Graduate student burnout a preliminary attempt at validation of an instrument.

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GRADUATE STUDENT BURNOUT:

A PRELIMINARY ATTEMPT AT VALIDATION OF AN INSTRUMENT

by

Jill Pickett

B.A., University of Waterloo, 1979

A Thesis
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ABSTRACT

The concept of "burnout" has been investigated quite extensively in the literature. However, two problems with this research can be recognized. First, although the definition of "burnout" seems to be expanding to a multi-faceted transactional process, the research itself has remained within a rather narrow definition of it. Second, most of the work on "burnout" has been limited to a single type of population, the human service provider, overlooking numerous other possibilities. The prolific research on stress in graduate students suggests the investigation of "burnout" with this group. However, there are no instruments presently available that are applicable beyond a narrow definition of burnout or beyond the human service provider.

This is the purpose of the present study. A new instrument was developed for and administered to a sample of graduate students as a preliminary attempt at validation. This new instrument was based substantially upon instruments available in the literature. The data was then examined to ascertain whether each item had a significant relationship with scores on a burnout inventory and whether they contributed sufficiently to the variance to be included in any future research. Statistics included
Spearman's rank-order correlation coefficient, point-biserial correlation coefficient, and a stepwise regression analysis.

Generally, the results from this questionnaire substantially corroborate the literature reviewed here. A greater than chance number of items were found to have a significant relationship with scores on this new instrument: the Maslach Burnout Inventory Transformed for Graduate Students. However, there are a few exceptions to this overall observation. First, the questions about background information resulted in mixed findings.

Second, the discriminant validity measure proved to be rather inadequate. Third, organizational factors did not appear to play as key a role in burnout as previously assumed. However, on the positive side, social factors do appear to have a greater influence on burnout than allocated to them in the literature. Further, personal factors appeared to maintain their importance with some modifications. For example, Freudenberger's theory about the psychosomatic symptoms and feeling states involved in burnout were re-substantiated here.

The major conclusion from the present study is that the questionnaire is a viable research instrument and further validation and investigation would be warranted.
Second, the general concept of "burnout" appears to have been corroborated. However, there are some slight modifications seen in regard to the role organizational, social, and personal factors play. The third conclusion from the present study is that the present sample of graduate students do appear to experience "burnout," which points to two possibilities: that graduate students as a group may experience burnout, and, that populations other than the human service provider experience this phenomenon. All three of these conclusions indicate the need for further investigation and clarification of the "burnout" issue.
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I would, of course, like to thank the members of my committee for the time and effort expended in this project, but I would especially like to thank Dr. G. Ron Frisch for his unique source of motivation. I would also like to thank Dr. Walter Sobota of Sinai Hospital of Detroit for his emotional and professional support in this monumental endeavor.
# TABLE OF CONTENTS

ABSTRACT ii

ACKNOWLEDGEMENTS v

LIST OF TABLES viii

Chapter

I INTRODUCTION
- Burnout 1
- Stress in Graduate Students 3
- Organizational Factors 9
- Social Factors 16
- Personal Factors 21
- Description of the Present Study 29

II METHOD
- Subjects 40
- Procedures 40
- Materials 41
- Statistical Analysis 42

III RESULTS
- Part A: Background Information 50
- Stepwise Regression Analysis 50
- Part B: Opinion Survey 51
- Part C: Attitude Survey 51
- Part D: Feelings Survey 57

IV DISCUSSION
- General Considerations 59
- Unexpected Findings 63
- Theoretical Implications 67
- Extension to Further Research 72
- Conclusions 75

Appendix

A Consent Form 76
B Graduate Student Attitude Survey 77
C Statement Read to Each Subject 90
D (Revised) Graduate Student Attitude Survey 91

vi
<table>
<thead>
<tr>
<th>Reference</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference Notes</td>
<td>101</td>
</tr>
<tr>
<td>References</td>
<td>102</td>
</tr>
<tr>
<td>Vita Auctoris</td>
<td>109</td>
</tr>
</tbody>
</table>
# List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Spearman Correlation Coefficients of 20 Remaining &quot;Opinion Survey&quot; Items after Stepwise Regression Analysis</td>
<td>52</td>
</tr>
<tr>
<td>2</td>
<td>Spearman Correlation Coefficients of 17 Remaining &quot;Attitudes Survey&quot; Items after Stepwise Regression Analysis</td>
<td>53</td>
</tr>
<tr>
<td>3</td>
<td>Spearman and Point-Biserial Correlation Coefficients of 5 Remaining Items in Statement Section (Discriminant Items) after Stepwise Regression Analysis</td>
<td>56</td>
</tr>
<tr>
<td>4</td>
<td>Spearman Correlation Coefficients of 8 Remaining &quot;Feelings Survey&quot; Items (Cherniss List) after Stepwise Regression Analysis</td>
<td>58</td>
</tr>
</tbody>
</table>
CHAPTER 1

INTRODUCTION

"The dictionary defines the verb 'burn-out' as 'to fail, wear out, or become exhausted by making excessive demands on energy, strength, or resources.'" (Freudenberg, 1974, p. 159)

Students enter graduate school with high hopes for the future and, accordingly, with high levels of energy to get through their requirements to graduate. However, as the workload at graduate school is usually very heavy and stretches out over a long period of time; often these energy levels quickly dissipate and a sense of tedium sets in. Nevertheless, external pressures (departmental, faculty, peer, social) and internal pressures (self-image, need to perform successfully) still demand that the individual student continue to perform at a high level of achievement. This conflict causes a great deal of stress. Then, what is often seen is a student who is continuing to get his or her work done, but not at their previously high standards and often without any joy of accomplishment. Their feelings and attitudes toward their work may become cynical and negative, and thus their goal becomes only "to get through," and not necessarily to do well, to actually learn something, or even to enjoy what they are doing. The longer this state of tension and turmoil continues, the
more likely the student will become physically and emotionally exhausted, thus making work that much more difficult. Of course, at this point, not only do they see their graduate work and the department negatively, but they also begin to view themselves negatively. One could certainly call this student "burned out" and could see that he or she is just one step away from dropping out of the program.

Universities invest considerable time and effort in training graduate students and faculty members undoubtedly experience frustration and dismay when students leave graduate school and relinquish plans to earn the Ph.D. Yet, as noted by Knox (1970), only 50-60% of Harvard graduate students who enter a Ph.D. program obtain the degree. All areas of study have similar attrition rates: from 1949 through 1958 in the U.S.A., 9% of medical students, 40% of law school entrants, 51% of engineering students, and 15-20% of theology students did not complete their degree (Knox, 1970, p. 1,027). Clinical psychology does no better. The best-known study of psychology graduate students to date is the Prediction of Performance in Clinical Psychology (Kelly & Fiske, 1951). This study showed that, of the 128 trainees evaluated in 1947, 77 were considered likely to obtain a Ph.D. or actually had obtained a Ph.D., whereas 25 had actually failed. These figures omitted the "doubtful" category (p. 127). However, not only are "attrition
rates" viewed with dismay by the faculty and administra-
tion, but these fatalities are expensive in both economic
and human costs. Therefore, it would be of benefit to all
concerned to explore graduate student dropout. Perhaps, as
outlined above, a process of demotivation or "burnout"
could be one explanation.

A student who is burned out is quite likely to with-
draw from or fail out of graduate school. However, more
extensive exploration would be more helpful for future pre-
vention of such losses. Should only certain personality
types of individuals be allowed into graduate school:
those who do not easily burnout? Should the demands and
requirements of graduate school be altered and therefore
make it less likely that any student will burnout? Would
the existence of better support systems, such as psycho-
logical counselling, "bitch sessions," or social relation-
ships alleviate or prevent burnout in the graduate experi-
ence? These are the questions being addressed by this
study: Does the graduate student burnout? What are the
correlates of graduate student burnout: organizational,
social, or personal?

---

**Burnout**

"It involves a loss of keenness, losing the
dge or zest for living every day to the
filllest. There is a lack of self-worth, in
Graduate Burnout

4:

yourself as a person and in what you do. You are not getting a sense of satisfaction and you lack the self-confidence and pep to do anything to get out of that state." (Lipovenko, 1981, p. T1)

There have been as many definitions of burnout as there have been writers on the subject. However, Herbert J. Freudenberger was the first to coin the term "burn-out" in 1974. He described individuals suffering from burnout as becoming too somatically involved with their bodily functions; i.e., a constant feeling of exhaustion and fatigue, being unable to shake a lingering cold, suffering from frequent headaches and gastrointestinal disturbances, sleeplessness and shortness of breath (Freudenberger, 1974).

Behaviorally, a person who is burned out is recognized by their quickness to anger and their instantaneous irritation and frustration. Indeed, they find it just too difficult to hold in their feelings. Their thinking becomes rigid, stubborn, and inflexible. The person looks, acts and seems depressed. A greater and greater number of hours are spent working, but less and less is being accomplished (Freudenberger, 1974). Freudenberger (1975) expands on some of the causes of burnout: hopeful expectations that do not turn out, pressure to accomplish and to succeed coming from all sides (including one's own in the form of guilt), and the boredom and monotony of the work.

Wallach (1973) is oriented towards burnout in the human
service provider, and for her it refers to only one particular kind of response—the tendency to treat clients in a detached and mechanical fashion. Specifically, burnout is the emotional exhaustion resulting from the stress of interpersonal contact: the losing of positive feelings, sympathy, and respect for their clients or patients (Maslach, 1978a). The professional who burns out is unable to deal successfully with the overwhelming emotional stresses of the job, and this failure to cope can be manifested in a number of ways: impaired performance, low worker morale, absenteeism, job turnover, and personal problems, such as alcohol and drug abuse, marital conflict, and mental illness (Maslach & Pines, 1977).

However, Maslach (1978a) points out that burnout also serves an adaptive function as it protects the individual against any kind of emotion that is painful, overwhelming, debilitating, inhibiting, or that interferes with some necessary, ongoing behavior. Ideally, there would be the achievement of "detached concern" (Lief & Fox, 1963), in which the health care practitioner provides sensitive and understanding care by being sufficiently detached to make objective, rational decisions (Maslach, 1979). However, Maslach and Pines (1977) reiterate that this ability is only an ideal as often this emotional protection degenerates into the total detachment and dehumanization of burnout.
Maslach (1976) outlined a number of detachment techniques commonly used to reduce stress or to cope successfully with burnout. The first is the "detached concern" noted above. Verbal and nonverbal techniques, such as using jargon and depersonalized labels (my schizophrenic patient), are used to reduce the worker's emotional involvement or to make the client seem less human and more like an object or number. The second technique noted is that of intellectualization where workers try to experience stressful situations more objectively by recasting them in more intellectual and consequently less personal terms. The third technique is compartmentalization, where workers make a sharp distinction between their job and their personal lives and thus they are able to confine the emotional stress to a smaller part of their lives (Pines & Maslach, 1978). The fourth technique is that of withdrawal by spending less time with clients, by being physically distant, and by communicating in impersonal ways. The fifth technique is "going by the book" where one avoid thinking and deflects responsibility, but often becomes a mechanical and petty bureaucrat. Other outlets such as staff support, "bitch sessions," social supports, and the use of humor were shown to be helpful as well in diffusing emotional stress (Maslach, 1976). As can be seen from this discussion, since they are only varying degrees of detachment, it would
be very difficult to distinguish between or to balance between the more positive "detached concern" and the dehumanizing "burnout."

Christina Maslach and Ayala Pines worked together to investigate burnout and to build a theory based on Zimbardo's theory (1970) of the dehumanization process. However, even during these early collaborations, Pines established a slightly different definition of burnout.

"Similar in symptomatology to burnout, but different in origin, tedium is characterized by a sense of despair, by feelings of hopelessness and by the development of a negative self-concept and negative attitudes toward work, life and other people. Most often tedium occurs as a result of a gradual process of daily grinding, of continuous struggles with chronic tension that is typical of everyday life and work. Tedium is the result of having too many negative features and too few positive features in one's environment: too many pressures, conflicts and demands, combined with too few rewards, challenges and successes." (Kanner, Kafry, & Pines, 1978, p. 36)

"When work demands exceed one's endurance and ability to cope, when one can no longer tolerate the occupational pressures and feels totally overwhelmed by work stresses, one is likely to reach a breaking point and experience a cluster of symptoms termed 'tedium.'...The experience is characterized by feelings of strain and 'burnout,' by emotional as well as physical depletion, and by negation of one's self and one's environment. It is the experience of distress and discontent with one's work and way of life, the sense of failure, and the feeling that one cannot take it any more." (Pines & Kafry, 1978, p. 499)

As can be seen from these quotes, there is an explicit
similarity between "burnout" and "tedium." It appears that Pines felt it necessary to expand on Maslach's narrow definition of burnout and so improve its generalizability beyond the human service provider. Specifically, the term tedium describes a cluster of exhaustion reactions which are the result of any prolonged chronic pressures, be they mental, physical or emotional.

Other writers have focused on changes in motivation (Cherniss, 1979; Daley, 1979; Meyer, 1977). Burnout is defined as psychological withdrawal from work in response to excessive stress or dissatisfaction and refers to the loss of enthusiasm, excitement, and a sense of mission in one's work. Although the causes of demotivation are similar, Meyer (1977) notes that lack of psychological and behavioral support, denial of sufficient information resulting in delays and errors, lack of sensitivity to individual needs, lack of constructive feedback, and inconsistent behavior by supervisors also result in making the employee feel devalued and lead to demotivation, or burnout. Several of these writers (Cherniss, 1980; Meyer, 1977; Shinn, 1979) have proposed that burnout is a transactional process, a process consisting of job stress, worker strain, and psychological accommodation.
Stress in Graduate Students

"And I gave my heart to know wisdom and to know madness and folly; I perceived that this also is a vexation of the spirit. For in much wisdom is much grief; and he that increaseth knowledge, increaseth sorrow." (Ecclesiastes: Chapter 1, Verses 17-18)

Stress, as Cherniss, Egnatios, and Wacker (1976) have observed, is not necessarily a bad thing. It can be the impetus for creative problem solving, the consideration of new alternatives, and much personal growth and learning. When a stressful challenge is confronted and mastered, the consequences for the individual can be an increased feeling of competence, a new sense of autonomy, and a greater inner-directedness. But too much stress contributes to strain, and efforts by individuals to cope with that strain often leads to the emotional detachment and withdrawal commonly associated with burnout. Thus, to understand burnout in graduate students, the first two questions are: 1) What in general, is stress? and, 2) What are the possible underlying sources of stress in the graduate student setting?

