed with a high number of scores with low values. However, the skewing is within the + 2.0 threshold, again meaning that it is generally acceptable. Substantively, this shows that a high percent of respondents reported low levels of depersonalization scores, a positive finding

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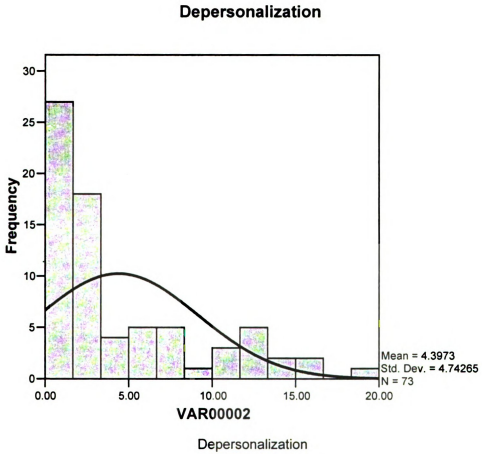
for this sample. Meanwhile, the graph reflects the .58 kurtosis score, inasmuch as the curve is not highly peaked or flat.

FIGURE 5.C.: Distribution of Depersonalization



The distribution of personal accomplishment responses is illustrated in the graph below. As the graph shows, the kurtosis is very high, indicating that the scores are highly peaked. This again reflects a deviation from a normal distribution, suggesting that the

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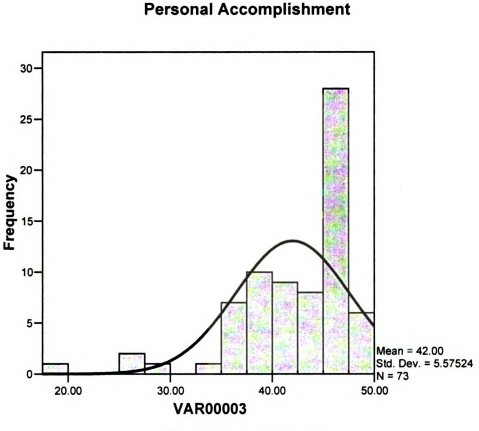
findings of our statistical tests be interpreted with a degree of caution. On a substantive level, this reflects that the sample demonstrates a higher degree of personal accomplishment, since the peak occurs at the high end of the distribution.

FIGURE 5.D.: Distribution of Personal Accomplishment



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Having described the methods used in this study, we now turn our attention to the findings themselves. The statistical findings for the survey research portion of the study follow next.

6. QUANTITATIVE FINDINGS

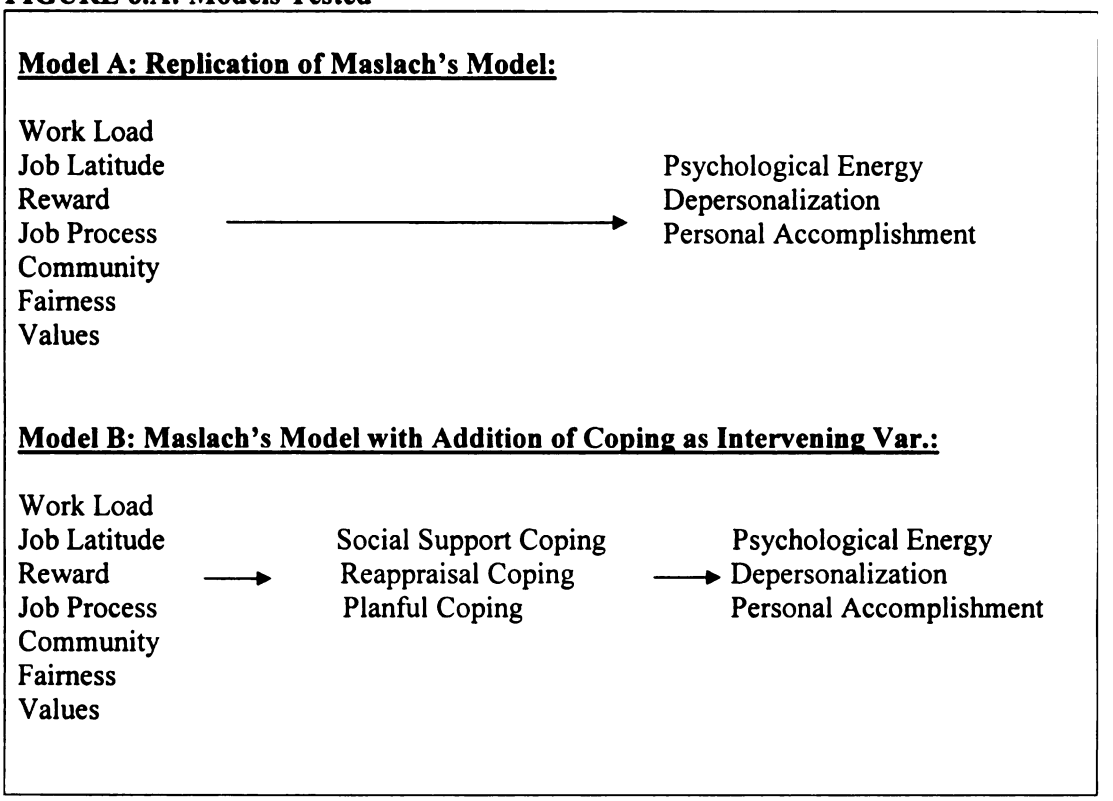
- **Introduction**

This chapter presents the statistical analysis undertaken to examine the job engagement model. Specifically, the chapter is divided into two portions. First, descriptive statistics are presented regarding the level of job engagement found among our sample and concerning our job-person fit variables. Subsequently, the inter-correlations of the job engagement scores are discussed, as are the alpha scores for the subscales used on the questionnaires.

Secondly, the statistical findings are explored. In general, the findings of a path analysis are reported on the proposed model, in which job-person fit variables are posited as independent variables, with coping style as the intervening variable, and job engagement as the dependent variable. Additionally, the direct effects of job-person fit variables on job engagement are also explored, without regard to an intervening variable. In particular, Pearson correlations and multiple regression finding are presented concerning these associations.

Taken together, the analysis undertaken in this chapter is conducted in order to test two models of job engagement. Both models are depicted in the table below. The first model essentially replicates Maslach's model of job engagement. The second model adds three styles of coping – reappraisal coping, planful coping and social support seeking -- as intervening variables in what is otherwise Maslach's same model of job engagement.

FIGURE 6.A: Models Tested



I. Descriptive Statistics

By way of introduction, we start by describing the extent of job engagement among the social workers in the sample. In particular, the mean scores on the three dimensions of job engagement are described relative to a wider comparison group. These findings follow.

A. Job Engagement Levels

The level of job engagement is strikingly high among the UMHS social workers, as indicated in the table directly below. In particular, the mean scores for all three MBI dimensions demonstrates that the UMHS social workers are more engaged in their jobs

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than a comparison sample drawn by Maslach, Jackson and Leiter (1996). This finding suggests that the UMHS Department of Social Work staff is more engaged in their work than the comparison sample published by the authors of the scale. Although their sample may not be fully representative of all United States social workers, a claim the authors do not make, it nevertheless serves as a benchmark against which to compare this UMHS sample.

The mean scores for the specific subscales or dimensions of job engagement are as follows. First, concerning emotional exhaustion, the UMHS social workers mean score is 20.47. This is lower than the mean score among 1,538 human services workers sampled by Maslach, Jackson and Jackson (1996), which was 21.25. This is more than a full point higher level of fatigue than the UMHS social workers. Second, the mean score for depersonalization among UMHS social workers is 4.39. The comparison mean among human services staff sampled by Maslach et al. (1996) is 7.46, which is substantially higher. This suggests that the level of depersonalization among UMHS social workers is substantially lower than the comparison. This is a second indication of higher job engagement among the UMHS staff. The third and final dimension of the MBI, personal accomplishment, shows a mean score of 42.0. This compares with the comparison mean of 32.75. Once again this suggests a higher level of job engagement among the UMHS social work group. Taken together, these UMHS scores demonstrate a consistently higher level of job engagement across dimension, relative to the comparison group.

While the UMHS mean scores are consistently higher than that of their comparison groups, as described above, the scores are rated differently by the MBI authors. That is, according to Maslach et al's scoring guidelines, the UMHS mean level of emotional

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exhaustion demonstrates a moderate level of burnout, while the depersonalization and personal accomplishment scores show low levels of burnout. More specifically, the emotional exhaustion score of 20.45 is in the moderate range, which is in between 17 and 26. On the other hand, the depersonalization score of 4.39 is in the low range which is between 0 and 6. Similarly, the personal accomplishment score shows that UMHS feel a high level of accomplishment. Taken together, these findings suggest that depersonalization and accomplishment scores show particularly high levels of job engagement according to the authors' ratings, while the UMHS mean of emotional exhaustion shows a moderate degree of exhaustion. Not withstanding this caveat regarding emotional exhaustion dimension, all three dimensions are higher than the comparison group, as mentioned earlier.

B. Normalcy of Job Engagement Distributions

Having briefly discussed the mean scores relative to a comparison group, we now turn our attention to the distribution of scores generally. These findings are reflected in the table below.

TABLE 6.A: Descriptive Statistics for Emotional Exhaustion, Depersonalization and Personal Accomplishment

		Emotional Exhaustion	Depersonal-Ization	Personal Accompl-ishment
N	Valid	73	73	73
	Missing	0	0	0
Mean		20.48	4.39	42.00
Std. Error of Mean		1.17	.56	.65
Median		20.00	2.00	44.00
Mode		4.00	1.00	45.00
Std. Deviation		10.03	4.74	5.57
Variance		100.69	22.49	31.08
Skewness		**.109**	**1.25**	**-1.71**
Std. Error of Skewness		.281	.28	.281
Kurtosis		**-.912**	**.58**	**3.86**
Std. Error of Kurtosis		.555	.56	.56
Range		36.00	19.00	29.00
Minimum		4.00	.00	19.00
Maximum		40.00	19.00	48.00

With regard to the distribution of scores, we see that most indicators of normal distributions are met for all three dimensions of job engagement. Specifically, the skewness and kurtosis scores, which are both highlighted above, are generally within the guidelines of $\pm$ 2.0. That is, all the indicators of skewness fall within this $\pm$ 2.0 range, and two of the three indicators of kurtosis do as well. The only indicator that falls outside this guideline is the kurtosis score for the personal accomplishment dimension. Therefore, the assumptions of normal distributions underlying this chapter's statistical tests are generally met, with the exception that caution is needed with regard to the personal accomplishment dimension, since the kurtosis score is high. (Recall, skewness is a measures of the degree to which a distribution of values deviate from symmetry around the mean, with a value of zero representing a symmetric or evenly balanced distribution, a positive value indicating a greater number of smaller values, and a

negative value indicating a greater number of larger values. Meanwhile, kurtosis addresses whether the distribution is too peaked or too flat to be considered normal. A kurtosis value near zero indicates a shape close to normal. A positive value indicates a distribution more peaked than normal. A negative score indicates a shape flatter than normal (George and Mallery,2003).

C. Inter-Correlations of the Job Engagement Dimensions

Having explored the descriptive statistics of the job engagement dimensions, we now turn our attention to their inter-correlations. These mutual relationships of emotional exhaustion, depersonalization and personal accomplishment are shown in the table below. As the table demonstrates, all three dimensions are inter-correlated at the .01 level of significance. Specifically, personal accomplishment is inversely correlated with both exhaustion and depersonalization, while the latter two are positively correlated with each other. This is an artifact of the test construction: high scores on personal accomplishment represent good outcomes, which is not the case on the other two dimensions. That is, higher scores on exhaustion and depersonalization reflect poor outcomes. It stands to reason that the correlations would reflect this fact.

TABLE 6.B.: Inter-correlations of Job Engagement Dimensions

	1	2	3
Exhaustion	1.00		
Depersonalization	.53**	1.00	
Personal Accomplish.	-.32**	-.55**	1.00

$p \leq .05$; (2-tailed). **$p \leq .01$ (2-tailed)

Among these relationships, the correlation between personal accomplishment and exhaustion was the lowest. However, it was nevertheless a statistically significant correlation. Meanwhile, depersonalization was more strongly inter-correlated than were the other dimensions. The moderate correlations among these three dimensions of job engagement support Maslach's contention that job engagement has three dimensions. On the other hand, the relatively high inter-correlation may suggest that the dimensions do not represent independent phenomenon, but rather measure the same constructs that overlap. This issue will be taken up under the multiple regression section later in this chapter. We now turn our attention to the findings concerning Maslach's job-person fit variables as they relate to the dependent variable, job engagement.

D. Descriptive Statistics for Independent Variables

As a further preface to the statistical findings, it merits reviewing the descriptive statistics for the independent variable, job-person fit. To begin with, by assessing the respective means for each independent variable, some clues to our findings arise. For instance, the means for both social support and values are especially high; at 12.8 and 12.2 they are the second and third highest means among the independent variables. This hints at their limited dispersion, which diminishes their correlations with job engagement, as discussed further below.

The descriptive statistics also show that the distributions of scores for the job-person fit scales generally reflect normality. To begin with, the kurtosis scores, below, show that the independent variables are generally inside the recommended guideline. Specifically, all of the variables except for values are within the recommended range of + 2.0. In this

case, the frequency of responses near the mean were very high, resulting in a highly peaked distribution. Secondly, the skewness scores also generally reflect normality in the distributions. Specifically, six of the eight scores are within the + 1.0 range and the other two are within + 2.0, suggesting that the skewness did not constitute problematic deviation from symmetry around the mean. Taken together, these statistics suggests that this criterion of the normal distribution is generally met, which is relevant for the statistical tests to follow.

TABLE 6.C: Descriptive Statistics for Job-Person Fit Variables

		Social Support	Work Load	Job Latit-ude	Reward	Work Process	Commun-it y	Fairness	Values
N	Valid	73	73	73	73	73	73	72	72
	Missing	0	0	0	0	0	0	1	1
Mean		12.7945	9.9041	11.6986	8.3973	14.7534	11.8767	11.7361	12.2083
Std. Error of Mean		.25505	.34188	.22385	.31378	.16642	.25280	.26240	.27332
Median		13.0000	10.0000	12.0000	8.0000	15.0000	12.0000	12.0000	12.0000
Mode		12.00	12.00	12.00	4.00(a)	16.00	12.00	12.00	12.00
Std. Deviation		2.17919	2.92102	1.91257	2.68090	1.42186	2.15989	2.22656	2.31916
Variance		4.749	8.532	3.658	7.187	2.022	4.665	4.958	5.379
Skewness		**-.284**	**-.401**	**.200**	**-.101**	**-.950**	**.155**	**-.327**	**-1.313**
Std. Error of Skewness		.281	.281	.281	.281	.281	.281	.283	.283
Kurtosis		**-.25**	**-.46**	**.34**	**-1.01**	**-.15**	**-.41**	**.57**	**5.35**
Std. Error of Kurtosis		.555	.555	.555	.555	.555	.555	.559	.559
Range		9.00	12.00	9.00	9.00	5.00	9.00	10.00	14.00
Minimum		7.00	4.00	7.00	4.00	11.00	7.00	6.00	2.00
Maximum		16.00	16.00	16.00	13.00	16.00	16.00	16.00	16.00

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E. Reliability of Subscales

To test the internal consistency of all subscales used in the study, the alpha coefficient of these subscales was determined. The results of these test show that the alphas were generally high, meaning that the items within the subscales were measuring the same phenomenon. Specifically, the coefficients were generally within the .70-.80 range. However, there were exceptions to this general finding. In particular, the reliability alphas for the independent variable, social support, was especially low at .53. The only other alpha in the 50s was the intervening variable, distancing, with an alpha of .59. All other alphas were in the mid-sixties and higher.

TABLE 6.D.: Reliability Statistics for Scales

	Cronbach's Alpha	Cronbach's Alpha Standardized	N of items
Dependent Variables:			
MIBI Personal Accomplishment	.83	.83	8
MBI Depersonalization	.78	.80	5
MBI Emotional Exhaustion	.89	.89	9
Independent Variables:			
Workload	.84	.84	4
Job Latitude	.81	.84	4
Reward	.70	.72	4
Work Process	.69	.72	4
Community	.75	.76	4
Fairness	.83	.83	4
Values	.72	.75	4
Intervening Variable – Coping Style:			
Seeking Social Support	.72	.70	6
Planful Problem Solving	.65	.64	6
Positive Reappraisal	.77	.77	7

The alphas of the MBI subscales were the highest as a group. This is consistent with the fact that within this study this subscale is utilized in the most standard fashion as compared to the other scales. In other words, the MBI is administered in this study consistently with Maslach et al.'s administrations elsewhere. In contrast, the other two scales in this study (Job-Person Fit and Ways of Coping) were administered in innovative ways. Job-Person Fit was entirely new, in that I constructed it for this study, in accordance with Maslach's job fit theory. Second, the Ways of Coping Scale, while standardized, addressed vocational coping in this study – a deviation from its general use elsewhere. Because these two scales were administered in these novel ways, responses among the subscale items may have diverged at a higher rate than the MBI. Nonetheless, the overall reliability ratings were relatively high across the various scales, suggesting that the scales were consistently measuring the same phenomenon. The relatively high reliability for the newly constructed job-person fit scale was especially notable.

II. Replication of Maslach's Model: Job-Person Fit Variables as Determinants of Job Engagement

Above we provided an overview of the descriptive statistics and explored the normalcy of the distributions for each of the variables under study. We now present the findings for the statistical tests performed, in order to shed light on our research hypotheses. That is, we will explore the correlations, multiple regression findings and standardized beta scores that test our model of job engagement. We begin with the Pearson correlations used to test the direct relationship between job-person fit variables and job engagement, without regard to coping as an intervening variable.

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A. Overview of Pearson Correlations

The table below provides a general overview of the correlations among the independent and dependent variables in Maslach's model. That is, the table shows the correlations found among the independent variables in the job-person fit scale, i.e., social support, work load, job attitude, reward, process, community, fairness and values. The table also addresses the correlations among the dependent variable scales measuring job engagement, i.e., emotional exhaustion, depersonalization and personal accomplishment. As the table shows, there are were significant correlations between these variables.

TABLE 6.E.: Correlations of Independent and Dependent Variables (Pearson's r)

		1	2	3	4	5	6	7	8	9	10	11
1.	Exhaustion	1.00										
2.	Depersonal-Ization	.53**	1.00									
3.	Personal Accomplishment	-.32**	-.55**	1.00								
4.	Soc. Support	-.19	-.15	.20	1.00							
5.	Work Load	-.48**	-.20	.17	.29*	1.00						
6.	Job Latitude	-.49**	-.38**	.31**	.29*	.37**	1.00					
7.	Reward	-.44**	-.38**	.29*	.35**	.43**	.48**	1.00				
8.	Process	-.41**	-.48**	.49**	.06	.08	.27*	.22	1.00			
9.	Community	-.30**	-.38**	.42**	.46**	.19	.39**	.34**	.18	1.00		
10.	Fairness	-.40**	-.30*	.17	.36**	.41**	.47**	.36**	.28*	.44 **	1.00	
11.	Values	-.08	-.39**	.23	.20	.15	.15	.06	.14	.20	.25*	1.00

*p≤.05; (2-tailed). **p≤.01 (2-tailed)

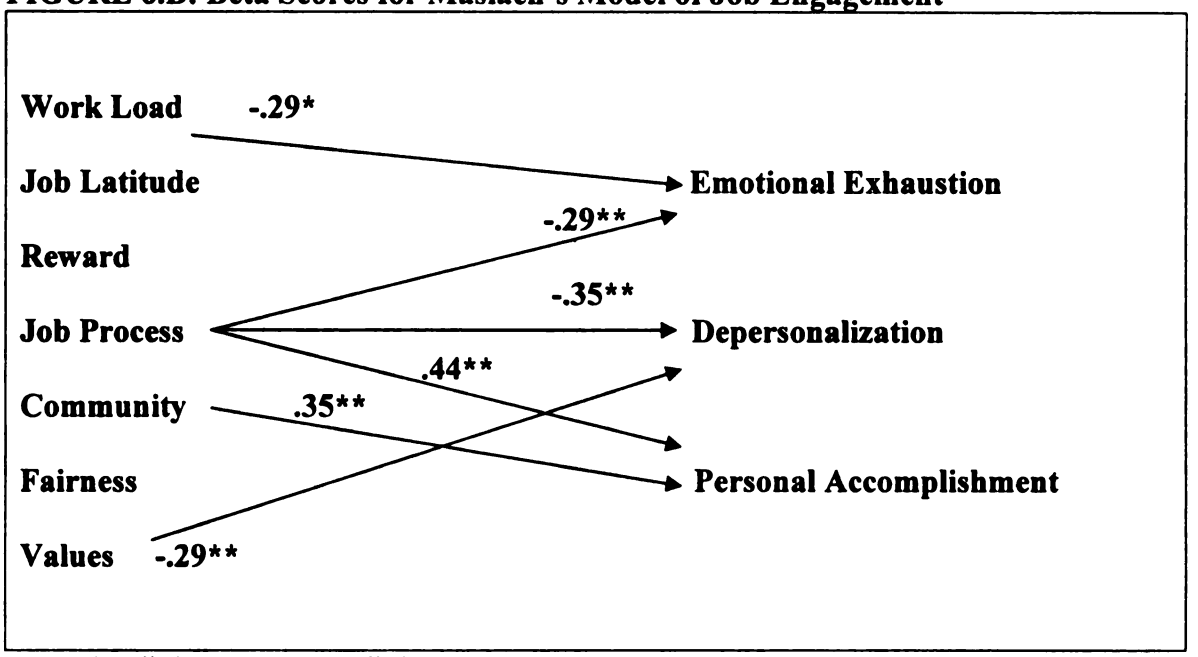
This table above demonstrates a number of general findings. First and foremost, the extent of the inter-correlations between the independent and dependent variables is striking. That is, the majority of the job-person fit variables are correlated with all three dimensions of job engagement. In other words, work load, latitude, reward, process, community, fairness and values all relate to each of the three job engagement dimensions at the .01 level of significance. The only job-person variables that do not meet this standard are as follows. Work load and values were not related to the three job engagement dimensions. And fairness was unrelated to one of the three job engagement dimensions, personal accomplishment. Otherwise, all job-person variables were significantly associated with the job engagement dimensions.

However, the correlations findings do not take into consideration the colliniarity problems occurring between the independent variables. That is, some of these correlations may be specious and may diminish when other variables are controlled. As such, the most salient interpretation of the correlational findings between the independent and dependent variables is that those independent variables that fail to meet significance may be ruled out as part of the proposed model. Nonetheless, the failure to meet statistical significance will be corroborated in the multiple regression analysis. In any event, elaboration of these finding will be provided further below as we more narrowly discuss each portion of our model testing. These correlations are presented here primarily to demonstrate the high degree of inter-correlation among the independent and dependent variables, and as a general overview.

B. Overview of Multiple Regression Findings

In a similar vein, the table below outlines the findings for the regression analysis, in order to provide a general overview. The specific findings regarding these statistics are addressed further below when statistics for each job engagement dimension is discussed. At this juncture, the below table demonstrates the general results that many of significance findings of the Pearson correlations fail to meet such significance under the multiple regression analyses. This failure is due to the multiple regression test's ability to control for respective independent variables within the model. Specifically, social support, job latitude, and reward do not reach statistical significance, meaning that they are not supported in the model. As such, the independent variables supported by the multiple regression analyses were work load, work process, community, fairness and values. That is to say, five of Maslach's seven independent variables were supported by the regression findings, while two were not. Meanwhile, the addition of social support as an independent variable in this study was not supported by the regression findings, nor was is su.pported by the previous Pearson correlation findings.

FIGURE 6.B: Beta Scores for Maslach's Model of Job Engagement



p≤.05; (2-tailed). **p≤.01 (2-tailed)

1. Job-Person Fit Determinants of Emotional Exhaustion

Having given a general description of our findings, we will now narrow our focus. We begin with a review of the emotional exhaustion dimension of job engagement, presented in two tables directly below. To begin with, 45% of the variance in emotional exhaustion is explained by the variables in the model (R Square = .448). Indeed, the significance score demonstrates that the job-person fit variables have a statistically significant effect on emotional exhaustion. Specifically, the ANOVA findings show that the model exceeds the .01 level of confidence (F score = 6.40; $p < .001$).

Having determined that the job-person fit variables, as a whole, determine emotional exhaustion beyond the .05 threshold, we now examine the specific relationships between these independent variables and emotional exhaustion. As the table directly below clearly shows, the correlational findings demonstrate that six of the eight job-person independent variables were significant predictors of emotional

exhaustion. In order of importance, job latitude, work load, reward, work process, fairness and community all are statistically significant correlates of emotional exhaustion. In contrast, the only independent variables that did not reach statistical significance were social support and values.

TABLE 6.F.: Job-Person Fit Determinants of Emotional Exhaustion

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	79.006	11.034		7.160	.000			
	Workload	-1.007	.393	**-.287**	-2.561	**.013**	-.465	-.305	-.239
	Latitude	-1.015	.624	-.194	-1.627	.109	-.482	-.199	-.152
	Reward	-.456	.444	-.122	-1.028	.308	-.460	-.127	-.096
	Process	-2.014	.700	**-.288**	-2.878	**.005**	-.412	-.339	-.269
	Community	-.360	.503	-.078	-.716	.477	-.314	-.089	-.067
	Fairness	-.220	.535	-.049	-.410	.683	-.399	-.051	-.038
	Values	.297	.423	.069	.702	.485	-.081	.087	.066

Also included in the above table are the multiple regression findings for the emotional exhaustion dimension. In contrast with the above Pearson correlation findings, the only independent variables that reached statistical significance were work load and work process. Not surprisingly, both of these variables were among the strongest correlates of emotional exhaustion in the Pearson correlations discussed above. However, other variables which were significantly correlated with emotional exhaustion washed-out, so to speak, in the multiple regression analysis. Specifically, job latitude, reward, community, fairness and values all failed to reach the .05 level of significance. Meanwhile, social support and values failed under both the Pearson correlation and multiple regression.

Substantively, what is interesting is that work load and work process remain statistically significant. This finding supports the notion that inherent and central aspects

of the work, itself, are at the core of job engagement, rather than extrinsic factors such as reward and community. In a sense, this suggests that job burnout results from high work demands and lack of enjoyment of work process no matter the nature of the extraneous variables such as reward and values. In the case of work load, this finding makes intuitive sense, because high work load would seem to lead to higher levels of effort, and consequently, to exhaustion. Conversely, those who view their workloads as being reasonable, will tend to be energized, or at least not exhausted, by their work.

Meanwhile, it should be kept in mind that this measurement involves subjective perception of factors such as job workload, rather than an "objective" measure of workload. In other words, what is at issue relative to job-person fit variables is the workers' view of their situations, rather than objective variables such as caseload. That is, workers who perceive that their work demands are high, presumably will feel more exhaustion than those who believe otherwise. In actuality, the job-person fit scales measure this subjective perception, rather than some objective aspect of work load.

2. Job-Person Fit Determinants of Depersonalization

We now review the depersonalization dimension of job engagement, presented in the tables below. The tables indicate that the Maslach's job-person fit variables are statistically significant predictors of depersonalization. Specifically, the R square value indicates that 44.7% of the variance in depersonalization is determined by the model as a whole, a substantial effect. Furthermore, the significance score demonstrates that the job-person fit variables have a statistically significant effect on depersonalization ($F = 6.37$; $p < .001$).

To extend this analysis of depersonalization as a dependent variable in this model, multiple regression analyses were performed, as indicated in the table below. Clearly, the only predictors of depersonalization that maintained statistical significance under this test were work process and values. Interestingly, the former, work process, is the only predictor that is statistically significant for both the emotional exhaustion and depersonalization outcome dimensions addressed to this point. As such, work process is the strongest, most salient predictor of job engagement thus far. This important finding suggests that it is the inherent nature of the work, itself, which is most germane to job engagement, at least in this sample.

TABLE 6.G.: Job-Person Fit Determinants of Depersonalization

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	38.175	5.224		7.308	.000			
	Workload	-.053	.186	-.032	-.283	.778	-.233	-.035	-.026
	Latitude	-.315	.295	-.127	-1.068	.289	-.395	-.132	-.100
	Reward	-.293	.210	-.166	-1.395	.168	-.368	-.172	-.130
	Process	-1.171	.331	**-.353**	-3.537	**.001**	-.476	-.404	-.330
	Community	-.402	.238	-.184	-1.687	.096	-.378	-.206	-.157
	Fairness	.192	.254	.090	.757	.452	-.296	.094	.071
	Values	-.594	.200	**-.290**	-2.962	**.004**	-.389	-.347	-.276

In contrast, the statistical significance of values only holds in its relationship to the depersonalization outcome addressed here, not to the aforementioned emotional exhaustion outcome. Again, this is not entirely surprising. Because values comprise an extrinsic variable with regard to work, focused more on job milieu, it makes sense that it would be significantly tied to depersonalization, another extrinsic variable. Conversely,

it understandably is not statistically related to emotional exhaustion, because exhaustion is a function of the amount or quantity of work, work load. This finding suggests that if an organization is interested in improving its workers treatment of clients, values have an important role.

3. Job-Person Fit Determinants of Personal Accomplishment

We now explore the relationship between our job-person fit variables and the third and final dimension of job engagement, personal accomplishment. First, 41% of the variance in the dependent variable is determined by the predictors in the model. Second, the significance score demonstrates that the job-person fit variables have a statistically significant effect on personal accomplishment. Specifically, the ANOVA findings show that the model exceeds the .01 level of confidence (F score = 5.50; $p < .001$).

The table below addresses the statistics for our personal accomplishment dimension of job engagement. The first of these statistics, the Pearson correlations, reveal that in total, four of the eight independent variables reached statistical significance at the .01 degree of confidence. Specifically, job latitude, reward, process and community all reached the .01 threshold in the Pearson correlations. Meanwhile, social support, work load, fairness and values all failed to reach statistical significance. The failure of social support here is consistent with its failure to correlate significantly with the other two dimensions of job engagement – emotional exhaustion and depersonalization. Additionally, the failure of work load to reach statistical significance is notable, because this variable was an important and statistically significant predictor of emotional

exhaustion, while here, in its relationship to personal accomplishment, it generated the second lowest correlation.

The multiple regression findings show that, fairness, community and process all reach statistical significance. Perhaps most striking is that work process was once again significant, as it was for the other two dimensions of job engagement. As such, it is the only job-person fit variable that reached significance on every statistical test performed thus far. One obvious interpretation of this finding is that work process is the most essential and inherent aspect of one's work, involving the day to day flow of work. In other words, one's ability to enjoy the very process of one's work is the most predictive measure of job engagement.

Another, more problematic interpretation, of this result is that work process as a determinant of job engagement actually represents a tautology. In other words, the ability to enjoy the process of one's work, rather than being a separate phenomenon from job engagement, and a determinant of it, is instead a part of job engagement itself. Accordingly, it would naturally be strongly related to multiple regressions, above, because it actually is part of such engagement. A defense to this criticism may be that while work process appears to be tautological, it actually is not, at least in Maslach's formulation. That is, because enjoyment of one's work process is technically a different phenomenon from psychological energy, depersonalization and personal accomplishment, it is not tautological. However, the weakness to this defense seems to be related to the psychological energy dimension: being energized by one's work conceptually is similar to the notion of enjoying one's work process.

