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I am submitting herewith a dissertation written by Karol Girdler entitled "An Investigation of the Construct Validity of a Measure of Job 'Burnout' for Human Service Workers." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Psychology.

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AN INVESTIGATION OF THE CONSTRUCT VALIDITY OF A MEASURE OF JOB "BURNOUT" FOR HUMAN SERVICE WORKERS

A Dissertation

Presented for the

Doctor of Philosophy

Degree

The University of Tennessee, Knoxville

Karol Girdler

June 1984

DEDICATED TO

My Grandmother, Beulah Lomax Smith

My Mother, Marion Smith Girdler

My Aunt, Peggy Smith Swicegood

My Daughter, Joanna Penn Cooper

ACKNOWLEDGMENTS

No significant achievement is the product of a single person. Each person receives much encouragement, support, knowledge, and work from others. A key concept I have learned in the study of Community Psychology is that of the network. Each of us lives and learns in many communities or networks.

I would like to thank the network of scholars and human service professionals who have taken their time and energy to investigate the concept of job burnout. Outside the library where you find this study, thousands of workers continue to try and create settings to help others maximize their potential. Burnout continues to be a vital issue to them. I appreciate the network of people who chose to study burnout so that we may attempt to care for the caregivers.

I would also like to thank my personal support networks.

To the committee of scientists/practitioners who guided my development I am deeply indebted. I would like to thank Dr. William H. Calhoun for his practical advice and readiness to listen whenever he was needed. Eric Sundstrom provided a good example of professionalism and rigor in research and can always be depended on for a straight answer. The model provided by David Harrison convinced me that a dissertation on burnout was possible. His calm, good humor was also greatly appreciated. I am especially grateful to John W. Lounsbury for being a friend and teacher, for being instrumental in the development of my viewpoint as a psychologist and a professional, and for years of sustained support.

Many friends and family members have been responsible for my sustained effort to obtain an education since I first entered college in 1969. I am especially grateful to my former husband, Peter P. Cooper, who always put education first, to my mother who taught me to believe in something and to "be somebody," to my father from whom I inherited my stubbornness, and to my Aunt Peggy who taught me thoughtfulness. I am also indebted to my college-days mentor, Dr. A. E. Roberts, for his encouragement and intellectual stimulation.

The fellow graduate students who guided and taught me have been indispensable to my education; especially my core network, the amoeba, who helped me maintain my sanity. Thank you Greg Meissen and Michael Cook for indoctrinating me and showing me what hard work really means. Thank you for the enthusiasm, Elizabeth Meares Turner. Thank you for the level-headed advice, Lois Pokorny. Thank you for the spontaneity and "the key," Joe Hughey.

Other students who provided advice and help were: Gail Fontenelle, Lucy Gibson, and especially Randy Mowry who graciously provided help and friendship in a number of situations both personal and professional.

I could not have survived without being employed while in school, and I am a better person for the knowledge, support and love I received from the staff members who accepted me into the community of the Daniel Arthur Rehabilitation Center. I especially want to thank Steve Brody who taught me more than I ever learned in school about human services and networks. Thank you Jim Griffin, whose love and

wisdom kept me sane, and helped me grow, and Elysse Kramer Myers whose love and strength kept me honest. I also owe thanks to Jim's wife, Virginia, and to their sons Brad and Travis for their kindness and understanding. A special thanks to Brad Griffin for coding my data and being a real friend when I needed one.

Many other women at work provided me with many favors, supportive friendship and/or with role models to live up to: especially, Teresa Suman, Gaye Denney, Debbie Cox, Karen Allsbrooks, Bobbie Beckmann, Jane Anderson, Alice Hotchkiss, and Mary Rayson. And thank you, Bo Scarbrough for the "mothering."

Finally, my most special thanks go to my daughter, Joanna Cooper, who grew up with this dissertation. Her patience exceeds that of any other child I have ever known. And, thanks to my husband, Tim Wibking, whose loving support helped me through the final stages of this effort.

ABSTRACT

The Maslach Burnout Inventory (MBI), a measure of job burnout, was analyzed to examine the factor structure and to discriminate it from other work-related measures. The instrument consists of eight scales each measured in frequency and intensity. The administrations of 12 agencies passed out the survey instrument to a total of 211 human service workers in a one-time only measurement. The participants represented a wide variety of human service fields and levels of job responsibility. Twenty-eight percent of the workers were male and 72% female. Participation was voluntary, and surveys were returned by mail. The survey included measures of job satisfaction, role conflict, role ambiguity, stress symptoms, job involvement, life satisfaction, intention to turnover, and demographic variables. Separate factor structures were derived for each of the eight MBI scales, which closely approximated the factor structure in the original report on the development of the scale (Maslach & Jackson, 1981). The two MBI optional scales were not considered for further analysis. The six remaining scales had fairly high reliability (alpha > .73) as calculated by Cronbach's coefficient alpha. The MBI scales were moderately correlated with intrinsic and extrinsic job satisfaction, but emerged as discrete factors in a factor analysis. Job satisfaction scores were not significant in multiple regression analyses to predict MBI composite scores. The MBI was distinct from role conflict and ambiguity in the factor analysis, but role items were significant in predicting burnout, especially intensity. The stress symptom checklist and burnout loaded

into the same factor, and stress accounted for 34% of the variance in the frequency of feelings of burnout. This finding may be inflated by the similarity of one item between the scales. Job involvement measures showed little relationship to burnout; the subscale of "importance to performance" being the only one to enter the equation to predict burnout scores. The utility of the MBI was compared to a composite of the other scales. The MBI was a significantly better predictor of the stress symptoms than the other scales. The MBI was not as good a predictor of intention to turnover as were the other scales. Results were discussed in terms of a profile of the burned out worker and the integration of the MBI into the job stress research as a criterion variable in a process model.

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CHAPTER I

INTRODUCTION

About a decade of observation and study has been directed toward the problem of "burnout" in human services. The term burnout has been used by workers in many fields of human services to describe a job-related syndrome experienced by many of them. This syndrome has been characterized in terms of the physical results of stress such as sleeplessness, exhaustion, or gastrointestinal disturbances (Freudenberger, 1975), but it is most distinguished by a fundamental change in attitude. The attitude toward clients is reported to shift considerably from a humanitarian, involved viewpoint to a lack of concern or a negative view of clients in general (Maslach, 1976). This disturbing change is said to create self-doubt and depression in the worker (Warnath & Shelton, 1976; Freudenberger, 1975), as well as to decrease the quality of services (Kahn, 1978; Maslach, 1976). The growing concern about burnout has led to professional symposia and workshops,[1] numerous magazine and newspaper articles (e.g., Blampied, 1978; McGuire, 1979; Reed, 1979), and the beginning of research into the antecedents, process, and consequences of burnout. Those interested include social workers, organizational psychologists, stress researchers and administrators and professional staff in human service organizations.

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[1]Such conferences have included a symposium at the annual American Psychological Association (1979), "Professional Burnout," a workshop held in Charlotte, North Carolina (1979), and a symposium on burnout held at Western Michigan University (1979).

The present investigation sought to expand our knowledge about the construct validity of job burnout among human service workers by examining the relationship of a number of closely-related constructs--including job satisfaction, role conflict and ambiguity, job involvement, job stress, and life satisfaction. Such examination sheds light on the discriminant validity of the construct of burnout by ascertaining its uniqueness (or redundancy) compared to constructs that have emerged in earlier research. The present study also investigated job burnout as a function of a number of demographic and job-related variables and it examined the degree to which consideration of burnout enhanced the predictability of two important work-related outcomes--turnover intention and stress symptoms.

The current study was conducted in response to the lack of empirical data regarding the validity of burnout as a psychological construct. Before turning to the literature on burnout, this discussion will consider burnout from the standpoint of construct relations, particularly construct validity.

Construct validity is at issue whenever a measure is interpreted as a reflection of a particular construct "to which are attached certain meanings" (Cronbach & Meehl, 1955, p. 290). Construct validity can not be determined from a single study or from a single finding. To validate a construct, a researcher must articulate a cogent definition of the construct and the attribute it represents. Then the researcher should hypothesize relationships between the construct and other constructs or observables. Through empirical research, these

hypothesized relationships can be disconfirmed or evidence can accrue in support of them. Thus, a theoretical framework or "nomological network" (Cronbach & Meehl, 1955) is established for a construct. The relationship between a construct and another variable can be found using several independent methods of measurement, for which some have reserved the term "convergent validity" (Campbell & Fiske, 1959). Also, the construct should be distinct from other constructs and it should have a relatively unique factor structure--conditions which some say constitute the "discriminant validity" of a construct. Naturally, in the initial development of theory pertaining to a new construct, its convergent and discriminant validity will be open to question, and the construct will have only limited connections to other variables.

With respect to the hypothesized construct of job burnout, there is not a consistent definition, although there are enough features common to most conceptualizations to permit measurement. Moreover, only a few relationships between burnout and other constructs and observables have been examined, even though there is no shortage of suggested linkages. In fact, only one published study has reported on the validity of the burnout construct (Maslach & Jackson, 1981). In this study, the authors provided some information on the convergent validity of a new instrument designed to measure burnout. Here burnout was conceptualized as

> a syndrome of emotional exhaustion and cynicism that occurs frequently among individuals who do "people-work" of some kind. A key aspect of the burnout syndrome is increased feelings of emotional exhaustion. . . . Another aspect is the development of negative, cynical attitudes and feelings about

> one's clients. . . . A third aspect of the burnout syndrome is the tendency to evaluate oneself negatively, particularly with regard to one's work with clients. Workers feel unhappy about themselves and dissatisfied with their accomplishments on the job. (p. 99)

Accordingly, variables which were examined by Maslach and Jackson in relation to burnout included physical and emotional exhaustion at home and on the job, attitude toward clients, feelings of personal accomplishment on the job, size of caseload, amount of direct client contact, feedback from the job, and "outcomes" of burnout such as dissatisfaction with growth opportunities on the job, lack of meaningfulness in the work performed, dissatisfaction with co-workers, turnover intention, frequency of breaks, absenteeism and various stress symptoms such as insomnia and increased use of alcohol or drugs. Although details of how burnout was related to these variables will be supplied later, it is sufficient to note at present that this has been the only previous study which directly assessed either the discriminant or convergent validity of the burnout construct.

The following sections will: (1) examine the meanings which have been attributed to burnout in the current literature; (2) review findings for some of the other key variables which have been postulated to be related to burnout and which will be examined in this study; and (3) describe the present status of efforts to measure burnout.

Meaning of the Term "Burnout" in Current Literature

There has emerged a body of descriptive literature on burnout. Interviews and personal observations or personal experiences constitute

the most typical basis for such descriptions. However, sound empirical data resulting from the tests of hypothesized relationships in support of most of the positions put forth have yet to arrive. Perhaps these descriptions will stimulate empirical work.

Freudenberger (1974, 1975), for example, has written on the topic and describes burnout from the viewpoint of an administrator who has observed the syndrome develop in his own staff and in himself. He defines burnout as a process which causes someone "to fail, wear out, or become exhausted by making excessive demands on energy, strength, or resources" (p. 159).

Freudenberger noted that burnout is not unique to the helping professions, but can occur in any number of cases where people reach their limits (e.g., the "speed freak," the compulsive gambler, or the over-extended executive). Freudenberger characterized the uniqueness of burnout in the helping professions in terms of the variety of the pressures which the worker faces. He noted at least three simultaneous "battle fronts": The ills of society, the needs of various individuals who seek assistance, and the worker's own personality needs. He characterized personality styles most likely to succumb to the burnout syndrome. For example, he described the authoritarian personality whose need for control leads to overextending. The administrator who cannot delegate responsibility can burn out, and can contribute to burnout in the staff by fostering the attitude that no one else in the agency can perform competently.

Freudenberger also described the "dedicated and committed" worker who seeks first of all to respond to the needs of others in the

community, and second is struggling with his or her personal value system. Such workers see themselves as dedicated and very involved in their job. Emotional demands of the job are tremendous, and such workers may lose sight of the realities and limitations of the situation. Freudenberger suggested that in addition to the demands the worker creates for himself or herself, problems in the system (such as poor supervision) can contribute to burnout.

Related to the above syndrome is the committed worker who is also over-involved in the job to the extent that he or she uses work as a substitute for trying to find meaningful outside activities and relationships. According to Freudenberger, such an attitude (sometimes reinforced by the agency) can lead to a loss of private time for reflection and activity which could be rejuvenating to the worker.

The signs of burnout are claimed to be both physical and behavioral. Freudenberger noted such physical signs as exhaustion, frequent headaches, gastrointestinal disturbances, sleeplessness, and weight loss. Behavioral signs reported by Freudenberger range from quickness to anger, depression, paranoia, risk-taking behavior with potentially dangerous clients, excessive use of drugs (tranquilizers, barbiturates, marijuana, hashish, alcohol), rigid thinking, and expression of generally negative symptoms which usually occur "about one year after someone has been working in an institution" (Freudenberger, 1975, p. 73).

Several studies have commented on the career period in which stress is greatest. A study by Cherniss, Egnatios and Wacker (1976)

reported the results of interviews with "new public professionals" within their first year or two of work in a variety of human service fields. They found that for most new public professionals, stress and anxiety existed at relatively high levels. Although they did not deal with the term burnout per se, they did conclude that this stress could result in an attitude of "blaming the victim" (Ryan, 1971) or dehumanizing acts toward the clients. Although this study did not attempt to document the exact process of the development of these attitudes over the first one to two years, it did note the stress and the attitudes in this time period during which the authors felt "the institution probably has its greatest and most lasting impact in the public professional's attitudes" (p. 429).

Cherniss (1980) has completed a book on burnout in which he gave an expanded account of the interview data gathered on these new public service professionals. Concerns relevant to training procedures, the bureaucratic system, and the work setting were also discussed. The bulk of the material on which the "book is based came from intensive study of 28 individuals from four professional groups: law, public health nursing, mental health, and high school teaching" (p. x). The interviews yielded much variety in experience within the small sample. However, empirical validation of the burnout construct was not addressed in Cherniss' study.

Another recent book by Edelwich and Brodsky (1980) also used the descriptive approach. The authors sought to integrate various interviews they had gathered into a proposed five-stage burnout

process. The stages are enthusiasm, stagnation, frustration, apathy, and intervention. In contrast to the approach of Cherniss (1980), in which he discussed his observations of job stress in terms of the human service system and of current organizational research, Edelwich and Brodsky approached the data from the point of view of intervention. They organized interview data gathered from numerous attempts at intervention, and used the data to explore what types of and at what point, intervention seemed most appropriate. Thus, their proposed five-stage system offered one of the first attempts to view burnout in terms of sequenced process. However, it is mainly a set of labels and anecdotes lacking the sophistication necessary to suggest a model for empirical research.

A similar book by Beninga and Spradley (1981) also divided the burnout process into five progressive stages: the "honeymoon stage" (energy depletion begins); "fuel shortage" (job dissatisfaction, overuse of alcohol); "chronic symptoms" (exhaustion, physical illness, anger, and depression); and "hitting the wall," where career and even life may be endangered. This book centered not only on individual diagnosis and stress management, but saw the "treatment" of job burnout as an organizational problem. Intervention was described in terms of job analysis and job redesign. In addition, this work recognized the lack of empirical data in this area, and made a plea at the end of the book for human service workers to help supply more data. In fact, the book ended in a seven-page survey entitled "The National Job Burnout Survey" which readers were urged to complete and return.

Another study described the two-year period in which Freudenberger (1975) suggested that burnout develops. Wasserman (1970) did not deal with the concept of burnout per se, but did examine changing attitudes and emotional effects on 12 social workers over the first two years on their first job. His report resulted in descriptions identical to those of burned-out workers in other reports. Wasserman linked these changes to the working conditions, to training, and to the role of social workers in general. Interviews and observation were made intermittently for two years, and changes were observed in some workers within one month. Wasserman concluded that the two principal feelings were frustration and fatigue which accumulated over a two year period. Further, eight of the twelve workers had left the agency for other employment by the end of the study. Wasserman speculated as to whether adverse working conditions almost inevitably cause these responses in social workers.

Cherniss, Egnatios, Wacker and O'Dowd (1979) proposed another possibility for the explanation of high levels of stress in new workers. Cherniss and his colleagues described widespread unrealistic expectations about the field of human services. Cherniss et al. collectively labeled these expectancies as a belief in the "professional mystique." They defined this as

> a set of characteristics commonly attributed to professionals and their work situations, including: autonomy; interesting work: the assumption that credentials equal competence; collegiality; cooperative and grateful clients; and sympathy and compassion in the professional. (p. 1)

They believe that many workers enter the system with these unrealistic views of the field of human service. Consequently, the rate of disillusionment is high. Cherniss and his colleagues linked this disillusionment with problems in the system such as bureaucratic controls, poorly designed jobs, and lack of realistic training. Logically, the combination of unrealistic expectations, poor training, and difficult work settings could contribute to role conflict and role ambiguity as two variables which may be related to burnout.

To further understand who is vulnerable to the job stress of human services, a study by Pines and Solomon (1977) addressed the issue of self-concept and its relationship with one's perception of others. They did not use the term burnout, rather they were interested in the construct of "dehumanization" as it refers to one's perception of others and to reported lack of job effectiveness and job satisfaction. In their survey, mental health workers who had more negative self-concepts actually reported a more humane empathetic attitude toward the client. Yet these same workers also viewed themselves as less effective overall on the job and less successful, as well as more dissatisfied with their work.

Another study which attempted to address job burnout from the perspective of personality variables was conducted by Gann (1979). In her doctoral dissertation, Gann related various stressors in the work environment, such as workload and ambiguity, to burnout, and some of these appeared to interact with individual ego-level and personality characteristics. Such characteristics as impulse control, interpersonal style, understanding and insight, and ego ideals were addressed.

Seventy-eight female social service workers were surveyed. They voluntarily completed four measures: the Washington University Sentence Completion Test; the Job Diagnostic Survey (JDS); the Adjective Check List; and Maslach Burnout Inventory (MBI). Ten subjects were also interviewed. High ego-level, or high self-esteem, subjects were found to be more positively oriented toward clients (in contrast to the Pines and Solomon study described above), and there was an indication that these subjects felt more competent than did modal ego-level subjects. Interaction of ego-level and job variables improved predictions of MBI scores only for the subscale of Emotional Exhaustion.

In an examination of job characteristics, extrinsic factors were related to burnout for modal ego-level subjects, whereas internal experiences at work were related to burnout for high ego-level subjects. Modal subjects also tended to be more alienated from clients and peers, and to externalize responsibility for problems more than high ego-level participants. Gann also reported that job satisfaction (or dissatisfaction) is not the same thing as job burnout.

Other definitions and lists of symptoms or consequences of burnout are available including those of Maslach (1976), Cherniss, Egnatios, Wacker, and O'Dowd (1979), Kahn (1978), and Larson, Gilbertson, and Powell (1978). The latter group of authors define burnout as "the therapist's failure to muster the reserve necessary to remain effective on the job" (p. 383). Symptoms include various physical tolls, as well as feelings of unworthiness, depression, and helplessness which lead to the consequence of dropping out of the profession. Kahn (1978) described burnout and its consequences as

> A syndrome of inappropriate attitudes towards clients and towards self, often associated with uncomfortable physical and emotional symptoms ranging from exhaustion and insomnia to migraine and ulcer. Deterioration of performance is a frequent additional element in the syndrome. (p. 61)

The key component according to Maslach (1976) is a shift to a negative attitude toward clients (a "blaming the victim" viewpoint). These professionals "tend to cope with stress by a form of distancing that not only hurts themselves but is damaging to all of us as their human clients" (p. 16). This job-related stress may spill over into the home life. According to Maslach, another response to burnout is to quit and get out of the situation.

Finally Cherniss et al. (1977) defined burnout as

> it refers to three types of change in professional attitude and behavior: (1) a decline in trust, sympathy, and tolerance for clients, including a tendency to view them increasingly as objects or cases rather than as real people; (2) a decline in idealism, hope, and optimism; and (3) increasing compartmentalization of and withdrawal from work as one turns to other, non-work related aspects of life for the fulfillment of higher order needs [a process Cherniss and Kane (1977) have referred to as "work alienation"]. (pp. 1-2)

How do these various descriptions, definitions, symptoms and correlates listed above overlap and/or disagree? First, there is considerable overlap in the types of physical and mental symptoms (although not all the same symptoms are listed by every author). There seems to be general agreement that burnout is a reaction to overwhelming stress. As noted by Maslach (1976), burnout is largely characterized by a development of a coping mechanism of withdrawal or alienation from the client in reaction to that stress. Such a wide variety of mental or physical symptoms listed in different articles would

be consistent with the conceptualization that individuals observed in various settings are reacting to the stress according to their own individual predispositions. From the definitions above, burnout can be characterized as a unique stress syndrome that occurs within a generally definable situation, and results in a largely negative attitude toward the client, in exhaustion and in a lack of involvement or feeling of accomplishment.

Second, there appears to be some disagreement over the behavioral indices of burnout. For example, Maslach (1976) noted the withdrawal from the job, including quitting the job. Freudenberger (1975) described long but unproductive hours at work. Cherniss et al. (1979) characterized burnout as resulting in an increased withdrawal from work coupled with the seeking of fulfillment from non-work related areas of life.

Third, there seems to be some agreement in the literature that burnout is related to tenure on the job, possible to the adequacy of the worker's education prior to entering the field, and to other work-related constructs such as role conflict and ambiguity, stress, job involvement, and job satisfaction.

It is to these related constructs that the present review will not be addressed.

Review of Constructs Related to Job Burnout

Job Involvement

The concern in field studies of job involvement has been its relationship to quality and quantity of performance, absenteeism,

grievances, and turnover or job commitment. The first definition of job involvement was noted in a review by Saleh and Hosek (1976) who said that Allport (1943) conceptualized it as the "degree to which an employee is participating in his job and meeting such needs as prestige, self-respect, autonomy, and self-regard" (Saleh & Hosek, 1976, p. 214).

Saleh and Hosek also attempted to classify the various definitions previously given. They concluded that four different conceptualizations of the construct had been used:

> A person is involved (1) when work to him is a central life interest; (2) when he actively participates in his job; (3) when he perceives performance as central to his self-esteem; (4) when he perceives performance as consistent with his self concept. (p. 215)

Different approaches have been used to measure these types of involvement. The amount of time on the job and perceived importance have been used to measure type 1. Type 2 has been measured by asking workers how much they psychologically participate in the job, and type 3 has been measured by different approaches. For example, how much a person thinks about unfinished business or whether valued skills are being employed have been used as items. Type 4, self-consistency, has been approached "in numerous studies, particularly those dealing with consistency theory" (p. 215). A person might be asked "whether the abilities required by his job performance are consistent with the amount that he possesses" (p. 215). Saleh and Hosek factor analyzed all measures used in previous investigations for a total of 65 items applied to a new sample.

Three factors, rather than the postulated four, were identified. "The reliability of the new scale was established by including only those items which loaded more than .40 on one factor and less than .35 on the other two factors" for a 30-item scale with an internal consistency of .86 and a coefficient of ".70, .85, and .83 for Factors I, II, and III, respectively" (p. 216). Factor I corresponds closely to the conceptualization of active participation, and had 16 items. Factor II was the central life conceptualization and had 25 items. Factor III corresponded to "perceiving performance as central to self-esteem" and had 19 items (p. 221).