Stress was first used in a manner relevant for social science when Selye (1956) defined it as "the state manifested by a specific syndrome which consists of all the nonspecifically induced changes within a biologic system" (p. 54). Miller's explanation (1964) is somewhat more specific: "A stress is any force that pushes the func-
tional of important subsystems beyond their ability to restore equilibrium through ordinary, nonemergency adjustment processes. A stress may either consist of a lack of some essential input, or of an excess" (pp. 13-14). In social-behavioral studies; stress has been used to characterize physical, social, and cultural conditions likely to be discomfoting for most people. The term stress, or sometimes strain, has also been used to refer to emotional tensions—anxiety, fear, depression, discomfort—either reported or observed, from which it is inferred that the individual is exposed to some stress situation. Here, for the purpose of clarity, stress shall refer to the response to internal or external processes which reach those threshold levels that strain an individual's physiological and psychological integrative capacities close to or beyond their limits, and not to the stressful situations themselves. This demarcation is supported by French (1974) who found that specific kinds of stressful situations interact with specific personality characteristics and result in specific stresses or strains in the person, including psychological stresses, physiological stresses, and psychosomatic diseases.

Meyer (1977) notes that environmental stressors interact with an individual personality to produce internal tension. In the initial stage, the body mobilizes its
defence mechanisms to cope with the stress. This results in increased striving to maintain effective performance. Job stress may be functional in its early stage because it represents a challenge to the worker and increases motivation and productivity. When frustration and tension increases or persists over a long period, the effects of burnout begin to appear, characterized by feelings of anxiety, tension, fatigue, and exhaustion. A high percentage of the worker's energy is devoted to managing the stress. Consequently, performance becomes disorganized and worker effectiveness is decreased. At this point, detachment from work begins as a protective mechanism. In the final stages of burnout, the protective mechanisms break down and give way to total exhaustion. The worker may then quit, become a bureaucrat, or break down physically or mentally. In these theories, burnout is not a linear phenomenon, but seems to be characterized by peaks of stress reduced by periods of rest.

A person's level of stress is seen (Cherniss, 1980) as a function of the perceived discrepancy between resources and demand and the perceived degree of harm that would occur if the demand were not met. Coping refers to efforts to manage demands and conflict which tax or exceed the person's resources. Lazarus (1966) distinguishes four modes of coping: 1) search for information, 2) direct
action, 3) inhibition of action, and, 4) intrapsychic defence. Sometimes, these coping methods are seen as or lead to disturbances of adaptive functioning in people which are then seen as signs of stress. Several writers (Lazarus, 1966; Perlman & Hartman, 1979) agree that stress generally takes one of four forms: 1) disturbed affects, such as anxiety, 2) motor behaviors, such as muscle tension, 3) changes in the adequacy of cognitive function, and, 4) physiological changes. Lazarus (1966) also includes the disruption of well established personal and social values, while Margolis and Kroes (1974) add chronic psychological responses, more chronic physical health decrements, and of course, work decrements, as indications of stress. In addition, Perlman and Hartman (1979) noted that if the stressful situations themselves are chronic, this can eventually cause lower work satisfaction, absenteeism, quitting, being asked to leave, or burnout.

Graduate students are preparing for their ultimate role of professional, scholar, or scientist; but, while they are doing this, they are reacting to the immediate pressures and expectations of the social system of the graduate school. This could quite possibly be stressful for them. For many people, admission to graduate school marks the beginning of a period of major, unavoidable life changes: changes in work, finances, living conditions, school, and social
relationships. Yet, several studies (Holmes & Masuda, 1974; Wildman, 1975) have found that Grade Point Average is inversely proportional to the amount of life change experienced, regardless of the level of college readiness. Therefore, programs must take into account students' economic and psychological realities.

Everyone is familiar with the hurdles placed in the way of graduate students: oral exams, comprehensives, prelims, dissertations. Taylor (1975) observes that many students feel that these are simply relatively meaningless rituals of academe. As one student commented, "the transition from student to professional occurs in spite of the main thrust of graduate school" (Taylor, 1975, p. 37). As Taylor (1975) noted, graduate school is seen as a demeaning process, one that is set up to test the student deliberately or perhaps to do more than just test— but to subject the student to rigors of deprivation. And the deprivations are many. The most commonly cited ones (Taylor, 1975) involve the loss of money, the loss of self-esteem, the loss of companionship, and the inability to act out an adult role. The graduate process can be a lonely, threatening business; only with the greatest dedication can one emerge from it intact. Often students can barely hold themselves together under the pressure.

Even though the graduate process is seen as so
problematic, the mood of the graduate students (Taylor, 1975) is usually only wry, cynical, and vaguely self-mocking. The students express resignation and passivity in their relationship to the graduate process. Yet, undeniably, for many of the students, the overall result is one of depression. In one essay (Taylor, 1975, p. 37), "the tone is revealing, since it seems to mirror the almost agonizing process of self-motivation that is necessary to survive the process. The student is seen as summoning up the last reserves of already sapped energy in order to finish."

As can easily be seen from these descriptions, graduate students often feel stressed. These stresses are chronic: "the overall mean time to completion of a Ph.D. program of students entering with the master's degree is 3.77 years for all specialties combined; of students entering without, 5.07 years" (Knox, 1970, p. 1,029). Again, the high "attrition rates" noted above can be pointed to as evidence of experienced stress and possibly of burnout. According to Lazarus (1966), situations characterized by high ambiguity, conflict, and helplessness will favor the use of withdrawal and intrapsychic defense as coping methods. The graduate student setting certainly appears to be one of those situations. Cherniss (1980) notes that burnout involves a particular way of coping, one which emphasizes
withdrawal, detachment, avoidance, lowering of goals, and blaming others. These are intrapsychic modes of coping, and the burnout syndrome involves a clear choice to use intrapsychic psychological defences rather than active problem-solving methods. Therefore, it seems quite possible that graduate students do "burn out."

But, what specifically could be some of the stimulus factors and/or task demands associated with burnout in graduate students? Since stress is a result of an imbalance between demands and resources, an attempt to analyze the possible causes of burnout in graduate students should also be guided by the following questions: What demands, internal and external, are made on graduate students? What resources are required to meet these demands? Are the necessary resources available?

Organizational, Social, or Personal Factors

Stress, and its extension, burnout, are responses to a stressful situation. However, the situations are usually far from simple and, more often, are extremely complex. So, too, for the stressed graduate student. Is he or she feeling stressed because of the heavy workload? Because of the mixed messages he or she receives from the faculty? Because of his or her feeling of not fitting in with the other students? Because he or she is married? Or because
his or her forced dependency is galling to him/her? As can be seen, the source of his or her felt stress could be any one of these elements or it could be all of them together. This is by no means a comprehensive list. All of the organizational, social, or personal components of burnout in graduate students cannot be completely catalogued here. However, research in related areas does point to certain possible major sources of stress. There is a great deal of overlap among the three areas and a certain amount of repetition is unavoidable.

Organizational Factors

When referring to organizational factors, one is referring to the program design itself. This includes such factors as the actual requirements; the general philosophy, the inherent attitude towards the students, the expected roles of both the faculty and the students, as well as the power structure of the program. All of these elements can be altered, yet they remain an explicit or an implicit part of the program. All of these factors are possible sources of stress for the graduate students involved in the program. These factors will be divided into four major areas for the following discussion: 1) organizational climate, 2) role conflict, 3) role ambiguity, and, 4) the work itself.

Organizational climate. The organizational climate refers to the formal, rational properties of an organization
that can be readily controlled by those responsible for designing and/or managing a program. It refers to the goals, norms, and ideologies of the program. This includes the strength and clarity of a guiding philosophy, the sense of cohesiveness in the department, the power structure, the degree of concern for students, the setting's impact on them, and the particular emphasis of the requirements (i.e., applied clinical skills vs. research skills).

Perlman and Hartman (1979) found that a lack of a sense of belonging led to greater degrees of burnout. Boniferro, Fisher, and Libby (Note 1) found that organizations that were unsupportive or were seen as inhibiting a worker's goal achievement were correlated with higher emotional exhaustion in social workers. Daley (1979) concluded that formalization of rules, centralization of authority, and greater supervisor control increased the possibility of burnout. Any decision affecting a person's work may be made by that person alone (autonomous decision-making), or by a supervisory person or group (hierarchical decision-making). Previous research and theory (Cherniss, 1980) suggest that hierarchical decision-making may increase stress and burnout. Although many factors influence the extent to which students in a program feel helpless, clearly, the degree to which they are able to exercise power and control over their work and themselves will be a
salient one. Autonomous decision-making has been seen by several writers (Cherniss, 1980; Daley, 1979; Perlman & Hartman, 1979; Pines & Kafry, 1978) as extremely important in preventing burnout or stress. Levine and Weitz (1968) and Shinn (1979) found that the major, and indeed the only outstanding, source of dissatisfaction for students was with their voice in influencing department policy.

Role conflict. This includes person-role conflict, work overload and time pressures. Several authors (Cherniss, 1980; Kahn, Wolfe; Quinn, Snoeck, & Rosenthal, 1964; Perlman & Hartman, 1979) found that role conflict contributes to stress, strain, and the emotional detachment of burnout. Cherniss (1980) found that person-role conflict (internal conflict: the role requires certain behaviors that are inconsistent with the role player's motives, abilities, or moral values) contributes to stress and burnout. Butler (1972) came to the conclusion that students experience greater role stress than registered employed therapists. He also sees the graduate student role as being subject to additional stresses because it is transitional. Person-role conflict can also include demands that are inherently incompatible (cannot comply with one message without disobeying the other). Warnath and Shelton (1976) find that psychology students often have to dissociate what they must learn in order to be evaluated as potential
counsellors from what they must do (or not do) to be judged as agreeable students.

Work overload is where the demands of the work (amount and difficulty) exceed the role player's time and effort. Kahn (1978) found that both qualitative and quantitative overload were related to elevations in cholesterol level and to chronic elevations in heart rate. Amount of work has been related to stress and burnout by several authors (Cherniss, 1980; Daley, 1979; Maslach, 1976; Pines & Kafry, 1978; Shinn, 1979). Stress has also been related to the rigors of academic demands (Baird, 1969) and to mental tasks of difficult character (Kahn, 1978).

The coping process requires time and emotional resources. If the workload is so heavy that the time and resources necessary for coping are not available, the coping process will be interfered with. Pines and Kafry (1978) and Pines and Maslach (1978) noted that time pressures and work schedule were correlated with tedium and burnout.

Role ambiguity. Role ambiguity in the professional school stems from contradictory, incompatible, and unreasonable faculty demands that lead to frustration, tension, and low morale as students must always defer to those in authority when disagreement or misunderstanding occurs. In Levine and Weitz's study (1968) of satisfaction in graduate students, the faculty (its general quality, supervisory and
technical competence, and breadth of outlook) was found to be the most important source of satisfaction as well as dissatisfaction in students. Butler (1972) indicates that in the professional school, ambiguity concerning professors' expectations, evaluations, and rewards is a critical source of stress in students. Baird (1966) explains that the ambiguity of professors' expectations and evaluations is stressful, and leads to the formation of student groups which attempt to clarify or resolve the ambiguity. When professors have conflicting expectations, students not only feel stress, but tend to withdraw psychologically. The stress from conflicting and ambiguous demands is greater where professors had greater power (Baird, 1966). Role ambiguity in general has been correlated with stress and burnout by several authors (Baird, 1969; Cherniss, 1980; Kahn et al., 1964; Perlman & Hartman, 1979; Shinn, 1979). Further, Baird (1969) noted that ambiguity and lack of direction provided by the faculty were factors adding to the duration of graduate study.

The work itself: Some of the aspects of graduate work itself that lead to stress reaction would be variety, significance, and feedback (from the work itself). Lack of variety has been correlated with stress by several authors (Cherniss, 1980; Daley, 1979; Perlman & Hartman, 1979; Pines & Kafry, 1978). Others have related challenge or
significance to stress (Cherniss, 1980; Daley, 1979; Pines & Kafry, 1978; Shinn, 1979). The absence of feedback, or concrete measures of success or failure, as well as tangible rewards, lead to stress and burnout (Daley, 1979; Kjerulff & Wiggins, 1976; Pines & Kafry, 1978; Shinn, 1979).

Kahn (1978) found that situations that are embarrassing, uncomfortable, annoying, and uncertain of success will also produce some of these symptoms (for example, oral exams). Interestingly, Mechanic (1962) found that a poor physical work environment correlated with greater stress in graduate students.

Social Factors

When examining the causes of burnout in graduate students, the social atmosphere both inside and outside of the department has to be included. Goplerud (1980) confirmed that social support emerges as a major mediating variable in students' assessments of the stressfulness of events experienced during their graduate study and in the number of emotional and physical problems experienced. Within the department itself, there are the interpersonal relationships with the faculty, which includes but goes beyond their working relationship, as well as the relationships with fellow students. Domenico and Tulkin (1976) found that, "the socialization and training processes in graduate school occur on at least two levels: the formal level which in-
cludes classes, examinations, etc.; and the informal level which includes all other forms of social interaction. Further it was found that a large amount of the activity of graduate students was centered around informal social contacts, and that a great deal of learning took place through these contacts" (p. 62). The amount of social support and stress experienced by the individual outside of school also plays a role. The individual's family life has the greatest amount of influence on alleviating or increasing stress. Other factors such as the influence and attitude of society at large also will be looked into.