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TABLE 6.H.: Job-Person Fit Determinants of Personal Accomplishment

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	3.680	6.320		.582	.562			
	Workload	.223	.225	.114	.989	.327	.201	.123	.095
	Latitude	.275	.357	.094	.770	.444	.322	.096	.074
	Reward	.100	.254	.048	.392	.697	.281	.049	.038
	Process	1.699	.401	**.436**	4.241	**.000**	.491	.468	.407
	Community	.888	.288	**.345**	3.079	**.003**	.416	.359	.296
	Fairness	-.606	.307	-.242	-1.974	.053	.172	-.240	-.190
	Values	.285	.243	.119	1.177	.244	.225	.146	.113

In any event, the other statistically significant determinants of personal accomplishment, according to the multiple regression findings, are community and fairness. The salience of fairness to personal accomplishment may be explained in part by the fact that the fairness scale addresses the fairness of performance evaluations by staff. Staff who believe that performance evaluations are conducted fairly may naturally be those who feel personal accomplishment. Conversely, those who are evaluated negatively by performance evaluations, may not feel accomplished in their work.

- **Summary**

To summarize, the above results regard the main effects of job-person fit variables on the job engagement outcomes: psychological energy, depersonalization and personal accomplishment. Of particular importance, the multiple regression analyses demonstrated the following statistically significant predictors of job engagement. First, work load and work process were supported as statistically significant predictors of psychological energy. Second, work process and values were corroborated as statistically

significant predictors of depersonalization. And third, work process, community and fairness were all statistically significant predictors of personal accomplishment.

Taken as a whole, these findings suggest that Maslach's job engagement framework is supported by the statistical analysis for this sample. Of particular note, work process as a predictor variable was statistically significant across all three dimensions of job engagement, suggesting that it is of central importance to job engagement in this sample. However, Maslach's predictor variables, reward and job latitude, were not supported by the regression analyses for any dimension of job engagement. As a whole, then, these findings can be taken to generally, but not universally, support Maslach's framework.

III. Step I of Preliminary Regression Analysis: Job-Person Fit Variables as Predictors of Coping Style

In the above section we tested Maslach's job engagement model and found general support for her framework. We now present an alternative framework, in which her job-person fit variables lead to coping styles, which in turn lead to job engagement variables. This section reviews the findings for the first part of this pathway, that is, the relationship between the independent and mediating variables. An overview of the statistically significant relationships found among these respective independent and mediating variables is depicted in the following summary table.

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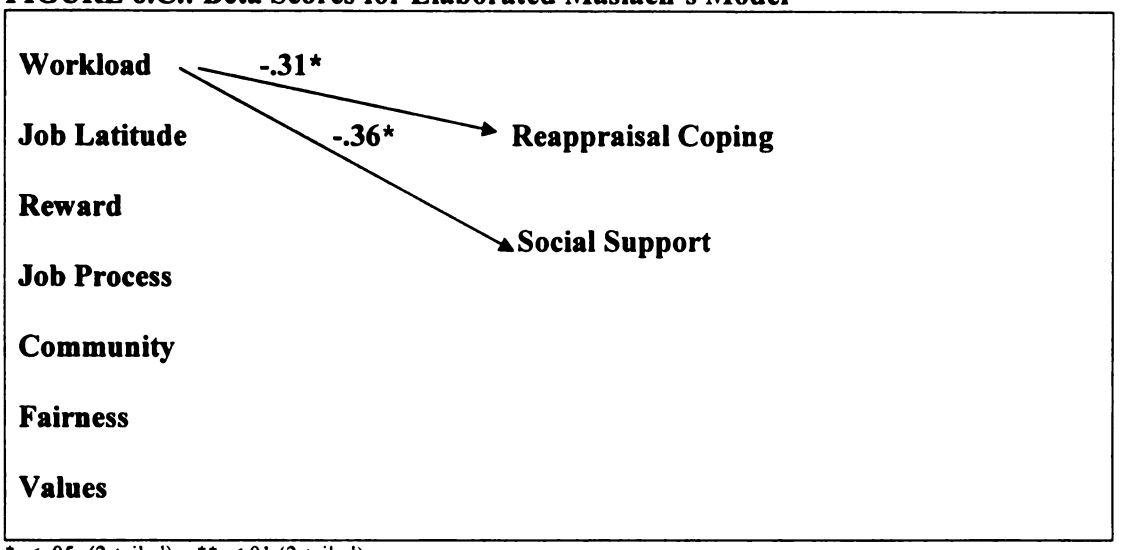
FIGURE 6.C.: Beta Scores for Elaborated Maslach's Model



*p≤.05; (2-tailed). **p≤.01 (2-tailed).

1. Job-Person Fit Variables as Predictors of Reappraisal Coping

To consider these findings in more detail, we begin by exploring the relationship of job-person fit variables as predictors of reappraisal coping. Specifically, we evaluate to what degree reappraisal coping is determined by our job-person fit factors. First, the model's predictor variables account for 17% of the variance in reappraisal coping (R Square = 17%). This is not a compelling correspondence, particularly given that the high number of predictors in the model, each of which only accounts for a portion of the 17% figure. Secondly, the general model is not supported, as the F value for the model was not significant (F = 1.83). However, the F value is marginally significant (p = .098), suggesting that the model should not be entirely dismissed.

However, when the individual coefficients are explored for each job-person fit independent variable, we see that workload was significantly related to reappraisal coping. The relationship between the variables was inverse, meaning that as the perception of workload being reasonable increases, the lower the level of positive

reappraisal. Meanwhile, none of the other job-person fit independent variables reached significance.

Overall, the findings suggest that there is minimal support for the association between job-person fit factors, on the one hand, and positive reappraisal, on the other. However, the specific relationship between workload and positive reappraisal does reach statistical significance, suggesting that there is an inverse relationship between these two specific variables that is unlikely to be due to chance. One interpretation of this finding is that the perception of unreasonable workload triggers the need for reappraisal as an adaptive response. Conversely, as workload is perceived to be more reasonable, the need for positive reappraisal diminishes. A more problematic interpretation might be that the two findings are confounded and actually manifestations of the same phenomenon, e.g., the perception of reasonable case load may, itself, be a positive reappraisal. In sum, this finding suggests that perception of work load is related to reappraisal coping, though this finding needs to be replicated in other samples, and the strength and direction of the relationship needs to be further explicated.

TABLE 6.I.: Job-Person Fit Determinants of Reappraisal Coping

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	-7.489	6.151		-1.218	.228			
	Workload	-.492	.222	**-.308**	**-2.215**	**.030**	-.134	-.271	-.256
	Latitude	.442	.354	.186	1.246	.217	.220	.156	.144
	Reward	.128	.247	.076	.520	.605	.116	.066	.060
	Process	.618	.390	.196	1.586	.118	.265	.198	.183
	Community	.156	.281	.075	.556	.580	.183	.070	.064
	Fairness	.086	.298	.043	.289	.774	.139	.037	.033
	Values	.140	.235	.072	.595	.554	.112	.075	.069

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2. Job-Person Fit Variables as Predictors of Social Support Seeking

We now turn our attention to the relationship between job-person fit variables and social support coping. That is, we explore the degree to which Maslach's job-person fit variables predict the use of social support seeking as a criterion variable. Only 15% of the variance in social support is explained by the entire package of job-person fit factors (R Square = .149). That is to say, the set of job-person fit variables are not strong predictors of social support seeking. Furthermore, the ANOVA findings indicate that the model is not a statistically significant predictor of social support seeking (F = 1.58; p = .16). However, as the coefficient table below shows, there exists one statistically significant relationship: reasonable workload is a statistically significant predictor of social support seeking.

TABLE 6.J.: Job-Person Fit Determinants of Social Support Seeking

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	12.724	5.124		2.483	.016			
	Workload	-.474	.185	**-.358**	-2.557	**.013**	-.277	-.307	-.297
	Latitude	.320	.296	.163	1.081	.284	.015	.135	.126
	Reward	.153	.206	.110	.742	.461	-.019	.093	.086
	Process	.114	.325	.044	.351	.727	.034	.044	.041
	Community	-.339	.234	-.197	-1.446	.153	-.162	-.179	-.168
	Fairness	.080	.248	.048	.322	.748	-.089	.041	.037
	Values	-.196	.196	-.122	-.997	.323	-.168	-.125	-.116

3. Job-Person Fit Variables as Determinants of Planful Coping

We now turn to the third and final coping style that is possibly determined by job-person fit variables: planful coping. To begin with, only 18% of the variance of planful coping is determined by job-person fit variables (R Square = .18). This leaves more than 80% of the variance unexplained. Secondly, the weakness of this relationship is further evidenced by the ANOVA findings, which show that the predictors are marginally related to planful coping ($F = 1.93$; $p = .08$).

In addition to the marginally significant support for the general model, there is limited corroboration of the predictors of planful coping. The coefficient table below shows that while none of the independent variables achieves statistical significance to the conventional .05 level of confidence, two of them reach marginal significance, i.e., between .05 and .10 (George & Mallory, 2003). Specifically, workload and latitude both fall within this marginally significant level. This suggests that, while these relationships are not particularly strong, they are not to be dismissed as potential predictors in future research. However, they are dropped from our model, hereafter, since they are not significantly related to planful coping.

TABLE 6.K.: Job-Person Fit Determinants of Planful Coping

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	-1.681	5.008		-.336	.738			
	Workload	-.332	.181	-.253	-1.834	.071	-.121	-.225	-.210
	Latitude	.567	.289	.290	1.959	.055	.257	.240	.224
	Reward	-.183	.201	-.132	-.907	.368	.007	-.114	-.104
	Process	.349	.318	.134	1.100	.275	.205	.137	.126
	Community	.213	.229	.125	.931	.355	.217	.117	.107
	Fairness	.160	.242	.096	.660	.512	.177	.083	.075
	Values	.011	.192	.007	.060	.953	.074	.008	.007

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- **Summary**

This portion of our analysis demonstrates that workload is the only strong predictor within this mediated model. In fact, it is the only predictor variable in the analysis that is related to all three coping styles. That is, it was significantly related to reappraisal coping and social support seeking, respectively; and marginally related to planful coping. The only other predictor variable that was associated with a coping style variable was job latitude, which was only marginally related to planful coping. Meanwhile, none of the predictors were significantly related to planful coping, so planful coping is omitted from the model. Taken at a whole, the relation between job situation variables and coping styles variables did not provide strong support for the proposed model.

IV. Step II of Preliminary Regression Analysis: Coping Styles as Predictors of Job Engagement

At this juncture, we have explored the first portion of our path analysis. Specifically, we described the relationship between job-person fit variables and coping style. We now address the second portion of our analysis: the relationship between coping styles and job engagement. Again, planful coping was dropped from the analysis because it was not related to job-person fit variables in the preceding section.

1. Coping Style as Predictors of Emotional Exhaustion

In this portion of our analysis, we explore the multiple regression analysis, in which reappraisal and social support serve as predictors of emotional exhaustion. To begin, 16% of the variance in the dependent variable, emotional exhaustion, is accounted for by

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the model (R Square = .155). The statistical significance of this model is evidenced by the ANOVA findings, which shows that the job-person fit variables are significantly related to emotional exhaustion (F = 6.24; p = .003). Therefore, the general explanatory model is supported by these data.

While the model as a whole is supported by the ANOVA findings, the individual relationships between our coping style variables, on the one hand, and emotional exhaustion on the other, are inconsistent. This is demonstrated by the below coefficient table. Specifically, reappraisal coping is not a significant predictor of emotional exhaustion while social support is significant. As such, the salience of social support seeking as a predictor of emotional exhaustion is supported.

TABLE 6.L.: Job-Person Fit Determinants of Emotional Exhaustion

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	13.762	3.100		4.439	.000			
	Reappraisal	-.469	.266	-.211	-1.761	.083	-.058	-.209	-.196
	SSupport	1.126	.322	**.418**	3.495	**.001**	.341	.390	.390

2. Coping Styles as Determinants of Depersonalization

We now turn our attention to coping styles as determinants of the second dimension of job engagement, that is, depersonalization. To begin, 21% of the variance in depersonalization is explained by our predictor variables, social support seeking and positive reappraisal (R Square = .21). Second, the statistical significance of this model is evidenced by the ANOVA findings, which show that the job-person fit variables did reach statistical significance (F = 9.04; p < .001). Therefore, the general explanatory model is supported by these data.

As evidenced in the table below, both our coping style variables predict depersonalization. That is, both social support and reappraisal coping were statistically significant predictors of depersonalization. However, social support is positively related, whereas reappraisal is negatively related. Taken together, our coping variables are more cogent predictors of job involvement, here, than they were of emotional exhaustion above, since two of the predictors are statistically significant rather than just one.

TABLE 6.M.: Coping Styles as Determinants of Depersonalization

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	2.039	1.393		1.463	.148			
	Reappraisal	**-.373**	.120	**-.361**	-3.117	**.003**	-.199	-.354	-.336
	SSupport	**.554**	.145	**.443**	3.829	**.000**	.312	.421	.413

3. Coping Styles as Determinants of Personal Accomplishment

We now turn our attention to coping styles as determinants of the third dimension of job engagement, that is, personal accomplishment. Firstly, roughly 11% of the variance in job involvement is explained by our predictor variables, social support seeking and positive reappraisal (R Square = .109). The explanatory power of this model is higher than that for the other two dimensions of job engagement. Specifically, the R square statistic was .16 for emotional exhaustion and .21 for depersonalization, as opposed to .11 for personal accomplishment, here. However, the ANOVA findings suggest that the predictor variables are nevertheless a statistically significant predictor of personal accomplishment ($F = 4.17$; $p = .02$).

Meanwhile, both our coping style variables were related to personal accomplishment. Specifically, positive reappraisal was related to personal accomplishment, while social support was marginally related to personal accomplishment.

TABLE 6.N.: Coping Styles as Predictors of Personal Accomplishment

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	42.055	1.772		23.739	.000			
	Reappraisal	.414	.152	**.334**	2.720	**.008**	.250	.313	.311
	SSupport	-.348	.184	-.233	-1.893	.063	-.111	-.224	-.217

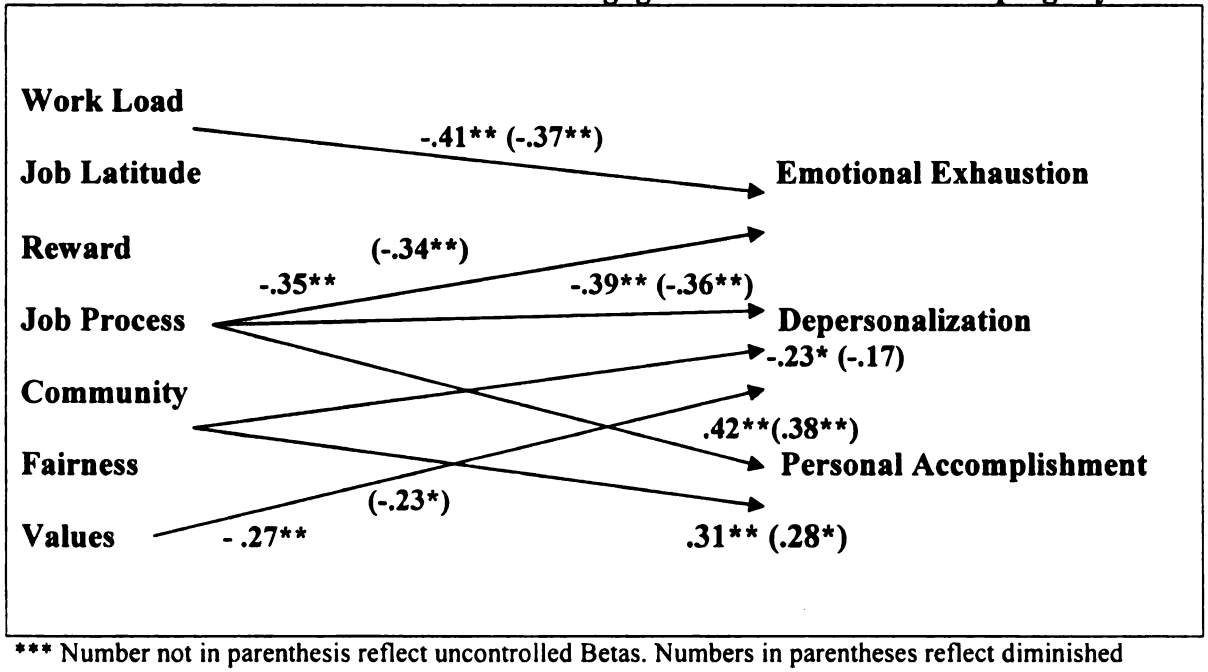
- **Summary**

The findings in this section regard the relationships between our model's mediating variables, coping styles, and the outcome variable, job engagement. The findings reveal the following relationships. First, the only statistically significant predictor of emotional exhaustion was social support seeking. Second, both mediators were significant predictors of depersonalization. Third, reappraisal coping was a significant predictor of personal accomplishment, while social support seeking was only marginally significant. Given these findings, social support seeking is a particularly strong predictor of job engagement, because it was significantly related to two dimensions of job engagement and marginal significant for the third. Meanwhile, reappraisal coping was substantiated, since it is found to be related to one dimension and marginally significant for another. Taken as a whole, our coping variables were predictive of our job engagement variables in numerous ways.

V. Hierarchical Analysis: Job-Person Fit Variables as Predictors of Job Engagement, Controlling for Coping Style

We now turn our attention to a series of hierarchical regression analyses. This analysis further explores whether our proposed mediating variables, coping styles, actually mediate the relationship between the job-person fit variables and job engagement. This is the final step of exploring whether such mediation exists. A graphic that depicts the diminishment of the independent variables' predictive strength when controlled for coping style is presented in the table below as a general overview of our findings. These findings are discussed in detail below further below. (Note that the parenthetical scores denote the reduction in Beta scores for the relationship between the job-person fit variables and job engagement dimensions when controlled by coping style.)

FIGURE 6.D.: Maslach's Model of Job Engagement Controlled for Coping Style***



*** Number not in parenthesis reflect uncontrolled Betas. Numbers in parentheses reflect diminished Betas when controlled for coping styles. *p≤.05; (2-tailed). **p≤.01 (2-tailed).

In general, the graphic demonstrates the modest effect of our control variables (coping styles) on the relationship between job-person fit variables and job engagement, as evidenced by the modest reduction of Beta scores when coping is controlled. Additionally, the graph reflects that job latitude, reward and fairness were not related to job engagement in the original replication of Maslach's model. Therefore, they were dropped from further analysis, as a test of their mediation is unwarranted. We now turn our attention to the specific hierarchical regression analyses performed for each of our job engagement dimensions.

A. Hierarchical Regression for Emotional Exhaustion

The findings of our hierarchical regression for our dependent variable emotional exhaustion are presented in the table below. Model 1 utilizes the four job-situation variables that were significantly related to job engagement in the original test of Maslach's model earlier. Model 2 utilizes the same four job-situation variables, but adds our significant coping variables from our path analysis as controls. The results for Model 1 show that only workload and work process are related to emotional exhaustion. Findings for Model 2 reveal that full mediation does not exist for either workload or work process because their relationship to emotional exhaustion did not diminish to non-significance as a result of controlling for coping styles. That is, in no case did the significant job-person predictors in Model 1 drop to non-significance as a result of adding the coping variables as controls in Model 2. Meanwhile, social support is found to be related to emotional exhaustion, even when controlled for the job-person fit variables. This suggests that social support may, at most, partially mediate the respective

relationships of workload and work process to emotional exhaustion, which is addressed next.

TABLE 6.O.: Job-Person Fit Variables Prediction of Emotional Exhaustion, Controlled for Coping

	Model 1	Model 2
Independent Variables:		
Workload	-.41**	-.37**
Process	-.35**	-.34**
Community	-.18	-.14
Values	.07	.11
Control Variables:		
Reappraisal Coping	N/A	-.10
Social Support Seeking	N/A	.29**
R Square:	.39	.47
F Score:	8.56	9.19
P Value:	<.001	<.001

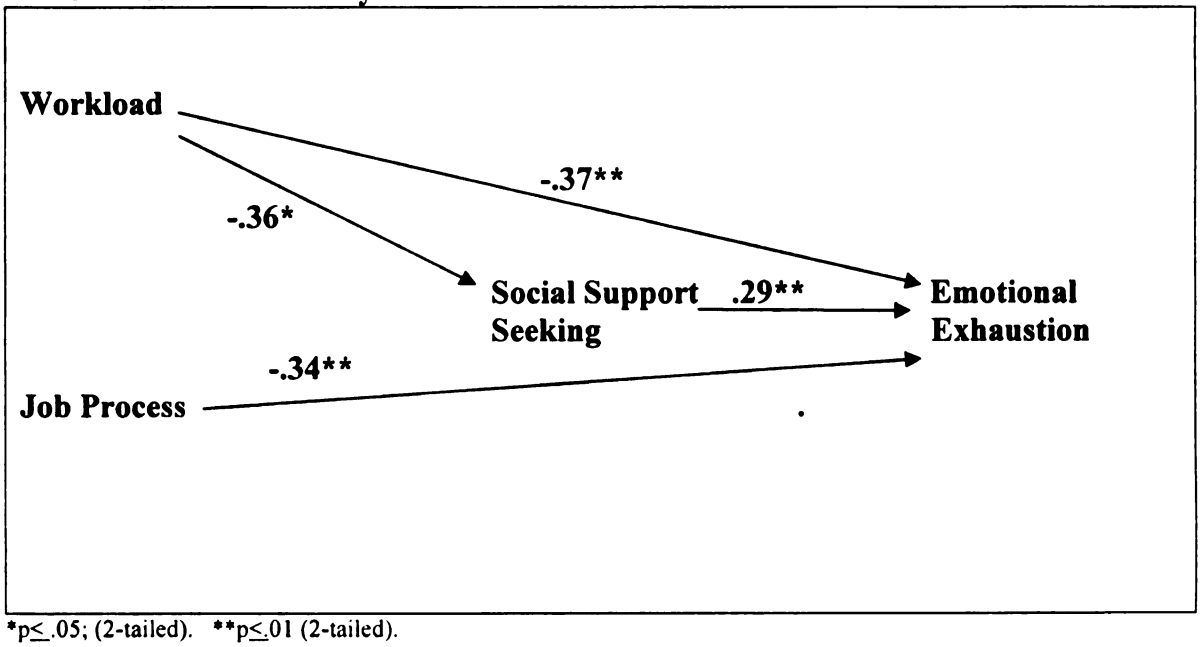
. *p≤.05; (2-tailed). **p≤.01 (2-tailed).

The direct and indirect relationships between our significant predictors of emotional exhaustion are more clearly depicted in the path analysis graph below. To begin with, the effect of workload on emotional exhaustion is found to be partially mediated by social support seeking. In other words, workload is both directly and indirectly related to emotional exhaustion, the indirect relationship being mediated by emotional support seeking. The direct relationship is inverse, suggesting that the more that workers felt that their workload was favorable, the lower their scores on emotional exhaustion. The indirect relationship suggests that perception of reasonable workload predicted a decrease in social support seeking, as was evidenced in our earlier regression findings; in turn, reduced social support seeking predicted reduced emotional exhaustion.

This suggests that when workers perceive a reasonable workload, their social support seeking is reduced, and in turn, their emotional exhaustion is reduced as well. An alternative interpretation is that this causal ordering is incorrect – that decreased emotional exhaustion results in less need to seek social support.

Meanwhile, job process was directly and inversely related to emotional exhaustion, meaning that the more job process was judged as favorable, the lower the scores on emotional exhaustion. However, job process was not mediated by coping in any way, as it was unrelated to coping styles in our earlier regression analysis.

FIGURE 6.E.: Path Analysis for Emotional Exhaustion



*p≤.05; (2-tailed). **p≤.01 (2-tailed).

B. Hierarchical Regression for Depersonalization

The hierarchical regression analysis conducted for our depersonalization outcome variable is presented in the table below. To begin with, Model I shows that process, community and values were all directly related to depersonalization. Meanwhile, Model 2 demonstrates that community was diminished to non-significance as a predictor of

depersonalization when it was controlled by our coping variables. However, since community was not related to coping in our earlier analysis, it does not evidence mediation. Meanwhile, Model 2 shows that process and values maintain significance even when coping style is controlled (although values is reduced in its confidence level). Further, Model 2 also shows that social support seeking is once again related to our outcome variable.

TABLE 6.P.: Job-Person Fit Variables Prediction of Depersonalization, Controlled for Coping

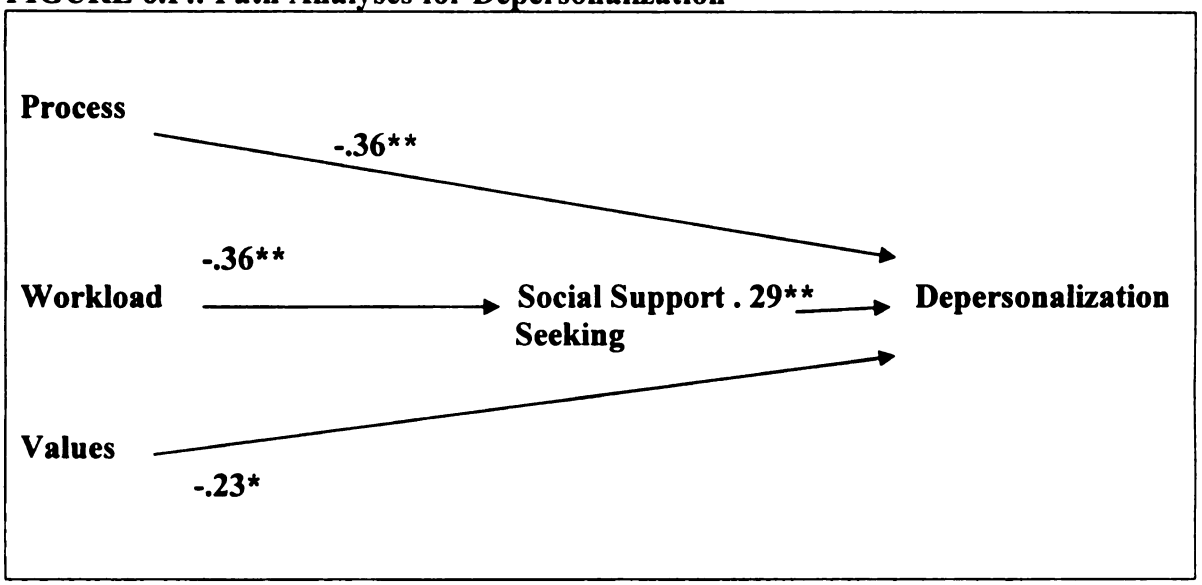
	Model 1	Model 2
Independent Variables:		
Workload	-.11	-.09
Process	-.39**	-.36**
Community	-.23*	-.17
Values	-.27**	-.23*
Control Variables:		
Reappraisal Coping	N/A	-.18
Social Support Coping	N/A	.29**
R Square:	.40	.48
F Score:	11.28	9.54
P Value:	<.000	<.000

*p≤.05; (2-tailed). **p≤.01 (2-tailed).

The direct and indirect relationships between job-person fit variables and job engagement are more clearly depicted in the path analysis graphic below. Again, job process was shown to be directly and inversely related to depersonalization even while controlling for our coping variables. This suggests that the more favorable staff perceived their job process, the less depersonalization they experienced. Once again, values are directly and inversely related to depersonalization, meaning that the more favorable the organization's values were perceived, the less depersonalization was experienced. Meanwhile, an indirect path existed for social support. That is, work load predicted social support

seeking, as shown earlier, which in turn predicted depersonalization. Although this indirect path did exist, it was not directly related to our outcome variable, depersonalization, suggesting that mediation did not exist.

FIGURE 6.F.: Path Analyses for Depersonalization



*p≤.05; (2-tailed). **p≤.01 (2-tailed).

C. Hierarchical Regression for Personal Accomplishment

The hierarchical regression analysis findings for personal accomplishment is shown in the table below. The evidence does not support the notion of coping as a mediator of personal accomplishment, as none of our coping styles were related to personal accomplishment. Because coping styles are not related to personal accomplishment, they cannot mediate the relationship between our independent variables and personal accomplishment. Meanwhile, process and community both are directly and positively related to personal accomplishment, suggesting that the more that staff perceived their work process and sense of community favorably, the more they felt a sense of accomplishment in their jobs.

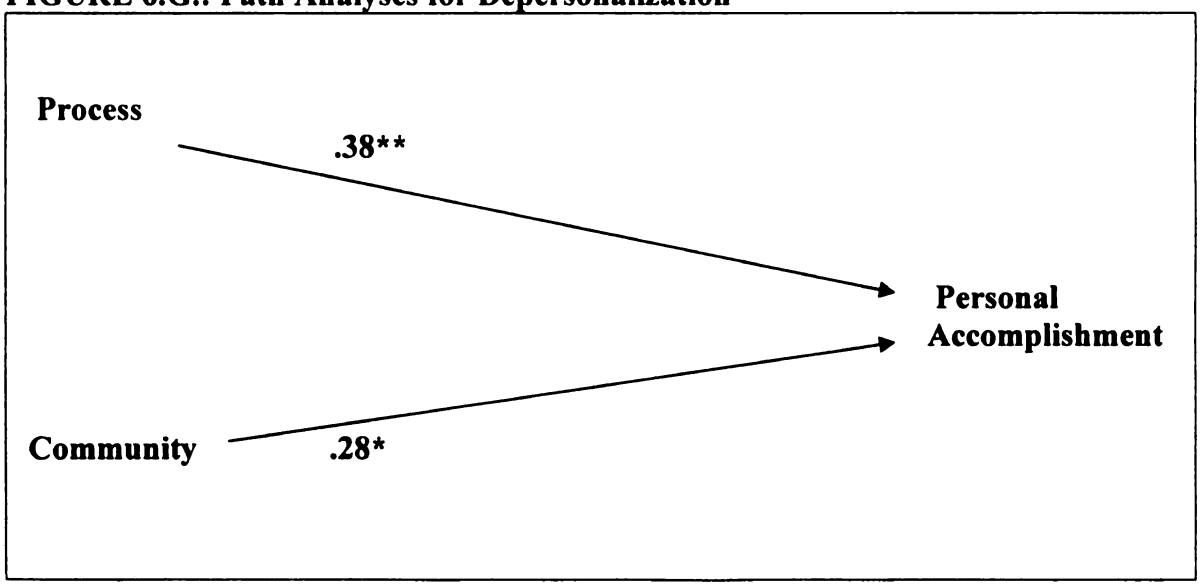
TABLE 6.Q.: Job-Person Fit Variables Prediction of Personal Accomplishment When Controlled for Coping

	Model 1	Model 2
Independent Variables:		
Workload	.09	.11
Process	.42**	.38**
Community	31**	.28*
Values	.09	.07
Control Variables:		
Reappraisal Coping	N/A	.15
Social Support Coping	N/A	-.09
R Square:	.37	.39
F Score:	9.86	6.75
P Value:	p<.001	p<.001

*p≤.05; (2-tailed). **p≤.01 (2-tailed).

Once again, our findings are depicted in the path analysis graph below. As discussed above, mediation failed to be demonstrated by our findings. As such, modest support is found for Maslach's unmediated formulation, while the mediated model is unsupported by our findings.