Saleh and Hosek concluded that job involvement "is the degree to which the person identifies with his job, actively participates in it, and considers his performance important to his self-worth . . . a complex concept based on cognition, action, and feeling" (p. 223). Given this definition of job involvement, and the previous comments regarding the human service workers' expectations regarding the job, it seems reasonable to suggest that initial involvement may set the stage for burnout if the workers' roles are not carefully monitored to allow performance to lead to self-worth.

The meaning of job involvement was discussed in 1965 by Lodahl and Kejner. Their discussion pointed out some interesting viewpoints and some correlations to be kept in mind in analyzing the current study. Lodahl and Kejner viewed job involvement as an attitude which is related to culture and to the organization. They felt that "job involvement is the internalization of values about the goodness of work

or the importance of work in the worth of the person and perhaps it thus measures the ease with which the person can be further socialized by an organization" (p. 24). In fact, these authors go so far as to say that in some ways this construct "operationalizes the 'protestant ethic,'" because it is the "result of the introjection of certain values about work into the self." Thus they feel that job involvement is "probably resistant to changes in the person due to the nature of a particular job" (p. 25).

Lodahl and Kejner noted along with Guion (1958) that the job-involved worker is not necessarily happy with his or her job. "In fact, very angry people may be just as involved in their jobs as very happy ones" (Lodahl & Kejner, 1965, p. 25). In previous unpublished research Lodahl had found evidence that variables dealing with satisfaction, motivation, and frustration were factorially independent of job involvement, and that job involvement was the most stable of the 21 attitude variables studied.

Although the argument presented was that job involvement is a relatively stable attitude which develops early in the individual's socialization process, evidence was found which linked this attitude to organizational conditions and job design. Participants who were more involved, contacted more people per day on the job, had more interdependent (team oriented) jobs, and were more satisfied with work, specifically with work itself (r = .29), promotion (r = .38), supervision (r = .38), and with people (r = .37). Finally, high involvement was also associated with the perceived technical proficiency of the supervisor (r = .29).

Whether the organizational quality alters involvement or whether involvement creates certain perceptions of the organization is unknown from their study. The involved person is postulated to be a target for burnout (Freudenberger, 1975). Attitudes of the involved worker have been empirically related to job satisfaction especially to satisfaction with supervision, promotion, and co-workers. Job involved people were found in settings where they were in close contact with a number of people and worked in a team oriented atmosphere.

Freudenberger (1975) discussed the "dedicated and committed" worker who is very involved in the job as one who has the potential for job burnout. In the job attitude literature, however, it is difficult to separate the constructs of involvement and commitment. The two concepts are sometimes used interchangeably. For example, Wiener and Gechman (1977) viewed these constructs as interchangeable labels for the same job behavior. Their definition of work commitment behaviors was a "special class of socially acceptable work behaviors that exceed formal and/or normative expectations relevant to work" (p. 47). Wiener and Gechman sought to develop a measure of commitment based on this definition. Actually, they attempted to develop a behavioral measure rather than an attitudinal measure for job involvement. They were correct in that behaviors which indicate job involvement had not been investigated.

> Possible commitment behaviors which exceed formal normative expectations may include the amount of personal time devoted to work activities, the amount of talk, conversation, and reading related to work, or personal sacrifices for the sake of the job (e.g., voluntarily postponing or giving up a vacation to complete a manuscript for a journal). (p. 48)

In attempting to identify behaviors above and beyond the call of duty, Wiener and Gechman felt that they were approaching an understanding not only of commitment to work, but also commitment to career and organization. Participants in their study kept a personal 24-hour diary for seven days. The subjects were elementary school teachers. The activities in the diaries were coded, and were compared with attitudinal measures of involvement. They found that Lodahl and Kejner's (1965) job involvement scale and Dubin's (1956) central life interest measure correlated significantly with commitment behavior ($\underline{r}$ = .37, $\underline{p}$ < .01, and $\underline{r}$ = .27, $\underline{p}$ < .05, respectively). Job satisfaction correlated moderately ($\underline{r}$ = .25, $\underline{p}$ < .05) with commitment behavior. Wiener and Gechman concluded, however, that any actual job behavior, including commitment, cannot be predicted to a great extent by job attitudes. They felt that work behaviors are better understood by the analysis of motivational processes.

It seems clear from the above studies that job involvement is probably related to job burnout. The likely direction of the relationship is not clear, although a lack of active participation in the job is postulated by Masloch (1976). These are the issues to be addressed in the present study.

Job Commitment and Organizational Commitment

Despite Wiener and Gechman's (1977) combining of the constructs of commitment and involvement, other researchers interpret commitment in terms similar to involvement but with additional variables, or in one study as simply as the "intention to turnover."

A number of studies employing different measures of job satisfaction have found that low degrees of satisfaction have consistently preceded turnover (e.g., Brayfield & Crockett, 1955; Hulin, 1968; Locke, 1976; Porter and Steers, 1973; Vroom, 1964; Waters & Roach, 1976). However, Porter, Steers, Mowday and Boulian (1974) investigated job satisfaction and organizational commitment changes across time in a sample of psychiatric technicians, and found commitment to discriminate better between "stayers and leavers" than did various components of job satisfaction.

Porter et al. noted that "organizational commitment may represent a related but more global evaluative linkage between the employee and the organization that includes job satisfaction among its specific components" (p. 604). Organizational commitment was defined in terms of the individual's identification with an involvement in a particular organization. Such commitment can generally be characterized by at least three factors:

> (a) a strong belief in an acceptance of the organization's goals and values; (b) a willingness to exert considerable effort on behalf of the organization; (c) a definite desire to maintain organizational membership. (p. 604)

Porter et al. also cited evidence that stated intention to remain on the job is strongly and inversely related to the act of turnover.

One study by Chattarjee and Ginter (1972) in the human service literature examined commitment to work among public welfare workers. Chattarjee postulated that commitment would be higher in higher status jobs of either blue or white collar occupations. They studied 290 caseworkers and supervisors in a large county welfare system whom

they termed "low-status white collar workers." The workers were asked to rank order 10 items describing possible goals in relation to work or advancement as they saw themselves in two years, and again as they saw themselves in five years. Thus, commitment was operationalized as intention to turnover. Chattarjee and Ginter concluded from the responses that many public welfare workers have little future orientation. Many workers who did not indicate a commitment to their present organization, could not specify an alternative.

Steers (1977), in an attempt to clarify a model for the antecedents and outcomes of organizational commitment (as defined by Porter et al. above), studied 382 hospital employees, and 119 scientists and engineers. For both samples, job commitment was influenced by personal characteristics, job characteristics, and work experiences. Performance was generally unrelated to commitment. Performance was measured by supervisors' ratings. Again, commitment here is an overlapping concept with involvement. Personal variables which influenced commitment were "need for achievement, group attitudes toward the organization, education (inversely), organizational dependability, perceived personal importance to the organization, and task identity" (p. 53).

Steers analyzed the lack of relationship between commitment and performance in terms of the nature of the organization. For example, these nonindustrial organizations were not pressured to be efficient, and the highly trained (hard to replace) staff members were more valued for their commitment to the job than for their efficiency. Steers

also suggested that part of the lack of performance-commitment relationship was related to the lack of role clarity in these organizations.

A further study of the attitude of commitment and turnover of 77 entry level employees was done by Koch and Steers (1978). Organizational attachment or commitment had been found to be a more effective predictor of turnover than satisfaction by Porter et al. (1974, see above). Koch and Steers more closely examined the relationship between these attitudes and the behavior of turnover. The measure of job attachment (commitment) consisted of four items with an internal consistency of .71, as opposed to a 15-item questionnaire used in the Porter et al. (1974) study. Again, commitment was found to be a more effective predictor of turnover than overall satisfaction or any facet of satisfaction. In addition, individual characteristics were more strongly related to attachment than were job characteristics. The opposite was true for job satisfaction.

In summary, job commitment is not a well-defined variable in the literature. If it is defined as "intention to turnover," however, we know that this attitude is strongly related to actually leaving the job (Porter, Steers, Mowday & Boulian, 1974).

Job Satisfaction

Job satisfaction in human service workers has been studied by several researchers in the past decade (e.g., Cherniss & Egnatios, in press; Cherniss & Kane, 1977; Harrison, 1978; Maslach & Jackson, 1981; Olmstead, 1974; Sarata, 1972, 1974; Sarata & Jeppesen, 1977). A review of the job satisfaction and "burnout" literature by Perlman and

Hartman (1980) led them to the conclusion that "the research has consistently found that mental health workers and administrators have lower job satisfaction than individuals with comparable education in other careers" (p. 17). In the review to follow, factors related to this chronic condition will be identified.

Sarata (1974) studied job satisfaction and job design in three agencies serving retarded persons. The questionnaire was distributed to all employees in the three agencies. Of the 542 persons surveyed, 222 completed the survey, a return rate of 41%. The Job Descriptive Index (JDI) developed by Smith, Kendall, and Hulin (1969) and the "faces" measure by Kunin (1955) were used to measure overall work satisfaction, satisfaction with the field, and satisfaction with the agency. Correlations were used to examine the relationships between aspects of satisfaction and job design.

The data suggested that satisfaction with the specific agency is the chief determinant of overall satisfaction. Extensive amounts of direct client contact and the perceived lack of client progress were found to be important sources of dissatisfaction. These client-related dissatisfactions were often attributed to agency or staff deficiencies (e.g., staff incompetence, or poor staff motivation). Job design variables correlating most highly with overall job satisfaction were amount of feedback concerning one's own performance (r = .46), opportunity to learn new information and procedures (r = .45), and availability of information on the functioning of clients and the agency (r = .44).

Sarata and Jeppesen (1977) studied 22 agencies providing services to children (n = 137 professional and nonprofessionals). Agencies included mental health facilities, visiting nurse associations, residential care settings, and foster placement and adoption agencies. Again, job satisfaction was related to job design variables. Seven measures of satisfaction were used including the "faces" technique, as well as the Minnesota Satisfaction Questionnaire (Weiss, Dawis, England & Lofquist, 1967). The job design variables were variety, task-identity, feedback, autonomy, participation, learning, and information.

Results are somewhat conflicting with the 1974 study. For example, the data did not support the hypothesis that adequate feedback was a necessary component for a satisfying work situation. In fact, the data suggested that feedback may be negatively correlated with employee satisfaction. Sarata suggested that this finding may reflect the nature of the feedback available. Only three agencies regularly obtained and communicated information about former clients. The most readily available information about clients concerned readmissions or "failures." Supervisory feedback was also restricted to failure experiences concerning paperwork, administrative matters and difficult staff-client interaction. "In essence, the feedback focused on failure experiences and provided no guidelines for improving performance" (p. 235). However, in general these job design variables were systematically related to satisfaction in professionals, but not in nonprofessionals (n = 18).

Job design has thus generally been shown to be highly related to job satisfaction in human services, and job design has been examined in

the burnout literature. Pines and Maslach (1978) pointed out a number of variables under the general heading of job design which are important to consider in human service agencies. Staff-client ratio, work relationships, amount of time spent in direct client contact, and amount of paper work are job design variables which they found to be associated with job satisfaction.

Cherniss and Egnatios (in press) examined job satisfaction in 164 staff members in 22 mental health programs. The survey return rate was 94%, and the measure of satisfaction was the JDI. Results indicated that satisfaction with co-workers and supervision were comparable to a sample of blue-collar workers, but mental health workers were lower in satisfaction with work itself. The major sources of job satisfaction reported by mental health workers were the level of personal accomplishment, the degree of clarity in organizational goals and policies, and the extent to which the worker felt the goals were worthwhile. Factors primarily cited as sources of dissatisfaction were related to "organizational quality," meaning poor communication, lack of organization, ambiguity, and inefficiency.

Harrison (1978) examined the levels of job satisfaction, role conflict, and role ambiguity in child protective service workers. Of 156 social workers surveyed, 112 useable questionnaires were returned (72%). The measure of satisfaction was the JDI. The child protective services workers scored considerably lower on the satisfaction with work scale than the normative sample (overall mean score = 29.19; female norm = 35.74; male norm = 36.57), and lower than a random

sample of NASW members in western states (mean score = 39.85). The child protective services workers also showed very high degrees of role conflict and ambiguity. Harrison found support for his hypothesis that workers who experience high degrees of role conflict and role ambiguity will also experience low degrees of satisfaction with their jobs.

Role Conflict and Role Ambiguity

Role conflict refers to the result of incompatible or perhaps unrelated demands or expectations being placed on the worker. Role ambiguity refers to a lack of clarity as to what is expected, appropriate, or effective behavior. The well-developed literature on indices of role (e.g., Rizzo, House, & Lirtzman, 1970; Schuler & Aldag, 1977) make these particularly accessible constructs to consider in the development of the understanding of the construct of burnout.

Various studies (e.g., Kahn, 1978; Warnath & Shelton, 1976) have described conditions within human service agencies which lead to role problems. Warnath noted that workers are unable to be self-directing in work situations, yet they often work in isolation from others in the agency. There are pressure to be efficient, yet there is little positive feedback indicating to the worker that efficiency has been achieved. Kahn also addressed the scope of the worker's responsibility, for example, to determine rewards and punishments for both himself or herself and for the client. Kahn noted that role conflict "tended to be especially high in positions where the job holders had the responsibility for dealing simultaneously with some people inside the organization and some outside it" (pp. 61-62). Another form of role conflict identified

by Kahn was role overload, wherein too many simultaneous demands are made on a worker with too little time and resources provided to meet these demands.

Kahn, Wolfe, Quinn, Snoek, and Rosenthal (1964) developed the concepts of role conflict and ambiguity to study the individual's response to large-scale organizations in general. Role is the behavior expected of a "focal person." In this case this person is the employee of any human service organization. "Role senders" are the agencies, supervisors, peers, clients, etc. Roles, or the expectations placed on the worker, are largely determined by the context of the organization, and are clarified by the job design and supervision, as well as the goals and philosophy of the agency. The people in the organization who have expectations regarding the behavior of the individual workers constitute the role set. Members of the role set (role senders) depend upon that individual's performance in some way. The role senders make up the role expectations. "The focal person receiving these communicated expectations interprets them according to his own motives and expectancies" (Kahn & Quinn, 1970, p. 54). Kahn and Quinn used the term role stress to indicate that role conflict, ambiguity, and overload can all be identified as sources of stress. Though they noted that the term stress has "become so diverse that the likelihood of agreement on any precise definition is remote" (p. 51). Several sources of role stress were distinguished:

> stressors which arise solely from inadequacies in meeting role expectations; stressors which result from discrepancies between expectations and organizational resources; and

> stressors which result from discrepancies between expectations and properties of the focal person. (p. 54)

Responses to role stress were discussed in a classic stress framework, i.e., the responses range from physiological responses to complex coping responses. Mediators of responses to stress were classed in terms of personal and interpersonal variables.

Rizzo, House, and Lurtzman (1970) developed and applied scales for the measurement of role conflict and role ambiguity. Rizzo et al. found that although extensive literature was available up to that time on the concepts or role conflict and ambiguity, systematic measurement and construct development was lacking. Their analyses showed the two constructs to be factorially independent. Role conflict was defined

> in terms of the dimensions of congruency-incongruency or compatibility-incompatibility in the requirements of the role, where congruency or compatibility is judged relative to a set of standards or conditions which impinge upon role performance. (p. 155)

Various kinds of conflict included:

> (1) conflict between the focal person's internal standard or values and the defined role behavior . . . (2) conflict between the time, resources, or capabilities of the focal person and defined role behavior . . . (3) conflict between several roles for the same person which require different or incompatible behaviors, as a function of the situation . . . , i.e., role overload . . . (4) conflicting expectations and organizational demands in the form of incompatible policies . . . conflicting requests from others . . . , and incompatible standards of evaluation. (p. 155)

Role ambiguity was defined

> in terms of (1) the predictability of the outcome or responses to one's behavior . . . , and (2) the existence or clarity of behavioral requirements . . . which would serve to guide behavior and provide knowledge that behavior is appropriate. (pp. 155-156)

Rizzo et al. also provided correlations between role conflict and ambiguity and other variables related to the organization. Supervision, as may be assumed, can play a crucial part in low role conflict and ambiguity. Conditions "in which superiors are described as more frequently engaging in emphasizing production under conditions of uncertainty, providing structure and standards, facilitating teamwork, and tolerating freedom" result in low conflict and ambiguity (p. 161). Leadership practices which were associated with lower scores were:

> emphasis on personal development, formalization, adequacy of communication, planning, horizontal communication, top management receptiveness to ideas, coordination of work flow, adaptability to change, and adequacy of authority. (p. 161)

Violations in chain of command such as the immediate supervisor being excluded from input to the worker, were associated with increased conflict and ambiguity.

Brief and Aldag (1976) further examined correlates to these role indices. Some of the correlates are as follows:

> Role conflict is significantly positively related to anxiety-stress (r = .41; p < .001), tension (r = .48; p < .001), and propensity to leave the organization (r = .23, p < .05). Role conflict is significantly negatively related to satisfaction with work itself (r = -.29; p < .01). . . . Role ambiguity is significantly positively related to . . . termination of employment (r = .21; p < .05). . . . Role ambiguity is significantly related to feedback from the job itself (r = -.27; p < .05). (p. 470)

Few studies have examined the levels of and correlates of role conflict and ambiguity in the human service population. One exception to this is the work of Harrison. Harrison (1978) examined role conflict and role ambiguity (and related them to job satisfaction) in child

protective service social workers. Role conflict and ambiguity were measured by using the scales developed by Rizzo et al. (1970). Specifically, the hypothesis that role conflict and ambiguity should be inversely related to job satisfaction was examined. Overall satisfaction, as well as certain facets of satisfaction were found to be related. The mean role conflict score for this group was 4.94, standard deviation 1.66, higher than the score of any other group located in a review of the studies using the Rizzo et al. scales. The mean for role ambiguity was 4.02, standard deviation 1.12, which was the same as the mean for a sample of research workers and engineers, the highest role ambiguity score located in the review.

Harrison (1980) expanded his discussion of "role strain" in child protective service workers to verify the previously "impressionistic accounts" of the relationship of role strain and burnout. Harrison's analysis indicated that the "most problematic outcome of role conflict is likely to involve the social worker's attitude about the supervisor" (p. 41). When the supervisor does not help sort out the contradictory role prescriptions or role information, dissatisfaction with supervision results. Harrison also suggested that greater attention should be focused on role ambiguity. Role ambiguity in this study accounted for about 20% of the variability in satisfaction with work. "It appears that workers need to be fairly clear about what is expected of them in fulfilling their role in order for them to feel good about their work" (p. 41).

Although Harrison (1980) has adopted the term "role strain" and Kahn and Quinn (1970) refer to "role stress," there is by no means any

agreement in the literature that stress is the correct term for the result of role conflict and ambiguity. Kahn and Quinn (1970), as noted above, felt that a precise definition of stress was not likely. They did state that stress "is concerned with extreme situations and their effects on the individual" (p. 51). Stress was regarded as

> a stimulus situation, the properties of which are response-inferred. Stress is defined as an extreme or noxious stimulus which generally results in certain physiological change, behavioral change, perceptual-cognitive change, affective change, and in both overt and intrapsychic coping efforts. (p. 51)

To avoid circularity in these definitions, Kahn and Quinn advocate regarding the responses of a whole class of organisms as defining a stimulus as a stressor. Thus, Kahn and Quinn find that some role characteristics can be regarded as stressors while others cannot, based on their ability to produce stress responses in many individuals. Several sources of role stress were distinguished, such as inadequacies in meeting role expectations (as discussed previously).

Fineman and Payne (1981) examined the basic methodology of the studies which have reported the relationship between the role measures and stress indicators, such as that of Kahn and Quinn. Although Fineman and Payne noted numerous studies which have reported these relationships, they question the validity of these relationships. Kasl (1978) made a case for the methodological problem in these studies arising from the similarity of the self-report role indices and stress indices. In summation, stress reactions and role factors must be operationalized as distinctly as possible before a relationship between work attitudes and stress reactions can be tested.

Fineman and Payne addressed this methodological problem in their study of 21 matched pairs of cases and controls from the staff of a scientific laboratory. Three different ways were used to operationalize the independent role variables. Five physicians determined a symptom complex which they agreed indicated stress, if any two of the symptoms were present. Four psychological/behavioral indicators were used, and eight physical/physiological indicators were decided upon: dizziness, awareness of heartbeat, hypertension, anterior chest pains or discomfort, digestive disturbances, loss or gain in weight, tremors, or excessive sweating. Symptoms had to be present for at least three weeks. Only one relationship was supported. The subjects who were chosen for stress symptoms perceived a significantly greater amount of role overload or underload in creativity demands.

One weakness of the study is that the reliability of the role indices were not established before the study. However, the trend of the results appeared consistent across two samples. In general, Fineman and Payne concluded that "the role model itself seems potentially a fairly blunt tool for understanding stress" (p. 63). This is one of the few studies identified which attempted to separate the method of measurement of stress from the measurement of job attitudes.

As noted above, Kahn and Quinn (1970) believed that stress is the result of role problems such as those problems listed on page 26 above. The framework for analysis which they proposed was to link various stress reactions or responses to certain extreme stimulus situations in a class or group or "organisms." Thus, the responses of the workers

involved define whether or not a role problem is a stressor. Kahn and Quinn defined stress responses as physiological change, behavioral change, perceptual-cognitive change, affective change, and overt and intrapsychic coping efforts.

Kahn and Quinn proposed this framework for analyzing the relationships between role and stress. They realized that role problems must be broken down into a number of distinct areas of ambiguity and conflict, not all of which cause stress, and that the ecological relationship, so to speak, of the extraorganizational environment, the organization, the role set, and the focal person involves a cyclical process. These variables react and interact as a total environment.

Stress

In this section, methodological issues in the measurement of occupational stress will be addressed and related to the measurement of job burnout. Articles which deal with the terms stress and burnout in human services will be noted; in general, the point being that in the human service literature, burnout is commonly used for a general reference to both the extreme stimulus situations found in human services and to the stress responses of individuals working in these settings. There seems to be no question that burnout involves stress responses in all the areas defined by Kahn and Quinn listed above. Rather, the problem is to separate out the stimuli from the stress responses. To address this problem, it may not be necessary to invent a new construct (burnout) to be measured. Possibly burnout can be

understood in terms of psychological constructs and stress measurements which have been previously validated.

Fineman and Payne (1981) studied the relationship of role indices and stress responses and discussed the "methodological trap" involved in not clearly defining the term stress when attempting to relate it to job attitudes. The problem is that measures that tap attributes like "stressful job" reflect perceived job environments and are not separated from self report measures of stress that tap personal reactions to these environments. Indeed, perceptions and reactions are often measured by items so operationally similar as to misleadingly produce a relationship.

The descriptive literature on human service work has typically not acknowledged this distinction. An exception is a study by Cherniss, Egnatios, and Wacker (1976) in which they have broken down those aspects of the job and the organization which they saw as stressors, and those behaviors which they termed responses to stress. Specifically, they viewed inadequate training and poor orientation to the job as sources of stress, because they increase anxiety. Role conflict and ambiguity were also discussed including the development of a "blaming the victim" attitude and a dehumanizing attitude. Thus, Cherniss et al. basically followed the methodology outlined above in separating stress stimuli from stress responses. But they did not use the term burnout. Rather, stress stimuli and responses to stress were described in that study, and these variables do coincide with descriptions of burnout published around the same time and after this study.