**Faculty Support.** Although most studies of social support in graduate school have focused on the effects of peer contacts, Goplerud (1980) has recently pointed to the quality and quantity of faculty-student interaction as a critical dimension in the milieu. In the ideal supervisory relationship, supervision will become a mentor relationship. There is often a hope by the department that students will learn and grow professionally as a result of their contact with their supervisors. In many settings, there also is a strong expectation that supervisors will help the student to understand and constructively manage his or her own emotional response to the workload. Thus it should not be surprising that
the supervisory relationship has a major impact on stress and burnout in the graduate student setting.

The quantity of supervision is a relatively straightforward dimension and has been discussed by several authors in various forms: frequency (Goplerud, 1980), availability (Cherniss, 1980), and accessibility (Baird, 1969). Overall, the more often students interacted with faculty outside of classes, the less likely they were to report intense or prolonged life disruptions or stressful responses. This was especially true during the first six months of graduate study (Goplerud, 1980).

Several authors (Daley, 1979; Perlman & Hartman, 1979; Pines & Kafry, 1978; Sain, 1979) have also discussed the relationship between stress or burnout and the general quality of supervision. Overall, supervision that helps prevent burnout is characterized by a high degree of support which does not reduce the individual's autonomy. The need for support in a supervisory relationship has been mentioned frequently in the literature, both in reference to student settings and to general work settings (Cherniss, 1980; Daley, 1979; French, 1974; Pines & Kafry, 1978). Warm and friendly supervisory relationships were seen as alleviating stress (Baird, 1969; Cherniss, 1980). Goplerud (1980) noted that emotionally and/or intellectually satisfying relations
with faculty were linked to a reduced likelihood of experiencing health or emotional problems. Social feedback from supervisors also was found to have a negative correlation with tedium (Pines & Kafry, 1978). Finally, a supervisor who reduced autonomy, who did not give reasons for his or her actions, or who was dictatorial and arbitrary, correlated with those individuals showing the greatest amount of burnout (Cherniss, 1980).

**Peer Support.** Cherniss (1980) has noted that social interaction with colleagues or peers serves to alleviate stress in a number of ways. First, discussing problems with colleagues can be a cathartic experience that reduces emotional tension and helps the individual acquire better perspective and understanding. Second, colleagues are an invaluable source of technical information and practical advice. Third, colleagues provide a frame of reference and feedback by which the student may gauge the impact and quality of his or her work. Fourth, colleagues can provide a "united front" in conflicts. Finally, colleagues can be an important source of stimulation; when one can discuss experiences with colleagues, those experiences often become more interesting and meaningful. Thus, in a number of ways, social interaction among colleagues in a program can help reduce stress and burnout.
Several authors (Baird, 1969; Daley, 1979; Domenico & Tulkin, 1976; Goplerud, 1980; Perlman & Hartman, 1979; Pines & Kafry, 1978; Pines & Maslach, 1978; Shinn, 1979) agree with the notion that positive social relationships with peers (other students) can alleviate stress. Other authors (Daley, 1979; French, 1974; Goplerud, 1980; Maslach, 1976, 1979; Pines & Kafry, 1978) have noted that supportive relationships are especially important in helping individuals cope successfully with stress.

Boniferro et al. (Note 1) found that a lack of professional and personal support on the part of colleagues correlated with emotional exhaustion in social workers. In addition, Baird (1969) found, in his factor analysis, that students will look to other students for solutions or attitudes to cope with the problems of graduate school and that a student's commitment is reinforced by contact with other committed students.

However, in a study of graduate students preparing for their qualifying exams, Mechanic (1962) found that greater interaction with peers led to heightened stress in many instances. Students who were most isolated during this period tended to experience the lowest levels of stress and difficulty. Cherniss (1979) noted that differences in theoretical orientation and personal values, as well as differences in resources, status, and power
Graduate Burnout

26

among peers could lead to a breakdown in these relationships, and therefore, increase the felt stress. One particular result of Dolmenico and Tulkin's study (1976) is of special interest here. They found indications that there is a trend for clinical psychology students to become more isolated that students in other areas. Therefore, it could be argued that clinical students are at greater risk for the development of stress and burnout.

Outside Support. Friends and relatives represent a potentially important source of support as they can provide many of the same kinds of social support that colleagues provide. However, these personal relationships outside school also can impose demands and obligations, thus creating conflict that can add to stress already present. The literature seems to be split as to whether outside relationships do serve to alleviate stress, or whether they themselves suffer from the stresses incurred.

Mechanic (1962) found that the family's response to a member's stress was strongly influenced by the nature of the family relationships and commitments prior to the onset of the stress. Stress outside the family required a change in family role expectations and behavior. Couples with no children seemed better able to make those accommodations than others. Baird (1966) found that stress in the graduate career was greater among,
students who were married and had children. Also, when both spouses were students, or when one had a relatively satisfying and nonstressful job of his or her own, the family and the individual adapted better to stress. An interesting research finding concerning the relationship between marital status and burnout tends to support the notion that close, personal relationships outside work help to mitigate the strains associated with the job. Maslach and Jackson (1978) found that human service workers who were single or divorced reported feeling more emotional exhaustion from their work that did married individuals. In addition, Knox (1970) found that, when completion of the Ph. D. is considered, married students completed the Ph. D. more frequently, or they remained as students longer (i.e., they were withdrawing less than single students).

However, evidence for the potential conflict between work and family life comes from a study of burnout in police officers by Maslach and Jackson (1978). They found that officers scoring high on a measure of burnout were more likely to want to be alone when they were at home and were more likely to get angry with their spouses. Boniferro et al. (Note 1) found higher emotional exhaustion in those social workers unable to separate home from work. Mechanic (1962) also noted that spouses of graduate stu-
students felt that they had a lot to complain about: not having enough money, not being able to go out enough, not having the student home enough, and that the student was not doing enough around the house. Clifford (1976) found that recreation, finances, psychological concerns, and academic concerns were problem areas causing students and spouses the most difficulty. Therefore, for the present, this particular issue remains unclear.

Other Social Factors: Two other social factors remain to be discussed: the availability of counselling services and the influence and attitude of the society at large. Cherniss et al. (1976) feel that if individuals are given the opportunity to discuss anxieties and concerns about their work and are encouraged to examine how their response to these feelings is affecting their behavior, stress or dehumanization can be avoided. This would best be done by making counselling services available to stressed individuals. Maslach (1979), Perlman and Hartman (1979), as well as Pines and Kafry (1978) seem to agree with this statement.

More external influences on stress and burnout are barely-discussed in the literature. The attitudes toward and the status accorded to students by their peers can be an additional social source of stress for them (Cherniss 1980). Students certainly are at the lower end of the
socioeconomic scale (although this position will certainly change upon graduation) and Kahn (1978) found that the lower one goes on the socioeconomic scale of occupations, by and large, the more evidence of strain—physical and emotional—one finds. A study noted by Sarata (1979) suggests that decisions made by state and federal authorities can increase job stress and interpersonal conflict in a program when those decisions threaten the program's integrity. As graduate programs always exist within a larger university and school system structure, thus these external forces certainly do have an impact upon all of the individuals within the program.

Personal Factors

Much of the research on stress shows that there is an interaction between the individual and the environment. As simply stated by Pervin (1967), it is the fit between the characteristics of the individual and the environment that is important in satisfaction rather than the characteristics of the individual or the environment alone. Mowrer (1973) explains the diathesis-stress hypothesis by stating that whether a stress response will be manifested or not is a function, not of one but two factors, namely, a predisposition or susceptibility and a stressful situation. Therefore, personal or individual sources of stress need to be considered. In addition, people do
differ in their vulnerability to stress and in their coping effectiveness. An analysis of burnout in graduate students would be incomplete if these individual factors were not considered. Research on stress and coping suggests that certain personality traits may influence one's susceptibility. Motivations, expectations, and commitment are some other personality factors that influence stress responses. More transient feelings that are inherent to graduate work, such as self-doubt and reactions to events, will also be considered under the heading of personal sources of stress as these types of feelings are very much an individual response. The influence of physical health, both in causing stress and as indicating the presence of stress will be discussed.

**Personality Variables.** The first influences to be explored are those particular traits which a student would arrive at graduate school already endowed with. This differentiation refers more to personality "types" and will include such variables as ego strength and locus of control. Several authors (Kahn et al., 1964; Lazarus, 1966; Perlman & Hartman, 1979) have found that one's defensive operation, such as a propensity to react with neurotic anxiety, would determine an individual's ability to cope effectively with stress, or alternatively, to experience more strain and tension than others. Ego.
strength is another variable discussed in the literature. Lazarus (1966) relates ego resources to the ability to cope with stressful situations. Gann (1979) found that high ego level individuals were more positively oriented toward their clients. Mowrer (1973) states that ego strength enters into an equation which determines whether a given amount of stress will or will not lead to serious distress or incapacity.

Another individual characteristic that makes one more susceptible to stress is the "Type A" personality (Cherniss, 1980). These individuals seem prone to a striving, competitive, time-pressured lifestyle, while others are characteristically more calm and relaxed in their approach to life. Further, these individuals experience more stress-related illness, especially coronary heart disease. Cherniss (1980) also notes that physicians, dentists, psychologists, and other helping professionals are more prone to Type A than those in other fields. He does not see this finding as surprising, since successful completion of the long and arduous schooling necessary for professional credentials requires precisely those traits associated with the Type A syndrome. Mowrer (1973) appears to agree with this: "Ambitious, upward-mobile individuals show an exceptionally high incidence of breakdown, depression, and suicide. Such persons
Graduate Burnout

would obviously experience stresses in their lives greater than those of non-mobile individuals....It is well known that in villages in India where the caste system prevailed there is a very low incidence of this type of psychopathology" (p. 265). Cherniss (1980) notes that individuals with an "external" locus of control are more prone to learned helplessness, and therefore, possibly to stress, while Kahn et al. (1964) has associated introversion with stress reactions. Finally, Kahn et al. (1964) found that flexible individuals were more likely to experience role conflict in work organizations, and they reacted to role conflict with more manifest anxiety, tension, and worry than did rigid individuals.

There are other personality variables that a student arrives at school with that are not necessarily traits. An individual's motivation and expectations may predetermine that individual's ability to cope with stressful events. Cherniss (1980) and Lazarus (1966) suggest that motivational characteristics can influence an individual's stress response. In one of the earliest studies of reaction to stress, Grinker and Spiegel (1945) found that unrealistic, neurotic motivation was a major cause of negative stress reactions in combat fliers. In one of the first papers to refer to burnout in the human services, Freudenberger (1975) suggested that the "dedicated and
committed" are the most prone to burnout. Daley (1979) and Perlman and Hartman (1979) found that an individual's unrealistic expectations led to "reality shock" when they entered the setting. Certain interpersonal styles were associated with stress and burnout as well (Cherniss, 1980; Gann, 1979; Lazarus, 1966).

**Feeling Responses.** In their study on graduate student styles of coping, Kjerulff and Wiggins (1976) obtained a picture of two very different types of graduate students and their responses to stress.

"Students who tend to be less competent professionally tended to be intrapunitive for academic failure situations and extrapunitive when encountering interpersonal problems. In addition, this type of student is extremely anxious when confronted with academic problems. He is not all anxious in purportedly stressful situations for which there is no clear source of blame (e.g., losing subjects in an experiment). On the other hand, the more competent type of student is characterized primarily by trans-situational anxiety. This type of student does not blame either himself or others when confronted with difficult situations. It might be that the generalized anxiety this type of student feels is in fact channeled into more constructive paths when he attempts to cope with various kinds of stress." (p. 253).

A very common reaction to stress is a "crisis of competence" (Cherniss, 1980). Taylor (1975) observes that "even the most competent student cannot always avoid the buried mines of self-doubt, which is the deadliest enemy of all" (p. 37). Kahn et al. (1964) as well as Pines and Solomon (1977) have confirmed the role self-
concept plays in the dehumanization of burnout. Similarly, Pines and Kafry (1978) found that mental health professionals who were lower in self-esteem tended to be more dissatisfied with their work and rated their job performance lower than others. Finally, Lazarus (1966) suggested that an individual's sense of vulnerability and susceptibility to stress are increased by feelings of inadequacy. Other personal responses, such as feelings of anger (Perlman & Hartman, 1979), feelings of tension (Baird, 1969), dependency problems (Butler, 1972), and use of humor (Maslach, 1979) have been seen as stress reactions or as coping mechanisms.

Other Factors. A common correlate of burnout is the deterioration of physical well-being or the occurrence of somatic complaints (Cherniss, 1980; Freudenberger, 1975; Hinkle, 1974; Maslach, 1979; Perlman & Hartman, 1979). Maslach and Jackson (1978) found that "younger workers scored higher on two measures of burnout than did older workers. The pattern for sex was more complicated. Females scored higher in 'emotional exhaustion' and lower on 'personal accomplishment', two dimensions of burnout measured by the Maslach Burnout Inventory; however, males scored higher on 'depersonalization', a third dimension used in the scale. This suggests that male and female workers in human service fields may not
differ in the amount of stress experienced in the job but
do cope with it differently" (p. 367).

Description of the Present Study

There has been a lot written about the phenomenon of
"burnout," a mere sampling of which has been presented here.
From these various articles, a comprehensive description of
the concept of "burnout" has emerged. "Burnout" appears to
be a transactional process consisting of prolonged stress-
ful situations and the individual's stress reaction to it
as well as the interaction between the two. The stressful
situations can include any chronic pressures, whether
mental, physical, or emotional. The initial stress reac-
tions can include coping responses, increased productivity,
anxiety, confusion, psychosomatic symptoms, and so on. If
the external stressors continue and the coping responses do
not alleviate the perceived stressfulness, burnout can then
occur. At this point, one sees emotional and physical ex-
haustion, increasingly serious somatic complaints, decreased
productivity, major personality changes, and so on. Various
authors (Cherniss, 1979, 1980; Freudenberger, 1974, 1975;
Maslach, 1976, 1976a, 1979; Maslach & Pines, 1977; Pines &
Maslach, 1978), when conducting their studies, have been
able to identify this phenomenon of "burnout," but usually
only within a narrow definition of it and not within this
more comprehensive transactional description. They may look at the signs and symptoms of burnout while overlooking a variety of components that could be involved in the phenomenon, such as the organizational, social, and personal factors outlined above. Obviously, it is indicated that the development of the research in this area should proceed in this direction.