FIGURE 6.G.: Path Analyses for Depersonalization

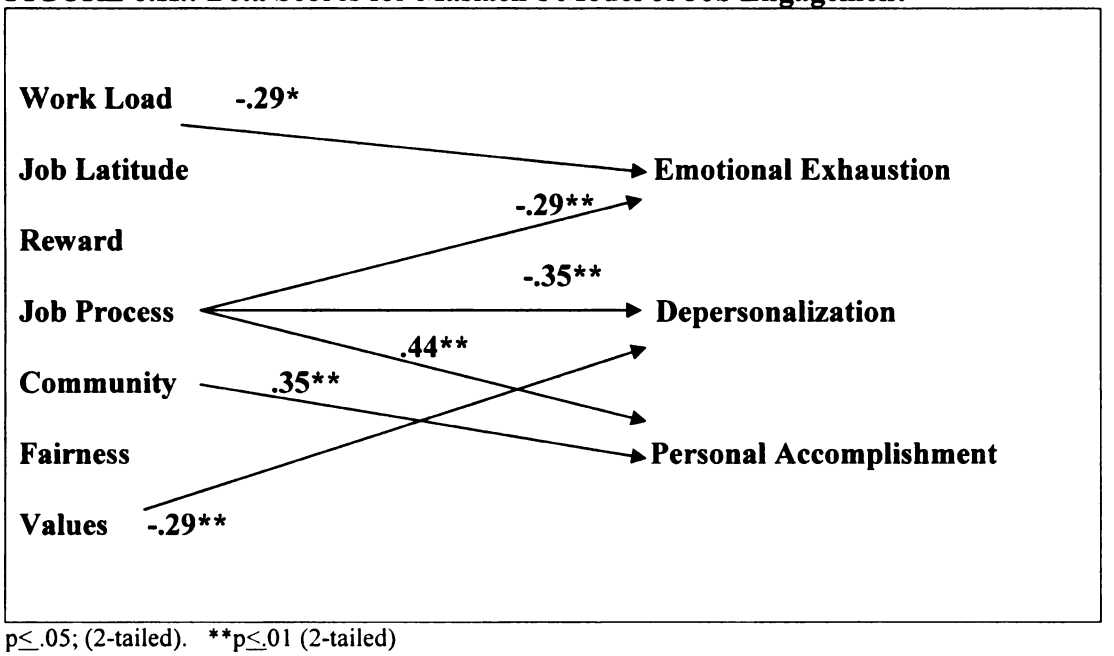


*p≤.05; (2-tailed). **p≤.01 (2-tailed).

- **Chapter Summary and Conclusion**

This chapter undertook three analyses. First, it replicated Maslach's model of job engagement, in which job-situation variables were posited as determinants of job engagement. In this regard, the analysis moderately supported Maslach's framework. That is, the direct relationships between job-situation variables and job engagement dimensions revealed six statistically significant relationships. These findings are depicted in the following table. As can be seen by the table, job process was found to be a robust predictor of job engagement, since it was uniquely predictive of all three dimensions of job engagement, and it contained two of the three strongest Beta scores. One interpretation of this finding is that inherent work process, the intrinsic daily flow of work itself, is of central importance, rather than extraneous variables. In contrast, all other significant predictors only predicted one outcome dimension – specifically, workload, community, fairness and values all predicted one dimension of job engagement. Meanwhile, job latitude, reward and fairness failed to predict job engagement.

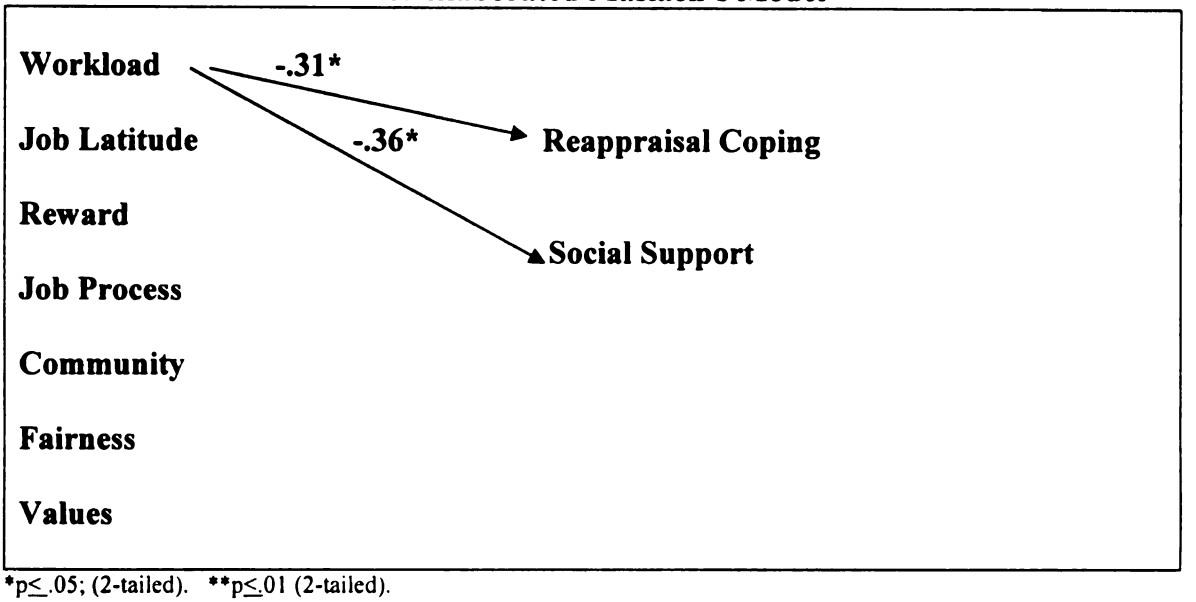
FIGURE 6.H.: Beta Scores for Maslach's Model of Job Engagement



p≤.05; (2-tailed). **p≤.01 (2-tailed)

The next section of this chapter delineated the first portion of a path analysis, in which job-situation variables were posited as predictors of coping styles. This analysis is represented in the table below. In general, the findings provided very modest support for the proposed model. Specifically, only workload was significantly related to both reappraisal coping and social support seeking. No other job-person fit variables predicted coping styles. Further, planful coping was unrelated to our job-person fit predictors all together, so it was eliminated from our analysis. In general, this portion of our analyses clearly failed to show strong support for the proposed mediated model, since only two relationships were found among the seven predictor variables and three coping style variables.

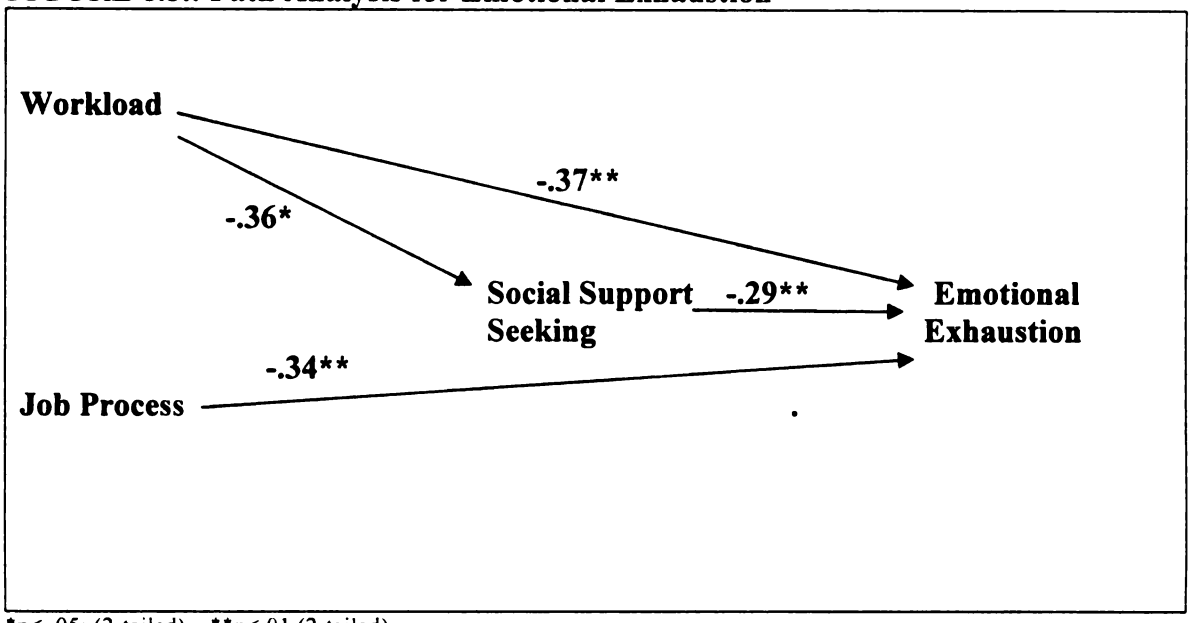
FIGURE 6.I.: Beta Scores for Elaborated Maslach's Model



*p≤.05; (2-tailed). **p≤.01 (2-tailed).

The remainder of this chapter constitutes hierarchical regression analyses in which the significance of our proposed mediators was tested. Overall, the findings provided modest evidence for mediation by our proposed mediators of the job-person fit variables relationship to job engagement, as follows. First, a regression analysis was done for emotional exhaustion, shown in the table below. In this analysis, job process was directly related to emotional exhaustion, while workload was partially mediated by social support seeking.

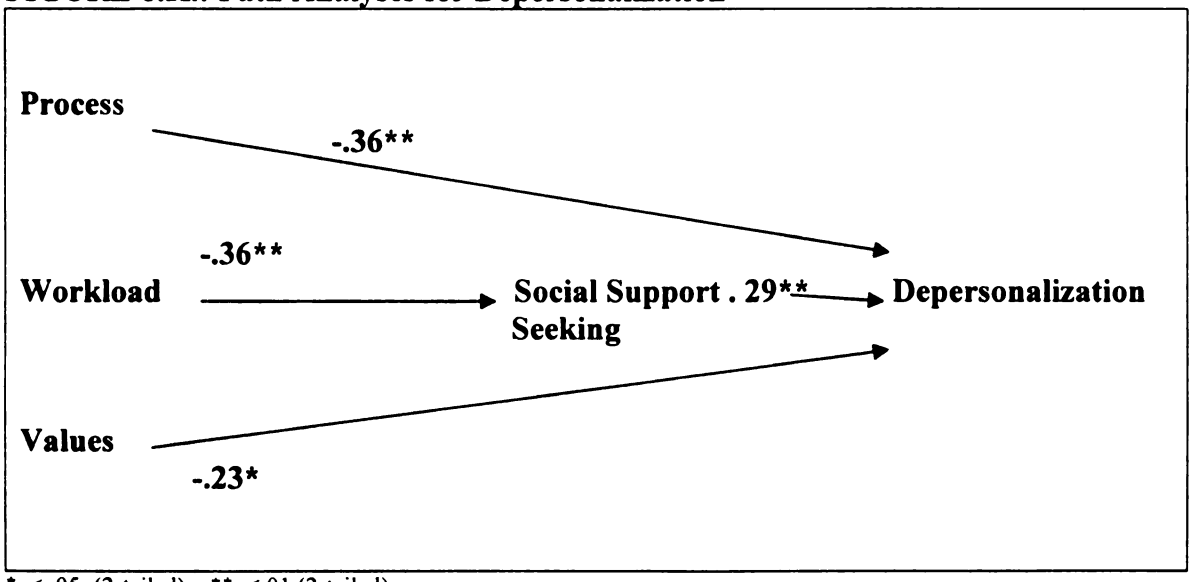
FIGURE 6.J.: Path Analysis for Emotional Exhaustion



*p≤.05; (2-tailed). **p≤.01 (2-tailed).

Thereafter, a hierarchical regression analysis was done for depersonalization. In this analysis, job process and values directly and inversely predicted depersonalization. Meanwhile, workload indirectly predicted depersonalization through social support seeking.

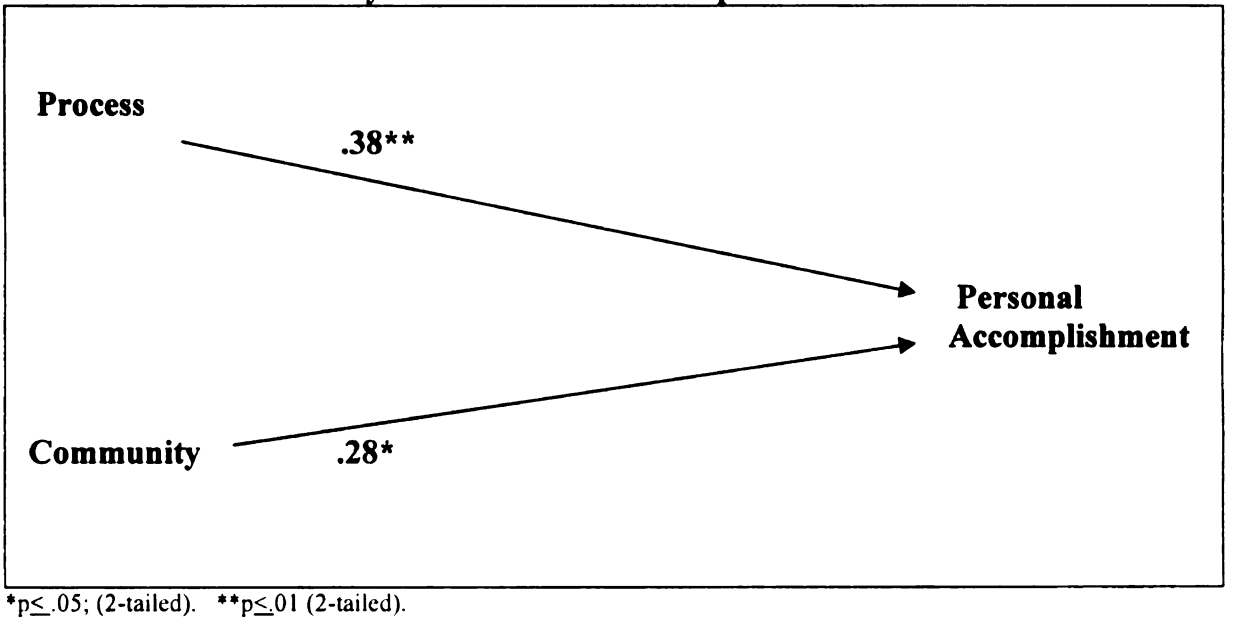
FIGURE 6.K.: Path Analyses for Depersonalization



*p≤.05; (2-tailed). **p≤.01 (2-tailed).

Finally, a hierarchical regression analysis was conducted for personal accomplishment. In this case, mediation failed to be demonstrated by our findings. While there was modest support for Maslach's unmediated formulation, the mediated model was unsupported by our findings.

FIGURE 6.L.: Path Analyses for Personal Accomplishment



*p≤.05; (2-tailed). **p≤.01 (2-tailed).

7. QUALITATIVE FINDINGS

Introduction

The selection of social workers into the qualitative interview sample was based on a number of factors. First, all social workers chosen for interviews were among the most job-engaged at the University of Michigan Health System. Again, all were selected from the top quartile of the job engagement distribution, based on their responses to the Maslach Burnout Inventory. More specifically, all participants scored in the top quartile of the three dimensions of the MBI, in order to assure consistently high-functioning across all three dimensions of job engagement. For instance, this eliminated the possibility of choosing workers who were energized but cynical about their work. Applying the concept of job engagement in this consistent manner adheres to the multidimensional definition of job engagement.

Secondly, those selected were all full-time staff, in order to assure consistency in the degree of occupational stressors that they experienced. This was done in order to assure fidelity to the concept of resilience, which presumes the experience of heightened psychosocial stress by those deemed resilient. This consistent focus on full-time workers eliminated confounds between actual resilience and part-time status as explanations for resilient outcomes.

Third, selected staff represented a variety of units within the University of Michigan Health System. For instance, social workers interviewed were based in the health system's geriatric center, the medical emergency department, the heart transplant team, the pediatric intensive care unit, cardiac rehabilitation, the oncology department,

child psychiatry, rehabilitation and the Infant Support Program. An effort was made to maximize the representation across work units, in order to increase the generalizability across the entire Department of Social Workers.

The format of the interviews included both open-ended and close-ended components. The initial phase of the interviews utilized only open-ended questions, in order to minimize my own influence of their answers. In other words, this was done in order reduce the likelihood of biasing responses based on my views and beliefs. Specifically, open-ended questions were initially asked about participants' attributions regarding their job engagement. Subsequently, close-ended questions were posed to explore predictors of job engagement in resilience. That is, a standardized sequence of questions was asked of all respondents. Respondents were encouraged to elaborate upon their answers in ways they deemed relevant.

In keeping with Institutional Review Board policies and ethical standards in the social sciences, the confidentiality of respondents is strongly protected. In addition not revealing names actual names of staff, descriptive and demographic aspects of the respondents was intentionally obscured. Although this may reduce the descriptive richness of these cases to a degree, this was seen as the appropriate and ethical decision that prioritized respondents' privacy over maximal qualitative detail.

A. Evidence of Stress and Adversity

As discussed earlier, the notion of resiliency presupposes that persons who are resilient have experienced some form of adversity or stress. Such adversity or stress is essential, because it is what necessitates a resilient response. Therefore, to apply this concept to an

occupational context suggests the need to demonstrate that the respondents actually faced such adversity. In fact, evidence of high environmental stressors was presented in the qualitative interviews that were undertaken. Stressors included the following.

- **Severity of Illness**

Patient illnesses were often severe among those seen by social workers in the qualitative sample. In spite of the variety of work units that these social workers were assigned to, the severity of illness was often striking. Indeed, many patients are referred to this academic health system based on the severity and complexity of their diseases. "Complex cases" are routinely referred by community hospitals throughout the region, and beyond, suggesting the possibility that these social workers are involved with a severely ill patient population. The sample is highly exposed to patients and families who are coping with various forms of trauma, which will be further addressed below. Suffice it to say that the health center's regional and national role is suggestive of a high degree of illness severity that may translate to high stress for clinical staff.

Severity of illness was obviously seen routinely by the emergency room staff. These workers were responsible for addressing emergent medical and psychosocial issues. Examples include counseling family members of patients with medical trauma, grief counseling for families of patients who have just died in highly traumatic and tragic circumstances, homicidal and suicidal patients, among other medical and psychosocial categories. Domestic violence was mentioned as a particularly stressful event by one of our emergency room social workers, who reported that

The emotional stressor comes for me when there is a child, a vulnerable adult, whomever – having bad things happen to them, and my having to intervene on some level, whether it be calling a community agency, whether it's protective services agency and to confront family members – anything that goes along with an abusive situation. Those are the most draining situations...Even when people die in an automobile accident, I am more confident about being able to help families in a death situation and an injury situation...I don't always feel that I can help a person in a domestic violence situation.

In some settings, the emergent nature of the patients' medical problem was combined with the volume of workload, resulting in particularly high stress for the workers. For instance, one worker from the emergency room reported that, "It is the multiple competing demands that are difficult. When fifty people show up at the emergency room and they all want to be seen now, it's very difficult."

Another example of the severity of bio-psychosocial stress among this sample was a social worker who was assigned to the pediatric intensive care unit. This worker was responsible for counseling families whose infants were medically unstable. She also provided grief counseling for the families upon their infants' death. In fact, infant death was a common part of this staff person's work life. During one nine week period recently, she was involved in providing services to over twenty families whose infants had died. Furthermore, at times of patient death, she also provides counseling to other staff, such as nurses and physicians. Additionally, she was involved in child protection in cases of child abuse and neglect. In such cases, she was instrumentally involved in the removal of children from their families due to concerns about the children's welfare and safety. Such separation constitutes a substantial psychological trauma for many of these families, which in turn creates a stressor for these workers. She was also involved in the care and advocacy for infants whose families were abusive or neglectful. In some

instances, this worker stayed late after her shift to advocate for children at risk for child abuse and neglect.

Crisis counseling was also a common stressor among these workers, an inherent aspect of much medical social work. For instance, an oncology social worker described the involvement of crisis counseling that occurs when patients are initially told that they have cancer. This worker described the severe stress and depression that often comes not just from the struggle with cancer, but also the complexity and difficulty of attendant psychosocial stressors. For instance, housing, health insurance coverage, unemployment and related stressors are highly chaotic for many patients. In one case, a worker describes patients' psychosocial stressors as being more chaotic and severe than the cancer itself. For instance, in one week, this worker was simultaneously serving two patients who were exhibiting suicidal thoughts. In one case, the patient's extensive economic problems exacerbated his suicidality.

Crisis counseling was also exemplified by a social worker who was assigned to an organ transplant team. This staff person was responsible for pre- and post-transplant counseling of patients and grief counseling for families whose loved ones had died during their treatment process. It is important to emphasize that crisis counseling was not restricted to the families of patients who had died. It also was a common part of services for patients pre-operatively, since many did not know whether donor organs would be made available to them in time to save their lives. As such, some patients question whether they will live. In all of this, questions of life and death are common, including fears, anxieties, depression, anger and other strongly felt emotions and reactions that come with dealing with end of life issues. This level of exposure to patients' intense

emotional pain provides evidence of the high degree of stressors that this staff experiences. It is also important theoretically, because it is consistent with Maslach's theory of burnout, as it is such intimate relationships with clients in distress that theoretically determines burnout.

Another consideration in assessing the severity of stress, is the level of care in which the service is provided. Whether the patient is being served in an intensive care unit, general inpatient unit, emergency department or outpatient unit may have baring on the severity of the stressors. However, outpatient care was not associated with a low level of stress. As our outpatient psychiatric social worker illustrated, severe medical and psychiatric symptoms do occur at the outpatient level. This is particularly the case in an era of managed care, in which hospitalization is minimized due to cost containment concerns. In her case, she provided care to a wide range of patients, many of whom had severe histories of physical, emotional and sexual abuse, resulting in diagnoses of Post-Traumatic Stress Disorder and Reactive Attachment Disorder. Accordingly, these psychiatric problems involved severe symptoms. Further, her work entailed the treatment of patients with various forms of clinical depression and suicidal and homicidal behavior. Moreover, outpatient care is also provided over a longer period of time, a stressor that typically does not occur at the inpatient level. That is, outpatient care is of a longer duration with the potential to involve more emotional involvement between worker and staff, especially in psychiatric settings.

Some workers directly commented on the high amount of emotional stress entailed in their jobs. For instance, our rehabilitation social worker described the acute grief and anger that patients exhibit and the hostility that is directed at staff. Meanwhile, our

psychiatric social worker indicated that her job is high stress, one that necessitates a response of resilience, and one that "people typically burn-out on."

Lack of community resources needed to meet patient needs was also given as a common stressor by numerous social workers, including our Infant Support Worker and our Geriatric Clinic clinician. Such lack of resources is particularly salient, given that linking of patients to these resources is a primary responsibility of these staff. Referrals are made to these social workers due largely to resources needs. However, due to limitation in local, state and federal funding, limitations in "the social safely net" are common. In this sense, the lack of resources represent an inherent stressor for many of these workers.

Another category of stressors were patients who may have poor clinical outcomes due to their own counter productive behaviors. Our geriatric social worker reported that patients who were unable to make good decisions for themselves, because of their mental state, caused a great deal of stress. As she said, "They are going to make poor choices, and you just can't do anything about that. She continued, "It's a powerless feeling when you know that someone is going to make a wrong decision." In a similar way, family problems and poor marriages were also stressful for this worker. As she reported, "Terrible marriages, long term terrible marriages, are sad and depressing in a way." She was quick to add that while these situations are difficult, they do not effect her sense of effectiveness because there is not anything that she can do about them. In this sense, she used clear boundaries for herself about what she could not achieve.

The continuity of stress depended somewhat on the way in which social work services were structured into operations. In some cases, social workers only served

patients who had urgent psychosocial issues, and therefore there caseloads were comprised almost exclusively of such patients. In other cases, social workers universally were involved in all patients without regard to psychosocial complexity, suggesting that they served some patients who were relatively stable psychosocially. This reduced the continuity of stress, to a degree, since workers "got a break from hard cases" and could enjoy the relative ease of serving some stable patients. One of our geriatric social workers made this point, indicating that all patients received psychosocial assessments by social workers at the point of admissions.

While universal assignment to all cases suggested some variety in psychosocial complexity of caseloads, stressors for these workers were still substantial. For instance, our pediatric intensive care worker universally assessed all patients. However, given the life threatening circumstances or actual death facing these families, even psychosocially healthy families can be expected to be in a state of severe stress or psychological trauma. That is, all patients facing these traumatic events can be expected to be in a state of crisis, so that universally working with them does not provide respite for the worker.

One formulation of stress severity for workers is that it is determined by the severity of the medical conditions found on the unit. This would lead one to assume that units such as the emergency room entail more stress than other units such as outpatient geriatrics or child outpatient. However, as our rehabilitation worker suggested, the amount of stress felt by the worker is mediated by the patients' perception of their own situation. As he said, some patients with total hip replacements may experience their situation as equally or more stressful than some trauma patients from the emergency room. This formulation of stress is consistent with a portion of Lazarus's model, i.e., that

the experience of strain, is determined by the personal, or subjective, appraisal of the external stressor. This formulation suggests that an assumption should not be made, out of hand, that the amount of job stress of inpatient units is necessarily higher than outpatient units, or that the emergency room stress for workers is inherently higher than outpatient units. That is, an assumption should not be made that higher levels of care signifies higher stress exposure.

Another stressor described by staff was the insufficiency of community resources needed to meet patient needs. Since social work staff commonly are responsible for securing programs and services for patients, and because these resources are often very limited, there is often stress experienced by patients and social workers alike. This is a significant concern to many workers, since this responsibility is often seen as central to their role. Ultimately, they cannot achieve the outcomes they would like to since in some cases, community resources do not exist. As our rehabilitation worker put it, "In some cases, the community resources just don't exist."

Yet another form of stress entailed the management of difficult and medically non-compliant patients. This theme cut across work units and may disproportionately fall upon social work units, particularly because it is often seen as a behaviorally based problem that by definition falls into the domain of social work. Our rehabilitation social worker provided an example of two clients who wanted to be discharged against medical advice, that is, when it was seen by their attending physician as medically detrimental. In these two cases, the social worker was involved in the case.

In some cases, stress involved the role of social workers acting as mediators and counselors. With regard to the former, social workers sometimes mediated between

patients and physicians. For instance, in the two cases involving patients discharged against medical advice, mentioned above, the attending physicians were initially unwilling to prescribe discharge medications. In these cases, social workers were involved in advocating that the medications be prescribed for the patient. In a general sense, social workers are often defined as patient advocates and therefore serve in this capacity.

With regard to the role of counselors, social workers are often utilized to counsel other staff in times of crisis. This clearly occurred in the pediatric ICU as well as in the emergency department. This suggests that in at least some work units, social workers provide an added function perhaps not expected by other staff – that of emotional supports for other workers. In the context of a high stress work environment, this serves as yet an added stressor.

- **Continuity of stressors**

As indicated above, the severity of stressors is an important consideration is assessing the overall level stressors within a unit. However, it is not the sole indicator. The continuity of stress is also an important consideration. For instance, the emergency care workers, while sometimes addressing extremely traumatic medical and psychosocial issues, have periods of relative inactivity as compared to other units. Additionally, emergency employees work in shifts, meaning that they do not serve ongoing patients whose problems must be considered in a continuous manner. In contrast, outpatient workers with caseloads have a relatively continuous burden of attending to, and being responsible for, patients' lives -- without periods of respite from these substantial responsibilities.

The continuity or daily flow of stress varied across units. Some workers indicated that stressors were episodic and very severe such as issues of medical trauma and death, followed by periods of relative calm baseline. Other workers characterized their work as very stressful with a stressful baseline. For instance, our pediatric intensive care worker described her work environment as continuously high in stress. "It's always a crisis at the drop of a hat, knowing that someone is probably going to die and someone is probably going to (have a cardiac) arrest." Additionally, this worker is very busy serving families with histories of neglect and abuse, potentially involving out-of-home placement of their infants. In contrast, other workers described their stressors as less severe -- that is, continuous but not acute, with occasional periods of very stressful peaks.

Another consideration in assessing the level of stress is the level of care provided. That is, care provided at the inpatient, emergency room and outpatient levels of care varied in their continuity of stress by virtue of the these levels of services. For instance, care provided at the outpatient geriatric clinic in some cases continued with patient for approximately ten years. In contrast, a long hospital stay would be measured in days, and an emergency room visit would be measured in hours. This results in a variety of consequences, one of which is the nature of the worker-patient relationship. A thorough comparison of levels of care is beyond the scope of this study, but suffice it to say that it is the source of variability in job environments found in this sample. Having said this, workers hastened to add that all these levels of care are stressful in numerous ways. None appear to be without substantial stress. Indeed, the job stress literature commonly assumes high stress when social services jobs are considered.

Administrative demands were also seen as salient stressors, according to numerous workers. This included paper work, statistical reporting, committee work and other reporting demands. This type of stress was defined as relatively continuous and insidious, rather than episodic and extreme. This provided a baseline of administrative stress among these jobs, so that even when emergent clinical issues were not arising, the baseline stress was present.

In some cases, continuity of stress was structurally arranged within the unit's clinical operations. For instance, one unit reportedly did not have a limit on the number of patients admitted to the program. The work unit was required to serve all appropriate referrals, no mater the quantity. In other cases, this meant that workers had to "cover" more than one unit. As a consequence of these structural arrangements, caseloads and referrals could increase precipitously and create high peaks in patient flow.

One worker had a split position at two work units, thus putting her in a uniquely good position to comment on the variability in stressors across these units. She described the emergency room as involving many episodic crises that required immediate attention. These crises could come into the unit at various frequencies, sometimes simultaneously, requiring multi-tasking and triaging of cases. Other times were relatively slow. In contrast, her Maternal Support Services work unit seldom involved life and death crises, yet the work demands were much more cumulative and the case load was ongoing. Additionally, while the patient issues did not involve as much acute care, critical patient issues were routine. For instance, homelessness, out of home placement of infants and the like were common patient concerns. In this sense, both positions were stressful, although they differed with regard to severity and continuity of the stressors.

Another indicator of the high flow of work is the extent of service requests that workers receive on a daily basis. All of these workers were accessible by phone, e-mail, beepers, and reachable by patients and staff alike. Clearly, the volume of daily service requests could be highly demanding. For instance, in the case of our pediatric social worker, she typically received about 50 beeper pages per shift. Some of these pages occur virtually simultaneously -- when she is responding to one, another message arrives. Similarly, as our rehabilitation social worker reported, "I used to not have a pager, now I get paged all the time. Sometimes I wonder, 'Why are they paging me about that.'" In addition to equating with high job demand, the use of pagers and e-mails amounts to information overload, according to our rehabilitation social worker. Such information flow has become more extensive, and therefore more taxing and stressful over time. As he put it, "Ten years ago we didn't get nearly as much information. Now we are getting bombarded with it."

Another structural factor in the daily flow of stress relates to the increased pressure on cost containment in health systems generally. Due to the escalating costs of health care generally, the university has reduced length of hospital stays, in some cases while simultaneously reducing staffing. This combination means that inpatient staff have less days/time to serve patients while having higher caseloads. As our rehabilitation social worker indicated, the patient unit has increased from 26 to 32 beds, while staffing has been reduced from 2.5 to 2.0 full time equivalents. Furthermore, length of patient stay has been concurrently reduced, meaning that (a) there is less time to serve patients and (b) the remaining patients are more homogenously unstable because the relatively healthy patients are discharged. On balance, there is reportedly less time, less staff, more

patients, and more medically unstable patients. Clearly, the implications for work overload and high stress are obvious. More importantly, the underlying budgetary pressures that give rise to such work conditions are not constrained to this unit, meaning that other units within this organizations may be experiencing similar stressors.