Later, Cherniss (1978) was using the terms burnout and stress together in a descriptive report. The meaning of the term burnout was

clarified by use of examples which included antecedents and consequences of burnout, and Cherniss recognized that considerable discrepancy existed over the term. However, Cherniss expressed the view that burnout is the response to stress which is constituted by negative changes in work-related attitudes and behavior, as well as physical symptoms and behaviors off the job (e.g., drinking more, and an increase in marital conflict). Cherniss also discussed stressors leading to burnout and effects of burnout which take into account the individual, the organization, and the surrounding culture.

Of course, the difficulty of distinguishing stressors and responses comes when a burnout response is a change in the worker's perception. For example, when more role problems are perceived, have the stressors increased or has the worker burned out due to other factors and perceptions have changed? Definition and measurement of the construct burnout is indeed prone to circularity, as is the construct of stress.

Perlman and Hartman (1980) addressed the issue of burnout as a stress reaction. The thesis of this "thinkpiece" was that burnout is best analyzed within a stress model. In defining burnout, Perlman and Hartman unfortunately reviewed the description of only two authors in the burnout descriptive literature, Freudenberger and Maslach. Burnout was seen as synonymous with stress outcomes except that burnout implied to these authors that at one time a committed, caring attitude existed.

In line with data presented above, Perlman and Hartman argued that much of the so-called burnout phenomenon could be explained in

terms of stressors resulting from role conflict and ambiguity. The suggestion here is that role is probably a key concept in understanding burnout, although it is equally crucial to note that the role-stress connection is only now being developed to a level of sophisticated measurements methodology. In the definition of variables and stress outcomes, the relationships are still being questioned.

Perlman and Hartman did not suggest a new conceptualization when they sought to integrate burnout into a stress model. Studies mentioned above, plus others in the human service literature have discussed job stress, and many have discussed role problems and stress outcomes specifically (e.g., Greenberg & Valletutti, 1980). Perlman and Hartman were however, the first authors to react to the idea that burnout as measured by the Maslach Burnout Inventory (MBI) is (1) revealing factors associated with the descriptive literature, but (2) burnout has still not been demonstrated as a separate unique psychological construct.

Before proceeding to a description of the instrument currently used to measure burnout, a recent study, by Shirom (1982) which addressed the methodological problems associated with occupational stress research will be discussed. The development of this methodology will be beneficial for constructing a framework for studying burnout.

Shirom (1982) noted that many varied and often conflicting conceptual definitions of organizational stress were found in the literature. The objective of Shirom's article was to develop a definition of stress based on the view that stress arises from "an employee's

perception of an environmental demand which exceeds his/her resources, and is theoretically distinct from the . . . coping processes and responses" (p. 21). (The concern was only with social psychological stress rather than such things as noise, and toxic substances.) Again, Shirom is interested in what he termed "stress perceptions," and we are faced with the circularity of determining whether stress is the excessive stimuli or the worker's response to it.

Shirom saw stress as neither. Instead he noted that stress comes from the interaction between the employee and the work environment. A reciprocal action of multidirectional causation between the worker and the environment is implied. "Stress resides neither in the environment nor in the person, but in the appraisal of both by the employee" (p. 22). The employee's personal traits and beliefs were noted only as they moderate stress perceptions.

This view of stress is in conflict with that of Fineman and Payne (1981) who preferred to operationalize "stress" as psychological, behavioral, and physiological symptoms or responses to excessive stimuli. In contrast, Shirom operationalized stress as the perceptions of excessive stimuli. Further, Fineman and Payne did not choose to operationalize stressors or excessive stimuli in terms of the workers' perceptions only. Instead they operationalized role stressors in three ways which included workers' perceptions as (1) a content analysis of interviews with workers, (2) a rating of role variables by the workers, and (3) the interviewer's perceptions. The interviewer rated the worker on the same variables which were rated by the worker.

However, the two ratings were highly interrelated (r = .86), and workers' self-report may serve as a satisfactory perception of stress stimuli.

Shirom actually conceived of a two part view of stress: (1) perception of excessive demands; and (2) perceived inability to meet those demands. The author continued with a description of the various facets of stress which were based largely on a role conceptualization (role demands and resources). These various items were organized under the facets of (1) duration of demands, (2) type of demands, (3) source of demands, (4) interaction context (e.g., group work process), (5) aspect of resource (quantitative or qualitative), (6) type of resource (individual or organizational), and (7) range of the stress (to what extent something is viewed as a stress). Measures of stress designed from this model would then be very similar to or at least overlap current measures of role conflict and role ambiguity. In summary, Shirom conceptualized stress as the perceptions of taxing work stimuli. It seems, however, incomplete to label stimuli as stressors which have not been linked to stress reactions.

In conclusion, the occupational stress literature is still in a youthful state of development with respect to the clarification of the definition of stress, as well as the methodology for the measurement of stress. However, this literature is conceptually and methodologically more sophisticated than the burnout literature, and offers studies and reviews relating occupational stress to various previously validated work attitudes (e.g., Beehr & Newman, 1978; Ivancevich & Donnally, 1975;

Miles, 1976), and for those reasons, probably offers a fruitful avenue for the establishment of nomological network for the construct of burnout.

Measuring Burnout

The current height of methodological sophistication in the burnout literature is the empirical work done by Maslach who has developed a measure of the construct. One published report exists which sought to validate the scale (Maslach & Jackson, 1981). The Maslach Burnout Inventory (MBI) was developed from descriptive and correlational work done by Maslach (e.g., Maslach, 1976). The MBI was designed to measure various aspects of the burnout syndrome. A review of the items reveals that ratings of stress symptoms or the absence of stress symptoms are often elicited. However, several other items require responses concerning perceptions of stress stimuli (e.g., "Working with people all day is really a strain on me.").

Each of the 25 items on this scale requires two responses. One response requests a rating of the intensity of the feeling or belief, and the other response is to rate the frequency of that feeling or belief. The scale results in eight subscales, i.e., frequency and intensity ratings of each of the following: (1) Emotional Exhaustion (9 items); (2) Depersonalization (5 items); (3) Personal Accomplishment (8 items); and, (4) an optional scale, Involvement (3 items). High degrees of burnout are reflected in high mean scores on subscales 1 and 2 and a low score on 3. No overall composite score is used, and no percentiles

or cut-off scores were established for "burned out" or "not burned out." The frequency portion of the item is measured on a 7-point scale ranging from 1 ("A few times a year") to 6 ("Everyday"), and the intensity portion is measured on an 8-point scale ranging from 1 ("Very mild, barely noticeable") to 7 ("Very strong, major"). The option of "never" for frequency is also available, and in this case, no intensity of feeling is recorded.

The Maslach and Jackson (1981) article detailed their reliability and validity analyses, as well as the factor analysis which resulted in the four factors above. The four-factor solution for a factor analysis of the 25 two-part items is based on a sample of 1,025 workers from a variety of human service jobs including administrators in these agencies. The fourth factor (the optional scale of Involvement) consistently appeared in the factor analysis, "but since the eigenvalue was less than unity, it has not been included as a subscale of the MBI" (p. 104).

The correlations between the frequency and intensity dimensions across all items ranged from .35 to .73 (mean = .56). The authors viewed this as a moderate relationship, and felt that the two dimensions "reveal different patterns of correlations with situational and personality variables" (p. 104). Thus, six scores are reported for one individual (with two "optional" scores also available).

The reliability of the MBI was calculated on a sample of 420. Cronbach's coefficient alpha was used to estimate the internal consistency, and a coefficient of .83 for a composite of frequency items and

.84 for intensity items were found for the 25-item scale. Reliability coefficients were also calculated for the eight subscales, and were found to be .89 (frequency) and .86 (intensity) for Emotional Exhaustion, .74 (frequency) and .74 (intensity) for Personal Accomplishment, .77 (frequency) and .72 (intensity) for Depersonalization, and .59 (frequency) and .57 (intensity) for the optional scale.

The convergent and discriminant validity of the MBI were also examined. The convergent validity was demonstrated in three ways. First, the self-report MBI scores were correlated with behavior ratings obtained from the spouse or a co-worker of the respondent. In this procedure, a small subsample "of 40 mental health workers were each asked to provide an anonymous behavioral evaluation of a designated co-worker who had also completed the MBI," and another sample of 142 wives rated their husbands who were policemen who completed the MBI. The behavioral ratings consisted of questions pertaining to how emotionally drained the worker was, how physically fatigued, and how he or she interacted with clients. (Spouses did not rate the third type of item.) Generally, two subscales of Emotional Exhaustion and Depersonalization were significantly correlated with the behavioral ratings. The optional subscale (Involvement) was not mentioned in the validation study. Only the correlations between the behavior ratings and intensity dimensions of Emotional Exhaustion and Depersonalization, and in one case, Personal Accomplishment, were reported in the article. A footnote stated that frequency dimension correlations were also in the same direction and significant (i.e., $\underline{p} < .05$) except where noted in the text.

The results of the study produced a number of correlations between the MBI subscales and various items on the behavioral ratings. MBI self-report subscales were significantly correlated with peer ratings of "emotionally drained" mental health workers for both Emotional Exhaustion (r = .41), and for Depersonalization (r = .57). Those self-report subjects who had been rated as physically fatigued scored higher on Emotional Exhaustion (frequency only, r = .42), and on Depersonalization (r = .50). Ratings of frequent complaints about clients did correlate significantly with Depersonalization scores (r = .33). No significant correlation was found between co-worker ratings of satisfaction with the job and scores on Personal Accomplishment.

The second sample of policemen and their wives (n = 142) also resulted in significant correlation with several of the different items on the behavioral rating scale. Again, a number of correlations were done with the individual items, and it is unclear how many correlations were actually considered. Emotional Exhaustion was reported as correlating significantly with the behavioral ratings of coming home angry and upset (r = .34), coming home tense and anxious (r = .25), coming home physically exhausted (r = .15), and complaining about problems at work (r = .29). Personal Accomplishment scores were higher for those policemen whom their wives rated as coming home in a cheerful or happy mood (r = .20, frequency only), and as doing work that was a source of pride and prestige for the family (r = .25).

Although a number of significant correlations were found, it remains difficult to interpret them in the context of the definition of

burnout offered by Maslach and Jackson (see page 3). For example, burnout was defined by the authors as "emotional exhaustion" and an attitude of "depersonalization" toward the client, and a feeling of lack of accomplishment. Correlations which fail to demonstrate the presence of all three elements in one sample are difficult to integrate into the definition. It is also difficult to determine the nature of the correlation between the worker's self-report items (for example on the item "I feel emotionally drained from my work") and the peer ratings of the same people using the same items. The interpretation is also hampered by the lack of detail given by the authors regarding safeguards to prevent co-workers from discussing the items prior to both sets of responses being completed.

In the second examination of convergent validity, the MBI was correlated with certain job characteristics which had been previously hypothesized (e.g., in Pines & Maslach, 1978) as being related to staff burnout. The authors reported that large caseloads (i.e., over 40 people served per day) had been correlated with high Emotional Exhaustion and Depersonalization and low Personal Accomplishment as reported by Barad (1979) in a sample of 845 public contact Social Security employees. A sample of 43 physicians who spent part of their time in teaching (r = -.33) or administration (r = -.36). Depersonalization scores were also lower for the group who worked part-time in administration (r = -.26, intensity only), but not for teachers. The Personal Accomplishment scale had no relationship to these divisions in job duties.

Job characteristics were defined by the Job Diagnostic Survey (JDS) (Hackman & Oldham, 1974; 1975) in a second sample of 91 social service workers. Three job dimensions from the JDS were considered for correlations with the MBI in this sample. Higher scores on the job dimension "feedback from the job itself" correlated with lower scores on Emotional Exhaustion (r = -.38) and on Depersonalization (r = .38), and higher scores on Personal Accomplishment (r = .29). A second dimension, "dealing with others," assesses how closely one must work with others. It correlated only with the optional subscale of the MBI, Involvement. A third dimension of the JDS, "task significant," correlated only with the Personal Accomplishment subscale.

Essentially, this second method of demonstrating convergent validity showed only higher self-reports of exhaustion and depersonalization in a small sample which had more direct client contact. These same workers, physicians, also have, in general, a much more directly responsible role in human service, and much longer hours of work. The clearest demonstration of the relationship between burnout and job characteristics was shown for the sample of 91 social service workers where it was found that "feedback from the job" is inversely related to both exhaustion and depersonalization, as well as positively related to Personal Accomplishment. The subscale of the JDS was described as measuring "the degree to which carrying out the work activities (i.e., contact with recipients) gives the employee direct and clear information about the job performance" (p. 107).

In their third assessment of convergent validity, Maslach and Jackson correlated what they had labelled in previous studies (e.g.,

Maslach, 1976) as "outcomes" of burnout with the new burnout scale. These outcome variables included dissatisfaction with growth opportunities on the job, meaningfulness of work, satisfaction with co-workers, and knowledge of results (feedback about the job), all defined by subscales of the JDS. Also included as outcomes were intention to turnover, frequency of breaks and absenteeism as measured by peer ratings, ability to get along with one's family, and stress symptoms such as increased alcohol consumption, insomnia, and increased use of tranquilizers.

Scores on the JDS scale "growth satisfaction" were negatively correlated with Emotional Exhaustion (r = -.26) and Depersonalization (r = .29), and positively correlated with Personal Accomplishment (r = .29). The sample consisted of 180 nurses, social service, and mental health workers. In another sample of 91 workers, low meaningfulness of work was correlated with higher Depersonalization (r = -.21) and lower Personal Accomplishment (r = .19). Low scores on amount of feedback (the JDS scale "knowledge of results") were correlated with high scores on Emotional exhaustion (r = -.21) and Depersonalization (r = -.28), and with low scores on Personal Accomplishment (frequency only, r = .20). Staff members scoring low on the JDS subscale of "peer and co-worker satisfaction" (n = 180) scored high on Emotional Exhaustion (r = -.19) and Depersonalization (r = -.36), and low on Personal Accomplishment (r = .32).

Intention to turnover was studied in the one sample of policemen mentioned above (n = 142). The MBI scores were highly predictive of

intention to turnover in this sample, R (6, 135) = .68, $p < .001$. Which subscales of the MBI were used in the equation was not specified.

Further correlations were done with co-workers ratings of frequency of breaks and absenteeism (n = 140). Reports of more breaks correlated with higher scores on Emotional Exhaustion (r = .29, intensity only). Absenteeism was correlated with higher scores on Depersonalization (r = .30).

The final "outcomes" of burnout, impaired ability to get along well with family and increased stress symptoms, also resulted on correlations with MBI subscales. Some individual items in the sample of policemen and their wives (n = 142) which correlated significantly with higher scores on Emotional Exhaustion and Depersonalization were wives' reports that the policemen wanted to spend time alone rather than with the family, that the policemen perceived their children as being emotionally distant from them, and ratings by the wife that the husband did not want to share his feelings with her. In the same sample, support was found for the hypothesis that more stress symptoms will be reported by workers scoring high on the MBI's negative scales. High scores on Emotional Exhaustion were significantly correlated with more problems with insomnia (r = .24). Use of tranquilizers was correlated only with self-reports of low scores on Personal Accomplishment (r = -.33).

The convergent validity procedures described above have linked the MBI scales to other variables in five separate samples (n ranging

from 40 to 180). A behavioral rating scale and various JDS subscales were used to demonstrate that the MBI correlates with behavior on the job, behavior toward the client, job characteristics, and some hypothesized "outcomes" of burnout. Physically and emotionally drained subjects were identified by the MBI and by behavioral ratings. Of course, in correlational study, it is impossible to determine whether the subjects were actually burned out on the job or whether they were just physically and emotionally exhausted in general. At no point were co-workers, spouses, or supervisors simply asked if they felt the subjects had burned out on the job. It is also difficult to interpret the correlation that burned out workers are more dissatisfied with co-workers. The reverse could be true, i.e., more difficult co-workers might contribute to burnout. The study described above presents evidence that two or more measures can identify exhaustion, rather than that the subjects were suffering from a unique job-related stress syndrome.

The construct validity of the MBI was further examined in a discriminant validity study of social service and mental health workers (n = 91). A paper-and-pencil measure of job satisfaction, the JDS measure of "general job satisfaction," was correlated with the MBI. General job satisfaction correlated negatively and significantly with Emotional Exhaustion (r = -.23) and with Depersonalization (frequency only, r = -.22). The authors stated that "since less than six percent of the variance is accounted for by any one of these correlations, one can reflect the notion that burnout is simply a synonym for job

dissatisfaction" (p. 109). Essentially, one can conclude, however, that the discriminant validity of the MBI has not been clearly demonstrated.

Discriminant validity requires (a) higher correlations between two methods of measuring one construct than, (b) the correlations between same methods of measurement of different constructs. The data already presented is difficult to assess by this standard, because different elements of the construct were assessed by the different method (i.e., behavioral ratings rather than paper-and-pencil) in several samples, and then correlated with subscales of the MBI. Also, little data were available for the second type of evidence (b above) of discriminant validity.

Possible comparisons between different methods-same construct in the presently described study include the correlations of the peer rating "emotionally drained" with Emotional Exhaustion (r = .41) and with Depersonalization (r = .57); and, peer ratings of physically fatigued with Emotional Exhaustion (frequency only, r = .42) and Depersonalization (r = .50). Peer ratings of frequent complaints about clients correlated only with Depersonalization (r = .33). Correlations between same method-different constructs were indeed lower: General job satisfaction correlated negatively with Emotional Exhaustion (r = -.23) and Depersonalization (r = -.22). Thus, some evidence for discriminant validity is available. However, a clear picture of the physically and emotionally drained worker who also displays negative attitudes toward clients and a feeling of lack of accomplishment on the job, does not emerge from the correlations. Does the syndrome of

burnout (as defined on page 3) exist, or have Maslach and Jackson merely measured the exhaustion that exists in some workers in any field, as well as the negative attitudes of some workers?

In conclusion, based on the above results of studies by Maslach and Jackson, there is some evidence to support the idea that the burnout construct is distinct from job satisfaction, but there is no evidence to date which shows that burnout is differentiated from other job-related constructs.

Research Questions

The primary purpose of the present study was to promote further understanding of the phenomenon of job burnout. In particular, the distinctiveness of the construct was investigated in relation to five other work-related constructs which have received extensive previous study: job satisfaction, role conflict, role ambiguity, job involvement, intention to turnover. Additionally, this study examined the relationship of job burnout to stress symptoms, job design characteristics, and other non-job-related variables, including life satisfaction and the demographic variables of age, sex, and educational level.

More specifically, the present study addressed the following four research issues:

1. What is the dimensionality of the job burnout construct as measured by the MBI? This study analyzes the factor structure of the MBI and compares it with the factors identified initially by Maslach and Jackson (1981). Further, having specified a set of dimensions, the

internal consistency reliability of the obtained MBI factors was evaluated using Cronbach's coefficient alpha.

2. What is the relationship of job burnout to job satisfaction, role conflict, role ambiguity, job involvement, stress symptoms, and life satisfaction? As discussed in the literature review, there are good reasons to think that each of these variables might be related to job burnout in the directions described earlier. The larger question is whether these variables are tapping one common psychological construct or whether they represent separate dimensions. Accordingly, these variables were intercorrelated and subjected to a factor analysis. As an additional test of their relationship to the construct of job burnout, the role conflict, role ambiguity, job satisfaction, job involvement, life satisfaction, and stress symptom measures were regressed on the job burnout measure to investigate which variables contributed uniquely and which variables contributed nonuniquely to its prediction.

3. Does the use of the job burnout construct as measured by the MBI enhance the prediction of two important work-role outcomes--turnover intention and stress symptoms--above and beyond that predicted by the other job-related constructs measured in this study? Thus, regression analyses were used with each of the two work-role outcome variables as dependent variables and job burnout, job satisfaction, role conflict, role ambiguity, and job involvement as predictors.

4. What is the relationship of the MBI measure of job burnout to demographic characteristics and job attributes? Specifically, the relationship between job burnout and age, gender, educational level,

and satisfaction with level of educational attainment was examined as was the relationship between job burnout and the following job attributes: tenure in one's profession, tenure on the job, amount of paperwork, and extent of direct client contact.

CHAPTER II

METHOD

Participants

Participants were drawn from varied human service agencies and organizations and from various levels of service from aid to administrator. Participants worked in public and private agencies, and a few worked more or less independently. Different career stages were represented from less than one year of employment to over twenty years. Some of the agencies which participated were Middle Tennessee Mental Health Institute, Nashville, Tennessee; the Oak Ridge Mental Health Center, Oak Ridge, Tennessee; Catholic Social Services, Knoxville, Tennessee; Daniel Arthur Rehabilitation and Special School, Oak Ridge, Tennessee; Anderson County School Speech Pathologists, Clinton, Tennessee; Mental Retardation Outreach Workers, Regional Mental Retardation Office, Knoxville, Tennessee; the Moorehead Retardation Center, Western North Carolina; the Oak Ridge Ministerial Association, Oak Ridge, Tennessee; and the two Pine Mountain Centers for handicapped children and adults, Campbell County, Tennessee.

Agency administrators were approached to solicit voluntary participation by their agency personnel. The project was presented to the Director of each agency or his or her designated staff person. Participation of each individual workers was also voluntary. No remuneration was provided. Eleven other individual questionnaires were included for analysis from workers from agencies not approached or

from those in private practice who heard of the study and requested to participate.

The total potential sample size was 820 participants from 15 agencies. The large number of possible subjects was approached to yield a usable sample size large enough for the statistical techniques of multiple regression which included a large number of predictors in the equation, and factor analysis.

Procedures

Portions of the questionnaire were pilot-tested with a sample of 150 Department of Human Services employees in 1978 as part of a grant from the Department of Human Services to study job stress in these workers. Generally, the pilot test led to two conclusions for future research. First, the cover letter must be carefully worded to convey the idea of how this research will eventually be used to aid in the prevention and amelioration of burnout in human services. Second, more explicit directions and an answered example item were necessary for the MBI items. The unusual format of the items seemed confusing to many respondents, and several questionnaires were eliminated in the pilot test because directions for answering the items were not followed.

The questionnaire was distributed through the administration of each agency. Each questionnaire contained a cover letter stating the purposes of the project, instructions for completion, and a self-addressed return envelope. Confidentiality was assured, and identifying information was required only for the signature indicating consent

to voluntary participation. Each participant was offered the option to include their name and address to receive feedback following the completion of the study. The pages containing the identifying information could be returned separately from the questionnaire.

Follow-up phone calls were made to the administration at approximately one week intervals until either permission to distribute the questionnaire was obtained or permission was not granted for the project. Follow-up phone calls were also made to agencies which had agreed to participate at approximately one and one-half to two week intervals requesting that they begin distribution of the questionnaire. This was continued until questionnaires from the agency began to come in. Final letters were sent to all agencies to thank them for their participation and to inform them as to how many responses had been returned from their agency.

Survey Instrument

The questionnaire was composed of eight sections as described below. A copy of the complete questionnaire can be found in Appendix B.