Also noted from the above literature review, it is obvious that graduate student settings frequently are very stressful. Changes in work, finances, living conditions, school, and social relationships are all sources of stress for students in addition to the stresses resulting from the rigor of the program itself (Gojlerud, 1980). The loss of self-esteem, the loss of companionship, the inability to motivate oneself, and the inability to act out an adult role have all been noted as major sources of stress for students (Taylor, 1975). The reactions of graduate students to these various stresses are similar to the indicators of burnout: physical and emotional exhaustion, high drop-out rates, negativism and cynicism, and lowered personal standards. From all of this evidence, it does appear that graduate students do "burn out." Therefore, there appears to be an indication here that stress in graduate students warrants further investigation.

However, at present, there are no adequate methods
available to measure the more comprehensive construct of
"burnout," nor are there any oriented toward a graduate
student population. The best instrument available at this
time is the Maslach Burnout Inventory (Maslach & Jackson,
1981). However, there are several problems with this
inventory. First, in its measurement of "burnout," the
Maslach Burnout Inventory (MBI) predominantly explores
personal factors and some of the signs and symptoms of
burnout. Obviously, from the literature reviewed above,
this could be seen as an inadequate approach. A more com-
prehensive, multi-faceted approach that included organiza-
tional, social, and other factors would be more useful for
identifying and exploring the phenomenon of burnout.
Second, the MBI was expressly developed for the human
service provider and is, therefore, not very useful for
other populations. Yet, these other populations, such as
graduate students, do "appear" to burn out and a measure
needs to be developed for these groups. A more generalized
inventory would be able to assist in the identification of
populations vulnerable to "burnout" and in the alleviation
of some of these stresses. Therefore, it is obvious that
a new instrument, although it could be based on the MBI,
would need to be constructed in order to adequately measure
a multi-faceted and transactional concept of "burnout" as
it is evidenced in a population other than that of the
human service provider. This is the express purpose of the present study.

Therefore, for the present study, a new questionnaire was developed from relevant instruments already available in the literature. It was hoped that in this way the organizational, social, and personal aspects of burnout would be more fully explored. These measures were: 1) the Maslach Burnout Inventory (Maslach & Jackson, 1981), 2) Moos' Community-Oriented Programs Environment Scale (1974), 3) Kann's Job-Satisfaction Index, his Confidence-in-Organization Measure, and his Job-Related Tension Index (Kann et al., 1964), and, 4) Cherniss' list of "Signs and Symptoms of Job Stress and Worker Burnout in Human Service Programs" (1980, p. 17). In addition, a number of items were constructed by the author based on rational considerations and the relevant literature as reviewed here in order to explore those areas not covered by these other measures. As a population of graduate students was chosen for the validation sample, therefore, each of these instruments were altered slightly in order to be applicable to graduate students. It should be noted that, obviously, this entire procedure essentially transforms these measures into a new and untried instrument. The questionnaire itself will be discussed in specific detail in the Materials section below.
At this point, it should be noted that the choice of graduate students as a population was a nonrandom and convenient one. However, the choice was warranted as the purpose of the present study is to test an instrument and not so much to describe a general population. Obviously, generalizability beyond the sample itself will be extremely limited. Nevertheless, the prolific research on stress in graduate students, noted above, points to the validity of graduate students as subjects.
CHAPTER II

METHOD

Subjects

The subjects for this study were drawn from the 61 full-time and the 26 part-time graduate students in the Department of Psychology at the University of Windsor. A total of 45 questionnaires were completed and returned. Of these, 33 respondents were female (73%) and 12 were male. The mean age was 28.47 years, ranging from 23 to 46 years of age. Twenty-two respondents were single, while 19 were married; two were involved in a common-law relationship, and one was separated. Of the 20 individuals who saw themselves as married, 15 of their spouses were employed and three were students. The mean number of children was 2.44, ranging from zero to two.

Forty of the respondents were enrolled as full-time students. Five were part-time students. Nineteen were working at the M.A. level, while 26, of course, were working at the Ph.D. level. Twenty-three of the students were in the Clinical Division, leaving 22 students falling in the remaining Divisions (Child-clinical psychology = 6; Human clinical neuropsychology = 3; Human development = 4; Social psychology = 6; Applied social psychology = 3; Other = 1). Eight students were in their
first year of study, nine were in their second year, six
were in their third year, five were in their fourth year,
ten were in their fifth year, and seven were beyond five
years of study.

The treatment of all participants was in accordance
with the ethical standards of the Ontario Psychological
Association. All subjects read and signed a Consent Form
(Appendix A) before participating in the study. The sub-
jects were reassured that information specific to a student
would be protected at all times from all faculty members
and fellow students.

**Procedures**

After reading and signing the Consent Form, each
participant was required to fill out the Graduate Student
Attitude Survey (Appendix B). In addition, the verbal in-
structions listed in Appendix C were read to each partici-
pant, before filling out the questionnaire. The question-
aire, and a copy of the instructions, was mailed to those
students unable to come into the department. They were
requested to complete the questionnaire in private without
any assistance and asked not to discuss it with other
graduate students. After two-, three-, and four-week
intervals, follow-up letters were mailed to those subjects
who failed to return the questionnaire.
Materials

Part A: Background Information

This section has 14 questions which require the subject to provide information about demographic variables as well as information about their graduate program and their present status in it. All of the questions in this section were generated by the author. Two questions are of special note. In one question (#13), the subject is asked what specific requirements he has completed up to the present time in order to discover the existence of critical time periods associated with "burnout." Another question (#14) explores the amount of time that is spent in school-related activities versus non-school-related activities.

Part B: Opinion Survey

This section has 40 questions drawn from Moos' Community-Oriented Programs Environment Scale (COPEES) (Moos, 1974), which assesses the psychosocial environments of transitional community-oriented psychiatric treatment programs. Although developed for treatment settings, it was felt that COPEES would be applicable for this study because of its organizational stress orientation. In addition, few changes had to be made to the scale for application to this study.

Moos (1969) suggests that COPEES was developed in order
to measure the general conceptualization of "environmental press." The press of the environment, as the individual in the environment perceives it, tends to define what he must adapt to and cope with and indicates the direction his behavior should take if he is to be adequately satisfied within the environment. Press may refer either to the objective ecological aspects of the environment or to the subjective perception which each person has of the events in which he takes part. Press relates directly to the stressful situations noted above under organizational, social, and personal factors in stress.

Wherever possible, the questions were drawn from the Short Form items provided by Moos (1974). Unfortunately, only about half of them were directly applicable. Several simple changes had to be made in the wording of some of the questions. The word "student" was substituted wherever the word "member" appeared. Only one item was altered substantially from "members who break rules here are punished for it" to "students who break informal or formal 'rules' here are somehow punished for it." Instead of a true-false response scale, a five-point Likert-type scale was included.

Moos (1972) divided COPES into 10 subscales. A brief description of each follows: 1) Program Involvement; measures how actively involved members are in their program, 2) Support; measures the extent to which members are en-
Graduate Burnout

44

couraged and supported by staff and other members, 3) Spontaneity; measures the extent to which the program encourages members to act openly and express their feelings openly, 4) Autonomy; assesses how self-sufficient and independent members are encouraged to be in making their own decisions, 5) Practical Orientation; assesses the extent to which the member's environment orients him towards preparing himself for leaving the program, 6) Personal Problem Orientation; measures the extent to which members are encouraged to discuss their personal problems, 7) Anger and Aggression; measures the extent to which a member is encouraged to argue with members and staff, 8) Order and Organization; measures how important planning and organization is in the program, 9) Program Clarity; measures the clarity of goal expectations and rules, and, 10) Staff Control; assesses the extent to which the staff determines rules.

Part C: Attitudes Survey

This section consists of 32 items, 14 of which were taken from Kahn's organizational stress measures (Kahn et al., 1964), and the remainder were constructed completely by the author. The principle objectives of Kahn and the other researchers were:

1) To explore the extent of role conflict and role ambiguity in industrial positions;
2) To identify the kinds of situations which
Graduate Burnout

are characterized by a high degree of conflict or ambiguity;

3) To determine the association between such conditions and several broad criteria of personal adjustment and effectiveness;

and,

4) To explore the extent to which such effects are modified by certain characteristics of the individual and of his interpersonal relations." (p-7)

These objectives are very similar to those of the present study, although with a different population. In addition, few questions had to be altered severely and they were already set up in a Likert-type response pattern.

In a subsection termed "Statement Section," seven questions were drawn from Kahn's Job-Satisfaction Index and Confidence-in-Organization Measure (Kahn et al., 1964). These items were to be used as a discriminant validity measure, i.e., to determine if "burnout" in graduate students is different from dissatisfaction with their work.

The other seven Kahn items were drawn from the Job-Related Tension Index. These items deal with ambiguity, role conflict, autonomy, workload, and social relationships.

Eighteen items were constructed by the author based on rational considerations and the relevant literature. Predominantly, these questions are attempting to identify social sources of stress or support or are looking at the sources of stress from the graduate work itself. These items were developed in order to fully determine the influences of
these specific factors as these areas seem to be neglected in these other tests. All in all, the Attitudes Survey subsection explores all aspects of the organizational as well as of the social sources of stress in graduate students as noted above in the literature review.

Part D: Feelings Survey

The 36 items in this section include Maslach's Burnout Inventory (Maslach & Jackson, 1981) in addition to a few selected items taken from Cherniss' list of "Signs and Symptoms of Job Stress and Worker Burnout in Human Service Programs" (1980, p. 77). Although there are a number of drawbacks to the MBI, which have been noted above, there are still some advantages. As she has administered this inventory to a large number of people (n=1,025) and to a wide variety of people (nurses, teachers, social workers, probation officers, counsellors, mental health workers, and agency administrators), the strength of this particular measure becomes apparent. It is hoped that by the addition of a few items from Cherniss' list (1980), the generalizability and the applicability to the present population will be fortified. The second advantage to using the MBI was the ability to compare our results to the statistics presented by Maslach and Jackson (1981), as this is really the only normative data available on burnout. A third advantage, of course, was that the questions were already
in a Likert-type format and could be easily transformed to apply to graduate students.

Several changes in the wording of the items of the MBI had to be made in order to make them more applicable to graduate students. Generally, the word "recipients" was changed to "the people around here," to "the people in this department," to "graduate work," or to "workload" as it was applicable. One question caused some difficulty: "I feel similar to my recipients in many ways." It could not be ascertained if this item was referring to a feeling of being lower in an authoritarian relationship or to the feeling of degradation that patients supposedly usually feel. Therefore, two items replaced this single item in the Feelings Survey.

The final 10 items in the Feelings Survey were taken from Cherniss' list (1960). They include more somatic complaints, in addition to physical and emotional withdrawal from an individual's work and fellow workers. Fortunately, these signs and symptoms were rather general and were easily expanded to fit a graduate student population.

**Statistical Analysis**

An intercorrelation of every item with every other item was performed in order to identify those items that
overlapped too greatly with other items in the questionnaire. A Spearman correlation coefficient was used here. These identified items were then eliminated from the questionnaire. Then a stepwise regression analysis was performed on the remaining items in relation to total scores on the MBITGS. This type of analysis retains only those items which contribute significantly to the variance of the MBITGS scores. In this way, those items not contributing significantly to the variance can be eliminated from the questionnaire, unless found to warrant inclusion on some other basis. The remaining items will then make up the revised questionnaire for any future research.

At this point, Spearman's rank correlation coefficient ($r_s$) will be used to determine the linear relationship between the total accumulated scores on the MBITGS and each of the remaining items, in addition to the Background Information items. However, there are several items in the questionnaire that are genuinely dichotomized: gender, marital status, spouse's status, registration, division, level, Att28, and Att30. In these cases, a Spearman's rank correlation coefficient is inappropriate and another statistical test is called for. The most appropriate test for this analysis would be the point-biserial correlation coefficient ($r_{pbs}$). A $t$-test will then be applied to
determine the significance of each point-biserial correlation coefficient. The significance level was set at $\alpha = .01$ for all statistical tests in this study.
CHAPTER III

RESULTS

Part A: Background Information

From the results of the Spearman and the point-biserial correlations for each of the 31 hypotheses for this section, only one variable, Age, proved to have a significant relationship with scores on the MBITGS (r = .434).

Stepwise Regression Analysis

The first step in this analysis was an intercorrelation of every item in the survey with every other item. In this way, those items that are redundant can be identified and eliminated. Of a total of 62 individual items, 17 items were eliminated in this way: Opin05, Opin12, Opin14, Opin21, Opin26, Opin31, Opin33, Opin39, Att07, Att14, Att17, Att19, Att20, Att26, Att32, Peel29, and Peel29.

A stepwise regression analysis was then performed on the 65 remaining items in order to discover those items that contribute significantly to the variance of the MBITGS. From the regression analysis, it is indicated to eliminate a further 21 items from the questionnaire, since these items do not contribute significantly to the variance. However, it was decided to eliminate only 15 items for a number of reasons, i.e., items having a significant relationship with scores on the MBITGS, and so on. Specifically,
these 15 items are: Opin01, Opin03, Opin06, Opin11, Opin16, Opin17, Opin23, Opin24, Opin25, Opin30, Opin32, Opin35, Att18, Att22, and Att25. Therefore, a total of 32 items were eliminated from the three sections of the questionnaire while 50 items were retained (exclusive of the items in the MBITGS itself). The revised 50-item version of the questionnaire is presented in Appendix D.

From the 50 remaining items, several were found to have a significant relationship with scores on the MBITGS. These items will be identified below.

Part B: Opinion Survey

The results of the Spearman correlations for each of the remaining 20 items for this section are presented in Table 1 below. Five items proved to have a significant relationship with scores on the MBITGS beyond the .01 alpha level: "Students often gripe," (r = .614) "People are always changing their minds here," (r = .452) "The program rules are clearly understood by the students," (r = .461) "Staff sometimes don't show up for their appointments with students," (r = .460) and, "This is a very well organized program" (r = .451).