B. Evidence of Job Engagement

In addition to scoring in the top quartile on the job engagement scale (M.B.I.), there was additional evidence that this sample of social workers was indeed engaged in their work. To begin with, this sample of workers very directly and clearly expressed great energy, even passion, about their work. The most striking example of this was our cardiac social worker. As she said, "I have incredibly high energy. I have a lot of physical and psychic energy." She provided evidence of this claim by describing her daily 6:00a.m. physical exercise program that she followed before going to work. High energy was not always expressed so directly. It was sometimes expressed in terms of their pride in working hard.

Job involvement was also expressed directly at times. For example, one Infant Support Worker expressed three times in her interview that "I love my job. It's not just my job. I feel that I'm helping people go out and do better. It gives me satisfaction...I love my work." Similarly, an emergency room worker reported that,

> *I love what I do. I've been in a number of different service areas within the social work department and the emergency room is the best fit for me. It's short- term crisis intervention, so I can see from start to finish that I've helped and that's very beneficial to me. I'm able to see from the beginning when I've had a very distraught family member to the end of the conversation with them that they've taken a deep breath and they can go on and they know what comes next.*

Another indicator of the staff's job engagement was their level of accomplishment. Numerous staff interviewed mentioned that they had received various honors and awards for outstanding performance. This took many forms. Some had been nominated for the Department of Social Work's annual Social Worker of the Year award, the most recognized award available within the unit. In this process of receiving these nominations, these workers were recognized for the quality of their work and their productivity, among other dimensions of outstanding performance. Additionally, these staff members received performance awards based on colleagues' feedback, such as "stars" given for outstanding performance. Similarly, our cardiac social worker reported that she had received more "You're Super" badges than anyone on her work unit. Further evidence of personal accomplishment and productivity were the academic achievements of some. For instance, two staff members had published books based on their professional subfields. This was done largely in their leisure time, which further demonstrates their professional commitment and energy. Additionally, there was evidence of team-based accomplishments as well. For instance, the geriatric team nominated itself for a "Team of the Year" award, given to a work unit that has made outstanding accomplishment throughout the fiscal year. In this case, the team perceived that they were accomplished relative to other units within the health system.

Another indicator of job engagement was the confidence and sense of effectiveness that many of these workers demonstrated during these interviews. For instance, our emergency room worker who had worked in the hospital for over 13 years said,

> *I've had a lot of experiences, so I can usually connect with patients at some level about what they are experiencing, and maybe help them see a different perspective to understand the system better, or whatever it takes to give them some satisfaction in their experience...Based on this experience, I feel confident that I know what to do, that I know how to help people.*

Confidence in one's clinical skills was related to staff members' sense of personal accomplishment. In the case of our emergency room worker, she indicated that she "listens very well," which helps her to be effective with patients. It helps her to solve problems with patients, and it enhances her psychosocial assessments of them.

C. Findings Regarding Maslach's Job-Person Fit Determinants

Participants were asked to comment on Maslach's job engagement framework. Again, this was done only after they were asked open-ended questions about the causes of job engagement. This was done in order to avoid influencing their responses. In general, there was moderate support for Maslach's model. However, respondents did not universally view the job-situation variables as cogent determinants of job engagement, and they extensively elaborated upon her model.

1. Workload

Maslach's model suggests that these engaged workers would view their workload as being quite reasonable, as reasonable workload predicts job engagement in the framework. However, workload was described as a substantial stressor by a number of these workers. That is, it was described as causing a significant amount of stress for most workers, rather than being a positive factor in enhancing job engagement. Stressful aspects of workload included both clinical as well as administrative duties. Among the

administrative duties, paperwork was commonly mentioned as a significant stressor. As one of our geriatric social worker put it, "the biggest non-clinical stress is the requirement to document everything we do; that gets kind of tedious...it's boring. That's the least favorite part of my work."

Similarly, the difficulty of workload was also seen as a substantial stressor by our cardiac social worker. She described her workload as highly demanding. Part of this high demand pertained to seeing many patients, in order to generate revenue for the health system. Additionally, she felt strain from a great deal of paperwork, such as medical record keeping, completing billing forms, filling-out confidentiality forms with patients, and the like. As she put it, the university "makes up work" for people to do.

Although workload was commonly viewed as a stressor that detracted from job engagement, this group reportedly responded with a high degree of energy. For some, high workload reportedly triggered control coping, that is, the attempt to deal with the stressor directly by acting on it. Most often this was done simply by working late to try to regain control of their work. As our geriatric social worker put it,

> *I like being caught up. I don't like being buried, and every so often I feel like I'm drowning and then I try to get caught up. That's one of the ways I cope...I don't like losing track of things. It helps me cope if I feel like I'm on top of things.*

Similarly, our cardiac social worker responded to her high workload by being the first one to arrive at work and being the last one to leave. While she saw her workload as excessive, and problematic, she approached it with characteristically high energy that was a long-standing personal quality. Again, her high energy appeared to mediate between high workload and job engagement. As she enthusiatically put it, "There's an

overwhelming amount of work, but factor in, there's an overwhelming amount of energy...I don't know many people who have my energy level."

While some staff responded to high workload with control coping such as working late, not all staff were able to do so. For instance, the two social workers who coped by working late had no children. This may be an important point relative to the accessibility of this coping approach. That is, since this subgroup does not have children to attend, their potential for experiencing role conflict between home and work responsibilities was reduced. They have more freedom to use this coping approach because of their family configuration. In this way, this particular approach to control coping may be seen as developmentally accessible by either younger or older staff, or alternatively, to those who simply do not chose to have children for a variety of other reason. In any event, this point underscores the relevance of a sociological factors in work stress.

Although numerous staff viewed workload as excessive, there were two who did not. For instance, one emergency room worker believed that she had a reasonable workload and that it facilitated job engagement. Interestingly, she attributed this reasonable workload to a structural arrangement – specifically, the fact that she did not have multiple supervisors. She contrasted this with past jobs in which she had numerous supervisors who did not coordinate with one another, and consequently overloaded her with work. In this conception, this worker specified a structural determinant of workload, which leads to job engagement or job stress.

Similarly, our second geriatric social worker also believed that she had a reasonable workload and that it contributed to job engagement. According to her,

reasonable workload was caused partly by a flexible management process. Specifically, staff had a degree of control over the number of patients assigned to them. If a particular clinician was overwhelmed, he/she could defer cases on a time-limited basis. Interestingly, she added that this process guarded against both excessive and inadequate workload. As such, she suggested that workload and job engagement were related curvilinearly. That is, having "too little or too much work," in her words, would lead to poor job engagement, but having a moderate amount of work would be ideal. As she indicated, too little work would lead to "boredom" and too much work would lead to "exhaustion." Interestingly, this formulation is consistent with the so-called Vitamin Model of job stress, which also posits a curvilinear relationship between workload and job stress.

While workload was not extensively identified as a determinant of job engagement, variety within the workload was seen this way. Our geriatric social worker indicated, for instance, that her ability to do assessments as part of the medical team, but also do group and individual psychotherapy, as well as memory improvement classes – all of these things contribute to a stimulating variety of tasks. In her mind, as long as the workload was feasible, the important cause of job engagement was variety, not workload per se. In other words, to this staff member reasonable workload was a necessary but not sufficient precondition for job engagement. Similarly, our second geriatric worker made a distinction between workload and work assignment or content. For her, the workload itself was not a problem, since she prefers to be busy. However, work assignments involving documentation were stressful because she found them tedious and boring.

There was evidence for the centrality of workload as a determinant of job engagement. In particular, our rehabilitation social worker viewed job demand as the most important environmental factor in job engagement. Although he saw job process and latitude as being important, he viewed job demand as more central. As he said, "How we design our work to be able to get the work done" determines whether "there enough time to see the patients." As he described, his unit increased patient capacity from 24 patients to 32 while reducing social work staffing from 2.5 to 2.0, resulting in less patient interaction with medically stable patients. In his formulation, excessive workload led to less patient contact, in turn leading to reduced job engagement.

2. Latitude

In contrast to the mixed evidence for workload as a predictor of job engagement, there was very consistent evidence that job latitude contributed to job engagement. Job latitude was seen as an important determinant of job engagement by all staff. It was most evident among the three emergency department workers. These social workers needed to be very independent and autonomous in terms of meeting the demands of their job because only one social worker was staffed per shift. Furthermore, this was especially evident among the midnight shift social workers, who had no supervisory staff on site and consequently felt a tremendous sense of freedom to control the process of their work. It was also due to the latitude they had been given to carry out their work. As one worker reported,

> *I think that the reason that we may have scored so high (on job engagement) is because the level of independence is so great. For social work needs...you have one person. And we have the opportunity to solve problems, to do what is called service recovery. If there's something*

that's gone wrong, we've been given the authority to do what you can to make this better.

This worker elaborated that emergency department social workers are chosen for their jobs, in part, because of the extensive amount of experience they have and ability to work very independently. In this sense, job latitude was not an accidental aspect of these jobs, but rather was acted upon consciously by managers and social workers. Indeed, the social workers were selected on this basis. Another emergency room worker agreed that there was extensive job latitude and that this helped her job engagement:

I am motivated to do my best without somebody looking over my shoulder, saying 'You do this and you do that.' That makes me unhappy.

Job autonomy was also seen as important to our cardiac social worker, as well. As she indicated, there was great freedom, especially when the program began.

I had amazing autonomy. There was no one else who practiced in my area. I said, 'this is what stress management is. These are the articles that we'll use...I had an amazing amount of autonomy.

Job latitude was also important to staff of other departments as well. For instance, our oncology social worker reported that

I think that (latitude)) has a role in feeling engaged in my work...I feel that I have control over how I structure and prioritize things...I feel trusted to do what needs to get done. I can plan that I'm going to do x, y and z from 9:00 to 9:30. I feel that the autonomy that is given on any given day is very helpful. So, yeah, I think that it's a pretty big piece of it.

In some case, social workers gave credit to their managers for allowing staff to make decisions about their own work. For instance, our geriatric social worker attributed her own positive morale in part to the amount of autonomy provided by her manager. As she put it,

> *Our manager is sort of the guru of this department. And she has -- I think her philosophy has been to hire good people, trust them to do their job well, and not be checking up on them all the time. I think that has created a lot of happiness here in that we can pretty much make decisions about how we want to spend our time. And so if I want to do something in the community, and it makes sense to me, she would generally trust me to do it.*

The worker elaborated that social workers in her unit function independently with a portion of patients who are medically stable. As she indicated, "social workers on this unit function independently from the medical team on some cases" in which medical problems are not present. In such cases, she said that "I'm the boss so to speak, so I can make decisions...I have my own little practice here..."

Our second geriatric social worker agreed, and reported that her manager allowed staff to make choices about their job assignment when one of the staff members resigned. Instead of automatically filling the open position, the manager asked the staff whether they would like to make adjustments in their own jobs before posting the position. By doing so, staff had some control over their job description, she reported. Similarly, this manager allowed staff to decide whether they could accept new patients on their caseload, rather than unilaterally assigning them. These practices illustrated the manager's general tendency to give her staff latitude in making decisions about their work, which positively impacted job engagement according to our respondent. This resulted in both an increased sense of job latitude and a greater likelihood of doing work

that she one inherently enjoys. As such, job latitude was tied to job process, showing how Maslach's independent variables are sometimes intertwined in the "real world."

3. Reward

Respondents made a very clear distinction between economic and social rewards. With regard to economic rewards, the evidence was mixed: some saw economic rewards as insufficient and a detraction from job engagement, while others saw economic rewards as adequate and enhancing of job engagement. Meanwhile, they almost universally saw social rewards as present and facilitative of job engagement. In this way, the results were diverse.

Concerning monetary rewards, numerous staff stated that such rewards in their profession were not satisfying, but that they chose the work anyway. These staff stated that salaries were substantially lower than other fields, and they attempted to not focus on this fact. Some expressed a sense of disappointment or frustration about their salaries, while others expressed a sense of humor as well. A geriatric social workers stated that, "Well...I think my salary stinks, probably, compared to other people of my capabilities." And our pediatric ICU worker reported that "We are not rewarded (financially) at the institution. We do a lot of work, and a lot of important stuff, and we are one of the lowest paid Master's level professions."

Meanwhile, other staff saw their salaries as being reasonable and facilitative of job engagement. For instance, our psychiatric social worker viewed her salary as relatively high and thus as increasing her job engagement. This was clearly the least experienced social worker in the qualitative sample, as she had less than five years of

social work experience as compared to the mean of approximately fifteen years. In her case, she expressed satisfaction that her pay was high relative to others and that salary was important to her. In this sense, she saw herself as benefiting from her perceived high salary. Interestingly, her case supports Maslach's view that the perception of adequate economic reward enhances job engagement. Conversely, the others largely saw their salaries as detracting from job engagement, as they were largely dissatisfied with their salaries. In both cases, the evidence was supportive of Maslach's framework.

Some social workers had spouses who earned larger incomes, and they spoke with insight about the effects of this second income on their job engagement. Two of them indicated that if they did not have a spouse who earned an ample income, they may not have been as engaged in their jobs. There was an acknowledgement that social workers without income-earning partners may have more difficulty financially. As our oncology social worker with a working husband put it, "I am very fortunate that I make the money that I make and it doesn't affect my life style." She added that at least one of her single social work friends struggled financially and suffered a decrease in her job engagement due to the financial difficulties. Additionally, our geriatric social worker said,

> *I am fortunate that I have a working husband...That has taken some of the pressure off my work. I do this work, not because I have to but because I want to. If I were working just for a pay check it would be different.*

Salaries were not the only economic rewards that were mentioned as relevant to job engagement. Receiving financial rewards such as bonuses and stipends from supervisors impacted job engagement as well. However, instead of generally being a detraction of job engagement, these rewards were seen as enhancing job engagement.

For example, our pediatric ICU worker was uplifted by the funding she received by her supervisor to attend a conference, which was provided as a reward for her hard work. This was seen as a form of acknowledgement that she does a good job. Such reward acted as a form of positive reinforcement that is consistent with Maslach's formulation.

In contrast to the mixed views about salaries, staff generally saw their social rewards as increasing job engagement. Positive feedback from other staff was a substantial determinant of job engagement. This took the form of complements that these staff received. As one oncology worker put it, "I get e-mails with messages that say, 'you're the best'...Its very rewarding to have them value the work that you do." Similarly, our pediatric ICU worker described the acknowledgement that other professionals give to the social work team. As she described it, "We're part of the medical team, and people look to us for our input and our assessment...and our psychosocial knowledge." Receiving such acknowledgement from the attending physicians, residents and nurses were all highlighted as important forms of acknowledgement. In this case, such acknowledgement or reward was not clearly distinct from social support or group cohesion, both to which she attributed her job engagement, as well. Of particular note, the acknowledgement that this worker knows more than the other professionals about the family was mentioned as a form of acknowledgement or validation. This was mirrored by one of our emergency workers who appreciated the positive feedback from others. As she said,

> *They call me to talk to people who are there for substance abuse. And they say, 'Can you come and talk to this person about substance abuse. Do what you do.' They call me to do something that they are not*

> *comfortable doing, and they appreciate it. I think they are respectful of you. There is a lot of professional respect.*

Social rewards sometimes took the form of unsolicited complements from physicians, which were seen as important enhancements of job engagement. For instance, a geriatric social worker emphasized that her contributions are valued by the physicians within the unit. In one case, a physician had e-mailed her direct supervisor as well as the departmental director to express his appreciation for her good work on a case. Similarly, our rehabilitation social worker told of a complement made to him in front of a patient by a prominent physician approximately ten years prior to the research interview.

> *I was a relatively new grad and I was doing an assessment, and (the doctor) came in and said in front of the patient, 'I'm going to let your social worker do what he does so well'...To get that from a physician who is really, really busy...For him to defer time to the social worker to spend with his patient, that's an example of support that's great. I don't get that from every physician, I don't expect to, but it's sure nice when you get it.*

These were clearly important social reinforcements, and they were not surprisingly powerful factors because they were made by those with a high amount of status and power within the medical community.

Social rewards from patients were also seen as very important sources of job engagement by most staff. One emergency services worker reported that "a lot of my reward comes from people I've helped and who tell me that I've done something important for them. That's were I get most of my reward." One of our pediatric workers similarly reported that feedback from patients and their families was very important to her, and that she received great satisfaction from such feedback. Another emergency

room worker also noted the importance of being appreciated and thanked by patients and families:

> *You get thanked a lot. You do -- you get thanked a lot...In the emergency room, after you get through the crisis, and before the patient goes out to the floor, the family will usually let you know how helpful you've been to them, which is nice, because you know. Otherwise, you don't have feedback, and you don't know whether you've helped or not.*

For this worker, the benefit of this appreciation was in part feeling rewarded and recognized. However, it was also beneficial in terms of the feedback loop that it provided her about her performance. The information about her performance was helpful to her because it helped her understand which interventions were effective and that her work was meaningful. This suggests that expressed appreciation from patents is not only positively reinforcing, as put forth by Maslach's model. There are also other beneficial mechanisms at work, in this case performance information and a sense of job meaning. As such, this worker's view elaborated on Maslach's notion of reward.

Another elaboration of Maslach's model is that social rewards were actively elicited by some staff, not just passively received. For example, our rehabilitation social worker added that he is energized by his work when patients simply thank him, send him a card, or call him to express their gratitude for what he has done. However, he himself contributes to this positive feedback by encouraging patients to visit after discharge, to "say hello, and say how they have been." In this way, he has enhanced the extent of this form of reward or reinforcement, and done so by taking action, rather than being passive. He even tells these patients that part of his purpose here "is to help re-energize our batteries for the next patients." As such, he is explicit that this process helps improve the

energy dimension of job engagement. As he simply put it, "It's uplifting." In this example, social reward is not something that is passively received from the organizational environment, but is acted upon and strategically enhanced by the worker.

There were other forms of social rewards that increased job engagement. For example, providing supervision to graduate student interns was mentioned as rewarding by our rehabilitation social worker. The sense of helping to launch the career of graduate students was seen as positive and fulfilling. While he described this as rewarding in terms of its meaningfulness, it also was a resource for him that helped him reduce his workload. That is, he could use students to help meet some of the clinical demands of his job. Furthermore, having increased resources could also impact his job process, since it mitigates the frenetic pace of his work.

In some cases social and economic rewards were not seen as mutually exclusive dimensions. For instance, in one case a social worker published a book with a colleague via a large publisher and received very positive press coverage for the same. This was rewarding both in terms of some monetary benefit and in the sense of acknowledgement of their expertise. Conducting trainings, talks, receiving publicity and the like all were highly rewarding in this case. As she said, this has "definitely helped my level of job engagement and was a lot of fun."

In sum, then, the participants made a very clear distinction between economic and social rewards. As a group, there were mixed results for the role of economic reward as a determinant of job engagement. However, social rewards were universally seen as facilitative of such engagement. These findings are inconsistent with Maslach's integration of the two dimensions of reward in the job-engagement framework, since the

two dimensions were quite inconsistent in this sample. In this way, the two dimensions may be conceptually similar as external forms of potential positive reinforcements, as Maslach suggests. Yet the two dimensions may be operationally distinct, given that organizations' economic conditions may vary from their social reinforcements.

4. Work Process

Work process was seen by most respondents as vital to their level of job engagement. By this, staff meant that the process of working directly with patients, the process of interacting with them, the daily work with them was central to their job engagement. One oncology worker put it this way:

> *I love the work. I really do. I love engaging with a person you just met and then entering into their lives to be with them at that moment when they have just received the most devastating news, where they're facing the most difficult stressor. And so I think that human interaction is very valuable to me...When I can see that the information that I'm providing brings them some sort of relief, or when you can see from their affect or tone of speech...that something that happened during that interaction has helped calm them down, I think that's really rewarding.*

The centrality of patient interaction was also emphasized by our emergency worker. She saw patient interaction as the essence of her work and important to her sense of job engagement.

> *Most important for me is the patient and family interaction, and how I fit into their whole ER or hospital experience. So it's what I can do for my client at the moment. That's what makes my job. So however I can be helpful to a family system or patient system is my focus.*

Some workers defined the process of interacting with patients as triggering an emotional response in themselves that was deeply satisfying. Our oncology social worker put it this way:

> *It's definitely...triggers something emotionally in me -- probable some need that I have...To be able to be with a person at a moment when they need something, and to help them through it, and to relieve some of their pain, I guess is just very rewarding—and to see it actually help them...It's touching another human being I guess.*

In a similar vein, one worker believed altruism was an important aspect of work process. That is, our rehabilitation social worker felt that many social workers gain a sense of gratification from helping others and that this is something that is gained on a daily basis and is inherent in the work. This view suggests that the process of helping others is important, not just the outcome of such altruism. This is the flip side of much burnout theory, which commonly attributes burnout to the daily relationships that exist with patients. In this case, our rehabilitation worker is citing the same daily human interactions as the basis for the opposite outcome, job engagement.

In contrast, none of the staff mentioned paperwork and administrative duties when asked about the process of their work as it relates to job engagement. This may have been due to the dislike that they had for such administrative duties. However, comments about such duties surfaced when they were asked about workload. In the context of discussing workload, staff complained that paperwork and administrative duties actually detracted from job engagement. In this sense, patient interaction surfaced as an enhancement of job engagement, while paperwork and administrative work appeared to detract from job engagement. As such, work process reflected a bifurcated experience,

one positive and one negative. This bifurcation is similar to the experience of reward, in which financial rewards were often seen as problematic but acknowledgement was seen as positive. As such, the interviews revealed the heterogeneous or multi-dimensional nature of the job-person fit constructs.

5. Community

There was mixed evidence for the importance of community as a determinant of job engagement among our qualitative sample. Some workers attributed their job engagement to group cohesion within the department of social work or within their work teams; some did not. For instance, an employee from the cardiology department described her thoughts about community this way:

> *I really like being part of a team...That I like more than anything: being with the people. Coming out with a program that represents all of us. I like being with the people...I thrive when I'm with people. I stand on their shoulders. I get smarter.*

In this statement, her enthusiasm, job energy and sense of competence are apparent. Her conception of her effectiveness and thriving are, at least in part, based on being integrated into a group. Although the causal pathway from group integration to work performance dimensions such as thriving were not explained, the group-based attribution is itself noteworthy as a determinant of job energy, a dimension of job engagement. In this conception, her effectiveness is not strictly an individual characteristic. As such, it differs from individualistic frameworks of resilience and job engagement, and is instead consistent with the group-based notion that such individuals benefit from social processes, such as social support and cohesion. Interestingly, in this case the worker

defines herself as a systems therapist. Therefore, her emphasis on group integration is not surprising, as her training predisposes her to attributing personal outcomes to group and family processes.

In some cases, the level of cohesion and intimacy within the work unit was very striking. For instance, our cardiac social worker reported that her unit was extremely close. As she described, "I think that my affection for people and their affection that seems to return to me is a predominant part of the happiness of my life. There has always been an incredible loyalty, connection and affirmation." This was also the case in the cardiac unit, where the social support was described as "immense…a very close unit."

A sense of community sometimes came in the form of clinical supervision. Our rehabilitation social worker suggested that this was an important determinant of job engagement. He demonstrated this with an historical perspective, recollecting that during a period of severe staff layoffs due to budgetary concerns, supervision was greatly reduced. Some time later, the present director of the department reintroduced supervision and this had very positive effect on his own level of job engagement.

> *Since that time (of no supervision), I've seen the morale of the department really take an upswing...So, yeah, I think supervision plays a key role, and I think the department pays much more attention to issues related to that.*

Supervisory support was also seen as conducive to job engagement by our emergency room worker. As she said, knowing that I have a good supervisor who knows what I do and who trusts my assessment is important – it makes for a really good working environment."

In some cases, workers felt that their supervisors were effective in one dimension of providing support but not another. For instance, one staff member felt that her supervisor attempted to be emotionally supportive and positive toward her, but did not provide adequate practical information. Therefore, the former was a source of satisfaction and the latter was not. "Sometimes my expectations are met as far as the social part of supervision, but not met for the practical things I need," was how this worker put it. "Sometimes you need the more directive feedback," is what she indicated. Other staff members reported that their supervisors were effective at providing both emotional and practical support and that both were helpful in reducing their level of stress.

Mutual trust between staff was also an important contributor of job engagement for some staff. One of our emergency room workers described the stability of the staffing as important because it led to mutual trust and support, which she valued. In her words,

> *When they call me, they know me; they know what to expect from me. And I know what to expect from them, as well. And to have that trust is (important). And to enjoy coming into work each day is because they are supportive and trustworthy.*

This attribution of support to an organizational characteristic is thematic. Numerous social workers were able to identify such structural determinants of job engagement, this being only one.

A sense of work community was also manifested away from the workplace. For instance, within the geriatric unit, social workers made it a regular practice to attend the dramatic performances of a social work colleague – done outside the work context, but still providing an important sense of group cohesion. Similarly, this work group had

occasional picnics and other outings. The cardiac unit also socialized together outside of work, for instance by celebrating occasional events by going out for dinner. In a similar vein, our psychiatric social worker said, she feels that her co-workers are "kind, supportive – they're all coming to my wedding. One of the geriatric social workers explained that such activities transformed the professional social support into friendships, which in turn increased job engagement. As she said, at work then "you don't feel like you're being judged."

Some workers emphasized the importance of social support at work as part of a broader form of psychosocial stability that leads to job engagement. As our cardiac social worker stated,

> *I have all the psychosocial support that a person could have: I have love, I have friends, I have money...I have a good marriage...Also, I have been in therapy for ever. I probably needed to be in therapy in order to be a good therapist.*

None of these were seen in isolation of the other, but rather as a part of broad form of stability that made job engagement possible. Again, the specific mechanisms by which these factors lead to job engagement were not explained. However, there are two mechanisms that can be hypothesized. First, social support may lead to an increased sense of self-esteem and social integration that acts as an emotional anchor at work. Additionally, the experience of being in therapy may share these benefits, in addition to increasing self-understanding that increases technical competence as a psychotherapist. These processes would clearly need to be confirmed in future research. However, this hypothesized pathway to job engagement demonstrates the possible intertwining of these social processes.

Some workers considered their units to be highly supportive across disciplines. As our rehabilitation social worker described it, his unit is highly supportive, including support from physicians, nurses, social workers, house keepers, transporters, and the like. "Everyone tries to appreciate each other for why they are there," he said. In some cases, this support was very simple, involving basic compliments from peers, which has made a difference.

Support from colleagues included pragmatic support. For one of our geriatric social workers, this included her colleague's willingness to cover her caseload while she is on vacation. She was quick to add that this was intertwined with emotional support. For instance, her colleagues empathy and responsiveness to personal crises at home combined with this willingness to see her patients was an important job engager. Interestingly, this worker partially attributed this social support to the physical work environment. That is, she saw an increase in social support when she lost her office and moved to a cubicle next to others. She believed that the cubicle arrangement, though problematic in some ways, did increase the social support she received. In this way, the physical environment was a determinant of job engagement. However, she was quick to add that this mechanism operated partly because she enjoyed her colleagues. An "annoying colleague" could preclude this process.

In contrast, community was not seen as a strong determinant of job engagement in some departments. In the Emergency Department, for instance, two of the three social workers indicated that they didn't feel particularly connected to other social workers. Such community among social workers was not possible during the night shift, as only one social worker works per shift, which precluded socialization. Moreover, even for our

social workers who work the day shift, community was de-emphasized as a determinant of job engagement. As one of these staff indicated, these social workers were highly experienced and independent; they were largely not invested in a sense of community. As one of these workers put it, "If you feel very stable, very loved in your own life, and so on, then colleagues are nasty to you, then that's fine." Interestingly, it may be that those social workers who sought and/or were selected for employment in the emergency room were especially independent. That is, because emergency room work does not entail ongoing relationships with patients, it may attract independent workers who are less concerned with a sense of community. Of course, this hypothesis requires further investigation.

To complicate this issue further, one of our three emergency workers viewed this issue differently. She believed that a sense of community did exist in the midnight shift. Interestingly, she attributed this sense of community to an organizational factor – namely, that it was due to lack of supervision during this shift. More specifically, she believed that lack of supervision led to increased informality in social relationships among workers, resulting in an increased sense of community. They were enabled to socialize during periods of slow patient flow, because they were not inhibited by supervisory monitoring. This led to increased community. Once again, a staff person derived a novel structural explanation for our outcome variable.

The degree of community was also mixed within specific work units. For instance, our pediatric ICU worker explained that she experienced a lack of connectedness with some employees, which was a job stressor. However, this was in a context of generally very supportive staff relations, which improved her job engagement. As our pediatric

ICU worker put it, "some staff will be more difficult to communicate with; they may not be particularly interested in what you have to say, and may be less accessible, and that can be frustrating or stressful." This same social worker was quick to add that, despite the few sub-par relationships within the unit, the relationships as a whole are very positive and that she works with a "terrific staff." In fact, she too attributed her sense of effectiveness in part to this staff. Interestingly, she defined effectiveness both in personal and communal terms – that the competence and ability of the staff in general enhanced her own effectiveness as well as the unit's effectiveness in general. For example, her ability to refer patients to competent staff provided her with a sense of competence. In this way, personal accomplishment was shown to have a social basis.

Similarly, our oncology worker suggested that community was sometimes caused by tenure of staff on the unit. The longer the tenure of a critical mass of staff, the more "they know each other like a family." She went on to add that this combination of community and experience increased her own job engagement, because it acted as an important resource for her. Like our pediatric ICU worker, she reported that being able to refer patients to experienced and competent staff who she knows increased her sense of accomplishment because she knows that these patients' needs will be met. Conversely, she added that it would be difficult to feel accomplished in an environment in which you were not confident of nurses or doctors.

To further complicate these findings, one worker who disavowed a sense of community reported that she did feel a mild sense of professional community among her colleagues from other disciplines. This was not a "personal" sense of community, as she

put it. That is, she did not see this as a cohesive community, but rather one that is merely collegial and respectful, one not fully integrated.

A moderate level of community was seen as important by our geriatric social worker. In her case, she preferred a "balance" of working within a team with working independently. As she said, I like working with a team, but I also like to work on my own part of the time, so it's a balance." Interestingly, her preference suggests a curvilinear relationship between community and job engagement, in the sense that both low and high levels of community integration would result in low job engagement, while moderate levels of community integration would result in high job engagement.

Our geriatric social worker attributed job engagement to the fact that the social workers in the geriatric center are well-integrated into operations and well respected.

> *I think that makes a big difference. I have noticed that in some areas of the hospital, social work is less respected. There's a big old hierarchy, with doctors up here (points upward). I feel like I have a more collegial system, for the most part.*

The integration of social work into this department is based on the universal involvement of social workers in all cases. That is, upon admission, all patients receive a social work services, as opposed to only receiving it in certain cases. This policy implicitly communicates the value given to social workers as a central part of the admissions process. This is another example of an organizational arrangement impacting upon job engagement outcome at the individual level. Meanwhile, this social worker also attributed the collegial atmosphere and consequent good job engagement to respect of social workers by physician leadership within the unit. As she put it, her manager

"respects social workers" and it's a "top-down kind of thing: if the lead doctors respect social workers, then it makes a difference."