Maslach Burnout Inventory (MBI)

This 25-item section results in eight subscales: (1) Emotional Exhaustion (9 items), (2) Depersonalization (5 items), (3) Personal Accomplishment (8 items), and (4) an optional subscale, Involvement, consisting of 3 items. Each item is reported in terms of "intensity" and "frequency." High degrees of burnout are reflected in high mean

scores on subscales 1 and 2 and a low score on 3. An overall composite score was not used in previous research, although the reliability of a composite of the frequency items and of the intensity items were calculated in Maslach and Jackson (1981). Each item asks for two responses; one response as to intensity and one as to frequency of a feeling or belief. The frequency portion of the item is a 7-point scale ranging from 1 ("A few times a year or less") to 6 ("Everyday"). The option "Never" is also available. The intensity portion of the item is an 8-point scale ranging from 1 ("Very Mild, barely noticeable") to 7 ("Major, very strong"). The only information pertaining to validity and reliability is found in the study by Maslach and Jackson (1981) as described above.

Role Conflict/Role Ambiguity

The second part of the questionnaire contained the Rizzo et al. (1970) scales. The eight-item role conflict scale and the six-item role ambiguity scale were presented together in the same fourteen-item format that has been used in past applications of the scale (e.g., Harrison, 1978; House & Rizzo, 1972; Keller, 1975). The items are scaled form 1 ("Very False") to 7 ("Very True"). An analysis of the psychometric properties of the scales is available in Schuler and Aldag (1977).

Job Satisfaction

The third section of the instrument was composed of the 20-item Minnesota Satisfaction Questionnaire. This measure was chosen in part

due to its brevity. "Too much paperwork" on the job shows up repeatedly as a complaint from human service workers. (See, for example, Pines & Maslach, 1978.) It was felt that a shorter survey instrument would yield more responses. Each item was scaled from 1 ("Very Dissatisfied") to 5 ("Very Satisfied"). The questionnaire has been thoroughly analyzed, and this information can be found in Weiss, Dawis, Lofquist, and England (1967).

Job Involvement

Section four of the questionnaire contained 17 items, and each was rated on a 7-point scale. The items were chosen from 65 items presented in a review of the job involvement literature by Saleh and Hosek (1976). They factor analyzed the 65 items which had been previously used in the literature to measure job involvement and came up with three factors: "Active participation items," "Central life interest items," and "Importance of performance with valued self items."

Items for the current survey were chosen from each factor based on the factor loadings of the item and the face value of its potential association with the present target population. Saleh and Hosek structured all the items on a 5-point scale. An expanded 7-point scale was decided upon in the current study to allow for more variance in answers.

Stress

The fifth section of the questionnaire consisted of 13 items pertaining to physical conditions which have been related to stress.

Many items have been reported as outcomes of burnout (e.g., Freudenberger, 1974, 1975; Maslach, 1976). These 13 items were used by Quinn and Staines (1977) in The 1977 Quality of Employment Survey. The items were "drawn from several overlapping sources. The first eleven of them formed an index of physical health, the internal consistency reliability of which was .80" (p. 235). Each item is measured on a 4-point scale ranging from 1 ("Often") to 4 ("Never").

Intention to Turnover

Part six pertained to expectations the respondent had about his or her current job. Two responses were requested: Where do you expect to be in two years, and in five years? Eight options were offered for each question, as well as an open-ended "other" category. Options included remaining with the same agency, moving to another agency, and leaving the field.

Life Satisfaction

Part seven included the Cantril 11-point "ladder scale" (Cantril, 1965). The respondent is asked to judge his or her general life satisfaction in terms of the rungs of the ladder. Each respondent is asked to judge their position on the ladder three points in their lives--five years ago, at present, and five years from now. One other item drawn from Andrews and Withey (1976) was also included to assess satisfaction with "life as a whole," and is measured on a 7-point scale ranging from 1 ("Terrible") to 7 ("Delighted").

Demographics, Personal Background, and Job Design

Part eight consisted of thirteen items concerning tenure on the current job, job design (the amount of time spent on paperwork and the amount of time in direct client contact), tenure in the field, amount of education, age, and sex. Also included was one item pertaining to the respondent's satisfaction with his or her training prior to entering the field.

Comments

The survey instrument concluded with one open-ended question: "Please feel free to make any comments you may wish which pertain to this survey or to your experience in human services work in general." This question was included for three reasons. In the pretest (noted on page 52), it was found that respondents felt the need to write comments and questions to the researchers in different places on the questionnaire. Second, since interviewing the workers was not practical, further information on how they feel about the human service field could be obtained. Third, information on how workers feel about being studied by use of a survey instrument, and by this particular instrument, may offer ideas for directing future research.

CHAPTER III

RESULTS

Response Rate

A total of 216 (26%) of the 820 surveys were returned. Three of the 15 agencies approached did not participate, and the surveys were not passed on to the workers by the administration. When these 95 surveys are discounted, the individual response rate was 216 of 725 (36%). Five incomplete surveys were discarded as they were incomplete. A total of 211 responses were available for analysis.

Description of the Sample

The following description is arranged so as to display the characteristics of the sample, as well as some sample norms for the scales administered. The information is summarized in Table 1.

Age

Ages of the respondents ranged from 20 to over 65 with a mean age of about 28. The majority of respondents (72.7%) were between the ages of 20 and 40.

Sex

There were 56 males (27.3%) and 149 females (72.7%) in the sample. Six participants did not respond to this item.

Table 1

Means and Standard Deviations on the Maslach Burnout Inventory (MBI) Scales by Sex, Age, and Educational Level

		MBI Frequency						MBI Intensity					
		Emotional Exhaustion		Depersonali-zation		Personal Accomplishment		Emotional Exhaustion		Depersonali-zation		Personal Accomplishment	
Descriptive	n	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Sex													
Male	56	2.18	1.14	1.36	0.95	4.41	0.70	3.20	1.40	2.10	1.34	4.91	0.91
Female	1.47	2.31	1.18	1.11	0.95	4.29	0.78	3.02	1.38	1.47	1.16	4.64	1.00
Age													
20-25	23	2.65	1.19	1.62	1.11	4.06	0.78	3.20	1.27	2.21	1.45	4.60	1.21
26-30	52	2.63	1.07	1.28	1.01	4.31	0.69	3.68	1.22	1.88	1.21	4.92	0.86
31-35	41	2.21	1.18	1.26	0.95	4.38	0.68	2.99	1.36	1.91	1.36	4.66	0.85
36-40	33	2.28	1.22	1.17	0.88	4.40	0.74	3.13	1.52	1.42	1.01	4.81	0.93
41-46	16	1.94	0.99	0.81	0.75	4.04	0.94	2.64	1.16	1.17	1.10	4.28	1.33
46-50	18	1.85	1.33	0.94	0.88	4.44	0.71	2.33	1.55	1.10	0.97	4.81	1.01
51-55	10	1.74	0.70	0.74	0.75	4.41	1.21	2.73	0.91	1.28	1.28	4.61	1.04
56-60	8	1.46	0.93	0.68	0.74	4.66	0.75	1.29	0.82	0.95	0.67	4.13	0.75
61+	4	2.00	1.70	0.95	0.85	4.38	0.87	2.48	2.17	1.20	1.30	4.59	1.18
Education													
No college	28	1.73	1.48	0.76	0.93	4.24	1.08	2.30	1.67	1.19	1.31	4.36	1.26
Some college	30	2.14	1.38	1.09	1.08	4.22	0.82	2.60	1.49	1.56	1.42	4.34	1.10
B.A./B.S.	33	2.34	1.11	1.24	1.00	4.21	0.82	3.06	1.27	1.69	1.18	4.71	1.15
Some graduate	20	2.34	1.03	1.37	1.05	4.33	0.64	3.12	1.27	1.85	1.32	4.81	0.75
M.A.	82	2.51	1.00	1.23	0.88	4.36	0.63	3.51	1.21	1.67	1.16	4.85	0.76
Ph.D.	11	1.66	0.83	1.27	0.78	4.80	0.50	2.82	1.39	2.02	1.17	5.30	0.68
M.D.	3	2.22	0.78	1.53	0.50	4.41	0.85	2.56	1.18	1.80	1.00	4.71	1.45

Education Level

Participants were asked to indicate their education level; three participants did not respond to this item. A little over half the sample (53.9%) had less than a Master's degree. Twenty-eight (13.5%) had no college; 30 (14.4%) had some college; 33 (15.9%) had a B.A. or B.S.; and, 21 (10.1%) had completed some graduate work.

Of the remaining 46.1%, 82 (39.4%) of the respondents had obtained an M.A. or M.S. degree. Eleven respondents (5.3%) held a Ph.D. and three (1.4%) an M.D.

Professional Backgrounds

The sample represented a wide variety of work fields with human services being the uniting characteristic. The job titles were distributed in 18 categories including administration (15.6%), social workers (12.8%), teacher (11.8%), psychologists (10.0%), and psychiatric technicians (9.0%). A total of 21 categories reflected the educational backgrounds of the respondents such as psychology (18.5%), special education/education (15.6%), no college degree (14.2%), and social work/welfare (10.9%). A complete list of job titles and areas of education by categories are found in Tables 2 and 3.

The type of client served was recorded by each worker. Up to three responses were possible for workers who saw more than one type of client. Three categories were suggested on the survey: Chronic adults, children, and families who were served by 61.6%, 43.1%, and 35.1% of the workers, respectively. Under the item "Other," responses

Table 2

Job Titles Represented in the Current Sample

Job Title Category	Frequency	Percent
Administration & Management	33	15.6
Social Worker	27	12.8
Teacher	25	11.8
Psychologist	21	10.0
Psychiatric Technician	19	9.0
Mental Health Worker (CMHC)	14	6.6
Registered Nurse	11	5.2
Nurse's Aide	9	4.3
Liscensed Practical Nurse	7	3.3
Speech Pathologist/Audiologist	6	2.9
Behavior Therapist	5	2.4
Teacher Aide	5	2.4
Case Manager/Liaison Worker	5	2.4
Physical Therapist/Occupational Therapist	5	2.4
Vocational Evaluator/ Rehabilitation Counselor	3	1.4
Counselor	3	1.4
Music/Recreation Therapist	3	1.4
Librarian	2	0.9
Missing	4	1.9
Total	211	1.00

Table 3

Areas in Which Respondents Received Their Highest Degree

Field of Degree	Frequency	Percent
Psychology	39	18.5
Special Educational Education	33	15.6
No Degree	30	14.2
Nursing	25	11.8
Social Work/Social Welfare	23	10.9
Other	8	3.8
Speech Pathology	7	3.3
Theology	6	2.9
Child & Family/Human Services	5	2.4
Physical Therapy	4	1.9
Counseling Psychologist	4	1.9
Educational Psychology	3	1.4
Occupational Therapy	3	1.4
Vocational Rehabilitation	3	1.4
Medicine/Psychiatry	2	0.9
Library Science	2	0.9
Audiology	1	0.5
Community Development	1	0.5
Public Health	1	0.5
Sociology	1	0.5
Curriculum & Instruction	1	0.5
Missing	9	4.3
Total	211	100

such as geriatric, forensic, and alcohol and drugs were given. Table 4 summarizes the types of clients served.

Scales Scores

Six scale scores were formed for each respondent for the Maslach Burnout Inventory (MBI). The three scales Emotional Exhaustion, Depersonalization, and Personal Accomplishment are each divided into two scores: Frequency and intensity. Table 5 reports the mean scores and standard deviations on the intensity dimension of the MBI scales by the variable sex, as compared to the scores found by Maslach and Jackson (1981). The three-item optional scale is not reported. The means and standard deviations found in both studies are comparable.

Table 6 reports the scores of the current sample on all the measures in the survey. The sample means and standard deviations found by Maslach and Jackson (1981) are also given for the six MBI scales. The means and standard deviations on the MBI scales in that study are generally comparable with the current sample with no differences between means exceeding .46 on a 6-point scale (frequency) or .49 on a 7-point scale (intensity).

Job satisfaction scores in the current sample were low when compared to most norm groups reported by Weiss, Dawis, England, and Lofquist (1967). For example, the current sample's mean scores fell at the 25th to 35th percentiles of the norm group of engineers; the 35 to 40th percentiles of the salesmen group; the 25th to 30th percentiles of the group of janitors and maintenancemen. Only two norm groups were

Table 4

Types of Clients Served by Current Sample[a]

Type of Client	Frequency	Percent
Chronically Mentally/Physically Handicapped Adults	130	61.6
Children	91	43.1
Families	74	35.1
Acute Adults	14	5.6
Service Deliverers	9	4.3
Adults (e.g., Mental Health Center Clients)	9	4.3
Missing	9	4.3
Geriatrics	7	3.4
Alcohol & Drug	5	2.4
Forensic	4	1.9
Adolescents	4	1.9
Women	1	0.5
Crisis Intervention	1	0.5

[a]The total percentage if greater than 100, because many workers served more than one type of client.

Table 5

Means (M) and Standard Deviations (SD) of the Intensity Dimension of the Maslach Burnout Inventory (MBI) Scales by Sex Compared to Those Values Found in Maslach and Jackson (1981)

	MBI Intensity Scales					
	Emotional Exhaustion		Depersonalization		Personal Accomplishment	
Sex	M	SD	M	SD	M	SD
Male	3.20 (3.02)	1.40 (1.46)	2.10 (2.33)	1.34 (1.56)	4.91 (5.05)	0.91 (1.00)
Female	3.02 (3.61)	1.38 (1.47)	1.47 (1.98)	1.16 (1.52)	4.64 (4.99)	1.00 (0.95)

Note: The figures in parentheses are those reported by Maslach and Jackson.

Table 6

Means and Standard Deviations of the Scale Scores for the Current Sample

Scale	n	Mean	S.D.
MBI Frequency			
Emotional Exhaustion	209	2.25 (2.71)	1.16 (1.30)
Depersonalization	209	1.17 (1.57)	0.95 (1.17)
Personal Accomplishment	204	4.31 (4.23)	0.77 (1.04)
MBI Intensity			
Emotional Exhaustion	204	3.04 (3.33)	1.40 (1.49)
Depersonalization	207	1.64 (2.13)	1.23 (1.54)
Personal Accomplishment	198	4.71 (5.02)	0.97 (0.97)
Job Satisfaction			
General Satisfaction	195	72.14	12.13
Intrinsic Satisfaction	199	47.07	7.04
Extrinsic Satisfaction	206	18.00	5.36
Job Involvement			
Active Participation	206	4.98	0.90
Central Life Interest	207	4.15	1.18
Importance of Performance	203	4.85	0.77
Role Conflict	206	3.79	1.26
Role Ambiguity	206	2.98	1.25
Stress	204	3.10	0.48
Life Satisfaction	195	24.11	5.07

Note: The Job Satisfaction and Life Satisfaction scores are totals; all other scales are scored by computing means. The figures in parentheses are the sample means and standard deviations reported by Maslach and Jackson (1981).

comparable: assemblers (59th to 55th percentiles), and electrical assemblers (50th to 70th percentiles).

The role conflict mean score for the current sample was 3.79, and the role ambiguity mean was 2.98, considerably lower than the mean scores found by Harrison (1978) in a sample of child protective service workers (4.94 and 4.02, respectively).

Internal Structure of the Scales

Maslach Burnout Inventory (MBI) Factors

A principal factor analysis with iterations was performed, and the orthogonal varimax rotation was applied to the 25, two-part MBI items (Bar, Goodnight, Sall, & Helwig, 1976). The results generally verified the factors previously found by Maslach and Jackson (1981). Table 7 reports the factor structure found in the current sample. The "criterion for saliency" or the cutoff correlation coefficient was .30 or -.30 (cf. Gorsuch, 1974). Nineteen of the items loaded on the same four factors previously identified in both dimensions (frequency and intensity). In the case of each of the other six items (4, 6, 7, 15, 21, and 25), the items loaded highest on the previously identified factor in only one dimension.

The Emotional Exhaustion scale (Factor 1) produced the most unique factor loadings. The loadings ranged from .55 to .81 for the frequency dimension and .58 to .82 for the Intensity dimension with no item loading above criterion on another factor in either dimension.

The total amount of variance accounted for by the factors in the analysis of the frequency items was 11.86%, with each factor accounting

Table 7

Item Factor Loadings for the Maslach Burnout Inventory

Items by Factors Previously Identified	Frequency					Intensity					
	I	II	III	IV	V[a]	I	II	III	IV	V	VI
I. Emotional Exhaustion											
1. I feel emotionally drained from my work.	.73	.12	.20	.19	-.04	.74	.12	.14	.11	-.10	-.04
2. I feel used up at the end of the workday.	.73	.16	.17	.16	-.12	.73	.02	.14	.17	-.31	.03
5. I feel fatigued when I get up in the morning and have to face another day on the job.	.71	-.05	.03	.14	-.26	.69	-.12	.13	.07	-.08	.30
9. Working with people all day is really a strain for me.	.63	-.21	.20	.24	.03	.62	-.02	.26	.13	.20	-.01
11. I feel burned out from my work.	.81	-.09	.26	.02	-.13	.82	.01	.18	.04	.02	.05
16. I feel frustrated by my job.	.68	-.10	.13	.01	-.10	.74	-.09	.12	-.05	.17	.12
17. I feel I'm working too hard on my job.	.55	.06	.11	.08	.15	.59	.14	.19	.14	.01	-.11
19. Working with people directly puts too much stress on me.	.61	-.23	.24	.22	.01	.58	.01	.23	.01	.18	.03
23. I feel like I'm at the end of my rope.	.74	-.14	.12	.12	.04	.64	-.07	.13	.06	.24	.06
II. Personal Accomplishment											
7. I can easily understand how my recipients feel about thigns.[c]	.08	.49	.04	.17	-.24	.04	.35	-.04	.11	-.01	.55
10. I deal very effectively with the problems of my recipients.	.01	.68	-.04	-.001	-.02	.06	.67	-.01	-.06	-.08	.32
12. I feel I'm positively influencing other people's lives through my work.	-.08	.58	-.14	.27	.33	-.07	.68	-.04	.17	-.07	.05
15. I feel very energetic.[b]	-.50	.37	.02	-.07	.03	-.08	.52	.04	-.22	.21	.07
20. I can easily create a relaxed atmosphere with my recipients.	-.12	.59	-.07	-.09	.02	.02	.66	-.04	-.13	-.04	.20
21. I feel exhilirated after working closely with my recipients.[d]	-.20	.32	-.01	.33	.15	.04	.58	-.05	.07	.22	-.06
22. I have accomplished many worthwhile things in this job.	-.17	.40	-.09	.23	.29	.01	.72	.05	.10	.05	-.11
24. In my work, I deal with emotional problems very calmly.	.02	.62	-.06	.03	.04	.01	.56	-.08	.03	-.09	.05

Table 7 (continued)

Items by Factors Previously Identified	Frequency					Intensity					
	I	II	III	IV	V[a]	I	II	III	IV	V	VI
III. Depersonalization											
8. I feel I treat some recipients as if they were impersonal "objects."	.12	-.08	.68	.35	-.02	.15	-.05	.67	.19	.17	-.07
13. I've become more callous toward people since I took this job.	.47	-.16	.61	-.13	.10	.39	-.15	.63	-.15	-.03	.14
14. I worry that this job is hardening me emotionally.	.51	.01	.52	-.06	.22	.35	-.06	.58	-.08	-.10	.08
18. I don't really care what happens to some recipients.	.20	-.16	.46	.09	-.21	.18	-.08	.53	.16	-.01	.02
25. I feel recipients blame me for some of their problems.[e]	.22	.13	.36	.38	-.07	.21	.22	.46	.13	.24	-.06
IV. Optional Items											
3. I feel similar to my recipients in many ways.	.23	.10	.03	.52	-.01	.19	.01	.18	.70	.09	.17
4. I feel personally involved with my recipients' problems.[c]	.35	.18	.03	.38	.20	.21	.11	.12	.29	.08	.37
6. I feel uncomfortable about the way I have treated some recipients.[c]	.23	-.09	.26	.56	-.04	.37	.08	.26	.28	.51	.06

[a]No items loaded highest on this fifth factor.

[b]Item 15 loaded highest on Factor II in the Maslach and Jackson (1981) study on both frequency and intensity.

[c]Items 4 and 6 loaded highest on Factor IV and item 7 on Factor II in the previous study on both scales.

[d]Item 21 loaded highest on Factor II in the previous study on both scales.

[e]Item 25 loaded highest on Factor III in the previous study on both scales.

for the following portions of the variance: Factor I, 6.78%; Factor II, 2.66%; Factor III, 1.14%; Factor IV, 0.79%; Factor V, 0.49%. No item loaded above the cutoff on Factor V except item 12 under the Personal Accomplishment scale (Factor II), "I feel I'm positively influencing other people's lives through my work." The value obtained was .33. However, this item loaded higher on Emotional Exhaustion, Factor II, the value being .58.

The total amount of variance accounted for by the factors in the analysis of the intensity items was 12.51% with each factor accounting for the following portions of the variance: Factor I, 6.10%; Factor II, 3.18%; Factor III, 1.21%; Factor IV, 0.82%; Factor V, 0.69%; Factor VI, 0.51%. In Factor V, item 2, "I feel used up at the end of the workday," from the Emotional Exhaustion scale, loaded above the criterion at -.31, but it loaded higher (.73) on Factor II, Emotional Exhaustion. Item 5, "I feel fatigued when I get up in the morning and have to face another day on the job," of the Emotional Exhaustion scale, loaded .30 on Factor VI. However, it loaded at .69 on Factor II, Emotional Exhaustion.

Item 6, "I feel uncomfortable about the way I have treated some recipients," from the Optional scale, loaded highest on Factor V (.51). Item 4, "I feel personally involved with my recipients' problems," from the Optional scale loaded highest on Factor VI (.37). The Optional scale is not considered in further analysis in this study.

Factors I through IV of the current study in both the frequency and intensity dimensions, closely approximate the factor structure

reported by Maslach and Jackson (1981). They reported that only a four-factor solution was obtained, however, in contrast to the present findings of a five-factor solution for frequency items and a six-factor solution for intensity. Values for the extra factors in the current study do not exceed the criterion, except as noted immediately above, and no items loaded highest on them except items from the Optional scale.