Part C: Attitudes Survey

The results of the Spearman correlations for each of the remaining 17 items in this section are presented in Table 2 below. In this section, eight items were found to
TABLE 1
Spearman Correlation Coefficients
of 20 Remaining "Opinion Survey" Items

<table>
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<tr>
<th>Item #</th>
<th>Item</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Students often gripe.</td>
<td>.614*</td>
</tr>
<tr>
<td>9</td>
<td>People are always changing their minds here.</td>
<td>.482*</td>
</tr>
<tr>
<td>39</td>
<td>The program rules are clearly understood by the students.</td>
<td>.461*</td>
</tr>
<tr>
<td>2</td>
<td>Staff sometimes don't show up for their appointments with students.</td>
<td>.460*</td>
</tr>
<tr>
<td>18</td>
<td>This is a very well organized program.</td>
<td>.451*</td>
</tr>
<tr>
<td>22</td>
<td>Students seldom help each other.</td>
<td>.329</td>
</tr>
<tr>
<td>19</td>
<td>If the program is changed, staff always say why.</td>
<td>.326</td>
</tr>
<tr>
<td>4</td>
<td>The staff almost always act on students' suggestions.</td>
<td>.289</td>
</tr>
<tr>
<td>40</td>
<td>Staff make &amp; enforce all the rules here.</td>
<td>.283</td>
</tr>
<tr>
<td>28</td>
<td>Students are rarely kept waiting when they have appointments with staff.</td>
<td>.273</td>
</tr>
<tr>
<td>8</td>
<td>Some students look messy.</td>
<td>.267</td>
</tr>
<tr>
<td>38</td>
<td>Things are very disorganized around here.</td>
<td>.246</td>
</tr>
<tr>
<td>29</td>
<td>Staff rarely give students a detailed explanation of what the program is about.</td>
<td>.216</td>
</tr>
<tr>
<td>15</td>
<td>There is relatively little emphasis on teaching students solutions to practical problems.</td>
<td>.209</td>
</tr>
<tr>
<td>34</td>
<td>The staff tend to discourage criticism.</td>
<td>.184</td>
</tr>
<tr>
<td>10</td>
<td>It is important to carefully follow the program rules here.</td>
<td>.127</td>
</tr>
<tr>
<td>27</td>
<td>Students here rarely argue.</td>
<td>.121</td>
</tr>
<tr>
<td>13</td>
<td>Students say anything they want to the staff.</td>
<td>.088</td>
</tr>
<tr>
<td>37</td>
<td>Students sometimes argue openly with each other.</td>
<td>.051</td>
</tr>
<tr>
<td>20</td>
<td>Students can call staff by their first names.</td>
<td>.037</td>
</tr>
</tbody>
</table>

* = p < .01
TABLE 2

Spearman Correlation Coefficients
of 17 Remaining "Attitude Survey" Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Item</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>I feel that I have too heavy of a workload, one that I can't possibly finish in an ordinary workday.</td>
<td>.608*</td>
</tr>
<tr>
<td>16.</td>
<td>I think that the amount of work that I have to do may interfere with how well it gets done.</td>
<td>.540*</td>
</tr>
<tr>
<td>15.</td>
<td>I do not know what my supervisor thinks of me, how he evaluates my performance.</td>
<td>.477*</td>
</tr>
<tr>
<td>23.</td>
<td>I have adequate social or recreational outlets in my off-hours.</td>
<td>.468*</td>
</tr>
<tr>
<td>11.</td>
<td>Differences in theoretical orientation seem to interfere with my relationships with my colleagues.</td>
<td>.456*</td>
</tr>
<tr>
<td>8.</td>
<td>I feel that I'm putting too much pressure on myself to complete my requirements.</td>
<td>.450*</td>
</tr>
<tr>
<td>12.</td>
<td>The physical environment here is incompatible with a good learning experience.</td>
<td>.441*</td>
</tr>
<tr>
<td>21.</td>
<td>I am able to &quot;leave the work at the office&quot; so that it does not interfere with my personal life.</td>
<td>.409*</td>
</tr>
<tr>
<td>24.</td>
<td>I have a positive, constructive relationship of mutual respect with my supervisor.</td>
<td>.392</td>
</tr>
<tr>
<td>3.</td>
<td>I feel that my work is very challenging and intellectually stimulating.</td>
<td>.358</td>
</tr>
<tr>
<td>2.</td>
<td>I feel that I am always as clear as I would like to be about what I have to do in my work.</td>
<td>.340</td>
</tr>
</tbody>
</table>

* = $p < .01$
### TABLE 2 (cont'd)

Spearman Correlation Coefficients of 17 Remaining "Attitudes Survey" Items

<table>
<thead>
<tr>
<th>Item #</th>
<th>Item</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>I feel dissatisfied with the opportunities for personal growth &amp; development.</td>
<td>.266</td>
</tr>
<tr>
<td>4</td>
<td>I feel unable to influence my immediate supervisor's decisions and actions that affect me.</td>
<td>.226</td>
</tr>
<tr>
<td>1</td>
<td>I feel accepted and/or recognized by professional colleagues beyond this department.</td>
<td>.189</td>
</tr>
<tr>
<td>13</td>
<td>The people closest to me only add to the pressure I am under at school.</td>
<td>.171</td>
</tr>
<tr>
<td>10</td>
<td>The people closest to me seem to resent the amount of time that I spend with my graduate work.</td>
<td>.160</td>
</tr>
<tr>
<td>9</td>
<td>I feel that there is not enough pressure from the department on me to complete my requirements.</td>
<td>.025</td>
</tr>
</tbody>
</table>

* = α < .01
have a significant relationship with scores on the MBITGS beyond the .01 alpha level: "I feel that I have too heavy of a workload, one that I can't possibly finish in an ordinary workday" \( (r = .606) \), "I think that the amount of work that I have to do may interfere with how well it gets done" \( (r = .540) \), "I have adequate social or recreational outlets in my off-hours" \( (r = .468) \), "I do not know what my supervisor thinks of me, how he evaluates my performance" \( (r = .477) \), "Differences in theoretical orientation seem to interfere with my relationships with my colleagues" \( (r = .456) \), "I feel that I'm putting too much pressure on myself to complete my requirements" \( (r = .450) \), "The physical environment here is incompatible with a good learning experience" \( (r = .441) \), and, "I am able to 'leave the work at the office' so that it does not interfere with my personal life" \( (r = .409) \).

**Statement Section.** Of the seven questions in this section, two items were eliminated by the stepwise regression analysis and two items resulted in coefficients beyond the .01 alpha level. These items are: "Would you advise a friend to come here?" \( (r = .420) \), and, "How much does your work give you a chance to do the things you are best at?" \( (r = .429) \). The results of the Spearman and the point-biserial correlations for the five remaining items in this section are presented in Table 3 below.
TABLE 3
Spearman and Point-Biserial Correlation Coefficients
of Remaining Items, in Statement Section (Discriminant Items)

<table>
<thead>
<tr>
<th>Item #</th>
<th>Item</th>
<th>$r_s$</th>
<th>$r_{pbs}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>28.</td>
<td>If you had a chance to do the same kind of work, but in another university, would you stay here?</td>
<td></td>
<td>.250</td>
</tr>
<tr>
<td>29.</td>
<td>How do you feel about the progress that you have made in this</td>
<td></td>
<td>.309</td>
</tr>
<tr>
<td></td>
<td>program?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27.</td>
<td>How do you like working in this program?</td>
<td></td>
<td>.360</td>
</tr>
<tr>
<td>30.</td>
<td>Would you advise a friend to come here?</td>
<td></td>
<td>.420*</td>
</tr>
<tr>
<td>31.</td>
<td>How much does your work give you a chance to do the things you are</td>
<td></td>
<td>.429*</td>
</tr>
<tr>
<td></td>
<td>best at?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* = $p < .01$
Part D: Feelings Survey

The results of the Spearman correlations for each of the eight remaining items in this section are presented in Table 4 below. Four items were found to have a significant relationship beyond the .01 alpha level: "I feel angry and resentful" ($r=.600$), "I have problems with insomnia" ($r=.474$), "I feel that I avoid talking to other students about my work" ($r=.415$), and, "The longer I am in graduate school, the more I feel that I am following the departmental requirements to the letter, no more, no less" ($r=.591$).

Three additional Spearman correlations were performed in this section, all three resulting in significant relationships with scores on the MBITGS. These three comparisons were: Item #11 -- "I feel burned out from my work" ($r=.885$), the total of the 10 Cherniss items ($r=.553$), and, the total overall score of the MBITGS and the Cherniss list ($r=.957$). These findings are not very surprising.
<table>
<thead>
<tr>
<th>Item #</th>
<th>Item</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>I feel angry and resentful.</td>
<td>.600*</td>
</tr>
<tr>
<td>31</td>
<td>I have problems with insomnia.</td>
<td>.474*</td>
</tr>
<tr>
<td>32</td>
<td>I feel that I avoid talking to other students about my work.</td>
<td>.415*</td>
</tr>
<tr>
<td>30</td>
<td>The longer I am in graduate school, the more I feel that I am following the departmental requirements exactly to the letter, no more, no less.</td>
<td>.391*</td>
</tr>
<tr>
<td>36</td>
<td>I try to spend as much time as possible away from the department.</td>
<td>.364</td>
</tr>
<tr>
<td>33</td>
<td>I have colds or the flu.</td>
<td>.343</td>
</tr>
<tr>
<td>35</td>
<td>I use alcohol or drugs to help me cope with day-to-day stress.</td>
<td>.241</td>
</tr>
<tr>
<td>34</td>
<td>When reasonable changes are made in this department, I feel that I readily go along with them.</td>
<td>.187</td>
</tr>
</tbody>
</table>

* $p < .01$
CHAPTER IV

DISCUSSION

General Considerations

When one examines the results from the first section, background information, one sees that, surprisingly, only one of the variables, Age, resulted in a significant relationship with scores on the MBITGS. This sparsity is certainly contrary to the literature and will be discussed further below. Although there were very few significant variables found here, some interesting observations can still be made. The finding that younger graduate students scored significantly higher on a measure of burnout than did older students certainly is consistent with the literature (Maslach & Jackson, 1978). As it does appear that younger students and those in their first few years of graduate school may be more prone to experienced burnout, perhaps there is an indication for the availability of better support systems for these particular students.

From the results of the Opinion Survey section, several variables appear to be important in relation to experienced burnout as measured by scores on the MBITGS. The Program Clarity subscale appears to have the most influence here, thus substantiating the views of Butler.
Graduate Burnout

(1972) and Baird (1966) on the effects of ambiguity in the organizational structure on burnout. The Support subscale also appears to be rather important, thus indicating the importance of encouragement and support by faculty and other students in the alleviation or avoidance of burnout. This finding is consistent with the viewpoint of several authors (Baird, 1969; Daley, 1979; Domenico & Tulkin, 1976; Goplerud, 1980; Perlman & Hartman, 1979). The Involvement subscale, how involved a person feels in the program, proved to be a rather good indicator of scores on the MBITGS. This finding supports Cherniss' (1980) and Lazarus' (1966) suggestion that motivational characteristics can influence an individual's stress response.

Finally, the Practical Orientation subscale, which assesses the extent to which the program orientates the students towards preparing themselves for leaving the program, also appeared to be of some importance in relation to experienced burnout.

Several observations can be made from the results of the Attitude Survey section. Consistent with the findings from the Opinion Survey section, role ambiguity was found to have a highly significant relationship with scores on the MBITGS. Work overload also correlates with experienced burnout. This finding is consistent with the work of several authors (Cherniss, 1980; Daley, 1979; Kahn, 1978;
Graduate Burnout

Maslach, 1976; Pines & Kafry, 1978; Shinn, 1979). In addition, the support of family and friends was found to be very important in influencing experienced burnout. This finding is consistent with the literature reviewing the role of the spouse in alleviating stress (Baird, 1966; Knox, 1970; Maslach & Jackson, 1975; Mechanic, 1962). However, these results point to social and recreational outlets as being much more important than one would assume from the literature reviewed here. Obviously, any further research in the area of burnout needs to explore the individual's social life to a greater extent. From the results of this section, relationships with fellow students and with the faculty also appear to be rather important. Of course, this finding is consistent with the literature (Baird, 1969; Cherniss, 1960; Daley, 1979; Domenico & Tulkin, 1976; Goplerud, 1980).

There were a few more observations from the results of the Attitude Survey section that are rather interesting. The indication that boring and routine work added to experienced burnout is consistent with several authors' findings (Cherniss, 1980; Daley, 1979; Perlman & Hartman, 1979; Pines & Kafry, 1978). Internal pressure to succeed was also found to add to experienced burnout. This feature is often associated with the "Type A" personality who shows an exceptionally high incidence of breakdown,
depression, and suicide (Mowrer, 1973). Interestingly, Mechanic (1962) found that a poor physical work environment correlated with greater stress in graduate students. This finding was corroborated in the present study. Of note, the questions exploring the formalization of rules, centralization of authority, and lack of autonomy did not prove to have a significant relationship with experienced burnout. This finding is inconsistent with the literature (Daley, 1979) and will be discussed further below.

Finally, several observations can be made from the Cherniss list of items. First, the feeling of anger and resentment is directly tied in with experienced burnout, much the same way as the item in the Opinion Survey, "Students often gripe," probably is. Certainly, feeling responses such as anger have been seen as stress reactions in the literature (Perlman & Hartman, 1979). Second, withdrawal from school, both in feeling and in commitment, appears to have a relationship with experienced burnout as measured by scores on the MBITGS. This finding also supports the findings from the literature (Cherniss, 1980; Lazarus, 1966). Finally, physical correlates with burnout such as insomnia and frequent colds were corroborated in this section. This finding is consistent with both Freudenberger's (1974, 1975) and Cherniss' (1980) theories about burnout.
Unexpected Findings

The most unexpected finding in this study was the lack of statistically significant results in the Background Information section. As noted above, this outcome is contrary to the literature reviewed here. Maslach and Jackson (1981), as well as others, have found gender, age, marital status, and number of children to contribute to experienced burnout; yet only age correlated here. There appear to be several explanations for this phenomenon of non-significance. First, it would seem reasonable that the small size of our sample (N=45) may be responsible for the mixed results seen. Due to the small number of individuals involved, the variance may be too great to allow for a significant relationship. Perhaps, as the sample size becomes larger, these variables may then present themselves as more important to experienced burnout.