Numerous staff experienced a sense of community within their specific clinics or work units but not within the Department of Social Work as a whole. The primary reason given for this was that the department is integrated across the health system in such as way that their daily work is conducted at the clinic, not the department, level. In other words, social workers were dispersed across the health system without much contact with each other as a group. Therefore, community was experienced within the clinic operations, in an interdisciplinary fashion, rather than among the social work staff as a whole. This was experienced despite the fact that the current administrator of the department was seen as committed to improving a sense of departmental community and morale. In this way, organizational structure was seen as an impediment to community.

6. Fairness

There was a moderate degree of support for fairness as a determinant of job engagement. To begin with, some staff believed that fairness was necessary for their own job engagement. For instance, our emergency department social worker saw that departmental administrators were making great efforts to be fair in terms of issues such as the determination of salaries, a current initiative of the department. As she put it,

> *I believe that I've been treated fairly in my work, in my supervision, my compensation, all of that. So I'm sure that has something to do with my engagement, and that if I hadn't been treated fairly that I wouldn't be as dedicated to this place or to this job. Everything needs to be fair... I am a very fair person. I try to be impartial. This is very important to my sense of job engagement.*

Similarly, our oncology worker indicated that the employer's fair treatment of staff was important and that treating her unfairly would hamper her sense of engagement. She felt that the organization did treat staff fairly and that this helped her feel engaged in her work. Positive feedback, positive enforcement and efforts to increase pay were sited as ways in which the employer treated her fairly and enhanced her job engagement. Similarly, one of our geriatric social workers suggested that fairness in procedures, performance evaluations and the like were important. Yet they are factors that are easy to overlook, she said. These are characteristics that "are taken for granted," as she said, "but the minute they are taken away, I would complain," she continued.

While some workers believed that they were treated fairly, others did not. These workers who held this latter view reported that such unfairness reduced their level of job engagement. For instance, our geriatric social worker indicated that salaries for social workers within the health system have been historically unfair. Despite efforts of the current administrator to improve these salaries, the salary structure remained unfair, she believed. This perceived unfairness detracted from her job engagement, she reported.

Meanwhile, other social workers believed that fairness was not a significant determinant of job engagement. For instance, our pediatric ICU worker believed that the social work department is not particularly fair, but that this did not make an appreciable difference in her level of job engagement. As our pediatric ICU worker put it, "I couldn't say to you that the (social work) department is fair, and that everything is equal, but nor is life. I don't have all those expectations." For this worker, fairness was not a necessary precondition for her to be engaged in her job, as she saw it. Meanwhile, others believed

that fairness is a necessary but insufficient determinant of job engagement. That is, it was seen as important that the employer be fair, and that an unfair work environment would lead to problems in job engagement. However, employer fairness was not a sufficient factor to cause someone to be engaged in their work.

Fairness was seen in a rather broad organizational context by one of the social workers. Our cardiac social worker believed that social work inherently struggles to maintain status, or in her words "significance," in a medical setting. Given the highly stratified social structure of a medical setting and the relative lack of a medical orientation within the field of social work, the social work department will always struggle with issues of fairness. Notwithstanding this organizational lack of appreciation, she did find fairness within her specific work unit and within her department.

Taken as a whole, respondents largely believed that fairness predicted their job engagement. Most believed that the organization was fair and thus increased their job engagement, while others held the opposite view – that unfairness detracted from their job engagement. In both cases, their responses comported with Maslach's model. Meanwhile, a few argued that fairness was simply not a factor in job engagement.

7. Values

Concordant values as a determinant of job engagement was not strongly supported by the workers' responses. The findings were inconsistent. On one hand, a number of respondents generally believed that their values comported with those held by their employer, and that this "goodness-of-fit" enhanced their job engagement. In particular, a few staff viewed the department of social work and the health system as putting a high

value on providing quality care to patients. One emergency worker gave a specific example of this value, citing a health system policy and practice:

> *I really care about people and one of the mission statements of the health system is 'putting families first'...I really believe that the University of Michigan is committed to helping people, not just making money.*

On the other hand, there were a number of workers who viewed the organization's values as discordant with their own and as being detrimental to their job engagement. This discordance generally regarded economic issues as they impacted patients. Specifically, perceived pressure to generate billable services has been seen as a problem in values. This was especially expressed about patients who do not have the financial resources or insurance to pay for a needed social work service, mainly psychotherapy. For instance, our emergency worker indicated that, while she understood the importance of revenue generation for the health system, she also would like to provide accessible services to patients. Interestingly, her emphasis on providing economically accessible services are rooted in professional values within the field of social work – that is, the amelioration of social inequalities. Similarly, our cardiac social worker indicated that her focus on serving wealthy patients who can afford to pay high out-of-pocket fees was a conflict with her values, or as she put it, "offensive to any social worker... and an assault on my values." Likewise, one of our geriatric social workers who felt a concordance of values with the organization, referred once again to accessibility of services. She contrasted her current ability to see indigent patients in her present position with a previous job within the department , in which she could not. As she said,

> *In that (previous) job, you...could only see patients who had insurance. I didn't become a social worker just to see people who can pay you. That was very hard for me (to refuse to see indigent patients). I remember that I felt very stressed about that. Whereas here...if you want to see someone who cannot pay...there are ways to do it...and that is really a relief for me.*

However, while some respondent reported that their values were discordant with their employers' values, their scores on job engagement were not substantially impacted by this job-person fit dimension: they were nevertheless engaged in their jobs, as evidenced by their MBI scores. Therefore, while they may have experienced this as dissatisfying, it was not strong enough to greatly reduce their job engagement scores. As such, concordance in values was not supported as a predictor of job engagement.

Furthermore, some staff directly denied that values make a significant difference in their job engagement. For instance, our pediatric ICU staff person reported having different values in terms of end of life decisions for patients. As she described it, the cardiology and NICU unit both aggressively prolong life: "They will try to save any human life that has a heart beat, basically." She elaborated that while she disagreed with this philosophy, it did not effect her job engagement. Conversely, when her values were consistent with her employer's, she again dismissed the importance of this variable on her level of job engagement. In general, her values were consistent with her employers, although she simply did not see this as engendering job engagement.

In sum, although a few respondents saw their values as consistent with the organization's and as enhancing job engagement, numerous others saw inconsistency in values with corresponding reduction of job engagement. Both of these scenarios comport with Maslach's model. Again, to the degree that there was discordance, it generally

concerned the accessibility of services to economically disadvantaged patients, a long standing social work value. On the other hand, some staff generally viewed values conflicts as not a significant determinant of their own job engagement.

D. Coping Styles as a Determinant of Job Engagement

In addition to commenting on Maslach's job-situation variables, interviewees discussed coping as a determinant of job engagement as well. This included comments on the coping styles delineated in Model 2 in this study -- reappraisal coping, planful coping and social support seeking. Respondents generally viewed these and other dimensions of coping as important determinants of job engagement, addressed next.

1. Reappraisal Coping

The first dimension of coping style used in Model 2 was reappraisal coping. Reappraisal coping was mentioned by a number of workers as an important cause of their job engagement. Broadly, the ability to focus on positive aspects of both one's job and home life was mentioned by numerous staff. For instance, our pediatric ICU worker reported that she uses reappraisal as a way to cope with difficult clinical outcomes for her patients. Specifically, she focuses her attention on achievable short-term objectives for her own service to these patients, rather than ultimate patient outcomes. In other words, her focus is on assisting patients cope with the immediate and short-term situation, rather than on focusing on the negative, global outcomes that may occur for these families. In this way, she gives greater attention to providing education and service referrals to the patient, as opposed to outcomes. As she puts it, "I always ask, what can I do better, what can I

change here to make things better for them" despite the enormity of the trauma at hand, such as a child who has suffered life threatening burns. In a similar manner, in cases when a child dies, she attempts to find positive factors on which to focus:

> *We have a lot of kids who die. I try not to take it home or to take it personally...I often ask myself, is this better for the child in the end – you know, quality of life and things like that.*

In this example, she actually contradicts her previous tenet of not focusing on outcomes. However, what remains consistent is her focus on the positive, the reappraisal dimension.

In a similar manner, this worker reminds herself that her work is out of the ordinary, and that it is abnormal for children to suffer severe diseases and death. In her case, she made efforts to focus on her nephew's health when she sees him, as a way to inoculate herself from her workplace exposure to childhood illness. That is, she attempts to focus on positive factors in her life. By focusing her attention on her role, what she can accomplish with her clients in the present, she was able to direct attention away from perhaps more emotionally taxing thoughts. This is consistent with cognitive-behavioral approaches to psychotherapy, in which emotions are managed through cognitive intervention. In this way, emotion is managed by changing cognitions. This worker did not use such language, but it appears that the underlying psychological mechanism may operate in this manner.

Similarly, our rehabilitation social worker described his definition of his work situation in a positive manner. As he described, many patients who come to his unit from the trauma-burn center had their lives saved. As such, they had good outcomes and were survivors. His job, then, in the rehabilitation unit, was to continue this recovery. Throughout this description was a focus on positive changes, healthy outcomes and

survival. He was clear and matter of fact that poor outcomes and deaths occur during this process, yet his focus and tone were upbeat and positive.

One of our emergency room workers suggested that she uses positive reappraisal as a coping style in her work. She equated this reappraisal coping with positive reframing that she does in her clinical work with patients. That is, she often helps patients identify positive aspects of their difficult situations as a way to help them adapt and develop in the context of hardship. She gave the example of sharing with physically traumatized patients that they do not have a closed head injury and that their broken bones will mend. It is this ability to identify positive aspect of patients' difficult circumstances that she applies to her own work situation.

2. Planful Coping

The second dimension of coping style used in Model 2 of this study is planful coping. There was general agreement that planful coping was an important aspect of job engagement. Some staff saw this in very pragmatic terms and as vitally important. For example, planning strategies for the completion of assignments, organizing one's schedule, organizing listings of community resources and the like were mentioned as planning activities that were important in terms of managing workload and stress. Two staff proactively compiled booklets to help themselves in this regard. One of these workers showed a book she had compiled of community services and programs, something she had proactively completed in order to accomplish her work and reduce stress. This book contained intervention and community resources information on sexual assault, domestic violence, homelessness, food assistance. As she said, this was an

important method of improving her sense of job accomplishment, since it helped her complete her work competently. Conversely, before compiling this booklet, she experience more stress on the job because she felt less organized. Meanwhile, her maternal support services colleague also had identified the lack of community resources as a stressor, expressed her commitment to learning as much as possible about such resources. "I try to learn as much as I can about resources and do this ahead of time. Note in this coping example that planful coping is intertwined with problem-focused coping, as there are elements of both.

Another coping method was the strategic use of staff development and continuing education. Some workers made extensive efforts to learn more about a substantive clinical issue, in order to practice their work more competently. This took many forms. In some cases, it was talking to a colleague about a problem. Other times it took the form of internet research. Sometimes it occurred through supervision. In general, the pursuit of education and training was a planful way to increase their sense of job engagement, perhaps especially personal accomplishment.

3. Social Support Seeking

The third dimension of coping style used in Model 2 of this study is social support seeking. Social support seeking is the active effort to access social support from the environment. It is distinguished from a supportive work environment, which is a dimension of Maslach's job-person fit variable, community. In other words, social support seeking is defined as a characteristic of the individual, whereas Maslach views social support as a quality of the organizational environment. Some staff clearly

attributed their job engagement to actively seeking social support during times of stress. As our geriatric social worker said,

> *When I feel stuck, I find someone to talk to about it. That would definitely be a coping skill: what do I do with this now? There are certain people I feel closer to who I bounce ideas off of. One of my colleagues and I are walking partners...At least half our time (walking) is spent talking about our work. It is sort of like peer supervision.*

During this time together, she benefits from both the pragmatic information she receives as well as from emotional support. In a similar manner, our oncology social worker also seeks social support. She put it this way,

> *When I am stressed out at work, I will always seek out someone to talk to. And definitely I know that there are some people in the department who if I talk to, I will immediately feel better. They'll listen, or they'll validate, or they'll try to give me an idea, or they'll say, 'You did everything you could'...For the extremely helpful cases, it's that debriefing...I very much appreciate that support that I get from my coworkers.*

Our emergency room worker similarly sought social support of peers, including both emotional support and practical help. She elaborated that social support helped her obtain ideas in an instrumental, problem-solving sense. She also expressed that it was helpful emotionally to talk to coworkers on an ad hoc basis and to friends who are also social workers.

Not surprisingly, it was important to seek social support from others who understood their work, usually others within their profession. One emergency worker put it this way. "They (social workers) understand right away. My husband doesn't get it."

Our oncology worker similarly said, "My friends who aren't social workers don't understand." She added,

> *My husband who is an engineer, doesn't think that way, so he doesn't get it. It's sometimes harder to go there with him than to talk to someone in the field because there aren't so many steps you have to go to explain. So I definitely think that it's the collegial support that helps when I need to vent.*

In many cases, staff purposely and informally sought out other staff in order to discuss difficult, frustrating clinical issues, often resulting in a form of catharsis. This occurred in numerous settings whether it was the Infant Support Services worker, the Oncology Department worker or the Emergency Department social worker. The latter put it this way.

> *Usually I will vent if the other person has experienced the same thing as I have. (For instance), if I had experienced an interaction with a nasty patient, I might say, "Geeze, that was really hard," or "I really wanted to wring his neck," or whatever. And they'll know what I'm talking about because they saw it, or they might have had the exact same experience.*

This venting often occurred on an ad hoc basis with other social workers, at shift change, or in supervision. In any event, it was seen as an important emotional safety valve. As our same emergency room worker put it later,

> *I also have people who I can rant and rave about whatever kind of day I've had. So I can say to someone. "I had this guy today that just ripped my head off."" Being able to vent to someone after a hard day is really helpful.*

Or as our psychiatric social worker put it, "it helps to moan and grown to friends who are in the field." Again, this benefit was combined with other advantages. As she explained, the benefits of talking to these friends were numerous. It included the practical support of receiving advice, reassurance that she was performing her work competently, as well as catharsis.

Workers sometimes sought cathartic social support from supervisors as necessitated by difficult cases. As our pediatric ICU worker said, "It's helpful to go into her room and vent and say, "This family is driving me crazy. I can't believe they're doing these things." In doing so, it was important to be understood, to not be judged negatively, and to know that the supervisor had been through similar experiences him/herself. This process could occur in a brief period of time according to this worker, in as little as five minutes of time.

A number of workers sought social support from their families. For the majority, this was seen as helpful but not sufficient as a determinant of job engagement. As one of our emergency room workers put it,

> *I have a girl friend who I call and talk to, and I have two sisters who I talk to, and I have a daughter who's a big support to me. But I'm not so sure that it affects how I like my job...It helped me feel normal, but didn't effect how I feel about my job.*

Meanwhile, others reported a striking lack of such family support. In two cases, this was largely due to family members and spouses who do not understand the nature of their work. In such cases, family members sometimes become uncomfortable or overwhelmed with description of these medical social work issues, and therefore these workers discontinued discussing work with them.

Some staff deliberately made efforts to increase the culture of social support within their work units. For instance, the rehabilitation social worker made efforts to compliment others when he noticed that such feedback was "stalling" within his work unit. This was often done in a spontaneous way with a sense that "dolling out compliments" would enhance morale generally. Interestingly, this was a more indirect and group-based approach to social support seeking. In this approach, this worker supportively acted on the group in order for it to supportively act on him. This is a clear example of the bi-directional and intertwined nature of some of Maslach's variables.

The importance of seeking social support away from work was emphasized by one of our workers. In his case, he described socializing with friends as being important to his coping with work, e.g., playing golf and having dinner together. Interestingly, in this case the worker is single without children. This might suggest the importance of active support seeking, because social support is not structured into his home life via a family. If true, it demonstrates the importance of sociological variables as determinants of job engagement, variables that are easily overlooked.

E. Additional Determinants of Job Engagement

The determinants of coping addressed thus far include Maslach's job-person fit variables as well as three forms of coping embodied in Model 2 of this study. Additionally, respondents spoke of other influences on job engagement, independent of the variables found in Model 1 and 2. These attributions follow.

1. Problem-Focused Coping

The coping styles used in Model 2 of the study were not exhaustive. Other coping styles were seen as causes of job engagement, including problem-focused coping. This approach was demonstrated by our oncology worker, who described her persistent efforts to manage her very high work load. As she reported, directly addressing the problem of unfinished paperwork resolved much of the stress. By leaving her job at night with a sense of being in control of it, she was able to derive a feeling of being engaged in her work. When contrasted with escapist coping, it is easy to see why this method of problem-focused coping is effective in the work place, perhaps particularly for demanding jobs.

Problem-focused coping was a primary method of coping for some of these workers. Some of these workers were very matter of fact and direct in expressing this, substantiating their comments about such coping. For instance, our emergency worker reported that "I'm there for a specific reason. There's a task that I've been assigned to do...I have a job to do, and how am I going to solve this problem whatever it is."

2. Optimistic Personality

Participants believed that their personalities enhanced job engagement. Personality factors that were seen as most salient determinants of job engagement were optimism and conscientiousness, the former being seen as the most significant by most workers. Our oncology social worker illustrated this perspective:

> *I think that my personality is -- I tend to be energized most of the time by things that I enjoy. I don't think that this has changed...I think that overall I'm a very happy person. I think that I see the glass half full as opposed to the glass half empty. I try to look for the positives in*

> *things...My perception is that people see me as a pretty optimistic, happy person.*

Our geriatric social workers expressed similarly optimistic and positive thoughts. "I just think that I'm just a lucky, lucky person. I feel that I'm blessed. I have just a good life." Some workers reflected their optimism in the way they saw others. For example, one of our emergency room workers put it this way,

> *I like people. People are generally good, and I want to do whatever I can to help...I guess you could say that I'm optimistic. I'm a very positive thinker, and I'll try desperately to see the good in whatever situation that I'm in.*

Additionally, some attributed both their effectiveness and longevity on the job to their optimism. Our rehabilitation social worker indicated the following:

> *Oh yeah, I'm optimistic. I couldn't do this job if I weren't. I couldn't do it well. And I couldn't have done it as long as I have. And it doesn't mean that I'm optimistic all the time because I'm not. But the prevailing piece is the optimism*

Evidence for personality factors playing a role in job engagement was also found in workers' consistent ability to be engaged in their work for different employers. The fact that these workers often felt a sense of job engagement across employers is consistent with the notion that personality played a role, since it was the constant ingredient of their engagement across these job situations. Although this is not definitive evidence of the primacy of personality playing a role, it is suggestive. In this way, our geriatric worker reported that she had a long history of being positive in a variety of jobs

and careers. She concluded that her positive outlook is probably related to her optimism. As she said,

> *I have enjoyed all of my careers...I have enjoyed them. So I think I'm generally positive about my work, and that's probably a personal thing. But I was also fortunate to come into this...I feel that I've lucked into a very good work place and I feel that I feel that I have an unusually great group of colleagues...we all feel that way...I really like all of my other jobs too.*

Another example of this was our Maternal Support Services worker who reported that she was very engaged in numerous stressful jobs. For example, one of these jobs entailed working with employees in a setting for dying patients, of which she also indicated that she "love that job too."

A sense of optimism was sometimes expressed despite staff having experienced hardships and adversity. As our emergency room worker reported,

> *Life is good. I've had losses in my life; I've had hardships in my life. So I wouldn't say that life has always been easy. But I can always be happy. It's important to me to be satisfied, in personal and professional life. And I do what I can to make that happen.*

Some saw their individual personality factors as being more primary than environmental factors in determining their job engagement. For instance, our oncology worker indicated that she saw her general optimism and happiness as being more primary than the organizational context. She attributed this optimism and happiness to the nurturance and affection that she enjoyed from her family of origin. "I was supported through my childhood and early adulthood by my family," as she put it.

In contrast, some staff saw their optimism as secondary to the job environment. In this conception both optimsism and job environment are important but the environment can over-ride optimism. As one of our geriatric social worker said,

> *I think that I am optimistic, but I also think that I've also chosen jobs that suit me well. Uh, I mean I can think of jobs that I'd be miserable in. I am an optimistic person, but I wouldn't assume that I'd be happy in any job that you plunked me in.*

3. Conscientiousness

Some staff attributed their job engagement partly to their conscientiousness. In the case of our pediatric ICU staff person, she is very conscientious about her job. For instance, she discussed staying late after work despite not being paid for it, but feeling effective because she strongly believes that the extra work made a "huge difference in the lives of some of these patients." Furthermore, she related this conscientiousness to job effectiveness. Specifically, she believes that her conscientiousness motivates her to objectively accomplish job tasks, which naturally leads to feelings of accomplishment and effectiveness.

Some workers described conscientiousness without labeling their job behavior as conscientious. Our emergency room worker put it this way,

> *I think what I do is make the best of whatever situation I'm in...For me, I do think it's personal: It's my choice to be here. It's my responsibility to come to work with a good attitude and to work well with the staff I'm assigned to. I can think of jobs that I've had that have been less satisfactory than others, and yet I've made the most of the situation that I was in.*

In this instance, she attributed a great deal of her job engagement to her personality, in the sense of making the most of her situation, as well as her sense of personal

responsibility. She saw her sense of responsibility, optimism, confidence and calm style as all being more salient as determinants in her job engagement than any environmental factors. Meanwhile, she did allow that some jobs were less intrinsically satisfying, suggesting that environmental factors were also at work.

This theme generalized not only across workers, but also across time for given workers. For instance, the worker who reported that she loves her current job also indicated feeling similarly about past employment, which was also stressful. One of these jobs entailed working with employees in a setting for dying patients, of which she also indicated that she "loved that job too."

Some staff saw themselves as natural at helpers of others. The emergency room worker reflected this as follows.

> *I have always been approached by others as someone to talk to bounce ideas off of, or whatever. I think I come by it naturally. It's not something that I necessarily learned, although I think I learned in school how to use that (more effectively). I think it is a personality trait. I couldn't define it necessarily, but this is the way I've always been...Being intuitive, approachable and willing gives you the basis to help others. To be effective you have to connect with people. You have to be someone that people want to talk to. And I can do that, and I'm glad for that.*

One worker described her personality as being consistent with those of her family with regard to their approach to work.

> *I'm more like my mother – even keeled...My children have this ability to keep on plunging. They're not at all depressive, where they just give it up, or quit trying or something. They're just going to keep working. I think my kids are resilient, and I think my Mom was too...My husband sees me this way too. He grumbles that if he died, I'd be fine (laughter). He wouldn't use the word resilient, but that's what he means.*

Other workers attributed their sense of job engagement to factor other than personality. For instance, our pediatric ICU worker suggested that her team is generally engaged in their work, but that they all have different personalities, thus concluding that personality was not a primary determinant of job engagement within her team. In her case, she attributed job engagement as a combination of personality and coping skills. She argued that some of her colleagues outside of her unit can not cope with death and dying issues. Conversely, she saw herself as being able to cope with difficult patient issues, and attributed this in part to her extroversion: "I have always been outgoing and can talk to anyone about anything" and since she "is here to help," they can always get information from her. She described that she is "just comfortable" with talking to others about very sensitive issues. In her case, she did not have definitive or specific notions about the underlying personality mechanisms or dynamics that explain her job engagement; however, she was nevertheless confident that personality issues were at least part of the causal explanation for her job engagement. Additionally, she attributed her ability to cope with sensitive clinical issues as stemming from being open-minded and nonjudgmental about families with whom she works. As she said, "I think it would be very difficult to work with some of the families I work with if I were really judgmental."

Another personality explanation is embedded in helping relationships. Our cardiac social worker suggested that workers in a medical system have the opportunity to help others and that such a role satisfies a need in such workers. As she said, "Whether this is based on someone's needs, based on their family of origin experience, or whether it is a pathology -- whatever it is, it satisfies a certain need."

Some workers felt that personal factors were secondary to environmental ones. For instance, one of the geriatric social workers hypothesized that even if she were particularly optimistic, this would be over-ridden by conflicts in values with her employer. She reported that her personality contributed to her job engagement but was not important relative to organizational variables such as values: "To me values are very important."

One worker suggested that personality style was more predictive of some job engagement dimensions than others. That is, she felt that her conscientious personality style has always resulted in her feeling a sense of personal accomplishment in all of her jobs. However, she has not always enjoyed these jobs due to organizational factors, which has resulted in a lower sense of job energy. In this way, her personality was important in its relationship to personal accomplishment but not to energy. (She did not have an opinion about depersonalization.)

4. Locus of Control

A theme that ran across interviews was staffs' internal locus of control. That is to say that these participants felt they could effectively impact their work environments in ways that they desired, and could determine various vocational outcomes. For instance, they also expressed confidence in their ability to change their work assignments or jobs, if they chose to do so, rather than passively accepting their positions. One of our emergency room workers indicated this as follows:

> *I am a person who believes that she has control. I am not stuck here, and if I were very unhappy I could seek to make a change, whether that be a*

big change like changing jobs or a small change like changing the environment.

This worker continued, "If I didn't feel that I could make a difference, then I'd get a new job." In fact, this same worker, after not having enough to do in a job assignment earlier, had gone to her administrator and said, "You need to put me somewhere else. I don't have enough to do." Shortly thereafter, she was switched to a position that she found more challenging, meaningful and important. Others, too, indicated that they had worked for problematic employers earlier in their careers, and they responded to these situations by actively seeking new employment. They expressed steadfastness and confidence in doing this in the past, and doing so in the future should they need to do so. In a similar way, some workers had a long history of considering their fit with their employers, with an eye to changing jobs if needed. Our oncology worker indicated that as early as high school, she considered her needs and personality in her work and whether her employer met these needs. If not, she was prepared to look elsewhere for employment.

Locus of control was very important as a factor in mitigating the negative effects of high work load. Sometimes this took the form of noticing that the workload was becoming more overwhelming and then making adjustments in one's work in order to take control of the amount of work that needed to get done.

Another aspect of locus of control was the ability of some staff to focus their efforts on those things that are achievable. One of our emergency room staff indicated that "I focus on what I can do, even if it something that is small. So that I feel that I can be effective with patients in this way." This practice conceptually overlaps with

reappraisal coping. In both cases a cognitive mechanism occurs, by which attention is placed away from a negative job domain to one that is positive.

One of the clearest demonstrations of the salience of internal locus of control was in our cardiac social worker. As an existentialist therapist, she strongly believed that people are ultimately responsibility for their decisions and responses to the world. This sense of personal responsibility and apparent urgency to act upon the world was put this way: "We are here, we are in this moment, and we are totally alive, and we have a choice about our life." Notwithstanding the definitive tone of this general statement, she later went on to elaborate in a more equivocal manner that her job engagement could have been caused by numerous factors. Perhaps this was a result, she said, of her situation. Specifically, when she was a younger worker, her financial insecurity made her more passive in accepting unwanted work conditions. Therefore, as a younger worker, her locus of control was weaker than it is now. This explanation of her job engagement includes an interesting integration of economic and developmental factors such that job engagement will increase over time – predicated on the increase of economic stability.

5. Humor

Humor was mentioned as an important coping skill by numerous staff. As one emergency room worker reported,

> *I use humor all the time. If it's appropriate with patients, you bet. And when I've established report with a family, I use humor all the time...Humor is very important.*

Our pediatric ICU worker said it this way: "I think you have to have a good sense of humor. It's important – we try to laugh a lot around here." Our rehabilitation social worker felt similarly: "Humor is huge. It's probably my primary coping style." This was true at work, at home, or as he said, "All over the place." He later added that humor may have a particularly positive effect on the level of cynicism that staff exhibit. In this sense, he believed that humor may enhance the job involvement dimension of job engagement. As such, this was an example of a worker hypothesizing about a specific dimension of job engagement, rather than speaking of job engagement more globally.

6. Spirituality and Meaning

The satisfaction gained from the basic purpose of helping other people was a theme that carried across interviews. Some times this was expressed as a religious purpose, although typically it was couched in more secular humanitarian terms. Regarding the former, one participant put it this way:

> *I feel that I'm doing what I was put on this earth to do – to help people. Be nonjudgmental, practice behaviors that God would approve of.*

Our pediatric ICU social worker simply indicated that social work is "what I was meant to do. It's what I'm here for." She did not define this in religious terms, but rather as a deep sense of meaning that she took from her work. The depth of such meaning was illustrated by our oncology social worker, who spoke of the deep gratitude that was expressed to her by a patient. This patient reportedly felt that the worker had represented a sort of spiritual intervention. As the patient put it, "You were like an angel, God has sent us an angel and you have helped us." Interestingly, this worker did not see this in a

religious sense, herself. Rather, she viewed it as moving and spiritual for the patient, and consequently poignant and meaningful for herself. More simply, the patient's profound gratitude triggered a deep sense of meaning for this worker. In turn, this sense of meaning was related to her own job engagement.

Additionally, our cardiac social worker was emphatic about the importance of meaning in her work. She believes strongly that the great sense of meaning that she derives from her work naturally results in high energy. That is, she attributed her high energy to the great meaning that she draws from her work.

> *If I get to do what — according to...an existential psychotherapy model— is the most meaningful thing to you, for pay...of course you have energy. I can't even believe that I do what I do. I get to do what is the most meaningful thing in my life. I get paid to grow and help other people grow.*

In a similar vein, our rehabilitation social worker indicated that, "I am not a particularly religious person," and religion does not play an important role for him in terms of coping or giving meaning to his work. In his case, too, the humanitarian nature of helping others was experienced as inherently meaningful, rather than being interpreted through a religious or spiritual world view. Also similar was one of our geriatric workers who attributed her job engagement, in part, to her need to find meaning in her work. This is a need that she saw as based in her personality, a need that is met by her job. Related to this need for meaningfulness was her need to use her capabilities. "I consider myself a pretty smart person, and if I felt like I wasn't using that intelligence I probably wouldn't be happy."

In contrast to this secular humanitarian theme, one worker viewed her work in a narrower religious context. In her case, she specifically attributed her commitment and involvement in her work to her religion. When asked if this was a spirituality that transcended religions, she denied this possibility and stated that it was her specific religion that made her work meaningful. In this case, then, there was a much more sectarian interpretation of vocational meaning, which was distinct from the sample as a whole. What was universal, then, was a deep sense of meaning that the respondents voiced, whether it was seen through the lens of general spirituality, secular humanism or a specific religion.

7. Skill Match

Although not a common response, one of our workers pointed out that a primary reason for her job engagement was the good match between her skills and those skills needed for the job. In the case of our cardiac social worker, the job gave her the opportunity to use her energy, teaching- and verbal skills. More broadly, she conceived of this match occurring in a wider social context, in which the institution of medicine became more open to alternative treatment options such as psychotherapy and hypnosis. Without this openness at this time, she believes she would not have had an opportunity to match these skills with those needed for the job. She expressed her gratitude for this skill by asking, "How many people, in their life, get to do, that in a sense, only they can do, at a certain place and at a certain time, when it needs to be done."

8. Job Variety

Having a job that entails a variety of tasks and responsibilities was reported as conducive to job engagement. Both of our geriatric social workers indicated that conducting a variety of clinical tasks was very helpful in maintaining job engagement. One reported that providing group psychotherapy, seeing individual clients, presenting inservices and lectures – this variety was a critical element in feeling engaged in her work. The other reported that giving talks in the community, working with volunteers, interacting with patients, training students in other disciplines, discharge planning and the like, made her job variable and engaging. As she stated it, "Having a variety keeps you from getting bored." Additionally, variety of patients was also seen as a determinant of job engagement, as mentioned above. Again, one of our geriatric workers emphasized that variety of illness was an important factor in staying engaged because easier cases acted as a respite from difficult cases. In sum, variety of tasks and variety of patients' severity of illness helped engender job engagement among our respondents.