Intercorrelations Among the MBI Scales

Table 8 summarizes the results of the intercorrelations of the MBI scales and the other scale scores. The frequency and intensity dimensions of the MBI scales of Emotional Exhaustion, Depersonalization, and Personal Accomplishment are highly intercorrelated, as expected. The coefficients are .83, .78, and .74, respectively ($p < .01$). The frequency dimension of Emotional Exhaustion correlated with the frequency dimension of Depersonalization (.60), and the intensity dimensions of the two scales also correlated highly ($r = .53$, $p < .01$). Higher scores on either Emotional Exhaustion or Depersonalization indicate higher levels of burnout. According to the Maslach and Jackson study (1981) a high score on the Personal Accomplishment scale is not supposed to represent the opposite (or inverse correlation) of either the Emotional Exhaustion or the Depersonalization scales. In line with this assertion, the correlations between the frequency dimensions of the first two scales and the frequency dimension of Personal Accomplishment are significant but low ($r = .22$, $p < .01$ and $r = -.18$;

Table 8

Correlation Matrix of All Scale Scores[a]

	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9	X_{10}	X_{11}	X_{12}	X_{13}	X_{14}	X_{15}
X_1	--														
X_2	.60**	--													
X_3	-.22**	-.18*	--												
X_4	.83**	.49**	-.20*	--											
X_5	.45**	.78**	-.15*	.53**	--										
X_6	.15*	-.13	.74**	.02	-.06	--									
X_7	.38**	.37**	-.16*	.43**	.30**	-.15*	--								
X_8	.42**	.37**	-.30**	.47**	.32**	-.18*	.50**	--							
X_9	-.39**	-.26**	.19*	-.42**	-.23**	.18*	-.52**	-.41**	--						
X_{10}	-.46**	-.41**	.38**	-.36**	-.34**	.37**	-.40**	-.53**	.56**	--					
X_{11}	-.45**	-.33**	.33**	-.40**	-.28**	.34**	-.56**	-.45**	.65**	.65**	--				
X_{12}	-.22*	-.13	.32**	-.19*	-.10	.27**	-.19*	-.14*	.43**	.48**	.40**	--			
X_{13}	-.34**	-.29**	.17*	-.33**	-.28**	.18*	-.18*	-.24**	.33**	.40**	.33**	.55**	--		
X_{14}	.54**	.38**	.18*	-.41**	-.26**	-.16*	-.21*	-.26**	-.19*	.35**	.28**	.05	.12	--	
X_{15}	-.32**	-.25**	.22*	-.20*	-.20*	.21*	-.21*	-.12	.24**	.32**	.26**	.05	.10	.43**	--

*$p < .05$

**$p < .01$

MBI Frequency:
X_1 = Emotional Exhaustion
X_2 = Depersonalization
X_3 = Personal Accomplishment

MBI Intensity:
X_4 = Emotional Exhaustion
X_5 = Depersonalization
X_6 = Personal Accomplishment

X_7 = Role Conflict
X_8 = Role Ambiguity
X_9 = Extrinsic Job
X_{10} = intrinsic Job Satisfaction

Job Involvement:
X_{11} = Active Participation
X_{12} = Central Life Interest
X_{13} = Importance of Performance with Valued Self

X_{14} = Stress
X_{15} = Life Satisfaction

[a]Negative correlations with the Stress scale reflect the "inverted" scale of measurement used.

$p < .05$, respectively). The intensity dimension of Personal Accomplishment does not correlate significantly with the intensity dimensions of the other scales.

Reliability of All Scales

After verifying the factor structure of the MBI, the reliability for the scales and of all other scales in the survey was calculated by means of Cronbach's coefficient alpha (Magnusson, 1967). Table 9 presents the alpha coefficients for each of the MBI scales as well as for the composites of all the MBI frequency items and of all intensity items. The standardized coefficients reported are calculated by dividing the observations on each item by the standard deviation of the item. The standardized coefficients are very close to those calculated on the raw data. For comparison, the alpha coefficients reported by Maslach and Jackson (1981) are also given. The coefficients reported by Maslach and jackson are very similar to those found in the current sample. All scores in the current sample were found to be very reliable (alpha > .70) with the exception of the optional MBI scale. The frequency alpha coefficient was .59, and the intensity .60 (standardized) which compared with .59 and .57, respectively, in Maslach and Jackson's study. The remaining coefficients for the current sample ranged from .73 to .90, standardized.

Table 10 reports the reliability calculated by Cronbach's coefficient alpha (standardized) for all other scales. All scales were found to have relatively respectable levels of reliability (alpha $\geq$ .77) with the exception of the "importance of performance to valued self-esteem"

Table 9

Cronbach's Coefficient Alpha for All MBI Scales with No Items Deleted Compared with Coefficients Found by Maslach and Jackson (1981)

Scale	Number of Items	n	Coefficient Alpha	Standardized Coefficient Alpha[a]	Maslach and Jackson's Coefficient Alpha[a]
Emotional Exhaustion frequency	8	209	.89	.90	.89
Emotional Exhaustion intensity	8	204	.88	.88	.86
Depersonalization frequency	5	209	.72	.73	.77
Depersonalization intensity	5	207	.74	.74	.72
Optional Scale frequency	3	207	.57	.59	.59
Optional Scale intensity	3	203	.60	.60	.57
Personal Accomplishment frequency	8	204	.76	.76	.74
Personal Accomplishment intensity	8	197	.81	.82	.74
MIB--All frequency items	25	198	.83	.82	.83
MBI--All intensity items	25	184	.86	.85	.84

[a]The standardized coefficients are calculated by dividing the observations on each item by the standard deviation of the item.

[b]Maslach and Jackson (1981) did not indicate if these were standardized coefficients.

Table 10

Cronbach Coefficient Alpha for All Other Scales with No Items Deleted

Scale	Number of Items	n	Coefficient alpha	Standardized alpha[a]
Role Conflict	8	206	.77	.77
Role Ambiguity	6	206	.81	.81
General Job Satisfaction	20	195	.89	.89
Intrinsic Job Satisfaction	12	199	.85	.85
Extrinsic Job Satisfaction	6	206	.83	.83
Job Involvement: Active Participation	6	206	.77	.77
Job Involvement: Central Life Interest	4	207	.81	.82
Job Involvement: Importance of Performance	7	203	.60	.62
Stress	13	204	.81	.82

[a]The standardized coefficients are calculated by dividing the observations on each item by the standard deviation of the item.

factor with the job involvement items (a = .62, standardized). The remaining coefficients ranged from .77 to .89.

Relationships Among the Scales

Introduction to Analyses

This section presents the overall analyses and results which report on the relationship between job burnout and job satisfaction, role conflict, role ambiguity, job involvement, life satisfaction, and stress symptoms. An in-depth examination of each variable and its relationship to burnout will be presented in the following sections. The analyses were designed to test whether the relationships were in the directions suggested earlier, and, more importantly, whether these variables are tapping a common psychological construct.

Accordingly, the study variables were first intercorrelated, and then subjected to a principal factor analysis with iteration, and an orthogonal varimax rotation using the composite scores on each measure as variables (Bar, Goodnight, Sall, & Helwig, 1976). As an additional test of their relationship to burnout, the variables were regressed on the job burnout measure, the MBI, to investigate which variables contributed uniquely and non-uniquely to its prediction.

Four separate stepwise multiple regression analyses (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975) were performed using four versions of an MBI composite score. The first two MBI composite scores consisted of all frequency and, secondly, of all intensity items for the Emotional Exhaustion, Depersonalization and Personal

Accomplishment scales. These two composite scores were previously examined by Maslach and Jackson (1981), but only to determine reliability coefficients. Only separate subscale scores were analyzed and discussed in the remainder of their study. As seen in Table 9 above, Cronbach's coefficient alpha yielded reliability coefficients of .83 (all frequency items) and .84 (all intensity items) in that study, and were .83 (frequency) and .86 (intensity) in the current study.

The third composite burnout score used as a dependent variable in the regression equation consisted of all frequency items for the scales Emotional Exhaustion and Depersonalization, the scales on which higher scores are supposed to indicate a higher degree of job burnout. The fourth job burnout composite score was composed of the Emotional Exhaustion and Depersonalization intensity items. These composite scores had not been considered by Maslach and Jackson (1981).

Table 8, summarizes the results of the intercorrelation of the 15 variables: the six MBI scales of Emotional Exhaustion intensity and frequency, Depersonalization frequency and intensity, and Personal Accomplishment frequency and intensity; and, role conflict, role ambiguity, extrinsic and intrinsic job satisfaction, stress symptoms, life satisfaction, and the job involvement scales of active participation, central life interest, and importance of performance with values self. Of the 105 coefficients calculated, a total 70 (67%) were significant at the .01 level, and 25 (24%) were significant at the .05 level. Fifty-four correlation coefficients were calculated between an MBI scale score and one of the other variables listed above. Thirty-seven (67%) were

significant at the .01 level, and 15 (27%) were significant at the .05 level. The only nonsignificant correlation coefficients were between central life interest and the frequency of Depersonalization, and between central life interest and the intensity of Depersonalization.

Generally, both intrinsic and extrinsic job satisfaction produced moderately high correlations with the MBI scales. Extrinsic job satisfaction correlated at the .01 level with four of the six MBI scales, and intrinsic satisfaction at the .01 level with all the MBI scales. The correlations were in the expected directions. The job involvement scale, active participation, also correlated at the .01 level with all six scale scores. More burnout correlated with less participation.

Role conflict produced correlation coefficients significant at the .01 level with all the MBI scale scores except Personal Accomplishment with which it correlated significantly at the .05 level. Role ambiguity resulted in five coefficients significant at the .01 level and one, with Personal Accomplishment intensity, at the .05 level. All coefficients were in the expected direction.

The job involvement scale of importance of performance with valued self produced coefficients significant at the .01 level with the MBI scales indicating burnout and at the .05 level with the Personal Accomplishment scales. High degrees of burnout correlated with less job involvement. The stress symptoms produced the same pattern of significance although directions were reversed. The life satisfaction scale produced coefficients significant at the .01 level only with the Emotional Exhaustion intensity scales. The correlation coefficients with

the other four scales were significant at the .05 level. The coefficients were in the expected directions.

As seen in Table 11, the principal factor analysis with iterations using the orthogonal varimax rotation was performed using the composite scores as variables. It resulted in four separate factors giving an indication of whether the construct represented by these variables are separate. The MBI scale scores did not factor with any other composite scores except stress symptoms which factored with Emotional Exhaustion frequency and intensity and Depersonalization frequency and intensity. The MBI scales, Personal Accomplishment frequency and intensity, formed a separate factor.

In predicting the dependent variable of job burnout by stepwise multiple regression, a total of 15% to 44% of the variance could be accounted for in the various MBI composite scores. Stress symptoms, role conflict, and job involvement-importance of performance with valued self, contributed uniquely to the prediction of the MBI composite of all frequency items (24% of the variance). Only role conflict and role ambiguity contributed uniquely to the prediction of all MBI intensity items (15% of the variance). Both of these analyses are summarized in Table 12.

As seen in Table 13, stress, role ambiguity, job involvement-importance of performance, role conflict, and life satisfaction contributed uniquely to the equation in that order, to predict Emotional Exhaustion and Depersonalization frequency (44% of the variance). Role ambiguity, role conflict, importance of performance, and stress

Table 11

Scale Score Factor Loadings for All MBI Scales and All Other Scales

	Scale	Factor I	Factor II	Factor III	Factor IV
I.					
	MBI Frequency:				
	Emotional Exhaustion	.73	-.34	-.11	-.10
	Depersonalization	.80	-.11	-.08	-.13
	MBI Intensity:				
	Emotional Exhaustion	.69	-.38	.04	-.09
	Depersonalization	.73	-.07	-.02	-.14
	Stress	-.42	.20	.19	-.05
II.					
	Role Conflict	-.31	-.65	-.06	-.04
	Role Ambiguity	.40	-.54	-.21	-.03
	Intrinsic Job Satisfaction	-.28	.55	.36	.38
	Extrinsic Job Satisfaction	-.11	.71	.05	.33
	Job Involvement				
	Active Participation	-.19	.71	.25	.27
III.					
	MBI Frequency:				
	Personal Accomplishment	-.13	.18	.76	.11
	MBI Intensity:				
	Personal Accomplishment	-.03	.11	.89	.14
IV.					
	Job Involvement:				
	Central Life Interest	.04	.26	.17	.80
	Importance of Performance	-.24	.12	.07	.64

Table 12

Summary of Results of Stepwise Multiple Regression Analysis for All Other Scales to Predict Composite MBI Frequency Items and to Predict Composite MBI Intensity Items

Variables	Step	Multiple R	R^2	R^2 Change	Bivariate r	Beta
			Prediction of MBI Frequency Composite			
Stress Scale	1	.37	.14	.14**	-.37	-.37
Role Conflict Scale	2	.47	.22	.08**	.37	.30
Job Involvement: Importance of Performance Scale	3	.49	.24	.02*	-.22	-.15
			Prediction of MBI Intensity Composite			
Role Conflict Scale	1	.34	.11	.11**	.34	.34
Role Ambiguity Scale	2	.38	.15	.03*	.33	.21

*$p < .05$.

**$p < .01$.

Table 13

Summary of Results of Stepwise Multiple Regression Analysis for All Other Scales to Predict MBI Frequency Composite Scores Formed by Emotional Exhaustion and Depersonalization Items

Variable	Step	Multiple *R*	R^2	R^2 Change	Bivariate *r*	Beta
Stress Scale	1	.59	.34	.34**	-.47	-.36
Role Ambiguity Scale	2	.62	.38	.04**	.46	.24
Job Involvement: Importance of Performance Scale	3	.64	.41	.03**	-.32	-.17
Role Conflict Scale	4	.66	.43	.02*	.45	.18
Life Satisfaction Scale	5	.66	.44	.01*	-.39	-.15

*$p < .05$.

**$p < .01$.

contributed uniquely as summarized in Table 14, to the prediction of Emotional Exhaustion and Depersonalization intensity (35% of the variance).

The following sections examine in greater detail the relationships between job burnout and the other variables separately and sequentially, including role ambiguity, role conflict, job involvement, and stress symptoms.

Job Satisfaction and Burnout

Two subscales of the measure of job satisfaction, extrinsic and intrinsic satisfaction, were intercorrelated with the MBI scales. (See Table 8, p. 72.) Generally, both job satisfaction scales produced moderately high correlations with the frequency and the intensity dimensions of both the Emotional Exhaustion and the Depersonalization scales. Intrinsic satisfaction also produced moderate correlations with both dimensions of Personal Accomplishment, whereas, extrinsic satisfaction did not. Specifically, extrinsic job satisfaction was negatively correlated ($p < .01$), as expected, with Emotional Exhaustion frequency ($r = -.39$) and intensity ($r = -.42$), as well as with Depersonalization frequency ($r = -.26$) and intensity ($r = -.26$). Intrinsic satisfaction was also negatively correlated ($p < .01$) with Emotional Exhaustion frequency ($r = -.46$) and intensity ($r = -.36$) and with Depersonalization frequency ($r = -.41$) and intensity ($r = -.34$).

However, the MBI Personal Accomplishment scale did not relate at the same level with both measures of satisfaction. Extrinsic satisfaction correlated significantly ($p < .05$) with Personal Accomplishment frequency ($r = .19$) and intensity ($r = .18$). Intrinsic satisfaction

Table 14

Summary of Results of Stepwise Multiple Regression Analysis for All Other Scales to Predict MBI Intensity Composite Scores Formed by Emotional Exhaustion and Depersonalization Items

Variable	Step	Multiple R	R^2	R^2 Change	Bivariate r	Beta
Role Ambiguity Scale	1	.46	.21	.21**	.46	.46
Role Conflict Scale	2	.53	.28	.06**	.45	.29
Job Involvement: Importance of Performance Scale	3	.57	.32	.05**	-.32	-.22
Stress Scale	4	.59	.35	.02*	-.32	-.16

*$p < .05$.

**$p < .01$.

correlated more highly ($p < .01$) with both the frequency ($r = .38$) and the intensity ($r = .37$) dimensions of Personal Accomplishment.

As can be seen in Table 11, the job satisfaction scales did not load into a factor with the MBI scales. The Emotional Exhaustion and Depersonalization scales, which indicate burnout, formed a factor with the stress measure. The "positive" MBI scale, Personal Accomplishment, did not load into a factor with the job satisfaction scales. Personal Accomplishment frequency and intensity together formed their own factor.

As can be seen in Table 12, job satisfaction was not a significant predictor in a stepwise multiple regression analysis of either composite MBI scale (all frequency or all intensity items).

Further regression analysis was done to predict MBI composite scores formed only by the Emotional Exhaustion and Depersonalization items. Table 13 summarizes the prediction of the composite frequency items, and Table 14 summarizes the prediction of the composite intensity items. The job satisfaction scales do not serve as significant predictors of either composite score.

Role Conflict and Burnout

The intercorrelation of all scale scores (see Table 8, p. 72 above) was examined for relationships between role conflict and the MBI scales. The role conflict scale produced significant correlations ($p < .01$) as expected, with the scales indicative of burnout, the Emotional Exhaustion frequency ($r = .38$) and intensity ($r = .43$) scales, and the Depersonalization frequency ($r = .37$) and intensity ($r = .30$) scales.

Role Conflict showed a low ($p < .05$) negative correlation with the Personal Accomplishment frequency ($r = -.16$) and intensity ($r = -.15$) scales.

As seen in Table 11, p. 80, the role conflict scale did not load into a factor with any of the MBI scales. This scale formed a factor (factor II) with role ambiguity, intrinsic and extrinsic job satisfaction, and the job involvement (JI) scale of active participation.

Table 12, p. 81, summarizes the stepwise regression analysis in which the best prediction of the MBI composite score for all frequency items accounted for 24% of the variance. The three scale scores which entered into this equation were stress, role conflict, and the job involvement scale, importance of performance to valued self ($R^2 = .24$; $p < .01$). Most of the variance (22%) was accounted for by the stress scale (14%) and the role conflict scale (8%).

Role conflict and role ambiguity scores in combination were the best predictors of the MBI composite score of all intensity items ($R^2 = .15$; $p < .01$). Role conflict accounted for most of the variance in the MBI scores (11%). None of the other scales entered into the equation.

Table 13 summarizes the results of a second stepwise multiple regression analysis to predict a frequency of Emotional Exhaustion and Depersonalization composite score. (An indication of the degree of burnout.) The other scales in the study accounted for a total of 44% of the variance in the responses ($R^2 = .44$; $p < .01$). Role conflict accounted for only 2% of the total. Stress accounted for 34%.

Role conflict was a slightly better prediction of the scores computed on the Emotional Exhaustion and Depersonalization intensity items. As summarized in Table 14, the equation resulting from the third stepwise multiple regression analysis contained the scales role ambiguity, role conflict, the job involvement scale importance of performance, and stress ($R^2 = .35$; $p < .01$). Role conflict accounted for 6% of the total variance.

Role Ambiguity and Burnout

The intercorrelation of all scale scores produced correlations in the expected directions between the Role Ambiguity scores and scores on the MBI scales. Significant positive correlations ($p < .01$) were found between Emotional Exhaustion frequency ($r = .42$) and intensity ($r = .47$), as well as Depersonalization frequency ($r = .42$) and intensity ($r = .42$). Negative correlations were obtained between role ambiguity and personal accomplishment frequency ($r = -.30$; $p < .01$), and intensity ($r = -.18$; $p < .05$). See Table 8, p. 72, as noted above.

As seen in Table 11, p. 80, role ambiguity did not load into a factor with any of the MBI scales. Rather, role conflict, role ambiguity, intrinsic and extrinsic job satisfaction, and the job involvement scale, active participation formed a factor. The only scale to load into a factor with the MBI scales was stress.

As seen in Table 12, p. 81, role ambiguity did not enter into the equation to predict the MBI frequency composite scores. Role ambiguity

accounts for only 3% of the variance in the intensity score (R^2 = .03; p < .05).

As summarized in Tables 13 and 14, pp. 82 and 84, respectively, role ambiguity accounted for only 3% of the variance in the scores for Emotional Exhaustion and Depersonalization frequency items composites. However, role ambiguity was the most significantly predictor of the composite intensity items of the two scales (R^2 = .21; p < .01).

Job Involvement and Burnout

Maslach and Jackson (1981) have written that burnout is characterized by a withdrawal from the client, as well as the job itself. For example, the burned out workers was described as taking more breaks, and achieving less on the job. Freudenberger (1974; 1975) also hypothesized that the workers most likely to burnout were those who were at first highly involved in their jobs. Although the present data cannot address changes over time, the relationship of less job involvement (JI) and higher burnout scores can be demonstrated, as will higher scores on Personal Accomplishment correlating with higher scores on the JI scales. The job involvement scale consists of three subscales: active participation (AP); central life interest (CLI); and importance of performance with valued self (IPVS). The relationships with each scale will be examined separately. Correlation coefficients can be found in Table 10, p. 75, and the factor analysis in Table 11, p. 80. The regression analyses are summarized in Table 12, p. 81, and Tables 13 and 14.

Active Participation. Significant ($p < .01$) negative correlations were found between AP and Emotional Exhaustion frequency ($r = -.45$) and intensity ($r = -.40$), as well as Depersonalization frequency ($r = -.33$) and intensity ($r = -.28$). Equally significant correlations were found between AP and Personal Accomplishment frequency ($r = .33$) and intensity ($r = .34$). In the factor analysis of all composite scores, the AP scale did not load into a factor with the burnout scales. It did load into the factor containing role conflict, role ambiguity, and intrinsic and extrinsic job satisfaction. (See Table 11, p. 80.) AP did not enter into any of the stepwise multiple regression equations to predict the composite MBI scores.

Central Life Interest. Low correlations ($p < .05$) were found between CLI and Emotional Exhaustion frequency ($r = -.22$) and intensity ($r = -.19$). No correlation was found between CLI and Depersonalization dimensions. However, CLI was correlated ($p < .01$) with Personal Accomplishment frequency ($r = .32$) and intensity ($r = .27$).

CLI did not load on a factor with any of the MBI scales in the factor analysis of composite scores. It formed a factor with the JI scale of IPVS. No other scales loaded on the factor. CLI, like AP, did not serve as a significant predictor of any of the MBI composite scores.

Importance of Performance with Valued Self. Significant negative correlations ($p < .01$) were found between IPVS and Emotional Exhaustion frequency ($r = -.34$) and intensity ($r = -.33$), as well as Depersonalization frequency ($r = -.29$) and intensity ($r = -.28$). IPVS was

also positively correlated ($p < .05$) with the Personal Accomplishment frequency ($r = .17$) and intensity ($r = .18$) scales.

The IPVS scale proved to contribute uniquely in the stepwise multiple regression equations to predict MBI composite scales. IPVS accounted for 2% of the variance in the frequency scores. IPVS did not enter in the equation to predict the variance in the intensity composite scores. IPVS accounted for 3% of the variance in the scores on the composite of Emotional Exhaustion and Depersonalization frequency items. IPVS accounted for 5% of the variance in the equation to predict the intensity composite of these two scales.

Life Satisfaction and Burnout

The life satisfaction scale was most highly related to the frequency of Emotional Exhaustion ($r = -.32$; $p < .01$) and Depersonalization ($r = -.25$; $p < .01$). Life satisfaction was not as strongly related to the intensity of Emotional Exhaustion ($r = .22$; $p < .05$), or to the intensity of Depersonalization ($r = .21$; $p < .05$).

Life satisfaction did not contribute to the equations produced by the stepwise multiple regression analyses to predict the MBI composite frequency scores or the composite intensity scores. It did account for 1% of the variance in the equation to predict the Emotional Exhaustion and Depersonalization frequency composite, but failed to enter into the equation to predict a composite of the same items on the intensity dimension.

Stress Symptoms and Burnout

The scale composed of stress symptoms was intercorrelated with the MBI scale scores. As seen in Table 8, p. 72, the stress scale correlated significantly ($p < .01$) with the MBI scales on which high scores are supposed to demonstrate high levels of burnout: Emotional Exhaustion frequency ($r = .54$) and intensity ($r = .41$), and Depersonalization frequency ($r = .38$) and intensity ($r = .26$). Significant negative correlations ($p < .05$) were found with the Personal Accomplishment frequency ($r = -.18$) and intensity ($r = .18$).

As seen in Table 11, p. 80, the stress symptoms scale formed a factor with the Emotional Exhaustion (frequency and intensity) and the Depersonalization (frequency and intensity) scales.

The stress symptoms scale was the most significant predictor of the MBI frequency items composite. (This composite included the Personal Accomplishment items.) Stress accounted for 14% of the variance in the scores. Stress did not contribute to the prediction of the intensity dimension composite which included Personal Accomplishment. Table 12, p. 81, summarizes these findings.