In addition, it is possible that other factors, such as those explored in the remainder of the questionnaire, may have a greater importance in the incidence of burnout than the factors in this section. Most of the questions in the Background Information section explore concrete and specific information while the remainder of the items explore attitudes and perceptions. In addition, the questions in the first section explore more personal details
while the remainder of the items are more concerned with organizational and social factors. It is quite reasonable to assume that the causes of experienced burnout in graduate students would lie more in the organizational climate of the department than in the number of children an individual has.

Obviously, there is no definitive explanation for the sparcity of significant results in the Background Information section. This issue will have to remain as an enigma to be clarified in future research. It should be noted here that because of this ambiguity, all of these questions should be retained in any further investigations of the present questionnaire.

There is an indication in the literature that also was not substantiated in this first section; that the longer an individual has been at a particular setting, the greater his or her level of burnout (Maslach & Jackson, 1978, 1981; Maslach & Pines, 1977; Pines & Kafry, 1978). A possible explanation is that there is a curvilinear relationship with these variables so that the present statistic is simply unable to discover significance. It seems reasonable that individuals first entering graduate school would be under a great deal of stress due to the numerous and severe changes in their lives. This proposal is consistent with Goplerud's (1960) viewpoint. Once
established at school, however, the felt stress may diminish. Then, at some point in their progression through the requirements, a more insidious type of burnout may set in, possibly closer in definition to Pines and Kafry's (1978) "tedium." Those individuals who are still attempting to complete their requirements far past the expected time schedule would logically be candidates for this type of burnout.

Although corroborated in other sections of the questionnaire, social interaction with the faculty and with colleagues was not significantly related to experienced burnout in the first section, although this is certainly indicated by the literature (Baird, 1969; Cherniss, 1980; Goplerud, 1980; Pines & Maslach, 1978; Shinn, 1979). It is possible that quality of interaction with the faculty and fellow students is more important than pure quantity of interaction, although this indication is contrary to Goplerud's (1980) assumptions. This issue obviously warrants further investigation.

As noted above, the results of the Statement Section in the Attitude Survey (discriminant validity section) were contrary to the predictions of the study. Closer examination of these seven items is warranted. Two of the seven items explored attitudes towards supervisors. As seen in other areas of the questionnaire, this factor is
Graduate Burnout

66
directly tied into burnout and should not therefore be included in any discrimination analysis. Two possible explanations of the remaining items are evident. Either these items are inadequate in differentiating between burnout and dissatisfaction or there is no appreciable difference between burnout and dissatisfaction as measured by the MBITGS. This particular issue is discussed to greater length below. This issue cannot be definitively interpreted here and will have to remain unclear until further investigations are carried out. At that time, a different measure could be included in addition to these five items from Kann's Job-Satisfaction Index (Kann et al., 1964).

From the Results section, several inconsistencies become obvious in regard to the stepwise regression analysis. Specifically, 31 items were included in the stepwise analysis even though they did not attain significance with scores on the MBITGS. Conversely, six items were not included in the stepwise analysis even though they did attain a significant relationship with scores on the MBITGS. In the former situation, it is possible that these variables only become a significant influence on burnout when they interact with other items in the questionnaire. This action would be similar to that of a catalyst, where a reaction is seen only when a certain element is added to a prime situation. It would therefore be very important to include these
moderating variables in any measure of experienced burnout in order to further explore these interactions. Since these "secondary" relationships do not appear to have been considered in the literature, these further analyses are even more relevant.

In the latter situation, it is possible that these omissions are demonstrating the inherent difference between correlation and variance. Those items that correlate with scores on the MBITGS may have such a direct relationship that there may not be sufficient variance within the item to be included in the stepwise regression analysis. Nevertheless, both types of questions could be included in a questionnaire in order to fully differentiate the concept of burnout.

Theoretical Implications

The overall impression one gets from reviewing the literature on burnout is that the symptoms consist of de-personalization and exhaustion, and that it appears predominantly in human service providers (Maslach & Jackson, 1981). Organizational factors are pointed to as the main causes of burnout while social and personal factors are neglected although certainly not overlooked entirely. The present study serves to validate some of these claims while negating others.
All in all, there was a general substantiation of the burnout concept in the present study. It is obvious from the present study that burnout, as based on the literature, can be found in populations other than that of the human service provider. Here, the concept of burnout was predominantly consistent with the literature but with a different population, i.e., the graduate student. This finding points to the future application of burnout to new and interesting populations. However, it is possible that the construct of "burnout" is actually more akin to that of "tedium" when exploration is taken beyond the human service provider. This possibility certainly was not established definitively in the present study, but the question was raised to be explored in future research.

At this point, an exploration of the question, "What is being measured here—is it 'burnout' or is it something else?" is indicated. In her work, Maslach has shown burnout to be a combination of symptoms: emotional exhaustion, lack of involvement, a lost sense of personal accomplishment, and a feeling of depersonalization (Maslach & Jackson, 1981). In the same study, she has attempted to show that "burnout" is different from mere work dissatisfaction. Maslach also states that "burnout" is
different from "tedium," which has been defined as "a sense of despair, feelings of hopelessness, a negative self-concept, and negative attitudes toward work, life, and other people" (Kanner, Kafry, & Pines, 1978, p. 36).

As can be seen, there is a certain amount of inherent overlap among this terminology. Also, Maslach's definition of burnout has only been utilized in relation to the human service provider. Beyond this group, therefore, her definition becomes questionable. For example, the opinion that tedium is a more generalizable concept is consistent, of course, with that of Pines and her colleagues (Pines & Kafry, 1978; Kanner, Kafry, & Pines, 1976; Pines, Kafry, & Etzion, 1979). In addition, issues such as depersonalization certainly do not appear to be relevant with the present population of graduate students. Therefore, it becomes obvious that, for the present study, we do not know if what is being measured can be called "burnout," "tedium," or mere "dissatisfaction." Certainly, the use of some outside criterion is definitely indicated for any future research.

Contrary to the literature reviewed here, organizational factors did not play such an integral role in experienced burnout as measured by scores on the MHTGS. That is not to say, however, that they played no role at
all. The clarity of the program rules, the feeling of autonomy, and the sense of organization were found to have a significant positive relationship with scores on the MBITGS.

In addition, it appears that social factors play a more important role than would otherwise be gleaned from the literature. This study appears to substantiate Goplerud's (1980) focus on the quality of faculty-student interaction as a critical dimension in the graduate milieu. Cherniss' (1979) finding that differences in theoretical orientation among peers could lead to a breakdown in these relationships, and therefore, increase the felt stress was also substantiated here. The effects of a student's social life on burnout appears from this study to be very important. Adequate leisure time, adequate social hours, numbers of friends, and ability to leave their work at the office are all either affected by or affect burnout itself. This last finding points out the neglect in the literature of the social influences on the alleviation or aggravation of burnout.

Finally, the personal factors in burnout did not appear to hold up under the present scrutiny. Specific personal details, such as marital status, stage in program, and so on, did not have a significant relationship with burnout as measured by scores on the MBITGS. This finding
is contrary to the literature, as noted above. Nevertheless, some previously overlooked personal factors were found to be important in the examination of burnout. Freudenberg (1974, 1975) was the first to coin the phrase "burnout." He described this construct as predominantly a feeling state and described many psychosomatic symptoms. Since then, the concept of "burnout" has evolved to the depersonalization and emotional exhaustion of Maslach (1976, 1978; Maslach & Jackson, 1978, 1981), while the physical complaints and feelings states, as described by Freudenberg, have been left by the wayside. Cherniss (1980), however, feels that these factors still play an important role in burnout. Obviously, this opinion was validated to some extent here.

All in all, the picture on gets from the present study is of a more balanced concept of burnout. Organizational factors are downplayed, social factors are given a more important role, while some personal factors are reinstated. Thus, in this way, burnout is seen as much more of an interaction among many variables and not as a simplistic concept. This more balanced concept of burnout also has greater applicability and generalizability to a larger variety of populations and situations.
Extensions to Further Research

From this study, it is obvious that several changes need to be made in the present questionnaire before any further research can be conducted with it. A revised version which includes several alterations is presented in Appendix D.

This revised questionnaire is now divided into three sections rather than four: Background Information, Opinion Survey, and Feelings Survey. In the Background Information section, several items were simplified while four specific items were eliminated: date, I.D. number, spouse's status, and division. Extensive changes were made to the question about degree requirements and to the question about time involved in school activities. In the former, the two items about core curriculum courses and internship hours for the M.A. were eliminated in addition to the request for an evaluation of the requirements. In the question about time involved in school activities, percentage of time per week was changed to number of hours per week; only the actual amount of time spent is now asked for; and, the items about taking care of the necessities of life and other activities were eliminated.

The Opinion Survey section now includes the 50 remaining items from Tables 1-4 above: the 20 items from the Opinion Survey, the 17 items from the Attitudes Survey, the
Graduate Burnout

73

five items from the Statement Section, and the eight items from the Cherniss List in the Feelings Survey. All of these items are now placed on an identical 7-point Likert-type scale with a continuum from Don't Agree At All to Agree 100%. In addition, the statement clarifying the term "supervisor" which was originally read to the subjects (Appendix C) is now included at the beginning of this section. The five items from the original Statement section were changed from interrogatory to first-person statements. For example, "Would you advise a friend to come here?" was changed to, "I would advise a friend to come here."

The Feelings Survey contains the items from the Maslach Burnout Inventory Transformed for Graduate Students. One item was eliminated in order to make the questionnaire more applicable to individuals other than those at the University of Windsor: "I feel similar to the clients at the Psychological Services Centre in many ways." Here too, all of the items were placed on the same 7-point Likert-type scale.

The next stage in the development of this new questionnaire should encompass two aspects: expansion of the size and type of subject pool and expansion of the validity and reliability measures. A factor analysis of both the MBITGS and of the remaining items would be very informative. However, a much larger sample size would be needed for this analysis. In addition, as noted above, the present sample is a small, nonrandom, and convenient
one with a very limited generalizability. Therefore, in any future research subjects should have a more varied background than in the present study. In other words, other universities and other departments, such as human kinetics and so on, could be included in this expanded sample.

Test-retest reliability measures should be included in the research design of any further investigations of this questionnaire. External validation can possibly be investigated through the correlation of scores on the MBITGS with behavioral ratings made independently by a person who knows the individual well. These individuals could be spouses of the subject, fellow students, faculty, or even secretaries in the department. The ratings could be either through a 10-point, "How burned out does this person appear to you?," scale or a more complicated behavioral evaluation scale. Also, MBITGS scores could be correlated with the presence of certain characteristics that would be expected to contribute to experienced burnout, i.e., size of workload required by the department. In addition, a direct comparison could be made with the findings from Maslach's own study (Maslach & Jackson, 1981). Finally, a comparison of scores on the MBITGS and the discriminant validity measure, noted above, would assist in the rejection of the notion that burnout is
simply a synonym for dissatisfaction with one's work.

Conclusions
The major conclusion from the present study is that the questionnaire, with several alterations, is a viable research instrument and further validation and investigation would be warranted. Second, the general concept of "burnout" appears to have been corroborated. However, there are some slight modifications seen in regard to the role organizational, social, and personal factors play. The third conclusion from the present study is that the present sample of graduate students do appear to experience "burnout," which points to two possibilities: that graduate students as a group may experience burnout, and, that populations other than the human service provider experience this phenomenon. All three of these conclusions indicate the need for further investigation and clarification of the "burnout" issue.
CONSENT FORM

The purpose of this study is to investigate the stresses that graduate students are under and their feelings and attitudes about their work and life in general. Your help in this matter would be greatly appreciated.

If you decide to participate in this study, you will have to fill out a questionnaire consisting of 160 questions about your background, your general attitudes, and your work attitudes. This should only take approximately forty-five minutes of your time.

You should be aware that you may be asked at a much later date to fill out this questionnaire again. For this reason, your student number is requested for identification purposes. Your name will not appear at any time during the course of the study or during the reporting of the study. The questionnaires themselves with your student numbers will be protected at all times from any and all faculty members or fellow students.

There is no risk foreseen for any student involved in this study.

I, the undersigned:

1) have read the details of the experimental procedure, and,

2) understand the purpose of this experiment and requirements and risks, if any, which are placed on me as explained by the investigator.

I willingly consent to participate in this study and realize that I can withdraw from the study at any time.

I also agree to permit data or photographic records from the above study to be used in research publications or for teaching purposes.

SIGNED: ____________________________

DATED: ____________________________
APPENDIX B

THE UNIVERSITY OF WINDSOR
GRADUATE STUDENT ATTITUDE SURVEY

Please be assured that all information will remain strictly confidential and anonymous. Your honesty in responding to each of the questions is very important. Please consider each of the questions carefully before responding.

Thank you for your cooperation.

PART A

BACKGROUND INFORMATION

1. Date: ___ ; 19___
   month year

2. My student I.D. Number is ________

3. My gender is: (1) Male   (2) Female

4. My age is: ___ years

5. Marital status: (1) single
   (2) married
   (3) common-law relationship
   (4) separated
   (5) divorced
   (6) widowed
   (7) other

6. Number of children: __

7. My spouse is: (1) employed
   (2) a student
   (3) both
   (4) other
   (5) not applicable

8. I am enrolled in the department of: (1) Psychology
   (2) other

9. I am registered as a: (1) full-time student
   (2) part-time student
   (3) no longer a student
   (4) other
10. I am presently in the following division:
   (1) Clinical psychology
   (2) Child-clinical psychology
   (3) Human clinical neuropsychology
   (4) Human development
   (5) Social Psychology
   (6) Applied social psychology

11. I am presently working at: (1) the M.A. level
    (2) the Ph.D. level
    (3) not applicable.

12. I have been working at the graduate level in this department for:
    (1) less than one year
    (2) between one and two years
    (3) between two and three years
    (4) between three and four years
    (5) between four and five years
    (6) more than five years

13. Below are a number of general requirements for the Ph.D. degree. For each item, please respond to the statements according to what's true for you. Then, evaluate the requirement according to how much value it has been/or will be to you in furthering your personal and professional development.