9. Gender

There was mixed evidence for the importance of gender among this sample. Some staff saw gender as an influence on job engagement. For instance, our psychiatric social worker believed that she was energized by her will to succeed, and this will to succeed is grounded in proving her competence in the work world. In other words, she felt determined to demonstrate her worth in the work world, due in part to the historic devaluation of women; this determination, in turn, energized her to succeed at work.

Additionally, one of our geriatric social workers believed that gender was an important factor in job engagement, although she attributed this importance to a different mechanism. In her view, job latitude was very important because many of the staff – all of whom were women – had childrearing considerations. Therefore, the latitude that they were given to make decisions about their jobs, such as reducing or increasing work hours, was very important. This resulted in less role conflict between work and home, according to this worker, because women are generally the primary caretakers of their children.

Some workers questioned the contribution that gender plays in their level of job engagement. As our emergency room worker put it, "I know that most social workers are women, but I don't think that gender plays a role at all." Meanwhile, our lone male social worker also questioned the role of gender. He believed that personality type underlies social workers' choice to enter the field, and that this variable is a more robust predictor of job engagement than gender. His view is that social workers select their field based on personality type, which overrides gender differences. Although he was unable to label this personality trait or state, he did suggest that it involved being gratified by helping others. Interestingly, he added that other demographic variables, which are less obvious than gender, could also explain his level of job engagement. Among these, he mentioned marital status and number of children. In sum, both he and our aforementioned female emergency worker were somewhat skeptical about gender being an important variable in determining job engagement, and he in particular identified other causal explanations that he saw as being more salient.

10. Age and Maturity

There was consistent support for age and maturity as a contributor to job engagement. Although this was not raised as a factor by all workers, but to the extent that it was mentioned, it was consistently defined as a determinant of job engagement. Age, maturity and life experience were seen as intertwined variables. As our cardiac social worker put it,

> *If you look at our team...I am 20 years older than everyone else. I mean, I was mature, I mean I had been to the wall a few times, so I had a lot of experience. I wasn't as fearful...So I think my age has something to do with it.*

She added that with life experience comes inevitable hardship, which enhances one's empathy. Since this empathy, in turn, is central to being a psychotherapist, it helps in one's work. In a sense, then, she was formulating a conception that age is associated with life hardships, which then enhance empathy, followed by increased effectiveness as a social worker or therapist. One of our geriatric workers saw it similarly. She believed that because of being middle aged, she has experienced numerous hardships, including the near death of a family member due to an accident and substantial losses. This has made her a more resilient person she believed, and distinguished her from those who may have responded with a negative trajectory.

One of our emergency room workers similarly attributed her job engagement to maturity. However, she specified professional maturity as the key determinant of engagement. Specifically, she pointed to increased clinical skills, improved assessments skills and professional judgment. The development of these talents into her everyday work life made her more competent, and consequently her work has become more

enjoyable. The process of her work has become more enjoyable because of her competence and ease of working. In a sense then, this worker developed a developmental model of job engagement.

Additionally, some staff believed that their coping skills had improved over time. Our oncology social worker put it this way.

> *The more experienced you are, the better you are to handle stress. Also its hard to separate that out from becoming more mature (which helps too). And the more experienced you are, the bigger your bag of tricks, so that what was difficult (at the beginning of your career) is less so because you have an idea what works.*

Age and maturity was also credited with the increased ability to set boundaries between work and home life. In some cases staff improved their ability to do so over time. Our rehabilitation social worker described this enhanced ability to set firmer boundaries. Earlier in his career he would often stay at work until 7:00 or 8:00p.m., leaving little time for leisure activities and home life. In more recent years, he has made greater efforts to leave work earlier, giving himself more time to relax and be away from work stressors. He also makes a greater effort to not carry beepers and cell phones in his home life. While he attributed these firmer boundaries to changes in himself, he was careful to add that this change was partly a function of the work itself. His current job is intrinsically more predictable and less focused on emergency services. Urgent cases do not occur regularly and precipitously at the end of his work shift. Therefore, it is easier to set firmer work-home boundaries. Nevertheless, enhanced boundary-setting between home and job was partly attributed to experience and maturity.

11. Relaxation Coping

An assortment of recreational and leisure approaches were used by staff as a way to cope with work stress. Our emergency room worker uses singing and pets as a great "therapy," as she put it, in order to cope with stress. Our rehabilitation worker mentioned getting together with friends, reading the paper, and watching television. He also mentioned smoking cigarettes as a way he copes, the health implications of which he was highly aware. Meanwhile, our psychiatric social worker mentioned a variety of coping techniques including various forms of exercising such as walking, skating, racquetball, along with social support seeking among peers. Further, our maternal support worker listened to music as a way to relax.

Some workers described very specific coping skills that they used away from work. For instance, the use of exercise was a common technique, one used by our pediatric ICU worker extensively, as well as by our cardiac social worker. Further, our cardiac social worker was a seasoned meditator and used this technique not only on her patients but also on herself. In this case, however, she combined this technique with basic health behaviors, such as eating and sleeping well. This was a very conscious effort on her part, something that she learned later in life, given that she had lost 70 pounds as a result of efforts to eat more healthily. In general, she described herself as very systematic in using coping techniques, if not compulsive in doing so.

12. Resilience

When respondents were done commenting on the causes of their job engagement, they were asked whether they thought they were resilient, and if so, to what they attributed their resilience. While generally seeing themselves as resilient, most workers were

unable to extensively apply the concept of resilience to themselves in a specific way. They did not elucidate resilient characteristics when asked to do so; rather, their answers to open-ended questions about resilience were generally brief and un-expansive (although a few conveyed anecdotes regarding resilience). This lack of elaboration may have been largely due to the abstract and non-specific construct of resilience – i.e., that it does not denote standard dimensions which are commonly known. Nevertheless, numerous resilient qualities surfaced in other aspects of the interview, which are addressed as follows.

First, respondents' attributions of their job engagement are related to resilience. That is, the determinants of job engagement, mentioned above, are relevant to resiliency qualities. Again, these qualities include: reappraisal coping, social support seeking, optimism, conscientiousness, internal locus of control, humor, spirituality and relaxation coping. To begin with, the majority of these characteristics have been described in the resiliency literature to characterize resilient persons, as discussed earlier in the literature review chapter. Specifically, social support seeking, optimism, internal locus of control, humor and spirituality have all been posited as characteristics of resilient persons. As such, while all of these characteristics were described as determinants of job engagement in these interviews, they all have direct bearing on resilience, as well. Furthermore, two of the three remaining characteristics – positive reappraisal and conscientiousness – potentially may relate to resilience as well, although this is not directly found in the resiliency literature at this juncture. For instance, positive reappraisal may relate to optimism, which is a resiliency characteristic, because both involve the positive interpretation of events. Additionally, conscientiousness appears to relate to pro-social

behavior, which is a resiliency characteristic, because both involve internalization of norms. Again, these hypotheses need to be confirmed. Taken as a whole, then, a number of the reported determinants of job engagement appear to coincide with job resiliency qualities. Although this requires corroboration through future research, the interviews at minimum revealed conceptual overlap between job engagement and resiliency qualities.

Second, although not expansive about the concept of resilience, a few workers clearly demonstrated resilient personal histories. In particular, two workers transcended severe psychosocial stressors in their pasts. This included traumas as severe as the extremely premature death of family members, as well as other substantial life stressors. (Given the highly sensitive nature of these personal issues, great care was taken not to conduct this part of the interviews in a probing, intrusive manner. In particular, they were not asked to comment on traumas because it appeared inappropriate to do so in the context of this study. This was a conscious decision that gave highest priority to respondents' comfort and wellbeing. Furthermore, the design of this study did not call for probing of hardships. Consequently, it was not possible to describe such hardship, unless it was offered by respondents. Nevertheless, some respondents spontaneously shared information about such personal matters in the context of discussing their resilience -- despite not being asked to do so.)

One of the most dramatic anecdotes given of overcoming adversity was provided by one of our social workers whose family member died very prematurely of a terminal illness. This was clearly a devastating and traumatic event in her life. Subsequently, another family member was diagnosed with a terminal disease and relatively soon thereafter died, as well. In the process, she herself was diagnosed with a terminal

disease. To say she is resilient is perhaps an understatement, especially in light of her apparent boundless energy and enthusiasm that she speaks with in discussing her work and her life story. Her transcendence of these tragedies was also evidenced by her high scores on the M.B.I. scale, awards received at work, her general reputation within the department of social work and the university health system, as well as the passion and affection with which she speaks of her family.

This worker believed that the losses that she transcended helped her to become more effective in her work. As she indicated, through the death of her family members and her own medical illness, she greatly increased her empathy toward others. And through this empathy, she was able to enhance her effectiveness as a social worker. As she said, "I know what it means to be sick. I know what it means to see your (family member) die." Accordingly, her empathy was a mechanism through which her past hardships and losses made her more effective in working with others. Additionally, there was another mechanism at work. Her hardships lent her a great deal of credibility with patients; she was seen not merely as a professional, but as someone who had "real world" experience who had survived severe hardship and loss. As she said, out of her experience with pain and loss came an authority with patients. This contributed to her effectiveness as a therapist, she believed.

In addition to this poignant anecdote, other social workers also discussed the losses that they experienced in their lives. One of these workers also discussed the premature death of a family member. Although she did not elaborate upon the details of this severe loss, she clearly was able to rebound to the degree that she functioned at a very high level vocationally. Again, the M.B.I. results as well as professional awards

within the department of social work attested to her positive outcome that manifested resilience.

The above anecdotes provide the clearest examples of resilience because both demonstrated severe psychosocial adversity and positive outcomes. Other interviews were less clear because the history of psychosocial adversity was neither probed nor spontaneously provided by respondents. For instance, our psychiatric social worker also alluded to substantial childhood adversity but did not offer details of such hardship. Therefore, a claim of resilience cannot be made with certainty, as adversity was not confirmed. However, if she did experience such hardship, then the concept of resilience is relevant. In this case, she attributed her competence and confidence to the work ethic she was instilled with by a parent, who modeled this for her. This work ethic was reportedly manifested by a keen focus on improving her work skills, being highly goal-directed, and maintaining high standards for her work performance.

In sum, it was difficult to confirm the full extent of resilience among this sample because it was inappropriate to probe the psychosocial adversity that underlies the resiliency construct. However, there was evidence that determinants of resilience may be related to that of job engagement. First, the fact that two of our respondent (spontaneously) shared their psychologically traumatic experience of the premature death of family members was suggestive that job engagement and resilience might be related, since these workers exhibited both severe adversity and positive outcomes – two criterial of resilience. This relationship between job engagement and resilience requires empirical confirmation through further studies because the existence of both qualities in this small sample could be due to chance. Second, the job engagement determinants defined by

these workers were consistent with resiliency qualities found in the resilience literature. As such, reappraisal coping, social support seeking, optimism, conscientiousness, internal locus of control, humor and spirituality seem to lie at the intersection of job engagement and resilience.

Summary

There were a number of themes that emerged from the qualitative interviews. First, Maslach's job engagement model was moderately supported, as most respondents largely agreed that the model's independent variables enhanced their own job engagement. However, their responses were not highly consistent and reflected caveats to be addressed further below. Secondly, the respondents agreed that the coping variables in Model 2 increased their job engagement as well, i.,e., reappraisal coping, social support seeking and planful coping. Third, the respondents identified additional determinants of job engagement, including problem-focused coping, optimism, conscientiousness, internal locus of control, humor, spirituality and relaxation coping. Fourth, some of these qualities are ones that are delineated in the resilience literature, as well, suggesting that job engaged and resilient persons may share some of these characteristics. And fifth, some of our job engaged respondents also demonstrated signs of resilience, as their life histories clearly revealed transcendence of substantial psychosocial adversity. In sum, the interviews tentatively suggest that job engagement and resilience are complex constructs with many contextual and personal dimensions, and that these dimensions overlap. Although this empirical relationship between job engagement and resilience requires further investigation, the findings are suggestive that the two characteristics may

be related. Additional interpretations and implications will be addressed next in the discussion chapter.

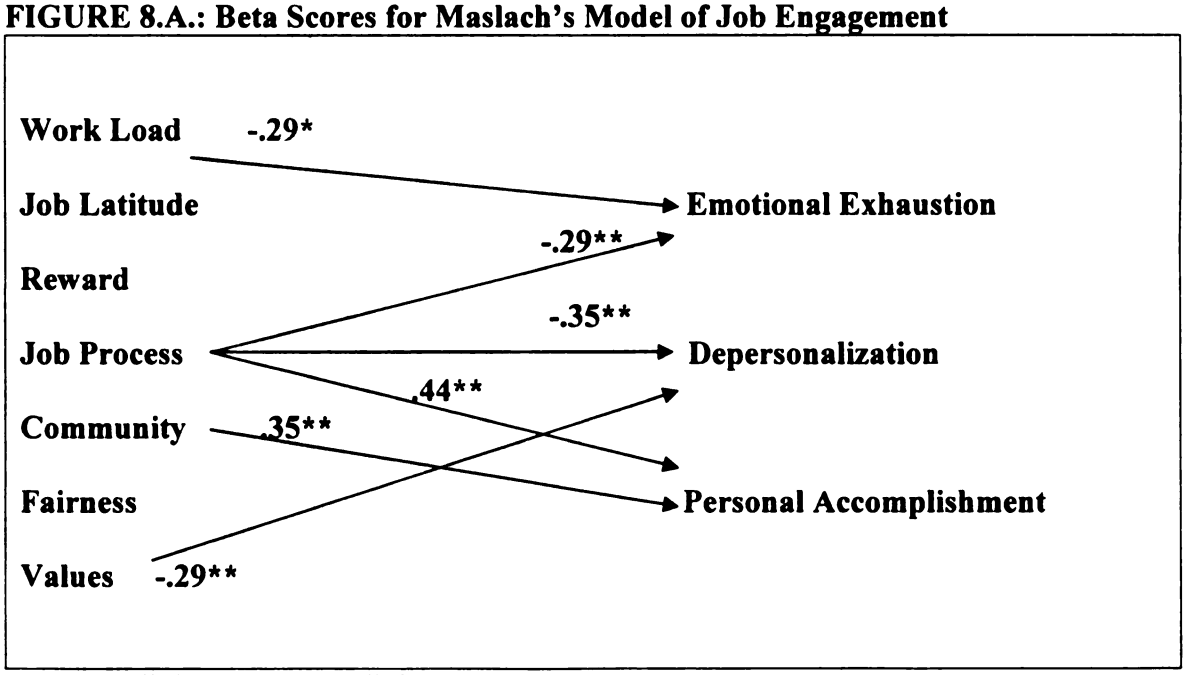
8. DISCUSSION

Having presented the quantitative and qualitative findings, we now more broadly discuss these findings in terms of their substantive and theoretical significance. We begin by addressing the theoretical implications of Maslach's model, that is, Model 1 in this study. We then address the implications of the mediated model posited by our study, Model 2. Subsequently, we turn our attention to the theoretical implications of the qualitative portion of this study. Thereafter, the existence of job engagement and resilience among this qualitative sample is discussed. Finally, we address numerous limitations of the study.

A. Theoretical Implications of Maslach's Model

Again, Model 1 in this study constituted a test of Maslach's model of job engagement, in which seven job-person variables were posited to determine the three dimensions of job engagement. The findings are once again presented below, for the reader's convenience.

FIGURE 8.A.: Beta Scores for Maslach's Model of Job Engagement



p≤.05; (2-tailed). **p≤.01 (2-tailed)

Again, the most fundamental finding was that Maslach's model was moderately supported by the findings, insomuch as four of the seven predictor variables were significantly related to Maslach's posited dependent variables. In short, her model is supported as a parsimonious set of predictors of job engagement. However, a caveat is that three of her predictor variables -- job latitude, reward and fairness -- were not found to be significant predictors of job engagement. As such, the model was not universally supported. Fundamentally, this suggests that social-organizational variables are predictive of job engagement for this sample. This is an important finding, as it provides support for the view that occupational outcomes for staff are not strictly due to personal factors such as personality traits. Theoretically, this is consistent with sociological and social psychological frameworks that view personal functioning as a function of social and organizational variables that are proximal to the person. Whether the framework is Maslach's model tested in this study, or a related socially-based model such as the Demand-Control-Support framework, the underlying premise that social variables are related to personal vocational outcomes is substantiated. Conversely, it is inconsistent with highly individualistic or intra-psychic models of human behavior, in which social environmental factors are seen as minimally predictive. Additionally, it is inconsistent with many intervention programs, which typically ignore social variables and target individual-level variables only.

Secondly, job process was found to be the most important predictor of job engagement. More specifically, job process -- the intrinsic enjoyment of one's daily work -- was found to be strongly related to all three of the job engagement dimensions.

In short, this was the most robust predictor of job engagement in Model 1. This suggests that extraneous variables, such as job reward and community, may be less salient predictors of job engagement than the process of one's work. As such, favorable extraneous conditions such as cohesive work community are not as predictive of job engagement as the work process itself. Conversely, unfavorable conditions such as a lack of community may be over-ridden by a positive job process. Indeed, this was the qualitative feedback from some of the workers who indicated that community and social support were not important factors in their job engagement, as they reportedly did not need these qualities – they simply enjoyed the work itself, the job process. For instance, two emergency room workers remarked that community and social support was secondary to the work itself.

A more general interpretation of these intrinsic and extrinsic work findings is that both job process and workload represent intrinsic variables, while the other independent variables represent extraneous social conditions, e.g., values and rewards. As such, a slightly broader conceptual distinction can be made between these predictors. Interestingly, an empirical distinction seems to corroborate this view. That is, these two intrinsic variables -- job process and workload -- account for a total of four significant relationships with job engagement. Meanwhile, of the five extrinsic variables, there are only two significant predictors of job engagement -- community and values. In this way, the intrinsic variables constitute a more parsimonious set of predictors of job engagement than the extraneous variables. When seen in this way, social factors are seen as important and relevant to this sample, yet are secondary to variables that describe the inherent nature of the work itself. This is an important theoretical finding because it suggests that

strong attention should be paid to these inherent factors when devising and refining occupational theory. It also has practical ramifications as well. For instance, management failure to consider intrinsic variables such as work overload and job process may be counterproductive, because it may lead to reductions in job engagement and performance.

Third, a related finding is that job process and values are significant determinants of depersonalization. That is, the more that staff perceived their job process as favorable, and the more they saw their values as consistent with their employer's -- the less cynical they were about their work. This is a particularly salient finding, given the intimate and highly influential relationships that social workers have with vulnerable patients, such as those in the process of life altering losses and those with multiple, chronic diseases. The importance of minimizing workers' sense of cynicism may be very important in terms of providing patients with "high quality of care," characterized by attentiveness, compassion and empathy.

Fourth, personal accomplishment was influenced by more independent variables than the other job engagement dimensions. Specifically, fairness, community and job process were all significantly associated with personal accomplishment. Furthermore, the personal accomplishment-job process relationship was the strongest association within the model. This suggests the possibility that enhancing personal accomplishment may be a relatively actionable goal, because there are numerous pathways that lead to it. In any event, to the extent that these variables can be enhanced, it may result in additional organizational improvements, such as increased longevity and enhanced job performance. This question of whether the enhancement of organizational variables such as fairness,

community and job process improves other personnel outcomes such as staff longevity is an area for future research.

B. Theoretical Implications of Mediated Model of Job Engagement

Model 2 in this study represented an elaboration of Maslach's model. It proposed coping style as a mediator of the job-person fit relationship to job engagement. In general, the evidence for this mediation was modest, but not negligible. These findings regarding the mediated model are presented again in the figures below. To begin with, the regression analysis for emotional exhaustion found that workload was negatively related to social support seeking, which in turn was positively related to emotional exhaustion. In other words, the perception of reasonable workload predicted a reduction in social support seeking, which in turn predicted a reduction in emotional exhaustion. More simply, as workers view their workload as reasonable, they reduce social support, and in turn reduce their emotional exhaustion. Conversely, perception of unreasonable workload predicted an increase in social supports seeking, which in turn predicted an increase in emotional exhaustion.

One interpretation of this scenario is that unreasonable workload is a powerful variable that cannot be over-ridden by personal actions such as social support seeking -- that despite efforts to manage unreasonable workload by seeking social support, emotional exhaustion nevertheless results. This scenario supports the notion that brute organizational demands such as workload play a crucial role in personal outcomes for workers, and that such demands transcend individual efforts to manage them. This is

consistent with the common finding in the job stress literature that organizational factors are more salient predictors of burnout than are personal factors.

A possible criticism of this interpretation, however, is that this study did not actually measure workload, per se, but instead measured the subjective perception of workload – something that could be seen to be, at least in part, a personal rather than an organizational factor. For instance, perception of unreasonable workload could be posited, in part, as a function of neuroticism. This general caveat about the external validity of workload appears to be a valid, and suggests a degree of caution be taken in interpreting these findings as supportive of the model. In any event, these findings do not comport with the mediated model's expectation that perception of unreasonable workload would predict an increase in social support, which in turn would lead to reduced emotional exhaustion. That is to say, social supports seeking was posited to over-ride the effects of unreasonable workload, and this was not supported by the findings.

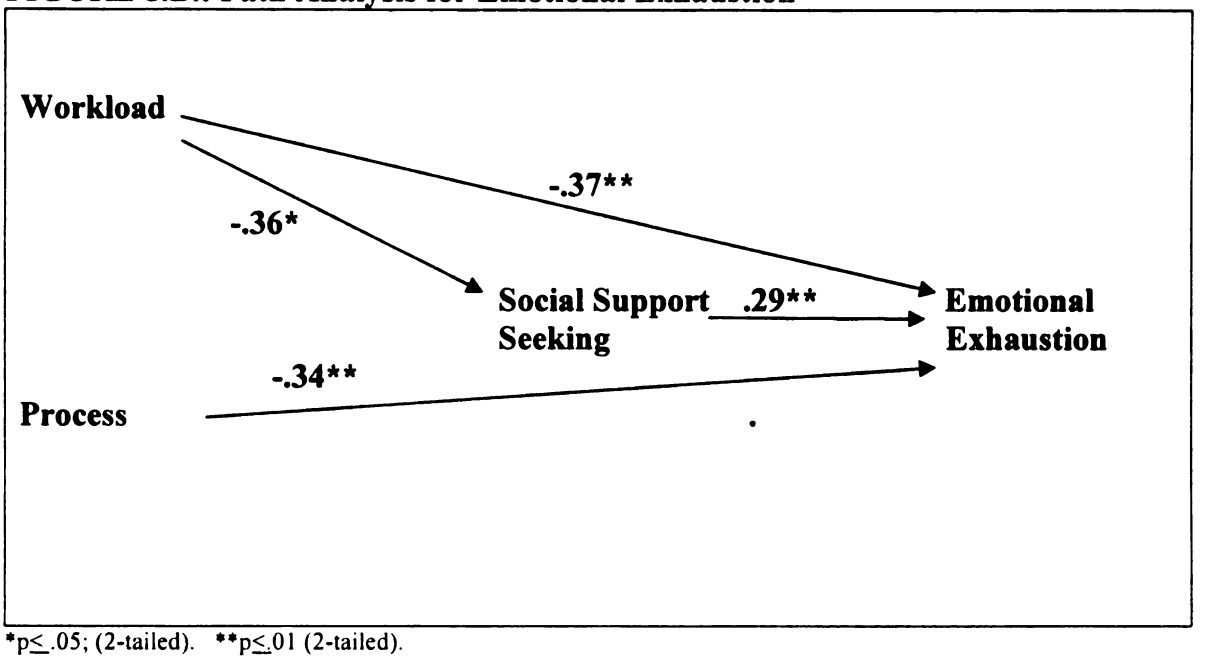
Additionally, workload was found to directly relate to emotional exhaustion. The direct relationship is inverse, suggesting that the more that workers felt that their workload was favorable, the lower their scores on emotional exhaustion. This makes intuitive sense, since high workload naturally drives up expenditures of energy, resulting in higher levels of emotional exhaustion. Indeed, this finding is often found in the job stress literature (Lee & Ashforth, 1996). Once again, this finding supports the notion that workload is a particularly important predictor of emotional exhaustion because it is related both directly and indirectly to this outcome variable.

Meanwhile, job process was directly and inversely related to emotional exhaustion, meaning that the more job process was judged as favorable, the lower the

scores on emotional exhaustion. However, job process was not mediated by coping in any way posited in the model, as it was unrelated to coping styles in our earlier regression analysis. One interpretation of this lack of mediation is that job process is such an inherent and over-riding part of one's work that it resists influence by coping style. For instance, if one's work is intrinsically aversive or boring, the influence of coping may not mitigate this aversion or boredom.

Taken together, the salience of workload and job process can be interpreted to mean that intrinsic work factors outweigh extrinsic work characteristics in predicting emotional exhaustion. More specifically, intrinsic work characteristics such as workload and job process may be seen as more important than extrinsic work factors such as values, fairness, reward and community in predicting emotional exhaustion. This intrinsic-extrinsic dichotomy offers a way in which to conceptualize organizational stressors and their relationships to the three dimensions of job engagement. In this way, intrinsic factors may be seen to influence workers' emotions such as exhaustion, fatigue, and even depression – feeling states that related to emotional and physical exhaustion.

FIGURE 8.B.: Path Analysis for Emotional Exhaustion



*p≤.05; (2-tailed). **p≤.01 (2-tailed).

The findings for depersonalization also demonstrated direct and indirect relationships for our outcome variable. Job process was shown to be directly and inversely related to depersonalization even while controlling for our coping variables. This suggests that the more favorable staff perceived their job process, the less depersonalization they experienced. Once again, values are directly and inversely related to depersonalization, meaning that the more favorable the organization's values were perceived, the less depersonalization was experienced. Meanwhile, an indirect path existed, through which workload predicted social support, which in turn led to depersonalization. That is, work load predicted social support seeking, as shown earlier, which then predicted depersonalization. Although this indirect path did exist, workload was not directly related to our outcome variable, depersonalization, suggesting that true mediation did not exist.

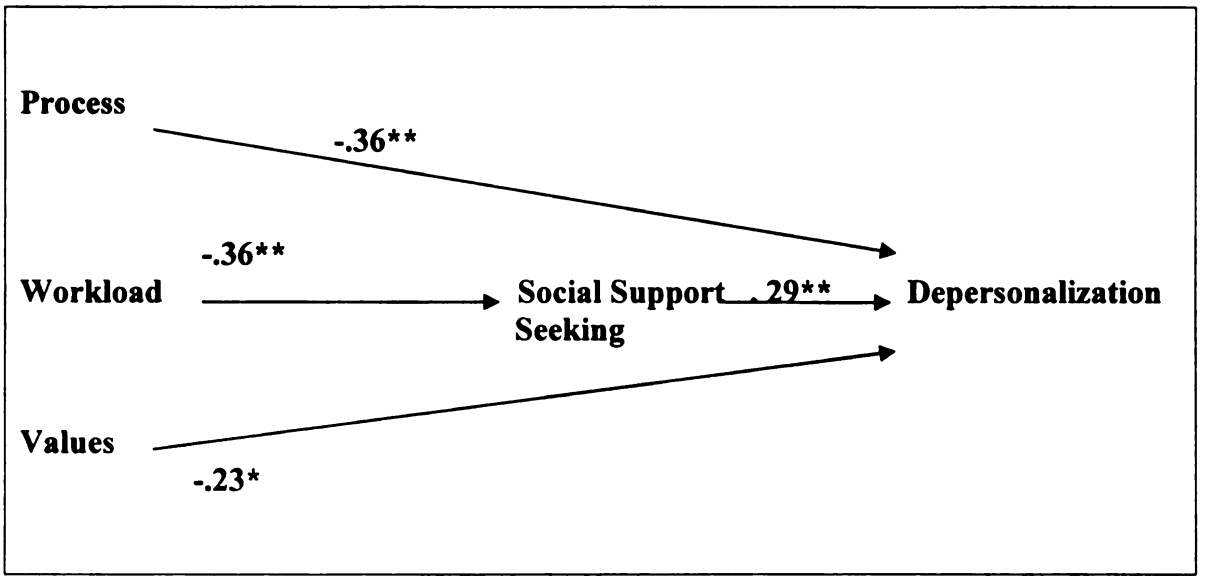
The salience of workload and work process is again supported by these findings. In general, this suggests that these intrinsic work characteristics (workload and process) are

important across job engagement dimensions. That is, they are not only salient predictors of emotional exhaustion, the emotional dimension of job engagement/burnout. They also are important predictors of depersonalization as well, an attitudinal dimension of job engagement. As such, this supports the notion that intrinsic work factors play a primary role in job engagement, generally, relative to the secondary roles of extrinsic job factors.

Additionally, these findings once again demonstrate more support for Maslach's unmediated model than for the proposed mediated model. In particular, workload was not related to depersonalization in a preceding multiple regression analysis, a necessary condition of mediation. As such, the direct relationships between process and values was more compelling as the indirect relationship between workload and depersonalization.

Further, the particular salience of job process was supported. Once again job process had a direct, unmediated relationship to job engagement. This suggests that job process, the actual work itself, is particularly robust as a predictor of job engagement. In this way, the work process itself transcends our proposed mediators and also outweighs our extrinsic variables.

FIGURE 8.C.: Path Analyses for Depersonalization



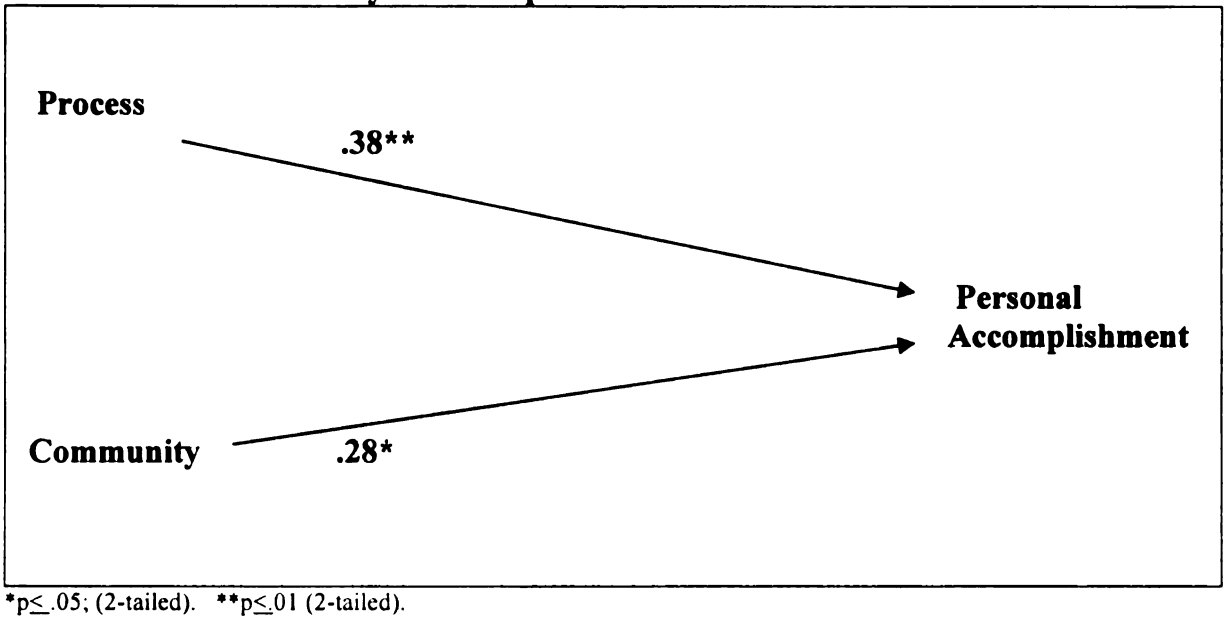
*p≤.05; (2-tailed). **p≤.01 (2-tailed).