Stress accounted for 34% of the variance in the equation produced to predict the composite scores of Emotional Exhaustion and Depersonalization frequency ($R^2 = .44$; $p < .01$). See Table 13, p. 82. Again, the weaker relationship between stress symptoms and the intensity dimension (as opposed to frequency) was shown when the Stress scale accounted for only 2% of the variance in the equation to predict the Emotional Exhaustion and Depersonalization intensity composite (as shown in Table 14, p. 84).

It should be noted that correlations between the MBI frequency scales and the stress scales may be inflated due to the similarity in the scale of measurement, i.e., frequency. However, there is no intensity scale for the stress measure, and the correlations among the stress scale and the MBI intensity scales are as significant as those with the frequency scales.

There is one item on the Emotional Exhaustion scale, item 5, "I feel fatigued when I get up in the morning and have to face another day on the job," which is similar to item 6 on stress scale, "finding it difficult to get up in the morning." This overlap may have inflated the correlations for the Emotional Exhaustion scales and the stress scale. These facts should be considered in the factor analysis regression analysis reported in this section and in the section below when the MBI is used to predict stress scores.

Using the MBI Scales to Predict Work-Role Outcomes

Stress

In order to investigate the usefulness of the job burnout construct, the MBI scales and all other scales were entered into an hierarchical multiple regression analysis to predict stress. A stepwise regression analysis was also done using the all scales in the study to predict stress (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975).

Table 15 summarizes the significant predictors in the equation obtained to predict scores on the stress scale. The first block of scores entered into the equation were those for the following scales:

Table 15

Summary of Results of Hierarchical Multiple Regression Analysis to Predict Scores on the Stress Scale[a]

Variables	Block	Multiple R	R^2	R^2 Change	Bivariate r	Beta
Importance of Performance					.12	.12
Role Conflict					-.21	-.20
Role Ambiguity					-.26	-.19
Central Life Interest					.05	-.04
Extrinsic Job Satisfaction					.19	.08
Intrinsic Job Satisfaction					.35	.37
Active Participation	1	.39	.15[c]	.15	.28	.09
MBI scales: (I)(F)[b]						
Personal Accomplishment (I)					.04	.16
Depersonalization (I)					-.13	-.26
Emotional Exhaustion (F)					-.52	-.54
Personal Accomplishment (F)					.01	.18
Depersonalization (F)					-.11	-.38
Emotional Exhaustion (I)	2	.58	.34[d]	.18[e]	.02	-.41

[a]Negative correlations with the Stress scale reflect the "inverted" scale used.

[b](I) = intensity; (F) = frequency.

[c]$F = 4.68$; $p < .01$.

[d]$F = 6.86$; $p < .01$.

[e]F change = 8.12; $p < .01$.

role conflict; role ambiguity; extrinsic job satisfaction; intrinsic job satisfaction; and the job involvement scales of importance of performance to valued self, active participation, and central life interest. These scales in combination resulted in a significant prediction of stress scores accounting or 15% of the variance ($F = 4.68$; $p < .01$). However, the second block of data entered, the MBI scales, accounted for an additional 18% of the variance. The MBI scales were a significantly better predictor of the stress scale (R^2 change = .18; $p < .01$). A total of 34% of the variance was accounted for.

As seen in Table 16, a stepwise multiple regression analysis revelaed that all the scales entered the equation to predict the stress scores. Only three scales produced significant F values. These were the MBI scale of Emotional Exhaustion frequency, intrinsic job satisfaction, and central life interest. A total of 33% of the variance was accounted for by all of the scales in combination ($R^2 = .32$; $p < .01$).

Intention to Turnover

Some authors have suggested that the ultimate result of burnout is to quit the job (e.g., Maslach, 1976). The utility of the burnout measure to predict intention to turnover was examined.

Table 17 summarizes the results of a hierarchical multiple regression analysis done to predict the stated intention to turnover in two years. The first of two blocks of data entered consisted of the stress, role conflict and ambiguity, extrinsic and intrinsic job satisfaction scales and the job involvement scales of central life interest, active participation, and importance of performance to valued self. This block

Table 16

Summary of Results of Stepwise Multiple Regression Analysis of All Scales to Predict Scores on the Stress Scale[a]

Variable[b]	Step	Multiple R	R^2	R^2 Change	Bivariate r	Beta
Emotional Exhaustion (F)	1	.54	.29**	.29	-.54	-.54
Intrinsic Job Satisfaction	2	.55	.30	.01*	.35	.13
Central Life Interest	3	.57	.32	.02*	.05	-.15
Emotional Exhaustion (I)	4	.57	.33	.00	-.41	.11
Personal Accomplishment (F)	5	.57	.33	.00	.18	.05
Importance of Performance	6	.58	.33	.00	.12	-.05
Extrinsic Job Satisfaction	7	.58	.33	.00	.19	-.05
Depersonalization (F)	8	.58	.33	.00	-.38	-.05
Depersonalization (I)	9	.58	.33	.00	-.26	.06
Role Ambiguity	10	.58	.33	.00	-.26	.04
Personal Accomplishment (I)	11	.58	.33	.00	.16	.04
Role Conflict	12	.58	.33	.00	-.21	.01
Active Participation	13	.58	.33	.00	.28	.01

*$p \leq .05$.

**$p \leq .01$.

[a]Negative correlations with the Stress scale reflect the "inverted" scale used.

[b](F) = frequency; (I) = intensity.

Table 17

Summary of Results of Hierarchical Multiple Regression Analysis to Predict "Intention to Turnover" in Two Years

Variables[a]	Block	Multiple R	R^2	R^2 Change	Bivariate r	Beta
Stress Scale					.02	.02
Central Life Interest					-.25	-.25
Role Conflict					.10	.67
Role Ambiguity					.17	.16
Importance of Performance					-.20	-.06
Extrinsic Job Satisfaction					-.31	-.27
Active Participation					-.25	-.11
Intrinsic Job Satisfaction	1	.42	.18[b]	.18	-.36	-.32
Personal Accomplishment (I)					-.06	.08
Depersonalization (I)					.18	.10
Emotional Exhaustion (F)					.24	.20
Personal Accomplishment (F)					-.10	-.03
Depersonalization (F)					.15	-.10
Emotional Exhaustion (F)	2	.46	.21[c]	.04[d]	.21	-.07

[a](I) = intensity; (F) = frequency.

[b]$F = 4.64$; $p < .01$.

[c]$F = 3.28$; $p < .01$.

[d]F change = 1.40; not significant.

accounted for 18% of the variance (R^2 = .18; p < .01). The second block of data entered were the MBI scales (R^2 = .04; p < .01). This increased the variance to a total of 21%. However, the increase was not significant (F change = 1.40), i.e., the MBI scales do not significantly enhance our ability to predict stated intention to turnover in two years.

As seen in Table 18, a stepwise multiple regression analysis done on the same scales revealed that all the scales entered into the equation accounting for a total of 21% of the variance. Only the scales of intrinsic job satisfaction, stress, and Emotional Exhaustion frequency resulted in significant F values.

The same two multiple regression analyses were performed using intention to turnover in five years as the dependent variable. Table 19 summarizes the results of the hierarchical analysis in which the first block consisted of the following scales: stress; central life interest; role conflict and ambiguity; importance of performance to valued self; extrinsic and intrinsic job satisfaction; and active participation. This block accounted for 13% of the variance (R^2 = .13; p < .01). The second block of data consisted of the MBI scales. Although they accounted for an additional 4% of the variance, this change was not significant (F change = 1.37).

Table 20 summarizes a stepwise multiple regression analysis using all scales to predict intention to turnover in five years. All of the scales entered into the equation except the Personal Accomplishment frequency scale. Only the scales of central life interest, role conflict and stress produced significant F values.

Table 18

Summary of Results of Stepwise Multiple Regression Analysis of All Scales to Predict "Intention to Turnover" in Two Years

Variables[a]	Step	Multiple R	R^2	R^2 Change	Bivariate r	Beta
Intrinsic Job Satisfaction	1	.36	.13**	.13	-.36	-.36
Stress Scale	2	.39	.15	.02*	.02	.16
Emotional Exhaustion (F)	3	.43	.18	.03**	.24	.22
Extrinsic Job Satisfaction	4	.43	.19	.01	-.31	-.11
Role Conflict	5	.44	.20	.01	.10	-.14
Personal Accomplishment (I)	6	.45	.20	.00	-.06	.07
Depersonalization (I)	7	.45	.21	.01	.18	.05
Depersonalization (F)	8	.46	.21	.00	.15	-.11
Central Life Interest	9	.46	.21	.00	-.25	-.04
Emotional Exhaustion (I)	10	.46	.21	.00	.21	-.07
Personal Accomplishment (F)	11	.46	.21	.00	-.10	-.04
Role Ambiguity	12	.46	.21	.00	.17	-.03
Importance of Performance	13	.46	.21	.00	-.20	.02
Active Participation	14	.46	.21	.00	-.25	.01

[a](F) = frequency; (I) = intensity.

*$p \leq .05$.

**$p \leq .01$.

Table 19

Summary of Results of Hierarchical Multiple Regression Analysis to Predict "Intention to Turnover" in Five Years

Variables[a]	Block	Multiple R	R^2	R^2 Change	Bivariate r	Beta
Stress Scale					.07	.07
Central Life Interest					-.27	-.27
Role Conflict					-.02	-.05
Role Ambiguity					.01	.02
Importance of Performance					-.17	-.04
Extrinsic Job Satisfaction					-.23	-.24
Active Participation					-.20	-.18
Intrinsic Job Satisfaction	1	.37	.13[b]	.13	-.17	-.02
Personal Accomplishment (I)					-.13	-.05
Depersonalization (I)					.05	.05
Emotional Exhaustion (F)					.17	.26
Personal Accomplishment (F)					-.14	-.03
Depersonalization (F)					-.03	-.10
Emotional Exhaustion (F)	2	.42	.17[c]	.04[d]	.16	.11

[a](I) = intensity; (F) = frequency.

[b]$F = 3.21$; $p < .01$.

[c]$F = 2.44$; $p < .01$.

[d]F change = 1.37; not significant.

Table 20

Summary of Results of Stepwise Multiple Regression Analysis of All Scales to Predict "Intention to Turnover" in Five Years

Variables[a]	Step	Multiple R	R^2	R^2 Change	Bivariate r	Beta
Central Life Interest	1	.27	.07**	.07	-.27	-.27
Extrinsic Job Satisfaction	2	.30	.09	.01	-.23	-.14
Role Conflict	3	.33	.11	.02*	-.02	-.17
Emotional Exhaustion (F)	4	.35	.12	.01	.17	.13
Stress Scale	5	.39	.15	.03**	.07	.21
Active Participation	6	.40	.16	.01	-.20	-.14
Role Ambiguity	7	.41	.17	.01	.01	-.09
Personal Accomplishment (I)	8	.41	.17	.00	-.13	-.06
Emotional Exhaustion (I)	9	.41	.17	.00	.16	.12
Depersonalization (F)	10	.42	.17	.00	.03	-.05
Importance to Performance	11	.42	.17	.00	-.17	.02
Intrinsic Job Satisfaction	12	.42	.17	.00	-.17	-.02
Depersonalization (I)	13	.42	.17	.00	.05	.01

[a](F) = frequency; (I) = intensity.

*$p \leq .01$.

**$p \leq .05$.

The Relationship of Burnout, Job Characteristics, and Demographic Variables

The amount of paperwork and the amount of time spent in direct client contact were noted in previous studies as problem areas in human services (e.g., Pines & Maslach, 1978). The current data were analyzed to determine if these variables were related to burnout as measured by the MBI scales. Most workers (76.3%) in the current sample estimated that they spent 10% to 40% of their day on paperwork, thus most workers (63.5%) reported spending more of their day (60% to 90%) in direct client contact. (Appendix A presents complete frequency distributions of the estimates given by this sample.) These variables were intercorrelated with the MBI scales. Table 21 summarizes these correlations.

The amount of paperwork correlated most highly with the frequency of Depersonalization (r = .23; p < .01). Significant correlations (p < .05) were also found between amount of paperwork and intensity of Depersonalization (r = .16), frequency of emotional Exhaustion (r = .18), intensity of Emotional Exhaustion (r = .15), and frequency of Personal Accomplishment (r = -.15). Amount of direct client contact also produced significant correlations with the MBI scales. Client contact correlated most highly (p < .01) with frequency of Personal Accomplishment (r = .24) and negatively with frequency of Depersonalization (r = -.21). Significant correlations were also found (p < .05) between client contact and frequency of Emotional Exhaustion (r = -.15), intensity of Depersonalization (r = -.16), and intensity of Personal Accomplishment (r = .19).

Table 21

Correlation Matrix of Maslach Burnout Inventory Scales and Age, Sex, Education, Tenure on the Job, Tenure in the Field, Amount of Time Spent on Paperwork, and Amount of Time Spent in Direct Client Contact

	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9	X_{10}	X_{11}	X_{12}	X_{13}	X_{14}
X_1	--													
X_2	.60**	--												
X_3	-.22**	-.18**	--											
X_4	.83**	.49**	-.20**	--										
X_5	.45**	.78**	-.15*	.53**	--									
X_6	-.15*	-.13	.74**	.02	-.06	--								
X_7	-.27**	-.23**	.10	-.31**	-.28**	-.09	--							
X_8	.06	.12	-.07	-.06	-.23**	-.12	-.01	--						
X_9	-.08	-.01	.05	.07	.003	-.02	.48**	.05	--					
X_{10}	-.08	-.05	.04	-.03	-.04	-.02	.57**	-.09	.61**	--				
X_{11}	.18*	.23**	-.15*	.15*	.16*	-.11	-.05	.03	-.01	.07	--			
X_{12}	-.15*	-.21**	.24**	-.15*	-.16*	.19*	-.04	.13	.08	-.14*	-.38**	--		
X_{13}	.14*	.15*	.12	.26**	.13	.23**	.01	-.21**	.06	.15*	.03	-.23**	--	
X_{14}	-.04	-.11	.08	-.02	-.08	.12	.06	-.04	.06	.13	.06	.10	.01	--

*$p < .05$

**$p < .01$

MBI Frequency:
X_1 = Emotional Exhaustion
X_2 = Depersonalization
X_3 = Personal Accomplishment

MBI Intensity:
X_4 = Emotional Exhaustion
X_5 = Depersonalization
X_6 = Personal Accomplishment

X_7 = Age
X_8 = Sex
X_9 = Tenure on Current Job

X_{10} = Tenure in Field
X_{11} = Paperwork
X_{12} = Client Contact
X_{13} = Education
X_{14} = Satisfaction with Education

Tenure in the field and tenure on the job were also correlated with the MBI scales. Although it was suggested that tenure on the job would correlate with levels of burnout, no significant correlations were found between tenure on the current job and scores on the MBI. There were also no significant correlations between tenure in the field and MBI scores.

The relationships between burnout and age, sex, educational level, and satisfaction with education were also examined. The literature suggests that the new (younger) workers may be at risk to burnout and that the most difficult adjustments are made in this period. For example, see the description by Cherniss, Egnatios, and Wacker (1976) of new public professionals. As previously mentioned, no relationship was found between tenure in the field and scores on the MBI. However, significant negative correlations ($p < .01$) were found between age and the frequency of Emotional Exhaustion ($r = -.27$), the intensity of emotional Exhaustion ($r = -.31$), the frequency of Depersonalization ($r = -.23$), and the intensity of Depersonalization ($r = -.28$). Higher scores on these scales of the MBI which indicate burnout were found for younger workers, and for workers over age 61. (The means and standard deviations on the MBI scales are displayed by the categories of age, sex, and educational level in Table 1, p. 59. No significant relationship was found between age and scores on the Personal Accomplishments scales. Only one significant correlation ($p < .01$) was found between sex and the MBI scale scores: A negative correlation of $r = -.23$, between sex and the intensity of Depersonalization. Males scored higher on this scale.

Educational level was found to be most strongly related to the intensity of Emotional Exhaustion (r = .26; p < .01) and the intensity of Personal Accomplishment (r = .23; p < .01). There were also low correlations (p < .05) with the frequencies of Emotional Exhaustion (r = .14) and Depersonalization (r = .15). Contrary to the suggestion in the literature that frustrations over inadequate training could be associated with burnout (for example, see Cherniss, Egnatios, Wacker, & O'Dowd, 1979) there were no correlations among the MBI scales and the satisfaction with education variable.

Summary of Findings

The scales within the MBI on which a high score is an indication of burnout are Emotional Exhaustion and Depersonalization. A third scale is Personal Accomplishment, which is not the inverse of burnout. Each of the three scales is measured in two dimensions: frequency and intensity. Separate factor structures for each dimension were constructed which validated the factor structure found by Maslach and Jackson (1981). In addition, the resulting six scales (two scores are calculated for each scale) have fairly high reliability (alpha > .73) as calculated by Cronbach's coefficient alpha. The coefficients for the composite frequency items and composite intensity items across scales were also high.

The relationships of the MBI scales to the various other constructs (e.g., job satisfaction) were also examined. The MBI scales were found to relate to the constructs in the expected directionality in most cases.

First, the relationship between job satisfaction and burnout was examined. Maslach and Jackson (1981) have maintained that burnout is not the same construct as job satisfaction. This claim is supported by the present study.

Job satisfaction was measured in the current study in two dimensions: extrinsic and intrinsic satisfaction. Both dimensions showed low to moderate correlations with all the scales of the MBI in both its frequency and intensity dimensions. The difference being that intrinsic satisfaction showed a stronger relationship with Personal Accomplishment. The difference between the construct of burnout and the construct of job satisfaction was supported by the factor analysis of all scale score. The MBI scales which measure high levels of burnout formed a factor with stress. A second factor was formed by the constellation of scale scores composed of role ambiguity, role conflict, job satisfaction, and job involvement, active participation. Further, the job satisfaction scales did not contribute uniquely to a multiple regression equation to predict the MBI scale scores.

Role conflict and role ambiguity, thought to be indications of, or causes of, burnout by such authors as Harrison (1980), were found to relate to burnout much as job satisfaction did, i.e., as separate constructs. Moderate correlations were found between the role scales and the "negative" burnout scales. And low correlations were found with the Personal Accomplishment scales. The role scales were found to contribute uniquely to the prediction of composite burnout scale scores in multiple regression equations. Role conflict accounted for 11% of the

variance in an equation to predict a composite formed by all MBI intensity items (including Personal Accomplishment), and 8% of the variance for a frequency composite. Role ambiguity was a slightly better predictor (4% of the variance) than role conflict (2% of the variance) of the frequency of burnout (Emotional Exhaustion and Depersonalization composite scores). Role ambiguity was a much better predictor (21% of the variance) than role conflict (6% of the variance) of the intensity of burnout (Emotional Exhaustion and Depersonalization). There were generally significant but low negative correlations between the role indices and Personal Accomplishment.

Where the indices of role seemed to be the most strongly related scales to the intensity with which the worker experiences job burnout symptoms, the stress scale seemed to the most strongly related to the frequency of job burnout symptoms as measured by the MBI. This lends some support to such authors as Perlman and Hartman (1980) who proposed the integration of the study of job burnout into a stress model.

In multiple regression analyses, stress responses accounted for 14% of the variance in response to all MBI frequency items, but did not contribute uniquely to the prediction of an intensity composite. Stress responses accounted for 34% of the variance in the responses to Emotional Exhaustion and Depersonalization frequency items, but only 2% of the variance in the intensity responses to the same items.

The strong relationship between the frequency of burnout and the stress scale may be artificially enhanced by the measure used in both

scales, i.e., the anchors were frequency. However, in contrast, the stress scale does coreelate as significantly with the intensity dimension of burnout (see Table 8, p. 72).

The stress scale loaded into a factor with the Emotional Exhaustion and Depersonalization frequency and intensity scales. There was a significant, but low, negative correlation between the stress scale and the Personal Accomplishment scales which formed their own factor as distinct from all other scales examined.

Job involvement has been proposed by some authors (e.g., Freudenberger, 1974; 1975) as a prerequisite for job burnout. The current study found that the three job involvement scales of active participation, central life interest, and importance of performance did not load into a factor with either the Emotional Exhaustion and Depersonalization scales or the Personal Accomplishment scales. The three dimensions of job involvement showed differing patterns of relationships with the MBI scales. For example, only the importance of performance scale contributed uniquely to predictions of any of the MBI composite scores used as dependent variables in the multiple regression analyses. It accounted for 2% of the variance in the responses to the MBI overall frequency composite, but did not contribute uniquely to predicting the intensity composite. Importance of performance also accounted for 3% of the variance in the equation to predict the frequency of Emotional Exhaustion and Depersonalization composite scores, and 5% of the variance for the intensity composite.

Active participation loaded into a factor with the scales role conflict, role ambiguity, and intrinsic and extrinsic job satisfaction and

was moderately correlated with all the MBI scales ($p < .01$). Central life interest was moderately correlated only with Personal Accomplishment.

The capability of the MBI was significantly better than the combination of the other scales in predicting responses on the stress scale as shown by an hierarchical multiple regression analysis. (See Table 15, p. 93.) The MBI scales accounted for 18% of the variance in stress scale responses, as compared with 15% accounted for by the other scales. A stepwise regression analysis revealed that the scales of Emotional Exhaustion frequency, intrinsic job satisfaction, and central life interest accounted for 32% of the variance in the stress responses, although all the scales in this study did enter the equation accounting for a total of 33% of the variance.

The possibility exists that (1) the overlap in the scale of measurement between the stress scale and the Emotional Exhaustion and Depersonalization scales, and (2) the similarity of one item on the stress scale and the Emotional Exhaustion scale may have effected these results.

A further test of the ability of the MBI to predict work-role outcomes was done using intention to turnover in two years and intention to turnover in five years as dependent variables. Hierarchical multiple regression analyses revealed that the MBI scales were not as a group significantly better predictors of either intention to turnover in two or in five years, than were the other scales in the study combined.

When examined by a stepwise multiple regression analysis, all 14 scales entered into the equation to predict intention to turnover on two

years. They accounted for a total of 21% of the variance in responses to this item. The most significant predictors were the intrinsic job satisfaction, stress, and Emotional Exhaustion frequency scales. In contrast, all scales except Personal Accomplishment frequency entered into an equation to predict intention to turnover in five years. The most significant predictors were the central life interest, role conflict, and stress scales.

Low to moderate correlations were found between amount of paperwork and the MBI scales, and the amount of direct client contact and the MBI scales including Personal Accomplishment. These relationships were predicted in the literature. Amount of paperwork was most highly related to Depersonalization (r = .23), whereas amount of client contact was most highly related to frequency of feelings of Personal Accomplishment (r = .24) and inversely to the frequency of Depersonalization (r = -.21).

Neither tenure in the field nor on the current job were related to burnout as measured by the MBI. Although tenure was not significantly related, correlations with age showed that the younger workers and the worker over 61 showed higher levels of the frequency and the intensity of Emotional Exhaustion and Depersonalization. No relationship was found between Personal Accomplishment and age. The only relationship found between burnout and sex was that high scores for males correlate significantly with the intensity of Depersonalization (r = -.23).

There was no relationship between satisfaction with education and burnout. However, educational level was moderately correlated with the

intensity of Emotional Exhaustion (r = .26) and the intensity of Personal Accomplishment (r = .23).

CHAPTER IV

DISCUSSION

The present findings offer great encouragement for the study of job burnout in human service settings. The results indicate that the measure of burnout analyzed does represent a discrete construct which was demonstrated to have many connections with other measures applicable to the job setting. These findings verify the concept, as well as provide support for the Maslach Burnout Inventory as a reliable instrument which represents the multidimensional nature of the construct in a factorially sound manner. The favorable findings about the measure support future use of the scale as a criterion in a field which has yet to develop much of an empirical or theoretical base.