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<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>No value</td>
<td>Not much value</td>
<td>Undecided</td>
<td>Some value</td>
<td>A great deal of value</td>
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For example:
I have completed $\frac{2}{3}$ of my $\frac{2}{3}$ statistics courses.
Evaluation: 1 2 3 4 5

If you had completed both of your required statistics courses, you would fill the first part in as above. If you felt that it was of some value to you, but that it was not going to help with what you would do when you finished school, you would circle 4, as above.

Proceed:

a) I have completed ___ of the ___ (0) core curriculum courses.
Evaluation: 1 2 3 4 5

b) I have completed ___ of the ___ (0) required courses for my division.
Graduate Burnout

Evaluation: 1 2 3 4 5

c) I have completed ___ of the ___ practicum or internship hours
required at the M.A. level for my division.

Evaluation: 1 2 3 4 5
d) I have completed ___ of the ___ internship hours required at the
Ph.D. level for my division.

Evaluation: 1 2 3 4 5
e) I presently have a title for my M.A. thesis. (yes/no)
If you do not have a title, how much difficulty are you having
finding one? (A great deal/ some difficulty/ none at all)
If you do have a title, how much difficulty did you have finding
one? (A great deal/ some difficulty/ none at all)
I have proposed my M.A. thesis. (yes/no)
I have defended my M.A. thesis. (yes/no)

Evaluation: 1 2 3 4 5

13. f) I have completed the written requirements of my Specialties
exams. (yes/no)
I have completed the oral requirements of my Specialties exams.
(yes/no)

Evaluation: 1 2 3 4 5
g) I presently have a title for my Ph.D. dissertation. (yes/no)
If you do not have a title, how much difficulty are you having
finding one? (A great deal/ some difficulty/ none at all)
If you do have a title, how much difficulty did you have finding
one? (A great deal/ some difficulty/ none at all)
I have proposed my Ph.D. dissertation. (yes/no)
I have defended my Ph.D. dissertation. (yes/no)

Evaluation: 1 2 3 4 5

14. Below are a number of activities that you could be involved in in a
typical week. For each item, think back to what you did during a typical
week for the past two to three months. Then, first indicate approximately
what percentage of time that you actually spent involved in that activity.
Second, indicate approximately what percentage of time that you would
like to spend involved in that activity. Third, indicate approximately
what percentage of time that you feel that the other graduate students as a
whole would like to see you involved in the activity. Fourth, indicate
approximately what percentage of time that you feel the faculty as a whole
would like to see you involved in the activity.
For example:

Travelling to and from school.

Actual: 5%  Graduate students: 2%
Would like to: 2%  Faculty: 2%

If you spend 5% of your time walking to and from school in a week, but would like to spend less time, you would answer the question as above. If you feel that other graduate students as a whole and the faculty members as a whole would also like you to spend less time walking to and from school, you would answer the question as above.

Proceed:

a) Either attending courses or working on course assignments.
   Actual:  x  Grad:  x
   Would like to:  x  Faculty:  x

b) Working at a practicum or internship setting.
   Actual:  x  Grad:  x
   Would like to:  x  Faculty:  x

c) Working on your thesis, specialties, or dissertation (includes reading, attending meetings, writing, etc.)
   Actual:  x  Grad:  x
   Would like to:  x  Faculty:  x

14. d) Dealing with course-associated clients, making process notes, or being involved in supervision for those clients.
   Actual:  x  Grad:  x
   Would like to:  x  Faculty:  x

e) Working on my teaching or research assistantship.
   Actual:  x  Grad:  x
   Would like to:  x  Faculty:  x

f) Performing administrative functions (such as attending committee meetings, etc.)
   Actual:  x  Grad:  x
   Would like to:  x  Faculty:  x

g) Doing other school-related activities (such as reading journals, attending colloquiums, etc.)
   Actual:  x  Grad:  x
   Would like to:  x  Faculty:  x

h) Working on research for potential publications.
   Actual:  x  Grad:  x
   Would like to:  x  Faculty:  x
1) Socializing or talking with other students (either in the department or elsewhere).
   Actual: _____%  Grads: _____%
   Would like to: _____%  Faculty: _____%

j) Socializing or talking with faculty members (either in the department or elsewhere).
   Actual: _____%  Grads: _____%
   Would like to: _____%  Faculty: _____%

k) Other activities
   Actual: _____%  Grads: _____%
   Would like to: _____%  Faculty: _____%

l) Working at a job unrelated to school.
   Actual: _____%  Grads: _____%
   Would like to: _____%  Faculty: _____%

m) Taking care of the necessities of life (such as eating, sleeping, etc.)
   Actual: _____%  Grads: _____%
   Would like to: _____%  Faculty: _____%

n) Leisure activities.
   Actual: _____%  Grads: _____%
   Would like to: _____%  Faculty: _____%

15. Approximately how many hours per week are you involved altogether in school-related activities (for example—all of the hours involved in items a) to h) in question 14, above)?
    ________ hours.

PART B

OPINION SURVEY

There are 40 statements in the following pages. They are statements about the program and the people in it. You are to decide which statements are true of your program and which are not, using the following scale:

1 2 3 4 5
Strongly Disagree Undecided Agree Strongly
Disagree

For example:

All of the students in this program have blue eyes.

1 2 3 4 5

If you felt that the statement was not at all true, that most of the students in this program had brown eyes, then you would circle the number 1 as above.

Proceed:
1. Students put a lot of energy into what they do around here.
   1  2  3  4  5
2. Staff sometimes don't show up for their appointments with students.
   1  2  3  4  5
3. Students tend to hide their feelings from one another.
   1  2  3  4  5
4. The staff almost always act on students' suggestions.
   1  2  3  4  5
5. There is relatively little emphasis on making specific plans for finishing this program.
   1  2  3  4  5
6. Staff are interested in learning students' feelings.
   1  2  3  4  5
7. Students often gripe.
   1  2  3  4  5
8. Some students look messy.
   1  2  3  4  5
9. People are always changing their minds here.
   1  2  3  4  5
10. It is important to carefully follow the program rules here.
    1  2  3  4  5
11. This is a lively place.
    1  2  3  4  5
12. Staff have relatively little time to encourage students.
    1  2  3  4  5
13. Students say anything they want to the staff.
    1  2  3  4  5
14. Very few students have any responsibility for the program here.
    1  2  3  4  5
15. There is relatively little emphasis on teaching students solutions to practical problems.
    1  2  3  4  5
16. Personal problems are openly talked about.
    1  2  3  4  5
17. Students often criticize or joke about the staff.
    1  2  3  4  5
18. This is a very well organized program.
    1  2  3  4  5
19. If the program is changed, staff always say why.
    1  2  3  4  5
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<td></td>
<td>20. Students can call staff by their first names.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td></td>
<td>21. The students are proud of this program.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td></td>
<td>22. Students seldom help each other.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td></td>
<td>23. It is hard to tell how students are feeling here.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td></td>
<td>24. Students here are very strongly encouraged to be independent.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td></td>
<td>25. Students here are expected to demonstrate continued concrete progress toward their goals.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>26. Students are rarely encouraged to discuss their personal problems here.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td></td>
<td>27. Students here rarely argue.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td></td>
<td>28. Students are rarely kept waiting when they have appointments with staff.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td></td>
<td>29. Staff rarely give students a detailed explanation of what the program is about.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>30. Students who break informal or formal &quot;rules&quot; here are somehow punished for it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td></td>
<td>31. A lot of students just seem to be passing time here.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td></td>
<td>32. There is relatively little sharing among the students.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td></td>
<td>33. Students are careful about what they say when staff are around.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td></td>
<td>34. The staff tend to discourage criticism from students.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td></td>
<td>35. Students are taught specific new skills in this program.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td></td>
<td>36. The students rarely talk with each other about their personal problems.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>37. Students sometimes argue openly with each other.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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</table>
38. Things are sometimes very disorganized around here.  
1 2 3 4 5

39. The program rules are clearly understood by the students.  
1 2 3 4 5

40. The staff make and enforce all the rules here.  
1 2 3 4 5

PART C  

ATTITUDES SURVEY

On the following pages there will be a number of statements about the program and the people in it. You are to decide which statements are true for you and which are not, using the following scale:

1 2 3 4 5 6 7
Don't Agree Strongly Disagree Undecided Agree Strongly Agree
At All Disagree Somewhat Somewhat Agree 100%

Proceed:

1. I feel accepted and/or recognized by professional colleagues beyond those in this department.  
1 2 3 4 5 6 7

2. I feel that I am always as clear as I would like to be about what I have to do in my work.  
1 2 3 4 5 6 7

3. I feel that my work is very challenging and intellectually stimulating.  
1 2 3 4 5 6 7

4. I feel unable to influence my immediate supervisor's decisions and actions that affect me.  
1 2 3 4 5 6 7

5. I feel that I have too heavy a workload, one that I can't possibly finish in an ordinary workday.  
1 2 3 4 5 6 7

6. I feel dissatisfied with the opportunities for personal growth and development in this department.  
1 2 3 4 5 6 7

7. I feel that I may not be liked and accepted by the people I work with.  
1 2 3 4 5 6 7

8. I feel that I'm putting too much pressure on myself to complete my requirements.  
1 2 3 4 5 6 7

9. I feel that there is not enough pressure from the department/my division on me to complete my requirements.  
1 2 3 4 5 6 7
10. The people closest to me seem to resent the amount of time that I spend with my graduate work.
   1 2 3 4 5 6 7
11. Differences in theoretical orientation seem to interfere with my relationships with my colleagues.
   1 2 3 4 5 6 7
12. The physical environment here is incompatible with a good learning experience.
   1 2 3 4 5 6 7
13. The people closest to me only add to the pressure I am under at school.
   1 2 3 4 5 6 7
14. I do not know just what the people I work with expect of me.
   1 2 3 4 5 6 7
15. I do not know what my supervisor thinks of me; how he evaluates my performance.
   1 2 3 4 5 6 7
16. I think that the amount of work that I have to do may interfere with how well it gets done.
   1 2 3 4 5 6 7
17. I do not seem to have as many friends as I used to.
   1 2 3 4 5 6 7
18. I receive professional and personal support from my fellow students in the program.
   1 2 3 4 5 6 7
19. I do not spend enough time with my family and friends.
   1 2 3 4 5 6 7
20. I must spend an excessive amount of time on routine, repetitive work.
   1 2 3 4 5 6 7
21. I am able to "leave the work at the office" so that it does not interfere with my personal life.
   1 2 3 4 5 6 7
22. I have no opportunity to directly participate in the development of policies and procedures in this program.
   1 2 3 4 5 6 7
23. I have adequate social or recreational outlets in my off-hours.
   1 2 3 4 5 6 7
24. I have a positive, constructive relationship of mutual respect with my supervisor.
   1 2 3 4 5 6 7
25. If it were not for my family and friends, I do not think that I would be able to get through graduate school.
   1 2 3 4 5 6 7
Statement Section

26. How good would you say your supervisor is at dealing with the people he supervises?
   (a) He is poor at handling people.
   (b) He is not very good at dealing with people; does other things better.
   (c) He is fairly good at dealing with people.
   (d) He is good at this—better than most.
   (e) He is very good at this—it's his strongest point.

27. How do you like working in this program?
   (a) It's not a very good place.
   (b) It's all right, but there are many things that should be changed.
   (c) It's a fairly good place, but quite a few things should be changed.
   (d) It's a good place, but there are a few things that should be changed.
   (e) It's a very good place—wouldn't change anything.

28. If you had a chance to do the same kind of work, but in another university, would you stay here?
   (a) I would prefer to go to the other university.
   (b) I would stay in this university.

29. How do you feel about the progress that you have made in this program?
   (a) I have made little or no progress.
   (b) I have made some progress, but it should have been much better.
   (c) I have made quite a lot of progress, but it should have been better.
   (d) I have made a great deal of progress.

30. Would you advise a friend to come here?
   (a) I would not advise a friend to come here.
   (b) I would advise a friend to come here.

31. How much does your work give you a chance to do the things you are best at?
   (a) No chance at all
   (b) Very little chance
   (c) Some chance
   (d) Fairly good chance
   (e) Very good chance
32. Taking it all in all, how well would you say your supervisor does his job?
   ___ (a) He does a poor job.
   ___ (b) He does a fair job
   ___ (c) He does a good job
   ___ (d) He does a very good job
   ___ (e) He does an excellent job

PART D

FEELINGS SURVEY

On the following pages are several statements of school-related feelings you might have. Please read each statement very carefully and decide if you ever feel this way about your graduate school experience. If you have never had this feeling, circle the number marked "NEVER". However, if you have experienced this feeling, indicate HOW OFTEN you feel it by circling the appropriate number on the 6-point scale.

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

For example:
 . I feel depressed at work.
   0  1  2  3  4  5  6

If you occasionally feel depressed at work (for example, a few times a month), you would circle the number 3 as above.