The hierarchical regression analysis findings for personal accomplishment is again shown in the table below. The evidence does not support coping as a mediator of personal accomplishment, as none of our coping styles were related to personal accomplishment. Because coping styles were not related to personal accomplishment, they cannot mediate the relationship between our independent variables and personal accomplishment. Meanwhile, process and community both are directly and positively related to personal accomplishment, suggesting that the more that staff perceived their work process and sense of community favorably, the more they felt a sense of accomplishment in their jobs. Therefore, our mediated model in this regression failed to be supported in any way, while Maslach's model was moderately supported.

Once again, the findings show that job process predicted job engagement. In sum, all three dimensions of job engagement are predicted by job process. This demonstrates that job process is the most robust predictor of job engagement in the quantitative analysis. As such, we see that job process does not merely predict our emotional

dimension of job engagement (emotional exhaustion); it also predicts our attitudinal dimensions of job engagement (depersonalization and personal accomplishment).

FIGURE 8.D.: Path Analyses for Depersonalization



*p≤.05; (2-tailed). **p≤.01 (2-tailed).

In sum, these quantitative findings indicated that modest support existed for our mediated model. Among the most salient findings was that workload was the only independent variable that was mediated by coping style. No other independent variables were shown to predict job engagement in a mediated manner. Interestingly, the salience of workload was much greater in this mediated model than in Maslach's framework. Instead of being among the weakest variables directly related to job engagement, it was the only variable indirectly related to job engagement in the mediated model. In other words, relative to the other independent variables, it was more salient in the mediated model than in Maslach's formulation.

Another salient variable engendered by the path analysis was social support seeking. Social support seeking was found to be positively, and directly, related to both emotional exhaustion and depersonalization. Substantively, this finding suggests that the more that

social support is sought, the more exhaustion and depersonalization was experienced. One interpretation of this finding is that once unreasonable workload is perceived, social support seeking is activated but does not sufficiently over-ride such a workload – strain is still experienced despite this coping effort. Another interpretation of this finding is that the model incorrectly depicts the causal ordering. Whereas the model posits that social support seeking leads to less exhaustion and depersonalization, a negative relationship, the findings show that that a positive relationship exits. Again, this may actually reflect that exhausted workers seek social support because of their exhaustion, a reversal of the causal order posited by the model. Of course, this question of causation is technically unanswered, as the level of knowledge allowed by our methods is correlational, not causal.

Another general finding is that work process and workload are the most robust predictors of job engagement. Again, these variables can be seen as a set of intrinsic work variables, as opposed to extrinsic or environmental factors. Their salience supports the view that workload and process are brute facts of work life that are unmitigated by mere coping style. Simply put, if work process and workload are perceived as excessive, coping style may not mitigate these perceptions because the very nature of work is experienced negatively. Metaphorically speaking, an indentured servant would not be engaged in their servitude merely because he/she has effective coping skills, inasmuch as the brute harshness of their work process and workload over-ride his/her coping. In this way, coping style may be a weak mediator when one feels overworked and dissatisfied with their daily work. Indeed, this interpretation is supported by the data, as follows. First, workload and work process account for four of the six relationships to job

engagement in Maslach's unmediated model. In contrast, the five extrinsic job-person fit variables only accounted for two relationships to job engagement. In this sense, these intrinsic variables (process and workload) are more predictive of job engagement than the extrinsic variables

Although evidence of coping as a mediator was not strong, Model 2 presented a finding that modestly supported the importance of coping as an independent predictor of job engagement. That is, our above path analysis for emotional exhaustion and depersonalization both showed that social support seeking were directly related to these dimensions of job engagement. In other words, job engagement is not only predicted by Maslach's organizational variables, it is also directly predicted by coping factors. As such, both organizational and personal variables are related to job engagement, not just one or the other, as is sometimes portrayed in the person-situation debate within the social sciences. Accordingly, this finding substantiates the criticism that the person-situation debate represents a false dichotomy, as both domains are important.

Furthermore, while mediation is not strongly supported by Model 2, the study did arguably demonstrate a sufficient degree of mediation to warrant further exploration of such mediated models. Specifically, social support seeking was found to mediate the relationship between workload and emotional exhaustion. To the extent that further research substantiates such mediated models, it would provide further evidence that the person-situation dichotomy is specious, because the evidence would show that, not only are both person and situation relevant, they actually relate to each other in ways that predict personal outcomes. Such mediated models, if supported, would help inoculate

against the criticism that work stress models are reductionistic, since it would involve more transaction between the organization and the individual.

C. Theoretical Implications of Qualitative Findings

The qualitative findings were also moderately supportive of Maslach's model as well. To summarize, the following patterns were revealed. First, with regard to workload, there was mixed evidence that it leads to job engagement. Specifically, numerous workers reported dissatisfaction with workload but remained job engaged nevertheless, which is inconsistent with the Maslach model. Additionally, there was a bifurcated set of responses, one regarding caseload and one concerning paperwork. Second, there was relatively strong evidence that job latitude contributed to job engagement, as staff consistently saw latitude as an important determinant of job engagement. They also generally reported their job latitude to be high, which accords with the model because latitude and engagement are posited to relate positively to each other. Third, rewards revealed two very distinct patterns: financial rewards were largely seen as a detractor of job engagement and social rewards were seen as conducive to job engagement. The strong split suggested a discrepancy between these two elements. Fourth, staff generally saw their work process as very conducive to their job engagement, as they were highly involved with, and even passionate about, their work with patients. Responses were once again bifurcated, here, as patient interaction was seen as vitally conducive to job engagement while administrative/paper work was seen as detrimental. Fifth, there was generally a strong sense of community, and most workers strongly believed that a sense of community positively contributed to their job engagement. A couple of workers

disavowed this, but they were exceptions. Sixth, fairness as a determinant of job engagement generated moderate support, including general agreement that the organization is fair and that this fairness increases their job engagement. Yet there was some disagreement concerning financial fairness of salaries. Seventh, values as a predictor variable was not strongly supported. Some workers believed that their values were consistent with their employer's, thus increasing their job engagement. Others disagreed with the organization's policies, e.g., toward end of life issues and toward indigent patients. Meanwhile, others dismissed the salience of the variable altogether.

Although the qualitative interviews engendered moderate support for Maslach's model, there are numerous caveats and complications. First, economic themes were very salient among these qualitative responses. Specifically, reward, fairness and values all were conflated with economic satisfaction. As such, economic issues surfaced in three of the seven job-persons fit determinants addressed in the qualitative interviews. This finding is striking in that it suggests the vital importance of economic factors in the lives of these workers. Furthermore, it suggests that these economic factors impact perceptions and judgments about their employer in ways not conceptualized by the theory. That is to say, the theory describes the independent variable, reward, as entailing economic dimensions, not values and fairness. Perhaps of more importance theoretically, is that perceptions of economic conditions appear to play an important role in job engagement, as opposed to the view that non-economic social conditions are primarily at play. This finding comports broadly with paradigms that posit economic conditions at the forefront of workers lives, such as Marxist perspectives on work, rather than social psychological models. In short, the economic themes found across interviews suggests

that Maslach's framework perhaps underestimates economic conditions as a determinant of job engagement.

Secondly, a number of respondents emphasized that Maslach's determinants were only partial factors in their job engagement. Indeed, a subgroup of these respondents viewed these job-person fit variables as secondary to their own personal attributes. For example, numerous participants described a history of being positive in their previous jobs, and positive in other aspects of their lives, suggestive that their job engagement reflected a general life pattern that transcended their current work environment. That is, these respondents saw their engagement as a general life pattern of optimism and energy, which they attributed to themselves, their nuclear families and families of origin, more than to their work environments. In other words, workers presented a general pattern of thriving and engagement that appeared stable across their careers and across work and home spheres. In these cases, Maslach's job-person fit variables present a less compelling model, since job engagement qualities seem to be present in all areas of their lives – unexplained by Maslach's independent variables. Stated differently, these workers could exhibit positive outcomes in many areas of their lives, resulting in high scores on the MBI and positive responses on the job engagement scale. In this way, job engagement could be confounded with more global measures of positive psychology, such as psychological adjustment, optimism and adaptation.

Third, the direction of the variables in Maslach's model was questioned. For instance, our rehabilitation worker suggested that a sense of community and social support was important in his level of job engagement, but he also pointed out that he, himself, increased team cohesion by providing positive feedback to others. His strategy

was to improve morale within the work team, with a goal of ultimately creating positive feedback toward him self. In this way, he viewed social support as cyclical, rather than a unidirectional pattern that emanated from the environment and was directed toward the individual. In a similar manner, one of our emergency room workers and an infant support services worker both indicated that they influenced their work environments and job placements. Recall, the infant mental health worker who asked for a job re-assignment due to under-utilization and boredom. These perspectives are more consistent with ecological or cybernetic perspectives, which include cyclical rather than linear relationships between variables.

Fourth, there were mixed perspectives about the primacy of environmental versus personal factors in determining job engagement. The primacy given to personal factors was demonstrated by our emergency department worker who explicitly reported that her optimism, internal locus of control and sense of responsibility to do a good job all over-rode the role of environmental factors. In contrast, the emphasis on environmental factors was exemplified by one of our outpatient workers, who emphatically dismissed her personality as a determinant of job engagement. Instead, she largely attributed her job engagement to the work environment and the maturity that came with life experience. In sum, although not universal, some respondents clearly attributed their job engagement to personal attributes more than to Maslach's job-person fit variables. This finding is inconsistent with the literature, which typically posits environmental factors as primary. As Maslach (2003) herself indicated,

> *research results have not supported the argument that burnout is related to a person's disposition. Although there are some personal variables that*

have been linked to burnout, the demonstrated relationships have not been large in size and sometimes vary from one study to another.

Additionally, the primacy given to personal variables is inconsistent with the training and ideology found among social workers, insomuch these professionals receives training that emphasizes psychosocial and extra-personal factors as determinants of personal outcomes. Given this training, one would expect a possible bias toward job-person fit variables as salient explanations for their own job engagement, when in fact this was not always the case.

Fifth, the interviews reflected a lack of internal consistency among some of Maslach's job-person fit variables. For instance, job process was seen as possessing minimally two elements: patient interaction and paperwork/administrative duties. These two job processes are both at odds with each other, as patient interaction was largely seen as important and facilitative of job engagement whereas paperwork was seen as a job stressors. Similarly, reward was seen as comprised of economic and social rewards, which were again seen as inconsistent at times, as mentioned above. This feedback suggests a need for further consideration of the internal consistency of some of these constructs. Although the internal consistency coefficients were adequate, supporting the notion of internal consistency, the interviews suggested otherwise.

Sixth, our qualitative findings suggest that Maslach's independent variables are inexorably interwoven. For instance, judgments about fairness, values and reward were all conflated with notions about financial reward. This opens up Maslach's model to criticisms of reductionism, on grounds that it falsely distills these determinants of job engagement into artificially distinct variables. Of course, this criticism is itself open to

debate and counter-criticism. Nevertheless, the qualitative findings do generate questions about the categorization of the job-person variables because they may be seen to overlap; they were not found to be mutually exclusive categories in ways depicted by the model.

D. Common Features of Job Engagement and Resilience

Our job-engaged workers shared numerous commonalities with resilient persons. To begin with, many of these workers in the qualitative sample appeared to possess protective factors that are found among resilient persons. These qualities were elaborated upon in the preceding quantitative and qualitative chapters. Again, they primarily included variables from Model 2 of this study, i.e., reappraisal coping and social support seeking, as well as variables voiced in the qualitative interviews, i.e., optimism, conscientiousness, internal locus of control, humor and spirituality. In short, all of these variables can be seen as commonalities among job engaged and resilient persons, and indeed, many of these factors were referenced in the earlier review of the resilience literature. Additionally, the job-person fit variable, community is also shared by these workers and those deemed resilient. Specifically, a perceived sense of community was associated with job engagement in our overall sample, and this also has been found to characterize resilient persons, as discussed earlier. In particular, the social support dimension of community has been found to be a quality found among resilient persons.

In addition to demonstrating the above qualities of resilient persons, our qualitative respondents all had experienced substantial or severe job stress that is consistent with the notion of resilience. In other words, the level of psychological stress endured on the job constitutes a psychosocial adversity that is consistent with resilience.

Recall the intimate emotional contact that workers had with patients and families who faced death and dying issues -- which typified, and even pervaded, the work lives of these workers. For instance, our pediatric ICU worker who served the families of nineteen infants who had died within a three month period and our oncology social worker who commonly dealt with death and dying issues. In these cases and others, the degree of job stress can be seen as exceptionally severe, as constituting a form of psychosocial hardship, perhaps even psychologically traumatic experience. If so, the transcendence of such hardship presents a clear picture of resilience on par with hardship cited in the resiliency literature. As such, the fact that these workers scored in the top quartile of this sample on all three dimensions of job engagement, that these scores were high relative to a comparison sample published by Maslach, that they reported and presented commitment, energy, satisfaction and even passion in their work lives, offers a compelling picture of resilience. In this way, this form of thriving in the face of substantial hardship constitutes a form of resiliency that is consistent with other forms.

Additionally, a number of our qualitative respondents experienced severe psychosocial adversities in their personal lives that were clearly on par with those deemed resilient in the literature. In addition to demonstrating thriving despite very stressful work, a number of these workers bounced back from substantial psychological traumas in their personal lives. That is, some of these engaged workers endured substantial hardships and traumatic experiences prior to becoming social workers, hardships that they apparently transcended in ways consistent with the notion of resiliency. In this sense, some of these workers demonstrate both job engagement as well as resilience. Most illustrative were the two workers who had endured traumatic deaths

in their families and transcended these experiences to be highly engaged workers and apparently well adjusted people. In these cases, as well as others, the staff made innumerable positive and enthusiastic comments not only about their work lives, but also about their lives in general. In short, some of these workers had experienced enormous personal losses through the deaths of family members and have thrived personally and professionally anyway. This correspondence raises the possibility that the two constructs may be correlated with one another, something that would need to be confirmed through further research. However, the findings are suggestive that a significant relationship may exist. If so, then job engagement would not merely be a proxy or rhetorical metaphor for resilience. Rather, it would actually be related in an empirical sense.

In further considering whether resilience is demonstrated by our sample, we can return to Mangham's (1995) definition of resilience:

> *Resilience is the capability of individuals and systems (families, groups, and communities) to cope successfully in the face of significant adversity or risk. This capability develops and changes over time, is enhanced by protective factors within the individual/system and the environment, and contributes to the maintenance or enhancement of health.*

The "significant adversity" clause of this definition clearly seems to be met by all in our sample, because all dealt with substantial job stress and some also faced personal losses and traumas. Additionally, the "successful coping" clause also appears to be met in our sample, in the sense that their reappraisal and social support seeking coping were statistically related to their job engagement, evidence that they did use successful coping, at least at work. Furthermore, although tentative, our qualitative findings suggest that protective factors exist in the individual and environment that may increase their ability

to cope. These include the above mentioned personal factors, such as optimism and internal locus of control, as well as environmental factors, such as positive aspects of the work environment as posited by Maslach and supportive family relationships.

Another commonality shared between these workers with resilient persons was the variation in the protective factors they utilized. For instance, some workers utilized spirituality in some general, non-sectarian sense, while one emphatically attributed her job engagement, in part, to her specific religion. Some emphasized the importance of family and childhood upbringing as determinants of their job engagement, while others emphasized the importance of current support from peers. Some attributed their engagement primarily to personality factors, while others emphasized environmental considerations. Some attributed their engagement to both and saw them as inextricably intertwined. This variability in the protective factors utilized by job-engaged and resilient workers may be seen as an example of equifinality, the notion that many processes and pathways may lead to the same outcome. This notion suggests the caveat that individual differences exist in terms of protective factors for both resilience and job engagement. Furthermore, such diverse pathways present challenges to developing models, which by necessity ignore such complexity or "noise."

In sum, there are a number of indications that our job engaged workers share commonalities with persons deemed resilient in the literature. These commonalities include the achievement of positive outcomes despite facing substantial psychosocial stress (in their jobs), as well as sometimes facing psychological traumas in their personal lives. Additionally, our qualitative respondents shared protective factors with those identified as resilient in other contexts, such as optimism, internal locus of control, work

ethic, ability to elicit social support, conscientiousness, sense of humor and spirituality. Accordingly, there is evidence that this sample of workers can be deemed both job-engaged and resilient.

E. Limitations of Study

As always, there were limitations to this study. The more substantial limitations are as follows. First, there were a number of measurement limitations. For instance, social support was initially posited as an independent variable, as a way to elaborate upon Maslach's set of predictors. However, the internal consistency of the subscale that I composed was below .60, i.e., under conventional standards of acceptability. Therefore, it was eliminated from the study. To attempt to retain the measure would have distorted the statistical analyses. In any event, the failure to compose a reliable social support subscale precluded my efforts to incorporate it into Maslach's set of independent variables.

Second, the novel use of the Ways of Coping scale may have introduced some measurement problems as well. Recall, I utilized the scale strictly for the measurement of vocational functioning, whereas it was originally designed as a general scale to be used in all areas of life. Since this approach varied from its intended use, this could have had a distorting effect. For instance, in this study the respondent was asked to reflect upon the last six months of their work life, in order to identify a stressful work event. In contrast, the normal use of the scale utilizes only a one month retrospective window. Accordingly, imprecision in reporting may have been introduced simply due to memory limitations of respondents.

Third, unintended bias could have resulted from the fact that I was an employee of the same organization as my research participants. For instance, I may have had some pre-existing knowledge of specific programs and services that influenced the way that I conceptualized worker's level of stress. Similarly, I had (limited) knowledge of the management style of some workers' supervisors. Although this effect seemed to be mild, it is nevertheless illustrative of the type of biasing that could have influenced my perceptions of the workers' organizational environment. Furthermore, some workers may have opted not to complete the survey instrument due to concern about their privacy, given my employment in the same organization. Despite strong efforts made to carefully maintain the privacy of participants, per the Institutional Review Board procedures, some staff may have opted against completing the survey because of my affiliation with the organization. To the extent that this occurred, this could have dampened the representativeness of the sample.

Fourth, the length of the research interviews may have been a limitation as well. Due to time constraints of the staff and myself, I conducted interviews in periods of approximately one hour. Had staff time been less constrained, I would have conducted follow-up interviews, in order to amplify upon and confirm earlier impressions. This would may have elaborated the qualitative findings, resulting in further refinement and reliability, and an increase of the "thick description" that is the goal of much qualitative work.

Fifth, the sample potentially may have been biased about the job engagement model. Specifically, social workers as a group are trained to consider social environmental factors as determinants of personal functioning. In other words, since they

are trained to conceptualize human functioning in the context of environmental factors, they may tend to give prominence to such explanations. To the degree that this is true, the importance that the interviewees gave to environmental factors may be partly inflated by this educational background. This would appear to be a mild or negligible influence, as numerous staff gave prominence to personal, not environmental, factors. However, it nevertheless may have had a distorting effect.

Sixth, the knowledge level presented by this study is merely correlational, not causal. This is consistent with much social research on organizational stress (Brief, 1998). That is, the research methods used are typically correlational and thus merely suggestive of possible causality, not evidence of causality, per se. Despite the fact that these methods are typical of other organizational research, it is nevertheless a limitation in terms of understanding causation of job engagement and resilience.

Seventh the study did not substantially consider the effects of gender in the sample. Although gender was addressed by respondents in the qualitative chapter, this was not a concentrated focus. Nor was it included as a control variable in the quantitative portion of the study. Meanwhile, gender has been frequently investigated as a correlate of burnout, although findings for this variable are very mixed. For instance, early results suggested that females may exhibit higher levels of burnout than males, but this may be confounded by the gender composition of the samples investigated e.g., nurses and social workers (Cooper, Dewe & O'Driscoll, 2002). Such confounding could clearly be operating in our sample. Pines et al. (1981) suggested that women experience higher levels of burnout due to greater overload and inter-role conflict, such as between job and family (Burke & Richardsen, 1993). Other research however does not support this

argument (Burke & Richardson, 1993). In any event, these findings are illustrative of the potential gender confounds in this study.

Eighth, age was not extensively considered as a predictor or job engagement. Although this was mentioned as a possible determinant for this sample, it was not included in the statistical analysis. This was omitted in part because of technical statistical reasons. Nevertheless, it remains a limitation of the study because it could underlie some of the determinants posited by the study. For example, it is possible that some of our coping variables may be impacted by age, e.g., social support seeking could increase with age.

Ninth, ethnicity and race were not considered as predictors of job engagement. Both the quantitative and qualitative samples were largely homogenously constituted by persons of European heritage, as the Department of Social Work from which these samples were drawn was similarly proportioned. These variables, too, are important considerations, as the protective factors and processes may differ across cultures. For instance, as was discussed in the resiliency literature review earlier, the protective mechanisms for urban families in neighborhoods with high crime rates appears to differ from others, as strict parenting may help reduce exposure to violence. In sum, all of these demographic variables – race, gender and age – offer important avenues of investigation that were not substantially addressed in this study. Their relative exclusion was a clear limitation. However, as a practical constraint, the statistical analysis required that the number of variables in the study be limited, among other parameters.

9. RECOMMENDATION AND CONCLUSIONS

Based on our findings, program and policy efforts to enhance job engagement and reduce job stress should take into account both environmental and personal factors. Again, it is often sited in the occupational and organizational psychology literature that the primary determinants of job stress are organizational, not personal, factors. Related discussions in the literature involve admonitions that organizational factors be the focus of intervention, not individually-based approaches such as stress management training and individual counseling. Conversely, the resiliency literature has been critiqued as exaggerating intra-psychic and personal factors, while ignoring social phenomenon, as discussed earlier. In contrast to both of these orientations, the findings in this study suggest that both organizational and personally–based interventions are potentially efficacious foci of intervention, not merely one or another. Accordingly, the following program and policy recommendations regard both organizational and individual factors.

A. Organizationally-Based Strategies

Prevention efforts focused on all employees is arguably the most effective strategy for preventing job burnout and enhancing job engagement. The breadth and early intervention benefits of primary prevention provides efficiencies not available through secondary and tertiary prevention strategies. As Savacki (2002) points out, "treating stagnant ponds that breed mosquitoes may be more functional for preventing the spread of infection than only slapping insects that attempt to bite."

Prevention efforts such as in-services should emphasize the organizational determinants of job engagement and burnout, while not ignoring the personal causes. These organizational models are particularly relevant to primary prevention efforts because they address root causes of the stress-engagement continuum, in keeping with basic principles of primary prevention. Additionally, the duration and symptoms of burnout may be presented in such in-services, in order to improve early detection efforts. Conversely, such prevention efforts should not merely address personal responsibilities of the staff. To do so may be perceived by workers as a disingenuous managerial tactic to shift blame to the individual level, while ignoring organizationally-based causes under their own watch. To the extent that this occurs, managerial in-services on job stress could paradoxically result in worsened job strain, rather than its amelioration. Instead,

Early detection of burnout is likely to occur at the middle management level of an organization, since middle managers are by definitions those who often supervise line staff and are close to them. Since these supervisors are in a position to see their staff's stressors and strains, they are situated to detect these problems early. Therefore, training for managers on the causes and symptoms of burnout, as well as job engagement and resiliency, is an important element of addressing these issues. To the extent that these same managers are familiar with these phenomena, they are best able to maximize their workers' engagement in their jobs and to intervene on the development of burnout. For example, supervisors could address these concerns as part of ongoing staff development processes and performance evaluations, and do so proactively.

More specific program and policy recommendations are also implied by the findings. To begin with, workload and work process were both related to energy in this

study. That is, to the degree that staff perceived their workload as reasonable and their work process as enjoyable, they felt energized by their work. These factors may lead to increased productivity, since energy may underlie productivity. This is stated tentatively, as this energy-productivity relationship was not explored in this study. In any case, it would appear that managers should attend closely to the feasibility of workload and the intrinsic enjoyment of work process, as they attempt to enhance productivity. Otherwise, the imposition of unreasonable workloads and process may have the unintended consequence of increasing job stress and burnout. In short, service delivery programs and policies intended to increase productivity need to carefully consider job workload and process in order to avoid burnout and increase job engagement. Indeed, some research participants were very explicit that their past burnout, job disengagement and intention to resign were caused by unrealistically high workload.

Additionally, programs and policies intended to improve treatment of clients should attend to values. Whether service provision regards psychotherapy, counseling, case management services, or the like, congruence between staff and employers values influences workers' depersonalization of their clients. Recall that, according to the multiple regression analysis performed in this study, employees' beliefs that their employer's values are discordant with their own is a significant predictor of depersonalization. This finding suggests that if an organization is interested in improving its workers' treatments of clients, attending to its values have an important role. In particular, consideration of workers' values about their patient's economic barriers is warranted because it was the source of worker stress in this sample. Conversely, managerial practices that ignore such values may increase depersonalization of staff.

Similarly, mission statements that disingenuously tout humanistic values in ways that are inconsistent with actual practice may increase cynicism, as well.

Additionally, programs and policies should attend to work process, as it is also associated with depersonalization, according to our multiple regression findings. To the degree that employees intrinsically enjoy the everyday process and flow of their work, they have lower levels of depersonalization. Furthermore, the involvement of staff in the design of their work becomes important in this regard, since staff members, themselves, are the best experts about the work process they enjoy. Indeed, this was precisely the feedback that some qualitative respondents provided: Managers who facilitated job processes and assignments that were perceived as positive were very highly credited for improving job engagement.

Further, job process also enhanced the other two dimensions of job engagement – energy and personal accomplishment. This suggests that the assignment and reassignment of staff to particular jobs may be a critically important management decision, since a favorable fit in job process is actually associated with all three dimensions of job engagement. In this sense, attention to the design of job process is an efficient way to improve job engagement and prevent job burnout. More specifically, input by line staff into decisions about job assignment may help improve the chances of a good fit between worker and job process.

Additionally, economic distribution among staff should be closely considered. Recall that qualitative respondents raised concerns about salary issues in numerous ways throughout these interviews. That is, perceptions of employer fairness, reward and values were all impacted by staff salaries. While this may not have substantially reduced job

engagement for this exceptionally engaged sample, it was a very salient focus. Thus, it raises the possibility that economic dissatisfaction is potentially destructive of engagement for more general staff populations. Indeed, the quantitative subscale for the general population substantiates this view, as the mean score for financial reward was notably lower than most subscales.

Finally, universities have a role to play in preventing burnout and enhancing job engagement. Since the risk of job burnout is especially high for young professionals in the human services, preventive training and education should be considered for curricular inclusion by schools of education, nursing, social work, among other human services departments. The more that students are aware of factors that influence the job burnout-engagement continuum, the better they are situated to prevent job burnout and maximize their work engagement and enjoyment. Within schools of social work, job engagement and resilience content fits within strength-based frameworks that have been historically influential, perhaps facilitating its curricular integration. In sum, by including this content, students may be inoculated against vocational stress to a greater degree, and simultaneously, job engagement and resilience material may enrich the literature on strength-based social work practice.

B. Individually-Based Strategies

Individually-based interventions such as vocational counseling and employee assistance programs should consider environmental factors that influence job stress. That is, vocational counseling and employee assistance efforts should not only incorporate traditional, individually-based theory of human behavior in their assessment and

treatment approaches. They should also consider current organizational factors that impact workers' daily lives. That is, current organizational environment, culture and dynamics should be assessed for their possible effect on burnout and job engagement. In particular, the job-person fit variables that were related to job engagement in this study should be considered: workload, job process, community and values. Meanwhile, the importance of the Maslach's other variables should also be considered: latitude, reward and fairness.

Additionally, counseling programs should take into consideration the benefits of reappraisal coping style on job engagement and burnout. Counseling that enhances positive reappraisal among its clients may be effective in combating job stress and burnout, as it is supported as a predictor of job engagement. Furthermore, it is also found to be a job stress buffer in other samples (Savacki, 2002). Moreover, processes of positive reappraisal are central to cognitive behavioral psychotherapy, the prevailing treatment approach to the treatment of depression, further suggesting its efficacy.

Further, counseling that addresses job stress should pay close attention to their client's individualized perceptions job stressors. As the qualitative interviews demonstrated, there is great variability in the perception of salient stressors for staff. Recall our emergency room workers whose opinions about the importance of community varied greatly. Therefore, while it is helpful for vocational counselors to be knowledgeable about common job stressors, it is necessary to understand the subjective perceptions of the client at hand. This is parallel to the notion that so called, "broad-band," statistical approaches to the study of job stress are insufficient; "narrow-band"

approaches, that consider individual work cultures are also needed to understand job stress.

C. Future Research

This study suggests a number of refinements for future research on job engagement. First, models of occupational stress should more fully consider transactions of organizational and personal variables. While Maslach's model considers personal factors in the form of job-person fit, it does not consider personal factors as independent from organizational variables. Models that more fully address the transactions between organizational and personal factors may offer a more comprehensive and nuanced perspective on occupational stress. Although Model 2 in this study was only modestly supported by the findings in this regard, the findings did suggest that future research in this vein may be productive.

Secondly, future occupational stress research may be benefited by further integrating related literatures. To begin with, further integration of resilience and occupational stress literatures may illuminate job engagement. Furthermore, further consideration of the literatures of positive psychology and strength-based social work may offer additional insights. In addition to enhancing the understanding of job engagement, cross-fertilization of these substantive areas may be mutually beneficial. At this point in the respective development of these literatures, cross-fertilization is unfortunately somewhat limited.

Third, the use of longitudinal research designs would offer a higher level of knowledge than the methods used in this study. Because this study's design is merely

correlational and cross-sectional, it does not provide compelling evidence that the posited independent variables actually caused job engagement. Inasmuch as this correlational design is common in occupational stress literature, longitudinal work would enhance the quality of this substantive area.

Summary and Conclusions

The focus of this dissertation was the psychosocial resilience and job engagement among clinical social workers at a large university health system. Specifically, the study addressed the following issues. At the outset, the literature on resilience was explored, including the historical context, definitions, dimensions and theoretical frameworks. Subsequently, the resilience construct was applied to an occupational context by exploring job stress and the theory of job engagement.

Thereafter, quantitative analyses were presented that explored two models of job engagement. Model 1 replicated and tested Maslach's model of job engagement, and demonstrated moderate support for her framework. Specifically, the following job-person fit variables were all related to job engagement: workload, job process, community and fairness. Model 2 elaborated upon Maslach's model by introducing coping styles as mediating variables. The hierarchical regression testing of this model demonstrated only very mild support for this model. However, the findings suggested that the development of mediated models is worthy of future research, given that slight evidence for mediation and the conceptual richness of adding personal factors. Additionally, the findings for Model 2 showed that social support seeking directly predicted job engagement in a manner predicted by the model. Fundamentally, these

quantitative findings suggested that both organizational and personal variables were related to job engagement, but need to be elaborated further in future research that examines the interplay between these variables.