No previous study had reported the factor structure of the MBI other than the report of the original development of the measure by Maslach and Jackson (1981). The current study replicated that factor structure, and confirmed the moderately high reliability coefficients for each of the six scales within the MBI: Emotional Exhaustion frequency and intensity; Depersonalization frequency and intensity; and Personal Accomplishment frequency and intensity. The MBI scales were found to be highly correlated with the other variables, but still retained their individual identities in the aggregate factor analysis as distinguished from job satisfaction, role conflict and ambiguity, and job involvement. The construct represented by the MBI scale was not as distinct from a measure of stress symptoms as it was from the former constructs.

Although the literature in the area of human service work consistently demonstrated that an unusually high level of job dissatisfaction exists in human service work (Harrison, 1978; Perlman & Hartman, 1980), the consequences of job burnout were believed to be quite different from those of dissatisfaction alone. Maslach (1976) discussed "correlates" of burnout which included prevailing characteristics of cynicism, reference to clients in derogatory terms, rigid adherence to rules, extreme detachment, psychosomatic illnesses, and family problems. Discriminating the constructs of burnout and satisfaction is the first step in a research framework to link such damaging outcomes as those described above to specific antecedents.

It is easy to understand why the two concepts would be difficult to separate in descriptions of human service work as the present study shows they seem to often manifest themselves simultaneously. But, outcomes apparently differ despite significant correlations between the two measures. The job satisfaction measures were not significant predictors of scores on the burnout measure. Satisfaction was a poor predictor of reported increase in stress symptoms over the past year as noted on the symptom checklist. The current findings demonstrated a much stronger relationship between job dissatisfaction and short-term intention to turnover than between burnout and intention to turnover. This verifies dozens of past studies (as reviewed by Porter & Steers, 1973) which found an association between satisfaction and turnover. It is important that empirical associations between work-related constructs continue to be refined. If burnout is to be developed and used as a

psychological construct, it should not be used as a catch-all or waste-basket term in the literature as the probable cause of all negative work consequences.

Further refinement of burnout was accomplished in the current study by establishing its relationship to role conflict and ambiguity. As mentioned earlier in the introduction, role conflict refers to the result of incompatible and/or unrelated demands or expectations being placed on the worker, while ambiguity refers to a lack of clarity as to what is expected, appropriate, or effective behavior. Using the framework suggested by Kahn and Quinn (1970), role variables are identified as stressors which should be linked to stress reactions. The current findings demonstrated that role stressors are linked to burnout, and are significant in predicting Emotional Exhaustion and Depersonalization. Role ambiguity and conflict were most significant in predicting the intensity of Emotional Exhaustion and Depersonalization, especially ambiguity. The absence of conflict on the job was more important to achieving feelings of Personal Accomplishment than avoiding burnout. Conflict, as well as ambiguity, were not important predictors of the variance in the stress symptoms scale. These findings allow an expansion of the stress framework proposed by Kahn and Quinn (1970). They suggested that not all aspects of proposed role stress should necessarily be thought of as stressors until empirical links are established between them and specific stress responses. The current study suggests that role ambiguity is likely to be a more fruitful concept than conflict as an antecedent in a stress model of research where the

burnout intensity scales are used as one criterion of stress responses. Yet, neither role conflict nor ambiguity were good predictors of responses to the stress symptom checklist. Thus, we begin to separate specific stressors and stress reactions in human service workers.

Freudenberger (1974; 1975) suggested that job over-involvement was a primary antecedent in the job burnout process. Logically, it would seem that a great deal of involvement would increase the intensity of the work situation. Job involvement in the current study means not only the degree to which a worker participates in the external activities of the job, but also the degree of psychological participation. The current findings offer some support for inclusion of at least one type of involvement as a possible antecedent in a work stress model. The job involvement subscale of importance of performance to valued self was the only involvement scale to significantly predict burnout scores. High levels of burnout correlated with lack of importance. A low, but significant, correlation was found between feelings of accomplishment and more importance.

Further findings do seem to discriminate the burned out and non-burned out workers in terms of job involvement. The resulting profile of burned out workers supports Maslach's (1976) previously untested contention that burned out workers withdraw from the job. In the current sample, the worker who reported being burned out also reported less active participation on the job, and denied that work performance is important to his or her "valued self." In contrast, the worker who reported feelings of personal accomplishment was actively

participating in the job, and viewed the job as a central life interest. Emotional Exhaustion, but not Depersonalization, was also negatively related to viewing the job as not a central life interest.

A possible explanation for these findings is that the workers who had sought to define his or her self worth in terms of personal accomplishment may shift into denying the importance of the job when accomplishment is lacking. From the current findings it is impossible to support or deny Freudenberger's contention that the over-involved workers is the one who burns out. To clarify the role of involvement, it will be necessary to investigate whether job involvement discriminates workers prior to burnout as well as measuring changes in the workers who later report burnout. Thus, involvement would be an antecedent or stressor. Changes in involvement may be a stress response.

Lodahl and Kejner (1965) suggested that job involvement represents an individual's values about work, and that these attitudes are "probably resistant to changes in the person due to the nature of a particular job" (p. 25). Investigating whether the patterns of job involvement found in burned out and non-burned out workers discriminant basic approaches to the job and/or change over time will also facilitate more sophisticated methods of job selection in human services.

The highest "cluster" of correlations in the current study relating any two constructs were those between the involvement scales and extrinsic and intrinsic satisfaction. Both intrinsic and extrinsic satisfaction were found to be moderately to highly related to all three aspects of involvement. Satisfaction also loads into a factor with active

participation. Satisfaction and all aspects of involvement related more strongly to each other in the current study than to burnout or stress. I would propose that the facets of job involvement be investigated further as both components of the satisfaction process and a separately defined burnout process.

Stress was the only variable in the current study which loaded into an independent factor with the MBI scales of Emotional Exhaustion and Depersonalization frequency and intensity. (Stress was defined by an increase in stress symptoms over the past year.) In addition, stress was most highly correlated with Emotional Exhaustion. (One item in this scale was very similar in content to the stress checklist.) The findings support the description of the burned out workers as one who uses more alcohol and/or tobacco (Freudenberger, 1974; 1975). Also, the lack of a factorially discrete burnout variable from the stress variable suggests that burnout may best be understood as a criterion variable in a job stress model.

Further study of burnout as a criterion is warranted in light of the current findings. Although a great deal of the variance (up to 44%) in Emotional Exhaustion and Depersonalization could be accounted for by the other scales in this study, one cannot dismiss the burnout measure as simply a redefinition of the other work-related variables studied here. In addition, the current findings indicate that the intensity of burnout has a separate network of relationships with other variables from the frequency of burnout.

Stress was the most significant predictor of frequency scores on the MBI for both of two different composite MBI scores. This finding

may, however, be compounded by the measurement dimension of the two scales which was frequency. (Note that job involvement was also measured by frequency, but relationships were low.) Intensity on the MBI scales when Personal Accomplishment was included, was best predicted by role conflict and ambiguity (especially conflict). When only Emotional Exhaustion and Depersonalization intensity scores were predicted, without Personal Accomplishment, role ambiguity was clearly the most superior predictor of the intensity of burnout. Role ambiguity accounted for 21% of 35% of the total variance in the intensity of burnout.

A possible explanation to account for the differences between intensity and frequency of burnout is that burnout is reaction to work stressors which is first manifested in infrequent, but intense, feelings of Emotional Exhaustion and Depersonalization. A this point, burnout scores are predicted by role ambiguity, conflict, lack of importance of performance, and slightly, but significantly by stress symptoms. As burnout becomes more severe, and people begin to have more frequent feelings of emotional exhaustion and depersonalization, then physical stress symptoms become more important. The same variables serve as predictors for the frequency of burnout as for intensity, but here stress symptoms is the most important variable and general life satisfaction enters the equation. This entry lends support to the claim that burnout can come to the point that it threatens not only career, but the worker's entire life (Beninga & Spradley, 1981).

"Advanced" (i.e., frequent) burnout could be operationalized in terms of a combination of frequent emotional symptoms (exhaustion and

withdrawal) and physical symptoms. The implications of this explanation are (1) that burnout might be divided into stages as noted in the literature, and (2) that physical symptoms should be added to the MBI scales as measures of stress reactions when viewing burnout in terms of a stress model and a process.

An outcome of burnout proposed in the descriptive literature (Beninga & Spradley, 1981; Maslach, 1976) which needs to be integrated into the model is leaving the job. The current study examined this assertion in terms of which variables could best predict intention to turnover. In contradiction to the literature, the current study suggests that burnout and turnover may not be so closely linked. Burnout, in terms of the MBI, was not nearly as good a predictor of intention to turnover as all the other scales in the study combined. Intrinsic job satisfaction accounted for the most variance in short-term plans. The central life interest scale was the most significant variable in long-range plans.

While the MBI scales could not predict as much of the variance in intention to turnover as the combination of the other variables studied, the MBI, primarily Emotional Exhaustion frequency, accounted for some variance not accounted for by the other variables. Neither the MBI scales, nor the stress symptom checklist, both proposed here to be used as measures of work stress, seem to be our best method for understanding intention to turnover in general.

Job Attributes and Demographics

The current study did not support the descriptive literature which had suggested that certain variables such as being new to the job (Cherniss, Egnatios, & Wacker, 1976; Wasserman, 1970), being dissatisfied with education (Cherniss, Egnatios, Wacker, & O'Dowd, 1979), or spending too much time in emotionally draining client interaction (Maslach, 1976; 1978) produced burnout. This suggests that a clear profile of who is most likely to burnout is needed.

A profile of who is at risk has been initiated by authors such as Gann (1979) and Pines and Solomon (1977) who examined individual variables such as "ego-level" of the workers and self-concept. Clearly, more empirically demonstrated profile variables are needed for intervention planning.

In the current study, there was no significant correlation between tenure on the present job or tenure in the field and burnout. Burnout may not be as inevitable for many new workers as suggested by Wasserman's (1970) profile of 12 new workers over the first two years on the job. Significantly higher levels of burnout were found in the current study, however, for younger workers and workers over age 61.

Current findings included a significant relationship between educational level and burnout, but no significant correlation between satisfaction with education and burnout. Burnout feelings were more intense in workers with more education. There was also a low significant correlation between frequency of burnout feelings and education. It was most interesting that there was no significant correlation between

education and frequency of Personal Accomplishment. There was, however, a moderate correlation between education and intensity of Personal Accomplishment.

Contrary to what was expected, amount of client contact per se was not found to be related to more burnout. In fact, more client contact was most highly related to more frequent feelings of Personal Accomplishment and less frequent feelings of Depersonalization. Low, but significant correlations were also found between less burnout on the other MBI scales, more intense feelings of accomplishment and more contact with clients. In the present study, jobs which included more contact with clients appeared to be possibly beneficial to the worker. More paperwork showed a low correlation with more burnout. Paperwork is a major complaint in human services jobs.

Limitations of the Present Research

A major limitation of the present study is in the sample selection. First, the administration of each agency had to agree to permit the distribution of the survey. This type of self-selection possibly excluded subjects who may be functioning in difficult or somewhat unsuccessful work environments where burnout could possibly be more prevalent. However, the range of scores on the MBI in the current sample were not restricted when compared with the standard deviations reported by Maslach and Jackson (1981).

A second major limitation is the individual self-selection which may have been influenced by a number of factors. One factor restricting

participation was the possibility that a severely burned-out worker would not have the time or energy to complete the survey form. On the other hand, perhaps workers who felt that they were having problems with their job would be more likely to complete the form in an attempt to think through the problem areas of their job. This possibility is supported by many comments on the form indicating that the form was thought provoking, and they had used it to examine their feelings about the job.

Another factor is a problem with the data collection method. In some cases, the administration directly handed out the survey. For workers who felt at odds with the administration, completing the survey may have seemed threatening. All participation was voluntary and many workers "dropped out" of the project after receiving a survey form.

In general, the individual self-selection process and data collection method possibly made the sample unrepresentative of human service workers, and thus, restricts the generalizations that can be made. However, since the survey was answered by a wide variety of human service workers, generalizations to the field may be enhanced.

A second data collection problem was that all the data were collected using a single self-report questionnaire. This could possibly result in inflated relationships between predictors and criteria due to common method variance. The high correlations among the predictors in this study result in a "problem of multicollinearity" (Cohen & Cohen, 1975). Multicollinearity among predictors may lead to instability in the regression coefficients. Due to the questionable nature of the construct

validity of the burnout measure and the general lack of data in the area, multimethod data would be preferred. Given the restrictions of funding, researcher time, and donated subject time, a single method was selected. In view of the lack of empirical data in the area, however, self-report data on a number of measures still represented a needed opportunity to clarify the burnout construct.

A third data collection problem that limits our understanding of burnout is that all the measures were taken at one point in time. A longitudinal design would provide support for burnout as a process and provide data to integrate into a model of burnout. Antecedents and outcomes could be operationally distinguished which might make the data more relevant to practical and conceptual concerns.

Future Research Issues

The research to date has been hampered by a lack of theoretical guidance, as well as a lack of known connections between burnout and other constructs and observables. The current study lends support to the MBI being one measure of the construct which is factorially sound and is reliable. If it is used as a measure of burnout, connections can be developed for the construct.

Another aspect of the MBI which is unknown concerns the norms on the six scales. In the current sample, means on Emotional Exhaustion and Depersonalization were relatively low. Means were higher on the Personal Accomplishment scales than the burnout scales for males and females, across age groups, and educational levels. Despite the

widespread attention burnout has received in the past decade (Jackson & Maslach, 1982), little is known about the prevalence of the problem. The present study indicates that burnout may not be nearly as pervasive as suggested by this attention.

A profile of norms for the burned-out workers, versus the well-functioning worker, would facilitate the useful application of the MBI. However, validated relationships are also needed between burnout and other attitudes and job performance to improve the usefulness of the MBI.

Research could be designed which would go beyond the limitations of the current study, and expand the nomological network of burnout. A replication of the current survey could be done to cross-validate the results of the regression analyses. At this time other methods of measurement could be introduced to expand the validation of the construct. We do not know, for example, if high burnout scores are actually correlated with poor job performance or dehumanizing behavior toward clients. Especially useful would be supervisor and peer ratings of job performance. Observation of worker-client interviews and of time use by workers would probably be useful though costly.

In studying the use of time by the worker, it would be of interest to explore the actual time spent with clients. The current study supports the idea, contrary to the literature, that more time spent with clients is correlated with less burnout and greater feelings of Personal Accomplishment. Whether more time with clients is beneficial to the worker, the time demand for better workers is greater, or better

workers find ways to spend more time with clients is not known from the current data.

A longitudinal study of human service workers is needed to explore the process of burnout, as well as job satisfaction or dissatisfaction. Particularly interesting would be a comparison of paper and pencil measures at time intervals compared to video tapes of worker-client interviews at the same intervals. Such data might reveal skills of workers who report more intense or frequent feelings of Personal Accomplishment.

Any further research should be designed with known connections between burnout and other variables in mind, as well as hypothesized relationships. More theoretical guidance of work in the area should improve the utility of the data which are collected.

Toward a Stress Model of Job Burnout

"Like the concept of stress, the term burnout seems to function better as a verbal Rorschach stimulus than as a meaningful label for a psychological state" (Jackson & Maslach, 1982, p. 1). The problem becomes that of narrowing down the concept of burnout and exploring one definition long enough to establish a nomological network. Recognizing the multifaceted nature of burnout is crucial to establishing a definition and measure of the concept (Jackson & Maslach, 1982). This has been done in the design of the MBI.

In order to establish a network of known variables related to burnout, a framework is needed within which variables can be tested

for their relationships. A theory building strategy is needed. Perlman and Hartman (1980; 1982) have advocated that burnout be studied within a stress framework. If burnout could be viewed as stress, this gives us the abundant literature on work stress (cf. Jick & Payne, 1980, for review) as a background for theory building.

First, how well does burnout as defined by the MBI fit the definition of stress? According to Selye (1976), stress is not the thing which causes the "alarm" to the organism. It is also not the alarm reaction or Selye's famous three-part "general adaptation syndrome" (G.A.S.) as a whole, of which the alarm reaction is only the initial reaction to demand stimuli. The second reaction is the stage of resistance which has different or even the opposite characteristics of the alarm reaction. Prolonged exposure produces the third stage, the stage of exhaustion. The syndrome is established by physical changes in the organisms, and by an evolution in time of the process as the stimuli continue.

Stress is, according to Selye, the <u>state</u> of the organism manifested by a specific syndrome (G.A.S.) which consists of changes in the biologic system. Stress has its own characteristic form. The elements of its form are the visible changes due to stress, whatever its cause. One can recognize and measure stress only by the intensity of the G.A.S. manifestations.

In conclusion, we can appraise stress only by the changes it produces. Stress is the condition or state of the organism; it is recognizable by changes in the organism. "The general stress syn-

drome affects the whole body . . . [it] manifests itself by a syndrome, a sum of changes, not by one change" (pp. 74-75). This multifaceted state of the organism is a function of reaction to stimuli over time. Changes which we expect to see in work related stress were detailed by Kahn and Quinn (1970).

Kahn and Quinn's proposed framework for analysis of stress was to link various stress reactions or responses to certain extreme stimulus situations for the subject group of interest. Thus, the stress process was defined in two parts: (1) stressors, which were verified by their ability to produce stress response, and (2) stress responses which are physiological, behavioral, perceptual-cognitive, and affective change, and overt and intrapsychic coping efforts.

In light of burnout descriptions detailed earlier, we see that job burnout fits the definition of stress. The elements of stress are the pathological state of the worker which are linked to noxious stimuli (such as role ambiguity). In terms of a criterion measure for the stress model, the present study supports the discreteness of the constructs of the Emotional Exhaustion and Depersonalization measures. This finding agrees with the idea that stress is multifaceted. I recommend that a measure of physical symptoms be added to the MBI scales to form criteria measures of work stress in human services. A close relationship between physical stress symptoms and burnout as measured by the MBI was found in this study. Personal Accomplishment does not predict stress symptoms or factor with any other variables in the current study. I would recommend eliminating it from

a criterion measure of burnout. The current study cannot offer data for the pathological states developing over time.

Fineman and Payne (1981) have discussed the methodological trap in stress research based on such a framework which includes role indices. Measures which seek to clarify stressors in the environment should isolate factors or stimuli that can then be linked to stress reactions. However, when role indices are used to measure the stressful factors in the environment, they cannot easily be separated from a measure which taps individual reactions to the stressors. As noted in Kahn and Quinn (1970), stress responses are not only physiological and behavioral, but perceptual-cognitive and affective changes. To define a role problem as a stressor by linking it to a stress reaction is difficult if the reaction to stress is a change in perception of the problem. This measurement problem is especially important in light of the current findings about the strong relationship between role ambiguity and the intensity of job burnout. Designing models to integrate role ambiguity with burnout will require a test of perceived ambiguity as both an antecedent and a response.

Although there are disagreements in the job stress literature as to how to measure stress, Perlman and Hartman (1982) are optimistic that burnout can best be understood within a stress framework. How well does burnout fit such a framework? Let us look at two proposed models. Perlman and Hartman (1982) proposed "an example" of a model which identified personal (expectations, attitudes, background, etc.) and organizational (work load, role ambiguity, etc.) variables. The

model allowed for four stages. "The model was based on a paradigm presented by House and Wells (1978) and is similar to models recently proposed by Beehr and Newman (1978) and Matteson and Ivancevich (1979). The model has a cognitive/perceptual focus" (p. 296). Building the model in terms of stages takes into account Selye's definition of stress as the state of the worker which is manifested by the G.A.S. This syndrome is established (measured) in two dimensions. Changes in the subject and evolution of the process over time.

The model is divided into four stages which are circular in process, i.e., in Stage 4, outcomes are expressed in either effective or ineffective coping strategies. This in turn, affects Stage 1, the degree to which the situation is conducive to stress, and Stage 2, the level of perceived stress. Stage 3 is the response to stress which is physiological, affective, cognitive and behavioral. It can be observed that the model breaks the stress responses noted by Kahn and Quinn (1970) into Stages 3 and 4. In Perlman and Hartman's (1982) model, it is suggested that the variables occur in succession and simultaneously.

In reviewing 48 articles about burnout, Perlman and Hartman found only 5 which presented empirical data about individual or organizational variables in relation to burnout which could be integrated into their model (Berkeley Planning Associates, 1977; Gann, 1979; Maslach & Jackson, 1981; Metz, 1979; and Westerhouse, 1979).

In a study drawn from the work stress literature, Jenkins (1979) emphasized that any model building about stress should avoid what is, in his opinion, the major weakness of most stress research--a two

variable model, even if the variables are examined over time. These two variables are noxious stimuli and responses. Jenkins based his model on the relationship of these variables, but included the adaptive capacity of the organism before the stressor, and the coping mechanisms in response to stress, as well as the pathological outcomes. In line with Selye's G.A.S., Jenkins suggested a model which differentiates between (1) initial responses of alarm, (2) sustained defensive behaviors, and (3) relatively irreversible end-states which remain after resistance has ended.

Thus, the variables in Jenkins' model include stressors, adaptive capacities, defenses, alarm reactions, and pathological end states. These take place at the biological, psychological, interpersonal and sociocultural levels simultaneously and successively. The state of stress should include the adaptive capacities at the psychological level of ego strength, problem-solving ability, flexibility, and social skills. At the interpersonal level the adaptive capacity is raised by positive primary relationships, and the network of social support.

Jenkins wisely suggests that "it would be an overwhelming task for any single research study to provide a comprehensive test of so elaborate a research model" (p. 5).

How does burnout as defined by the MBI (Emotional Exhaustion and Depersonalization intensity and frequency) fit into such a model? Where do the other variables in this study appear to fit the model? The remainder of this section will relate the constructs in the current findings in terms of relationships within a stress model and suggested

relationships. Findings from the current study primarily have implications for selection or rejection of criteria measures in job stress research in human service settings.

Table 22 uses the labels for the model for stress proposed by Jenkins (1979). The current variables are inserted in this table based on the research findings and further hypotheses. Such a complex paradigm includes the total person as a biological system and as a part of a social eco-system. The current study did not attempt to address each area. Variables of specific interest to human service work are emphasized although general variables such as physical health are added for consideration in future research.

Some of the current variables are not included in the model. For example, job dissatisfaction appears in Perlman and Hartman's model as an outcome response following Stage 3 ("Response to Stress"). Job satisfaction was found to be a discrete construct from burnout in the current study and in Maslach and Jackson (1981) and Gann (1979). The current results also indicate that job satisfaction does not account for any significant, unique variance in the MBI scores nor much of the variance in the responses to a stress symptom checklist. What job satisfaction does account for better than any other variable is intention to leave the job within two years. Job satisfaction also loads into a factor which embraces role conflict, role ambiguity, and job involvement-active participation. Where does that put job satisfaction in the sequence of the model? I would propose that job satisfaction is a response formed early which may continue without burnout or may

Table 22

A Stress Framework for the Process of Job Burnout

	Adaptive Capacity	Stressors	Alarm Reaction	Defense Reaction (Stage of Resistance)	Pathological End-State
Biological Level	--State of health		--Intense but infrequent physical stress symptoms	--Physiological compensations --Exercise	--Frequent stress symptoms indicative of disease and/or dysfunction
Psychological Level	--Age --Ego strength --Social skills --Flexibility --Value of work to self-esteem --Feelings of Personal Accomplishment --Problem-solving skills --Educational level --Work as a central life interest	--Time on paperwork		--Intense but infrequent Emotional Exhaustion --Planning --Problem-solving --Work becomes less important --Rigid adherence to rules	--More frequent Emotional Exhaustion --Depression --Alienation --Dissatisfaction with life
Interpersonal Level and Sociocultural Level	--Family support --Social support network --Active participation on the job --Job design/ organizational responsiveness	--Role ambiguity --Role conflict --Client contact --Isolation		--Depersonalization intensity --Less participation on the job	--Depersonalization intensity and frequency vis a vis clients --Family problems

coexist with stress responses. The current findings suggest that intrinsic dissatisfaction is most likely to be present with stress. But, job satisfaction does not contribute much to the prediction of emotional and physical stress responses. It is, perhaps, not necessary to include job satisfaction or turnover in the burnout model.