Subsequently, qualitative findings were presented regarding the interviews of job engaged workers. These findings revealed that job engaged workers moderately supported Maslach's independent variables, but introduced numerous elaborations and caveats. Among these caveats were that the linear nature of her model was brought into question by respondents, who saw themselves as acting on their job environment, revealing cyclical relationships between organizational and job engagement. This feedback was suggestive of the need for ecological and cybernetic models of job engagement and resilience. Additionally, the salience of economic issues among these staff was striking, an inconsistency with Maslach's relative de-emphasis on economic conditions of workers. Another qualitative finding was the set of additional independent variables voiced by these workers. These variables included problem-focused coping, optimism, conscientiousness, internal locus of control, humor, spirituality and meaning, skill match, job variety, gender, age and maturity and relaxation coping. On balance, these qualitative findings suggested the importance of organizational, personality and coping factors that enhance job engagement. Finally, a subgroup of these workers presented life stories that clearly demonstrated resilience, given the severity of the hardships and the successful professional outcomes they achieved. Indeed, the fact that all of these workers were exposed to substantial emotional stressors in their clinical work, coupled with their high levels of job

engagement, demonstrates an ability to transcend adversity that constitutes resilience. Accordingly, all of these workers could be labeled as vocationally resilient.

Finally, program and policy recommendations were made. A salient suggestion is that programs and policies should consider both personal and organizational variables in their efforts to reduce burnout and promote job engagement. This duel focus on personal and organizational variables is important at both the organizational and individual levels of intervention -- prevention and treatment alike. By considering both personal and organizational factors, prevention and treatment efforts may not only increase the numbers of workers who are engaged and resilient, they may actually enhance their organizational productivity and effectiveness. Ultimately, this may benefit patients – the ultimate proof in the pudding.

REFERENCES

Addley, K. (1997). Occupational Stress: A Practical Approach. Butterworth-Heinemann. Boston.

Apfel, N., and Seitz, V. (1997). *The firstborn sons of African-American teenage mothers: Perspectives on risk and resilience.* In S.S. Luthar, J.A.

Arroyo, C.G., and Zigler, E. (1995). Racial identity, academic achievement and the psychological well-being of economically disadvantaged adolescents. *Journal of Personality and Social Psychololgy*, 69, 903914.

Beehr, T. (1995). *Psychological stress in the workplace.* London: Routledge.

Bellman, S. , Forster, N., Still, L., Cooper, C. (2003). Gender differences in the use of social support as a moderator of occupational stress. *Stress and Health: Journal of the Interanational Society for the Investigation of Stress*; Vol. (19)1. US, John Wiley and Sons, 45-58.

Benard, B. (1991). *Fostering resilient kids: protective factors in the family, school, and community.* Portland, OR: Northwest Regional Educational Laboratory.

Berman, S., Kurtines W., Silverman W. & Serafini L (1996). *The impact of exposure to crime and violence on urban youth.* American Orthopsychiatric Association, Inc., 66 (3).

Black, M. and Krishnakumar, A. (1998) Children in low-income, urban settings: interventions to promote mental health and well-being. *American Psychologist*, 53, 6, 635-646.

Blumer, H. (1937). Social psychology. In Emerson P. Schmidt (ed.), *Man and Society.* New York: Prentice-Hall.

Bogenschneider, K. (1996). Family related prevention programs: An ecological risk/preventive theory for building prevention programs, policies, and community capacity to support youth. *Family Relations*, 45, 127-138.

Bradley, J. & Cartwright, S. (2002). Social support, job stress, health, and job satisfaction among nurses in the United Kingdom. *International Journal of Stress Management*, Vol. 9, No 3, July 2002.

Brief, A. (1998). *Attitudes in and around organizations.* Sage Publications.

Brofenbrenner, U. (1979). *The ecology of human development.* Cambridge, MA. Harvard University Press.

Bryman, A., & Cramer, D. (1997). *Quantitative data analysis with SPSS for Windows: A guide for social scientists.* London and New York: Routledge.

Burack, D, Cicchetti, and J.R. Weisz, (Eds.), *Developmental psychopathology: Perspectives on adjustment, risk, and disorder.* New York: Cambridge.

Burke, R., & Richardsen, A. (1993). Psychological burnout in organizations. In R. Golembiewski (Ed.) *Handbook of organizational behavior* (pp. 263-298). New York: Marcel Dekker.

Cicchetti, D., and Rogosch, F.A., Lynch, M., and Holt, K.D. (1993). Resilience in maltreated children: Processes leading to adaptive outcomes. *Development and Psychopathology*, 5, 629-648.

Collings, J. & Murray, P. (1996). Predictors of Stress Amongst Social Workers: An Empirical Study. *British Association of Social Workers*, 16, 375-387.

Cooper, C. (1998). *Theories of organizational stress.* New York: Oxford University Press.

Cooper, C., Dewe, P., & O'Driscoll, M. (2001). Organizational stress: A review and critique of theory, research, and applications. Sage Publications.

Cranny, C.J., Smith, P.C., & Stone (1992). *Job satisfaction: How People Feel About Their Jobs and How it Affects Their Performance.* New York: Lexington.

De Haan, L, and MacDermid, S. (1998). The relationship of individual and family factors to the psychological well-being of junior high school students living in urban poverty. *Adolescents*, 33, 129, 73-89..

Dollard, M., Winefield H. and Winefield, A. (2001). *Occupational strain and efficacy in human services workers.* Kluwer Academic Publishers.

Duncan, G., Brooks-Gunn, J. (Eds.) (1997) *Consequences of growing up poor.* New York: Russell Sage Foundation.

Duncan, G., Brooks-Gunn, J., and Klebanov, P. (1994). Economic deprivation and early childhood development. *Child Development*, 65, 296-318.

Dubow, E.F., Edwards, S., and Ippoloto, M.F. (1997) Stress, neighborhood disadvantage, and resources: A focus on inner-city children's adjustment. *Journal of Clinical Child Psychology*, 26, 130-144.

Dunham, J. (2001). *Stress in the work place: past, present and future.* Whurr Publishing. London and Phyladelphia.

Edwards, J. (1998). A cybernetic theory of stress. In C. Cooper, *Theories of organizational stress*, 2001, Oxford University Press.

English, C. (1997) *Mental illness and poverty*. ASP Association Paper.

Fairbrother, K. & Warn, J. (2003). Workplace dimensions, stress and job satisfaction. *Journal of Managerial Psychology*; Vol 18(1), 8-21).

Flach, F. (1988). *Resilience: discovering a new strength at times of stress*. Fawcett Columbine, New York.

Folkman, S. (1984). Personal control and stress and coping processes: A theoretical analysis. *Journal of Personality and Social Psychology*, 46, 839-852.

Fox, M.L., Dwyer, D.J., & Ganster, D.C. (1993). Effects of stressful job demands and control on physiological and attitudinal outcomes in a hospital setting. *Academy of Management Journal*, 36, 289-318.

Fraser, M., Richman, J., & Galinsky, M. (1999). Risk, protection, and resilience: Toward a conceptual framework for social work practice. *Social Work Research*, 23, 129-208.

French, J.R. P, Jr., & Kahn, R. (1962). A programmatic approach to studying the industrial environment and mental health. *Journal of Social Issues*, 18 (3) 1-47.

Gaines, J. & Jermier, J. (1983). Emotional exhaustion in a high stress organization. *Academy of Management Journal*, 26, 267-586.

Ganster, D., Fusilier, M., & Mayes, B. (1986). Role of social support in the experience of stress at work. *Journal of applied psychology*, 71, 102-110.

Garmezy, N. (1970). Process and reactive schizophrenia; Some conceptions and issues. *Schizophrenia Bulletin*, 2, 30-74.

Garmezy, N. (1974). The study of competence in children at risk for severe psychopathology. In E.J. Anthony and C. Koupernik (Eds.). *The child in his family: Children at Psychiatric Risk,* 349-353.

Garmezy, N. (1991). Resiliency and vulnerability to adverse developmental outcomes associated with poverty. *American Behavioral Scientist,* 34, 416-430.

Germain, C. & Bloom, M. (1999). *Human behavior in the social environment: an ecological view*. Columbia University Press. Second Edition.

Glantz, M. & Johnson, J. (1999). *Resilience and development: positive life adaptations.* Kluwar Academic/Plenum Publishers.

Goldstein, H. (1997). Victors or Victims. In D. Saleebey, ed., *The strengths perspective in social work practice*, 21-35. New York: Longman.

Green, R. (1999). *Human behavior theory and social work practice.* Hawthorne, NY: Aldine de Gruyter.

Greene, R. (2002). *Resiliency: An integrated approach to practice, policy, and research.* National Association of Social Workers Press.

Golembiewski, R., & Munzenrider, R. (1988). *Phases of burnout: Development in concepts and applications*, New York; Praeger.

Harrison, R. (1978). Person-environment fit and job stress. In C. L. Cooper and R. Payne (Eds), *Stress at Work* (175-205). New York: Wiley.

Helmreich, R. (1975). Applied social psychology: the unfulfilled promise. *Personality and Social Psychology Bulletin.* 1:548-560.

Higgins, E.T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, 94, 319-340.

Hobfoll, S., & Freedy, J. (1993). Conservation of resources: A general strerss theory applied to burnout. In W.B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research*, Washington, DC; Taylor & Francis.

Hobfall, S., & Shirom, A. (1993). Stress and burnout in the workplace. In R. Golembiewski (Ed), *Handbook of organizational behavior* (pp. 41-60). NewYork: Marcel Dekker.

House, J. (1977). The three faces of social psychology. *Sociometry*, Vol. 40, No 2, 161-177.

Jackson, S.E., & Schuler, R.S. (1985). A meta-analysis and conceptual critique of research on role ambiguity and role conflict in work settings. *Organizational Behavior and Human Decision Processes*, 36, 16-78.

Jayli, G., Yaman., H. & Jaman, A. (2003). Stress and work-life in a university hospital in Turkey: Evaluation of the Brief Symptom Inventory and Brief Coping Styles Inventory in hospital staff. *Social Behavior and Personality.* Vol. 31(1). New Zealand. 91-100.

Jex, S.M., & Beehr, T. A. (1991) Emerging theoretical and methodological issues in the study of work-related stress. *Research in Personnel and Human Resources Management*, 9, 311-336.

Jones, E. (1998). Major developments in five decades of social psychology, *Handbook of social psychology*, McGraw Hill/Oxford Press.

Jones, E. and Gerard (1967). *Foundations of social psychology*. New York. Wiley.

Kalil, A., Born, C., Kunz, J., and Caudhill, P. (2000). Life stressors, social support, and depressive symptoms among first-time welfare recipients. *American Journal of Community Psychology*.

Kalil, A., Spencer M., Spieker, S., and Gilchrist, L. (1998). *Effects of family living arrangements and quality of relationships on the mental health of lower income adolescent mothers*. Family Relations 47 (4), 433-441.

Kahn, R., & Byosiere, P., (1992). Stress in organizations. In M.D. Dunnette and L.M. Hough (eds), *Handbook of Industrial and Organizational Psychology*, Vol. 3, 571-650. Palo Alto California, Consulting Psychologists Press.

Kaplan, H.B. (1999). Toward an understanding of resilience: A critical review of definitions and models. In M.D. Glantz & J.R. Johnson (Eds.), *Resilience and development: Positive life adaptations* (pp.17-83). New York: Plenum.

Kaufman, J., Cook, A., Arny, L., Jones, B. & Pittinsky, T. (1994). Problems defining resiliency: Illustrations from the study of maltreated children. *Development and Psychopathology*, 6, 215-229.

Kessler et al. in Biafora, F. (1995). Cross-Cultural perspectives on illness and wellness: implications for depression. *Journal of Social Distress and the Homeless*; 4, 2, April, 105-129.

Lazarus, R. (1990). Theory-based stress measurement. *Psychological Inquiry*. 1, 3-13.

Lazarus, R. & Folkman, S. (1984). *Stress, appraisal and coping*. New York, Springer.

Lardner, J. (1999). *World-Class workaholics*. U.S. News and World Report, 42-53. December 20.

L'Abate, L. (1994). *Handbook of developmental family psychology and psychopathology*. John Wiley and Sons, Inc.

Lee, R., & Ashforth, B. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, 81, 123-133.

Lefley, H. (1998) *Families coping with mental illness: The cultural context.* Jossey-Bass Publishers, Number 77, Spring.

Leiter, (1992). Burnout as a crisis in professional role structures: Measurement and conceptual issues in *Anxiety, stress, and coping*, 79-93.

Leiter, M., & Harvie, Pl. (1996). Burnout among mental health workers: A review and reearch agenda. *International Journal of Social Pyschiatry*, 42, 90-101.

Leiter, M. and Maslach, C. (2001). Burnout and health in *Handbook of health psychology*. Lawrence Erlbaum Associates. Mahwah, New Jersey.

Linzer, M., Ferrity, M., Douglas, J., McMurray, J., Williams, E. & Conrad., T. (2002). Physician Stress: Results from the Physician Worklife Study. *Stress and Health: Journal of the International Society for the Investigation of Stress*, Vol 18(1) Feb., John Wiley and Sons; 37-42.

Losel, F., Bleisener, P., and Koferl T. (1989). On the concept of invulnerability: evaluation and first results of the Bielefeld project. *Children at risk: Assessment, longitudinal research, and intervention* (186-219). New York: Walter de Gruyter.

Luthar, S. (1999). *Poverty and children's adjustment.* Newbury Park, CA: Sage.

Luthar, S., & Zigler, E. (1992). Intelligence and social competence among high-risk adolescents. *Development and Psychopathology*, 4, 287-299.

Luthar, S., Doernberger, C., & Zigler, E. (1993). Resilience is not a unidimensional construct: Insights form a prospective study on inner-city adolescents. *Development and Psychopathology*, 5, 703-717.

Luthar, S., Cicchetti, D. & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, May/June 2000,Volume 71, November 3, 543-562.

Lynch, J and Kaplan, G. (1997) Cumulative impact of sustained economic hardship on physical, cognitive, psychological, and social functioning. *New England Journal of Medicine*; 337, 26, 25, December 1889-1895.

Mangham, C, McGrath, P. Graham, R. Stewart, M. (1995). *Resiliency: Relevance to health promotion.* Office of Alcohol, Drugs and Dependency Issues. Catalogue No. H39-330/1-1995E. ISBN 0-662-23594-0.

Maslach, C. (1998). A multidimensional theory of burnout. In C. Cooper (Eds.), *Theories of organizational stress.* Oxford University Press.

McLoyd, V. (1998). Socioeconomic disadvantage and child development. *American Psychologist*, 185-204.

Masten, A., Best, K., & Garmezy, N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and Psychopathology*, 2, 425-444.

Mearns, J. & Cain, J. (2003). Relationship Between teachers' occupational stress and their burnout and distress: Roles of coping and negative mood regulation expectancies. *Anxiety Stress and Coping: An International Journal.* Vol. 16(1) March. United Kingdom, Taylor & Francis, 71-82.

Nash, J., & Fraser, M. (1998). After-school care for children: A resilience-based approach. *Families in Society*, 79, 370-382.

National Institute for Occupational Safety and Health (2003). *Stress.* Publication No. 99-101. Publication Dissemination, Cincinnati, OH.

O'Driscoll, M., & Schubert, T. (1988). Organizational climate and burnout in a New Zealand social service agency. *Work and Stress*, 2, 199-204.

Orford, J. (1987). *Coping with mental disorder in the family.* Provident House, Croom Helm Australia.

Peterson, M. & Wilson, J. (2002). The culture-work health model and work stress. American Journal of Health Behavior. Vol 26 (1), Jan.-Feb.

Pines, A., Aronson, E., & Kafry, D. (1981). *Burnout: From tedium to personal growth.* New York: Free Press.

Revenson, T.A. (1997). Wanted: A wider lens for coping research. *Journal of Health Psychology*, 2, 164-165).

Rosenau, *Post-Modernism and the social sciences: Insights, inroads and intrusions.* Princeton University Press. Princeton, New Jersey.

Saleebey, Dennis. (1993). Theory and the generation of subversion on knowledge. *Journal of Sociology and Social Welfare*, Vol. 20, 1, 5-25.

Saleebey, D. (1997). *The strengths perspectives in social work practice.* New York: Longman.

Savicki, V. (2002). *Burnout across thirteen cultures: Stress and coping in child and youth care workers.* Praeger. Westport, Connecticut.

Schaufeli, W., & Bunk, B. (1996). Professional burnout. In M. Schabracq, Winnubst, & C. Cooper (Eds), *Handbook of work and health psychology* (pp. 311-346). New York: John Wiley.

Schaufeli, W. and Enzmann, D. (1998). *The burnout companion to study and practice: A critical analysis*. Taylor and Francis. Philadelphia, PA.

Schulz, R., Greenly, J., & Brown, R. (1995). Organization, management and client effects on staff burnout. *Journal of Health and Social Behavior*, 36, 333-345.

Smith, Pl C., Kendall, L.M., & Hullin , C.L. (1969). *The measurement of satisfaction in work and retirement. A strategy for the study of attitudes*. Chicago: Rand Mcnally.

Spiers, C. (1996). Suicide in the workplace. *Occupational Health*. 7: 247- 249.

Tessler, R., Gamache, G. (2000). *Family experience with mental illness*. Auburn House, Westport, Connecticutt, London.

Tyson, K. (1995). *New foundations for scientific social and behavioral research: The heuristic paradigm*. Simon and Schuster Company. Needham Heights, Massachusetts.

Walkey, F., & Green, D. (1992). An exhaustive examination of the replicable factor structure of the Maslach Burnout Inventory. *Educational and Psychological Measurement*, 52, 309-323.

Wallace, R., Wolf, A. (1999). *Contemporary sociological theory: Expanding the classic tradition*. Prentice Hall. Fifth Edition.

Walsh, F. (1998). *Strengthening family resilience*. The Guilford Press. New York, London.

Webster's New Collegiate Dictionary (1981). G. & C. Merriam Company.

Weick, A. , Rapp, C., Sullivan, W. & Kistharedt, W. (1989). A strength perspective for social work practice. *Social Work*, 3, 350-354.

Weis, D.,J., Dawis, R.V., Lofquist, L.H., & England, G.W. (1996). Instrumentation for the theory of work adjustment. Minneapolis: University of Minnesota, Minnesota. *Studies in Vocational Rehabilitation*.

Werner, E. (1989). Vulnerability and resiliency: A longitudinal perspective. In M. Brambring, Foussel & Skowronek (Eds.) *Children at risk: Assessment, longitudinal research, and intervention* (pp 157-172). New York. Walter de Gruyter.P. (1992).

Werner, E. (1990). Protective factors and individual resilience. In S. Meisel and J. Shonkoff (Eds.). *Handbook of Early Intervention.* (pp.97-116). Cambridge University Press.

Werner, E. & Johnson, J. (1999). Can we apply resilience? In M. Glantz & J. Johnson (Eds.), *Resilience and development: Positive life adaptations* (pp. 259-268. New York: Kluwer Academics Plenum.

Werner & Smith (1992). *Overcoming the odds: High risk children from birth to adulthood.* Ithaca, NY: Cornell University Press.

Young-Eisendrath, P. (1997) *The resilient spirit: transforming suffering into insight and renewal.* Addison-Wesley Publishing, Inc.

APPENDIX A:
SURVEY ON OCCUPATIONAL STRESS AND RESILIENCE

CODE PAGE

Note: In order to carefully protect your privacy, you are being asked to include your name only on this cover page. Once you complete the questionnaire, the cover page will be separated and kept in a locked cabinet off site of the University of Michigan. Accordingly, the questionnaire will not reveal your identity. Upon completion of the data analysis, the code page will be destroyed, eliminating any possibility of revealing your identity.

Name: _____ _____
(Last) (First)

Code: _____

CONFIDENTIAL

SURVEY ON OCCUPATIONAL STRESS AND RESILIENCY

Andrew Greifer, M.S.W.
Department of Social Work
University of Michigan Health System
(Questionnaire Code #:_____)

Introduction: Thank you for completing this survey. There are four parts to the survey, each of which has its own directions. Please carefully read the respective directions for each section before completing it, and please try to answer all questions. The four sections are as follows:

Part I: Demographic Information..... page 1
Part II: MBI Job Engagement Scale..... page 2
Part III: Job-Person Fit Scale.....page 4
Part IV: Ways of Coping Scale.....page 6

Part I. Demographic Information

Directions: Please complete the open-ended items by filling in the line. Otherwise, please check the items that best describes you.

Today's Date: _____ Age: _____

Gender (Check)
(1) Male_____
(2) Female_____

Marital Status (Check):
(1) Single_____
(2) Married_____
(3) Widowed_____
(4) Separated/Divorced_____

Race: (Check)
(1) White_____
(2) Black_____
(3) Hispanic_____
(4) Asian_____
(5) Other_____

Are you a parent? _____yes _____no. If yes, how many children do you have? _____

Number of years in current position: _____

Number of years of social work practice (post MSW):_____

What is your job title (Check): Clinician I_____ Clinician II_____ Clinician III_____

Work Unit Assigned to: _____

Part II: MBI Humans Services Survey:

Instructions: The purpose of this portion of the survey is to discover how various persons in the humans services view their jobs and the people with whom they work closely. It uses the term patients to refer to the people for whom you provide services, care, treatment, or instruction.

There are 22 statements of job-related feelings. 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 circling the number (from 1 to 6) that best describes how frequently you feel that way. Specifically, use the key below to guide your responses.

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

1. I feel emotionally drained from my work..... 0 1 2 3 4 5 6
2. I feel used up at the end of the workday.....0 1 2 3 4 5 6
3. I feel fatigued when I get up in the morning and have to face another day on the job.....0 1 2 3 4 5 6
4. I can easily understand how my patients feel about things.....0 1 2 3 4 5 6
5. I feel I treat some patients as if they were impersonal objects.....0 1 2 3 4 5 6
6. Working with people all day is really as strain form me.....0 1 2 3 4 5 6
7. I deal very effectively with the problems of my patients.....0 1 2 3 4 5 6
8. I feel burned out from my work.....0 1 2 3 4 5 6
9. I feel I'm positively influencing people's live through my work.....0 1 2 3 4 5 6
10. I've become more callous toward people since I took this job. 0 1 2 3 4 5 6
11. I worry that this job is hardening me emotionally..... 0 1 2 3 4 5 6
12. I feel very energetic.....0 1 2 3 4 5 6
13. I feel frustrated by my job.....0 1 2 3 4 5 6

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

14. I feel I'm working too hard on my job.....0 1 2 3 4 5 6

15. I don't really care what happens to some patients.....0 1 2 3 4 5 6

16. Working with people directly puts too much stress on me.....0 1 2 3 4 5 6

17. I can easily create a relaxed atmosphere for my patients.....0 1 2 3 4 5 6

18. I feel exhilarated after working closely with my patients.....0 1 2 3 4 5 6

19. I have accomplished many worthwhile things in this job.....0 1 2 3 4 5 6

18. I feel like I'm at the end of my rope.....0 1 2 3 4 5 6

19. In my work, I deal with emotional problems very calmly.....0 1 2 3 4 5 6

22. I feel patients blame me for some of their problems.....0 1 2 3 4 5 6

(Administrative use only) cat. cat cat.
EE:_____ _____ DP: _____ _____ PA: _____ _____

Part III. Job-Person Fit Scale

Instructions: Please, take a few moments to reflect about your work situation over the past six months. Then read the following statements and indicate to what extent you agree or disagree with them, using the key below. Please circle the number at the right side of the page that best describes your level of agreement or disagreement.

Key: 1 = Strongly Disagree 3 = Agree
2 = Disagree 4 = Strongly Agree

1. I do not receive emotional support from my supervisor.....1 2 3 4
2. I receive practical support (such as advise) from my supervisor.....1 2 3 4
3. I do not receive emotional support from staff other than my supervisor.....1 2 3 4
4. In general, I am satisfied with the amount of social support I get at work.....1 2 3 4
5. The social support that I get from staff reduces my work stress.....1 2 3 4
6. My work load is not reasonable.....1 2 3 4
7. The amount of paperwork I am required to do is reasonable.....1 2 3 4
8. My caseload is excessive.....1 2 3 4
9. My reasonable caseload keeps me from being overly stressed.....1 2 3 4
10. I cannot control the decisions about how I conduct my work.....1 2 3 4
11. I cannot control the pace at which I work.....1 2 3 4
12. I am given freedom in how I do my work.....1 2 3 4
13. I control the process of how I do my work.....1 2 3 4
14. Controlling my work process results in my not being overly stressed.....1 2 3 4
15. I do not enjoy doing my work.....1 2 3 4
16. I am recognized for the work I do.....1 2 3 4
17. I am not adequately paid for the work I do.....1 2 3 4
18. I receive adequate benefits for the work I do.....1 2 3 4
19. I do not feel pride in doing my work well.....1 2 3 4
20. I feel pride in doing important work.....1 2 3 4
21. Enjoying my work helps keep me from being overly stressed.....1 2 3 4
22. My work place does not give me a sense of community.....1 2 3 4
23. I do not feel a positive connection with co-workers.....1 2 3 4
24. My relationships at work are free of conflict.....1 2 3 4
25. The sense of community at work helps keep me from being overly stressed.....1 2 3 4

Key: 1 = Strongly Disagree 3 = Agree
2 = Disagree 4 = Strongly Agree

26. Formal decision making is done fairly by my supervisors.....1 2 3 4
27. Performance evaluations are not done fairly.....1 2 3 4
28. Procedures at work are not fair.....1 2 3 4
29. My employer is generally fair 1 2 3 4
30. My employer's fairness helps keep me from being overly stressed.....1 2 3 4
31. My values are not consistent with the values of my employer.....1 2 3 4
32. I believe in the values of my employer.....1 2 3 4
33. My employer is not ethical.....1 2 3 4
34. My employer's values help keep me from being overly stressed.....1 2 3 4

Part IV. Ways of Coping Questionnaire

Instructions: To respond to this questionnaire, you must have a specific work situation in mind. Take a few moments and think about the most stressful work situation that you have experienced in the past month. That is, think of a work situation that was difficult or troubling to you, either because you felt distressed about what happened, or because you had to use considerable effort to deal with the situation. The situation must involve your job/work situation, rather than other aspects of your life. Before responding to the statements, think about the details of this situation, such as where it happened, who was involved, how you acted, and why it was important to you. You may still be involved in this situation, or it could have already happened. However, it should be the most stressful work situation that you experienced during the month.

As you respond to each statement in the questionnaire, please keep this stressful job situation in mind. Read each statement carefully and then circle 0, 1, 2 or 3, to indicate the extent to which you used it in the situation. In other words, use the key below to guide your answers.

Key: 0 = Does not apply or not used 2 = Used quite a bit.
1 = Used somewhat 3 = Used a great deal

1. I just concentrated on what I had to do next – the next step.....0 1 2 3
2. I tried to analyze the problem in order to understand it better.....0 1 2 3
3. I turned to work or another activity to take my mind off things.....0 1 2 3
4. I felt that time would have made a difference – the only thing was to wait.....0 1 2 3
5. I bargained or compromised to get something positive from the situation.....0 1 2 3
6. I did something that I didn't think would work, but at least I was doing something.....0 1 2 3
7. I tried to get the person responsible to change his or her mind.....0 1 2 3
8. I talked to someone to find out more about the situation.....0 1 2 3
9. I criticized or lectured myself.....0 1 2 3
10. I tried not to burn my bridges, but leave things open somewhat.....0 1 2 3
11. I hoped for a miracle.....0 1 2 3
12. I went along with fate; sometimes I just have bad luck.....0 1 2 3
13. I went on as if nothing happened.....0 1 2 3
14. I tried to keep my feelings to myself.....0 1 2 3
15. I looked for the silver lining, so to speak; I tried to look at the bright side of things.....0 1 2 3

Key: 0 = Does not apply or not used
1 = Used somewhat
2 = Used quite a bit.
3 = Used a great deal

16. I slept more than usual..... 0 1 2 3
17. I expressed anger to the person(s) who caused the problem.....0 1 2 3
18. I accepted sympathy and understanding from someone.....0 1 2 3
19. I told myself things that helped me feel better.....0 1 2 3
20. I was inspired to do something creative about the problem.....0 1 2 3
21. I tried to forget the whole thing.....0 1 2 3
22. I got professional help.....0 1 2 3
23. I changed or grew as a person.....0 1 2 3
24. I waited to see what would happen before doing anything.....0 1 2 3
25. I apologized or did something to make it up.....0 1 2 3
26. I made a plan of action and followed it.....0 1 2 3
27. I accepted the next best thing to what I anted.....0 1 2 3
28. I let my feelings out somehow.....0 1 2 3
29. I realized that I had brought the problem on myself.....0 1 2 3
30. I came out of the experience better than when I went in.....0 1 2 3
31. I talked to someone who could do something concrete about the problem.....0 1 2 3
32. I tried to get away from it for a while by resting or taking a vacation.....0 1 2 3
33. I tried to make myself feel better by eating, drinking, smoking, using drugs, or medications, etc.....0 1 2 3
34. I took a big chance or did something very risky to solve the problem.....0 1 2 3
35. I tried not to act too hastily or follow my first hunch.....0 1 2 3
36. I found new faith.....0 1 2 3
37. I maintained my pride and kept a stiff upper lip.....0 1 2 3
38. I rediscovered what is important in my life.....0 1 2 3
39. I changed something so things would turn out all right.....0 1 2 3
40. I generally avoided being with people.....0 1 2 3
41. I didn't let it get to me; I refused to think too much about it.....0 1 2 3

Key: 0 = Does not apply or not used 2 = Used quite a bit.
1 = Used somewhat 3 = Used a great deal

42. I asked advice from a relative or friend I respected.....0 1 2 3
43. I kept others from knowing how bad things were.....0 1 2 3
44. I made light of the situation; I refused to get too serious about it.....0 1 2 3
45. I talked to someone about how I was feeling.....0 1 2 3
46. I stood my ground and fought for what I wanted.....0 1 2 3
47. I took it out on other people.....0 1 2 3
48. I drew on my past experience; I was in a similar situation before.....0 1 2 3
49. I know what had to be done, so I doubled my efforts t make things work.....0 1 2 3
50. I refused to believe that it had happened.....0 1 2 3
51. I promised myself that things would be different next time.....0 1 2 3
52. I came up with a couple of different solutions to the problem.....0 1 2 3
53. I accepted the situation, since nothing could be done.....0 1 2 3
54. I tried to keep my feelings about the problem from interfering with other things.....0 1 2 3
55. I wished that I could change what had happened to how I felt.....0 1 2 3
56. I changed something about myself.....0 1 2 3
57. I daydreamed or imagined a better time or place than the one that I was in. 0 1 2 3
58. I wished that the situation would go away or somehow be over with.....0 1 2 3
59. I had fantasies or wishes about how things might turn out.....0 1 2 3
60. I prayed.....0 1 2 3
61. I prepared myself for the worst.....0 1 2 3
62. I went over in my mind what I would say or do.....0 1 2 3
63. I thought about how a person I admire would handle this situation and used that as a model.....0 1 2 3
64. I tried to see things from the other person's point of view.....0 1 2 3
65. I reminded myself how much worse things could be.....0 1 2 3
66. I jogged or exercised.....0 1 2 3

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