From the current data, the criteria of stress can be broken down into emotional exhaustion, depersonalization, and physical symptoms of stress. The burnout scales do appear to measure stress reactions somewhat unique to human service work. (Measurement of alienation and depression along with burnout in future research would better define whether burnout is a unique stress criterion.) The descriptive literature suggested that burnout is accompanied by feelings of emotional exhaustion and depersonalization which over time occur increasingly closer together, creating an overall effect of exhaustion and depersonalization (Freudenberger, 1974; 1975). This course could be altered by the adaptive capacity of the worker, e.g., problem-solving and planning, or intervention by the work organization. If intensity of stress reactions could be separated as in the MBI, all three stress criteria may be found to occur first as intense but infrequent, as the descriptive literature suggests.

As Kahn and Quinn (1970) suggested, it is also important to separate out the factors in role ambiguity which really are stressors, and which are not. Role ambiguity, and to some extent, conflict, were the best predictors of the intensity of burnout, but not the frequency. They were not important in predicting stress symptoms. Their relationship to work stress is still unclear. They seem to be stressors which

induce emotional exhaustion and depersonalization to some degree. The current study suggests that ambiguity is the more important variable to define and for which to develop links in the model. Only a longitudinal study with clearly defined stress criteria could ascertain its contribution as a stressor.

Job involvement as measured here is difficult to classify as a stressor or reaction. It seems to represent a construct that either exists as a mediator of effective coping or is changed as part of a coping style. For example, burned out workers reported not actively participating in their job, and the job is not important to their "valued self." But workers who report feelings of accomplishment are active participants and view the job as a central life interest. Accomplishing workers do not generally attach importance to the job in the sense of self worth. For this reason, further examination of this variable in a longitudinal study is needed to determine its role.

Demographic factors are included in the model. As noted above, younger and older (over 60) workers were more likely to report emotional exhaustion and depersonalization. Tenure and satisfaction with education were not included in the model. Burnout was reported as more intense for those with more education. More client contact was actually associated with less burnout and may actually be a "positive" stress which energizes the worker. Paperwork was included in the model as a contributor to stress.

Without longitudinal data based on a model, we will not know if workers move from feelings of intense, then frequent, exhaustion and

depersonalization or follow various paths to accomplishment or failure in the difficult arena of human services. The current findings elucidate the multiplicity of relationships which contribute to and coexist with emotional and physical exhaustion and an attitude of depersonalization in the human service worker. Perhaps most important of all is the basic findings that emotional and physical exhaustion are associated with derogatory feelings toward clients. These feelings include reports in the current data of treating clients as objects, being callous toward clients, or not caring about clients. Our understanding of the burnout process and its remedy is important to all of us who will at some time receive the care or guidance of a teacher, a nurse, a social worker or others in the helping professions.

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APPENDICES

APPENDIX A

Table 23

Amount of Time Spent on Paperwork and Amount of Time Spent in Direct Client Contact by the Current Sample (n = 211)

Percent of Day Spent on Paperwork	Frequency	Percent	Percent of Day Spent in Client Contact	Frequency	Percent
<10	3	1.5	<10	3	1.5
10	46	21.8	10	3	1.4
20	51	24.2	20	11	5.2
30	39	18.5	30	11	5.2
40	25	11.8	40	14	6.6
50	11	5.2	50	17	8.1
60	15	7.1	60	23	10.9
70	8	3.8	70	37	17.5
80	6	2.8	80	38	18.0
90	2	0.9	90	36	17.1
100	1	0.5	100	14	6.6
Missing	4	1.9	Missing	4	1.9
Total	211	100.0	Total	211	100.0

APPENDIX B

THE UNIVERSITY OF TENNESSEE, KNOXVILLE
COLLEGE OF LIBERAL ARTS
DEPARTMENT OF PSYCHOLOGY

Knoxville, TN 37916
(615) 974-2431

I have read the information attached, and I am participating in this study of work attitudes voluntarily. I understand that the information that I am giving will be kept confidential and will be used for research purposes. If while filling out this questionnaire, I decide that I do not wish to continue, I may discontinue my participation. If I have any questions, I understand that I may contact Dr. John Lounsbury or Karol Girdler at the address above.

_____
Your Signature

_____
Date

NOTE: YOU MAY DETACH THIS PAGE FROM THE REST OF THE QUESTIONNAIRE AND RETURN IT SEPARATELY.

INTRODUCTION

The data you supply in this questionnaire will be used for my dissertation project which is being conducted by me under the direction of Dr. John Lounsbury, Department of Psychology, University of Tennessee, Knoxville, Tennessee. The general purpose of this study is to further the understanding of job burnout in human service workers, so we can better understand how to diagnose and cope with job burnout. The questionnaire will ask you about your job.

What is in the Questionnaire

The questionnaire is divided into eight sections.

Section 1 contains questions concerning your feelings about your work and the clients (recipients) with whom you work.

Section 2 contains questions about your job design and your role at work.

Section 3 contains the Minnesota Job Satisfaction Questionnaire.

Section 4 contains items pertaining to Job Involvement.

Section 5 contains a list of stress-related symptoms.

Section 6 contains questions about your future work plans.

Section 7 contains some questions about satisfaction in general.

Section 8 contains questions about background information.

How to Complete the Questionnaire

Remember that the purpose of this questionnaire is to gather information for research purposes. It is not a test. There are no "right" and "wrong" answers.

Please read each question carefully, but don't take too long on any one question. Your first reaction to a question is usually the most accurate for these kinds of questions.

You will notice that some of the same questions are asked several different ways. This is done to see how well different questions measure the same ideas.

Please answer each question as carefully and frankly as possible.

Your Responses are Strictly Confidential

Any responses that you give will be kept strictly confidential, and no one will see any person's answers except researchers working under the supervision of Dr. Lounsbury. Any information that is reported from this research will be in the form of group averages. Furthermore, no groups will be identified by name.

The questionnaire will take approximately 25-30 minutes to fill out. Please feel free to contact me if you have questions. THANK YOU FOR YOUR TIME.

Karol Girdler

Section 1: FEELINGS ABOUT YOUR JOB AND THE PEOPLE YOU SERVE

Instructions: Circle the number 1 through 6 which best describes how frequently you experience each item below. If you ever experience the feeling, then circle the number 1 through 7 which best describes how intense the feeling is. Frequency means how often you have that feeling; intensity means "how much" you notice the feeling.

EXAMPLE

1. I feel emotionally drained from my work.

a) Frequency: Never 1 A few times a year or less 2 (3) 4 5 6 Everyday

b) Intensity: 1 Very mild, barely noticeable 2 3 4 (5) 6 7 Major, very strong

Instructions:
If you never experience the feeling described, simply check never and go on to the next question. You do not need to tell how much you notice the feeling if you never have that feeling.

EXAMPLE

2. I feel used up at the end of the workday.

a) Frequency: ✓ Never 1 A few times 2 3 4 5 6 Everyday

b) Intensity: 1 Very mild, barely noticeable 2 3 4 5 6 7 Major, Very strong

Section 1: FEELINGS ABOUT YOUR JOB AND THE PEOPLE YOU SERVE
See page one for instructions.

1. I feel emotionally drained from my work.

a) Frequency: Never 1 A few times a year or less 2 3 4 5 6 Every day

b) Intensity: 1 Very mild, barely noticeable 2 3 4 5 6 7 Major, very strong

2. I feel used up at the end of the workday.

a) Frequency: Never 1 A few times a year or less 2 3 4 5 6 Every day

b) Intensity: 1 Very mild, barely noticeable 2 3 4 5 6 7 Major, very strong

3. I feel similar to my recipients in many ways.

a) Frequency: Never 1 A few times a year or less 2 3 4 5 6 Every day

b) Intensity: 1 Very mild, barely noticeable 2 3 4 5 6 7 Major, very strong

4. I feel personally involved with my recipients' problems.

a) Frequency: Never 1 A few times a year or less 2 3 4 5 6 Every day

b) Intensity: 1 Very mild, barely noticeable 2 3 4 5 6 7 Major, very strong

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

a) Frequency: _____ 1 2 3 4 5 6
Never — A few times a year or less — Every day

b) Intensity: 1 2 3 4 5 6 7
Very mild, barely noticeable — Major, very strong

6. I feel uncomfortable about the way I have treated some recipients.

a) Frequency: _____ 1 2 3 4 5 6
Never — A few times a year or less — Every day

b) Intensity: 1 2 3 4 5 6 7
Very mild, barely noticeable — Major, very strong

7. I can easily understand how my recipients feel about things.

a) Frequency: _____ 1 2 3 4 5 6
Never — A few times a year or less — Every day

b) Intensity: 1 2 3 4 5 6 7
Very mild, barely noticeable — Major, very strong

8. I feel I treat some recipients as if they were impersonal "objects."

a) Frequency: _____ 1 2 3 4 5 6
Never — A few times a year or less — Every day

b) Intensity: 1 2 3 4 5 6 7
Very mild, barely noticeable — Major, very strong

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

a) Frequency: _____ 1 2 3 4 5 6
Never — A few times a year or less — Every day

b) Intensity: 1 2 3 4 5 6 7
Very mild, barely noticeable — Major, very strong

10. I deal very effectively with the problems of my recipients.

a) Frequency: _____ 1 2 3 4 5 6
Never — A few times a year or less — Every day

b) Intensity: 1 2 3 4 5 6 7
Very mild, barely noticeable — Major, very strong

11. I feel burned out from my work.

a) Frequency: _____ 1 2 3 4 5 6
Never — A few times a year or less — Every day

b) Intensity: 1 2 3 4 5 6 7
Very mild, barely noticeable — Major, very strong

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

a) Frequency: _____ 1 2 3 4 5 6
Never — A few times a year or less — Every day

b) Intensity: 1 2 3 4 5 6 7
Very mild, barely noticeable — Major, very strong

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

a) Frequency: _____ 1 2 3 4 5 6
Never — A few times a year or less — Every day

b) Intensity: 1 2 3 4 5 6 7
Very mild, barely noticeable — Major, very strong

14. I worry that this job is hardening me emotionally.

a) Frequency: _____ 1 2 3 4 5 6
Never — A few times a year or less — Every day

b) Intensity: 1 2 3 4 5 6 7
Very mild, barely noticeable — Major, very strong

5

15. I feel very energetic.

a) Frequency: 1 2 3 4 5 6
Never — A few times a year or less — Every day

b) Intensity: 1 2 3 4 5 6 7
Very mild, barely noticeable — Major, very strong

16. I feel frustrated by my job.

a) Frequency: 1 2 3 4 5 6
Never — A few times a year or less — Every day

b) Intensity: 1 2 3 4 5 6 7
Very mild, barely noticeable — Major, very strong

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

a) Frequency: 1 2 3 4 5 6
Never — A few times a year or less — Every day

b) Intensity: 1 2 3 4 5 6 7
Very mild, barely noticeable — Major, very strong

18. I don't really care what happens to some recipients.

a) Frequency: 1 2 3 4 5 6
Never — A few times a year or less — Every day

b) Intensity: 1 2 3 4 5 6 7
Very mild, barely noticeable — Major, very strong

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

a) Frequency: 1 2 3 4 5 6
Never — A few times a year or less — Every day

b) Intensity: 1 2 3 4 5 6 7
Very mild, barely noticeable — Major, very strong

20. I can easily create a relaxed atmosphere with my recipients.

a) Frequency: _____ 1 2 3 4 5 6
Never — A few times a year or less — Every day

b) Intensity: 1 2 3 4 5 6 7
Very mild, barely noticeable — Major, very strong

21. I feel exhilarated after working closely with my recipients.

a) Frequency: _____ 1 2 3 4 5 6
Never — A few times a year or less — Every day

b) Intensity: 1 2 3 4 5 6 7
Very mild, barely noticeable — Major, very strong

22. I have accomplished many worthwhile things in this job.

a) Frequency: _____ 1 2 3 4 5 6
Never — A few times a year or less — Every day

b) Intensity: 1 2 3 4 5 6 7
Very mild, barely noticeable — Major, very strong

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

a) Frequency: _____ 1 2 3 4 5 6
Never — A few times a year or less — Every day

b) Intensity: 1 2 3 4 5 6 7
Very mild, barely noticeable — Major, very strong

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

a) Frequency: _____ 1 2 3 4 5 6
Never — A few times a year or less — Every day

b) Intensity: 1 2 3 4 5 6 7
Very mild, barely noticeable — Major, very strong

7

25. I feel recipients blame me for some of their problems.

a) Frequency: _____

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

b) Intensity:

1	2	3	4	5	6	7
Very mild, barely noticeable						Major, very strong

8

Section 2: THE WAY YOUR JOB IS DESIGNED

The following questions concern certain aspects of your job. Please circle a number for each item depending on how true you think the statement is. There is no "right answer", so please respond according to how you see your job at the present time. A value of one (1) signifies that the statement is very false, while a value of seven (7) indicates that the statement is very true.

		Very False						Very True
1.	I feel certain about how much authority I have.	1	2	3	4	5	6	7
2.	Clear, planned goals and objectives exist for my job.	1	2	3	4	5	6	7
3.	I have to do things that should be done differently.	1	2	3	4	5	6	7
4.	I know that I have divided my time properly.	1	2	3	4	5	6	7
5.	I receive an assignment without the manpower to complete it.	1	2	3	4	5	6	7
6.	I know what my responsibilities are.	1	2	3	4	5	6	7
7.	I have to buck a rule or policy in order to carry out an assignment.	1	2	3	4	5	6	7
8.	I work with two or more groups who operate quite differently.	1	2	3	4	5	6	7
9.	I know exactly what is expected of me.	1	2	3	4	5	6	7
10.	I receive incompatible requests from two or more people.	1	2	3	4	5	6	7
11.	I do things that are apt to be accepted by one person and not accepted by others.	1	2	3	4	5	6	7
12.	I receive an assignment without adequate resources and materials to execute it.	1	2	3	4	5	6	7
13.	Explanation is clear of what has to be done.	1	2	3	4	5	6	7
14.	I work on unnecessary things.	1	2	3	4	5	6	7

Section 3: JOB SATISFACTION

9

Instructions: Check one blank for each item.

On my present job, this is how I feel about:	Very Dissatisfied	Dissatisfied	Neutral (Can't Decide)	Satisfied	Very Satisfied
1. Being able to keep busy all the time.	___	___	___	___	___
2. The chance to work alone on the job.	___	___	___	___	___
3. The chance to do different things from time to time.	___	___	___	___	___
4. The chance to be "somebody" in the community.	___	___	___	___	___
5. The way my boss handles the staff.	___	___	___	___	___
6. The competence of my supervisor in making decisions.	___	___	___	___	___
7. Being able to do things that don't go against my conscience.	___	___	___	___	___
8. The way my job provides for steady employment.	___	___	___	___	___
9. The chance to do things for other people.	___	___	___	___	___
10. The chance to tell people what to do.	___	___	___	___	___
11. The chance to do something that makes use of my abilities.	___	___	___	___	___
12. The way agency policies are put into practice.	___	___	___	___	___
13. My pay and the amount of work I do.	___	___	___	___	___
14. The chances for advancement on this job.	___	___	___	___	___
15. The freedom to use my own judgment.	___	___	___	___	___
16. The chance to try my own methods of doing the job.	___	___	___	___	___
17. The working conditions.	___	___	___	___	___
18. The way my co-workers get along with each other.	___	___	___	___	___
19. The praise I get for doing a good job.	___	___	___	___	___
20. The feeling of accomplishment I get from the job.	___	___	___	___	___

Section 4: JOB INVOLVEMENT

10

The following items describe feelings people have about their jobs. Please respond to the items by using the scale below. Put the number that best describes how you feel about your job in the blank beside each item.

1	2	3	4	5	6	7
Never	Once	Rarely	Sometimes	Often	Usually	Always

_____1. How much chance do you get to do interesting work?

_____2. How much chance do you get to feel at the end of the day that you've accomplished something?

_____3. How much chance do you get to work without feeling pushed?

_____4. How much chance do you get to finish things?

_____5. In general, I have much say and influence over what goes on in my job.

_____6. If I have a suggestion for improving the job or setup in some way, it is easy for me to get my ideas across to my immediate superior.

_____7. The most important things that happen to me involve my work.

_____8. The major satisfaction in my life comes from my job.

_____9. My job plays an important part in my ideas about getting ahead.

_____10. I spend a great deal of time on matters related to my job both during and after working hours.

_____11. How well I perform on my job is extremely important to me.

_____12. I avoid taking on extra duties and responsibilities in my work.

_____13. Quite often I feel like staying home from work instead of coming in.

_____14. I'll stay overtime to finish a job even if I'm not paid for it.

_____15. If a problem comes up in your work and it isn't all settled by the time you go home, how likely is it that your will find yourself thinking about if after work?

_____16. Sometimes I lie awake thinking ahead to the next day's work.

Please answer the last question by circling the number on the scale below it which best describes your feelings.

17. I used to be more ambitious about my work than I am now.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Disagree somewhat	Undecided	Agree Somewhat	Agree	Strongly agree

Section 5: STRESS-RELATED SYMPTOMS

Please check how often each physical condition has happened to you in the last year.

		1 OFTEN	2 SOMETIMES	3 RARELY	4 NEVER
1.	trouble breathing or shortness of breath	___	___	___	___
2.	pains in my back or spine	___	___	___	___
3.	becoming very tired in a short time	___	___	___	___
4.	having trouble getting to sleep	___	___	___	___
5.	having trouble staying asleep	___	___	___	___
6.	finding it difficult to get up in the morning	___	___	___	___
7.	feeling my heart pounding or racing	___	___	___	___
8.	hands sweating so that they feel damp or clammy	___	___	___	___
9.	feeling nervous or fidgety and tense	___	___	___	___
10.	poor appetite	___	___	___	___
11.	spells of dizziness	___	___	___	___
12.	smoking more than I used to	___	___	___	___
13.	drinking more than I used to	___	___	___	___

Section 6: FUTURE WORK PLANS

Please indicate which item best describes where you would expect to be at the end of two years by entering a 2 in the blank next to the item. Also indicate where you expect to be five years from now by entering a 5 in the blank next to the item.

_____Same agency and same position

_____Same agency at a higher level service position

_____Same agency in an administrative position

_____Some other human service agency in a client service position

_____Some other human service agency in an administrative position

_____In another field of work

_____Not working

_____Back in school

_____Other (Please describe briefly)_____

_____

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Section 7: GENERAL SATISFACTION

1. Below is a picture of a ladder. Suppose we say that the top step of the ladder represents the best possible life for you and that the bottom step represents the worst possible life for you.

   a) Where on the ladder do you think you will be 5 years from now?

   Fill in step number _____

   b) Where on the ladder would you say you stood 5 years ago?

   Fill in step number _____

   c) Where on the ladder do you feel you personally stand at the present time?

   Fill in step number _____

10	- Best possible life
9	
8	
7	
6	
5	
4	
3	
2	
1	
0	- Worst possible life

2. How do you feel about your life as a whole? (Circle one)

7	6	5	4	3	2	1
Delighted	Pleased	Mostly Satisfied	Mixed	Mostly Dissatisfied	Unhappy	Terrible

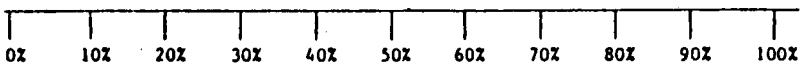
Section 8: BACKGROUND INFORMATION

1. What agency do you work in?_____

2. What type of clients do you deal with usually? (Check all which apply)

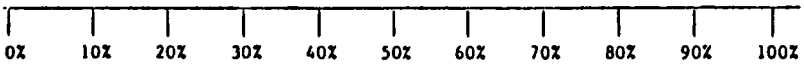
   _____ Chronic adults
   _____ Children
   _____ Families
   _____ Other_____
   _____

3. Approximately how much of your time is spent in direct client contact?



(Circle one)

4. How much time spent on paperwork?



(Circle one)

5. What is your job title or classification?_____

6a. How many years of experience have you had in full-time paying human service jobs?

_____years _____months 6b. Full-time on present job? ___years ___months

7. How many years of education have you had?

   ___ no college
   ___ some college
   ___ B.A.
   ___ some graduate work
   ___ Master's
   ___ Ph.D.

8. What area is your degree in?_____

9. In general I feel that my education was adequate preparation for my job.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Disagree somewhat	Undecided	Agree Somewhat	Agree	Strongly agree

10. How many previous human service jobs have you had (full-time)? _____

11. If this is your first job, please indicate the amount of practical experience you had in this type of work before taking a full-time job.

_____

_____

12. Male _____ Female _____

13. Age:

_____ 20-25	_____ 36-40	_____ 51-55
_____ 26-30	_____ 41-45	_____ 56-60
_____ 31-35	_____ 46-50	_____ 60+

Please feel free to make any comments you may wish which pertain to this survey or to your experience in human service work in general:

THANK YOU VERY MUCH FOR PARTICIPATING IN THIS SURVEY

1. Would you like to see a summary of the results of this survey?

___ 1. YES	___ 2. NO

2. What is your name and current or probable mailing address:

_____
_____
_____
_____
_____

NOTE: YOU MAY DETACH THIS PAGE FROM THE REST OF THE QUESTIONNAIRE AND RETURN IT SEPARATELY.

VITA

Karol Girdler became the first born child of Marion Girdler in Salisbury, North Carolina, on July 17, 1952. She completed elementary and junior high school in that town. She attended Pfeiffer College in Misenheimer, North Carolina, while also attending high school in Salisbury. She left high school prior to completing credits for graduation and enrolled in Catawba College in Salisbury in 1969. After taking a one year leave for the birth of her daughter, Joanna Cooper, in 1971, she completed a Bachelor of Arts degree in Psychology in 1974, graduating with high honors.

For the next three years, Girdler worked in various aspects of human service delivery in North Carolina and Michigan, including the Department of Human Services, CETA, and Michigan Department of Mental Health programs. She entered the Graduate School of The University of Tennessee, Knoxville, September 1977, to continue studying psychology.

Girdler was employed at the Daniel Arthur Rehabilitation Center, Oak Ridge, Tennessee, from October 1978 to July 1982. She was awarded the Doctor of Philosophy degree in June 1984. She is an Associate Member of the American Psychological Association, a member of the Tennessee Behavior Therapy Association, and Phi Kappa Phi.

Girdler is currently living in Heidelberg, Germany, where she is employed as a Research Psychologist for the U.S. Army Research Institute for the Behavioral and Social Sciences.