Proceed:

1. I feel emotionally drained from my work.
   0  1  2  3  4  5  6

2. I feel used up at the end of the workday.
   0  1  2  3  4  5  6

3. I feel similar to an undergraduate student in many ways.
   0  1  2  3  4  5  6

4. I feel personally involved with other students' problems.
   0  1  2  3  4  5  6
5. I feel fatigued when I have to get up in the morning and have to face another day as a student.
   0 1 2 3 4 5 6

6. I feel uncomfortable about the way I have treated some of the people around this department.
   0 1 2 3 4 5 6

7. I can easily understand how some people around here may feel dissatisfied.
   0 1 2 3 4 5 6

8. I feel that I treat some of the people around here as if they were impersonal "objects".
   0 1 2 3 4 5 6

9. Working around this department all day is really a strain for me.
   0 1 2 3 4 5 6

10. I feel that I deal effectively with the problems that come up around here.
    0 1 2 3 4 5 6

11. I feel burned out from my work.
    0 1 2 3 4 5 6

12. I feel I'm positively influencing other people's lives through my work.
    0 1 2 3 4 5 6

13. I've become more callous toward people since I came here.
    0 1 2 3 4 5 6

14. I worry that this work is hardening me emotionally.
    0 1 2 3 4 5 6

15. I feel very energetic.
    0 1 2 3 4 5 6

16. I feel frustrated by my work.
    0 1 2 3 4 5 6

17. I feel I'm working too hard on my graduate work.
    0 1 2 3 4 5 6

18. I don't really care what happens to some people around here.
    0 1 2 3 4 5 6

19. My workload puts too much stress on me.
    0 1 2 3 4 5 6

20. I can easily create a relaxed atmosphere for myself in my work.
    0 1 2 3 4 5 6

21. I feel exhilarated after working intensely on my graduate work.
    0 1 2 3 4 5 6

22. I have accomplished many worthwhile things while at graduate school.
    0 1 2 3 4 5 6
23. I feel like I'm at the end of my rope.
   0 1 2 3 4 5 6
24. I deal with emotional problems that arise from my work very calmly.
   0 1 2 3 4 5 6
25. I feel blamed for some of the problems around here.
   0 1 2 3 4 5 6
26. I feel similar to the clients at the Psychological Services Centre in many ways.
   0 1 2 3 4 5 6
27. I feel angry and resentful.
   0 1 2 3 4 5 6
28. I feel that what I do at graduate school doesn't seem to matter much any more.
   0 1 2 3 4 5 6
29. I feel that I am counting the days until I get out of graduate school.
   0 1 2 3 4 5 6
30. The longer I am in graduate school, the more I feel that I am following the departmental requirements exactly to the letter, no more, no less.
   0 1 2 3 4 5 6
31. I have problems with insomnia.
   0 1 2 3 4 5 6
32. I feel that I avoid talking to other students about my work.
   0 1 2 3 4 5 6
33. I have colds or the flu.
   0 1 2 3 4 5 6
34. When reasonable changes are made in this department, I feel that I readily go along with them.
   0 1 2 3 4 5 6
35. I use alcohol or drugs to help me cope with day-to-day stress.
   0 1 2 3 4 5 6
36. I try to spend as much time as possible away from the department.
   0 1 2 3 4 5 6

THANK YOU FOR PARTICIPATING!
APPENDIX C

Statement Read to Each Subject

"As you answer the following questionnaire, you will run across the term supervisor. I would like to clarify this term for you. Here, I mean that single individual who presently has the greatest influence on you, whether he or she is your academic advisor, thesis advisor, therapy supervisor, or otherwise. This individual does not have to be a member of the University of Windsor faculty however. Therefore, choose a single individual and keep that person in mind whenever you answer a question referring to your supervisor."
APPENDIX D

(Revised)

THE UNIVERSITY OF WINDSOR

GRADUATE STUDENT ATTITUDE SURVEY

Please be assured that all information will remain strictly confidential and anonymous. Your honesty in responding to each of the questions is very important. Please consider each of the questions carefully before responding.

Thank you for your cooperation.

PART A

BACKGROUND INFORMATION

1. My gender is: (1) Male (2) Female
2. My age is: ___ years
3. Marital status: (1) single (2) married (3) common-law relationship (4) separated (5) divorced (6) widowed
4. Number of children: ___
5. I am enrolled in the department of: (1) Psychology (2) Other
6. I am registered as a: (1) full-time student (2) part-time student
7. I am presently working at: (1) the M.A. level (2) the Ph.D. level
8. I have been working at the graduate level in this department for: (1) less than two years (2) between two and four years (3) more than four years
9. Below are a number of general requirements for the Ph.D. degree. For each item, please respond to the statements according to what's true for you.

For example:

I have completed ___ of my ___ (#) statistics courses.

If you had completed both of your required statistics courses, you would fill in the item as above.

Please:

a) I have completed ___ of the ___ (#) required courses for my division.

b) I have completed ___ of the ___ internship hours required for my degree.

c) I presently have a title for my M.A. thesis. (yes/no)
   If you do not have a title, how much difficulty are you having finding one? (A great deal/ some difficulty/ none at all)
   If you do have a title, how much difficulty did you have finding one? (A great deal/ some difficulty/ none at all)
   I have proposed my M.A. thesis (yes/no)
   I have defended my M.A. thesis (yes/no)

d) I have completed the written requirements of my Specialties exams. (yes/no)
   I have completed the oral requirements of my Specialties exams. (yes/no)

e) I presently have a title for my dissertation. (yes/no)
   If you do not have a title, how much difficulty are you having finding one? (A great deal/ some difficulty/ none at all)
   If you do have a title, how much difficulty did you have finding one? (A great deal/ some difficulty/ none at all)
   I have proposed my dissertation (yes/no)
   I have defended my dissertation (Yes/no)
10. Below are a number of activities that you could be involved in in a typical week. For each item, think back to what you did during a typical week for the past two to three months. Then, indicate approximately how many hours per week that you actually spent involved in that activity. For example:

5 hrs Travelling to and from school.

If you spend five hours per week walking to and from school, you would answer the question as above.

Proceed:

__ hrs a) Either attending courses or working on course assignments.

__ hrs b) Working at a practicum or internship setting.

__ hrs c) Working on your thesis, specialties, or dissertation (includes reading, attending meetings, writing, etc.)

__ hrs d) Dealing with course-associated clients, making process notes, or being involved in supervision for those clients.

__ hrs e) Working on my teaching or research assistantship.

__ hrs f) Performing administrative functions (such as attending committee meetings, etc.)

__ hrs g) Doing other school-related activities (such as reading journals, attending colloquia, etc.)

__ hrs h) Working on research for potential publications.

__ hrs i) Socializing or talking with other students.

__ hrs j) Socializing or talking with faculty members.

__ hrs k) Working at a job unrelated to school.

__ hrs l) In leisure activities.

11. Approximately how many hours per week are you involved altogether in school-related activities (for example— all of the hours involved in items a) to n) in question #10, above)?

__ hours.
PART 3

OPINION SURVEY

There are 50 statements in the following pages. The y are statements about the program and the people in it. You are to look back over the past two to three months and then decide which statements are true for you and which are not, using the following scale:

1 2 3 4 5 6 7

Don't Disagree Undecided Agree, Somewhat Agree Somewhat Agree Strongly Agree At All

For example:
All of the students in this program have blue eyes.

2 3 4 5 6 7

If you feel that the statement was not at all true for the past two to three months, that most of the students in this program had brown eyes, then you would circle the number 1 as above.

As you answer the following questionnaire, you will run-against the term supervisor. It should be clarified here. "Supervisor" refers to that single individual who presently has the greatest influence on you, whether he or she is your academic advisor, thesis advisor, therapy supervisor, or otherwise. This individual does have to be a faculty member in your department however. Therefore, choose a single individual and keep that person in mind whenever you answer a question referring to your supervisor.

Proceed:

1. Staff sometimes don't show up for their appointments with students.

1 2 3 4 5 6 7

2. The staff almost always act on students' suggestions.

1 2 3 4 5 6 7

3. Students often gripe.

1 2 3 4 5 6 7
Don't Strongly Disagree Undecided Agree Strongly Agree
Agree Disagree Somewhat Somewhat Agree 100%
At All

4. Some students look messy.
1 2 3 4 5 6 7

5. People are always changing their minds here.
1 2 3 4 5 6 7

6. It is important to carefully follow the program rules here.
1 2 3 4 5 6 7

7. Students say anything they want to the staff.
1 2 3 4 5 6 7

8. There is relatively little emphasis on teaching students solutions to practical problems.
1 2 3 4 5 6 7

9. This is a very well organized program.
1 2 3 4 5 6 7

10. If the program is changed, staff always say why.
1 2 3 4 5 6 7

11. Students can call staff by their first names.
1 2 3 4 5 6 7

12. Students seldom help each other.
1 2 3 4 5 6 7

13. Students here rarely argue.
1 2 3 4 5 6 7

14. Students are rarely kept waiting when they have appointments with staff.
1 2 3 4 5 6 7

15. Staff rarely give students a detailed explanation of what the program is about.
1 2 3 4 5 6 7

16. The staff tend to discourage criticism from students.
1 2 3 4 5 6 7

17. Students sometimes argue openly with each other.
1 2 3 4 5 6 7

18. Things are sometimes very disorganized around here.
1 2 3 4 5 6 7
19. The program rules are clearly understood by the students.
   1 2 3 4 5 6 7
20. The staff make and enforce all the rules here.
   1 2 3 4 5 6 7
21. I feel accepted and/or recognized by professional colleagues beyond those in this department.
   1 2 3 4 5 6 7
22. I feel that I am always as clear as I would like to be about what I have to do in my work.
   1 2 3 4 5 6 7
23. I feel that my work is very challenging and intellectually stimulating.
   1 2 3 4 5 6 7
24. I feel unable to influence my immediate supervisor's decisions and actions that affect me.
   1 2 3 4 5 6 7
25. I feel that I have too heavy of a workload, one that I can't possibly finish in an ordinary workday.
   1 2 3 4 5 6 7
26. I feel dissatisfied with the opportunities for personal growth and development in this department.
   1 2 3 4 5 6 7
27. I feel that I'm putting too much pressure on myself to complete my requirements.
   1 2 3 4 5 6 7
28. I feel that there is not enough pressure from the department/my division on me to complete my requirements.
   1 2 3 4 5 6 7
29. The people closest to me seem to resent the amount of time that I spend with my graduate work.
   1 2 3 4 5 6 7
30. Differences in theoretical orientation seem to interfere with my relationships with my colleagues.
   1 2 3 4 5 6 7
<table>
<thead>
<tr>
<th>Don't</th>
<th>Strongly Disagree</th>
<th>Undecided</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>At All</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. The physical environment here is incompatible with a good learning experience.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>32. The people closest to me only add to the pressure I am under at school.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>33. I think that the amount of work that I have to do may interfere with how well it gets done.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>34. I do not seem to have as many friends as I used to.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>35. I am able to &quot;leave the work at the office&quot; so that it does not interfere with my personal life.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>36. I have adequate social or recreational outlets in my off-hours.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>37. I have a positive, constructive relationship of mutual respect with my supervisor.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>38. I like working in this program.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>39. If I had a chance to do the same kind of work, but in another university, I would stay here.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>40. I feel that I have made a great deal of progress in this program.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>41. I would advise a friend to come here.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>42. My work gives me a very good chance to do the things that I am best at.</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>
Don't Strongly Disagree Undecided Agree Strongly Agree
At All Disagree Somewhat Somewhat Agree 100%

43. I feel angry and resentful.
   1 2 3 4 5 6 7

44. The longer I am in graduate school, the more I feel that I am following the departmental requirements exactly to the letter, no more, no less.
   1 2 3 4 5 6 7

45. I have problems with insomnia, frequently.
   1 2 3 4 5 6 7

46. I feel that I avoid talking to other students about my work.
   1 2 3 4 5 6 7

47. I have colds or the flu frequently.
   1 2 3 4 5 6 7

48. When reasonable changes are made in this department, I feel that I readily go along with them.
   1 2 3 4 5 6 7

49. I use alcohol or drugs frequently to help me cope with day-to-day stress.
   1 2 3 4 5 6 7

50. I try to spend as much time as possible away from the department.
   1 2 3 4 5 6 7

PART 7

FEELINGS SURVEY

On the following pages are 25 statements of school-related feelings you might have. Please read each statement carefully, think back over the past two to three months, and decide if you ever felt this way about your graduate school experience, and then circle the appropriate response.
For example:

I feel depressed at work.

1. 2 3 4 5 6 7
Don't Strongly Disagree Undecided Agree Strongly Agree
Agree Disagree Somewhat Somewhat Agree 100%
At All

If you feel that you don't really become depressed at work, you would circle the number 3 as above.

Proceed:

1. I feel emotionally drained from my work.
   1 2 3 4 5 6 7

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

3. I feel similar to an undergraduate student in many ways.
   1 2 3 4 5 6 7

4. I feel personally involved with other students' problems.
   1 2 3 4 5 6 7

5. I feel fatigued when I have to get up in the morning and have to face another day as a student.
   1 2 3 4 5 6 7

6. I feel uncomfortable about the way I have treated some of the people around this department.
   1 2 3 4 5 6 7

7. I can easily understand how some people around here may feel dissatisfied.
   1 2 3 4 5 6 7

8. I feel that I treat some of the people around here as if they were impersonal "objects".
   1 2 3 4 5 6 7

9. Working around this department all day is really a strain for me.
   1 2 3 4 5 6 7

10. I feel that I deal effectively with the problems that come up around here.
    1 2 3 4 5 6 7

11. I feel burned out from my work.
    1 2 3 4 5 6 7
Don't      Strongly Disagree      Undecided      Agree      Strongly Agree
Agree      Disagree      Somewhat      Somewhat      Agree      100%
At All

12. I feel I'm positively influencing other people's lives through my work.
   1  2  3  4  5  6  7

13. I've become more callous toward people since I came here.
   1  2  3  4  5  6  7

14. I worry that this work is haraening me emotionally.
   1  2  3  4  5  6  7

15. I feel very energetic.
   1  2  3  4  5  6  7

16. I feel frustrated by my work.
   1  2  3  4  5  6  7

17. I feel I'm working too hard on my graduate work.
   1  2  3  4  5  6  7

18. I don't really care what happens to some people here.
   1  2  3  4  5  6  7

19. My workload puts too much stress on me.
   1  2  3  4  5  6  7

20. I can easily create a relaxed atmosphere for myself in my work.
   1  2  3  4  5  6  7

21. I feel exhilarated after working intensely on my graduate work.
   1  2  3  4  5  6  7

22. I have accomplished many worthwhile things while at graduate school.
   1  2  3  4  5  6  7

23. I feel like I'm at the end of my rope.
   1  2  3  4  5  6  7

24. I deal with emotional problems that arise from my work very calmly.
   1  2  3  4  5  6  7

25. I feel blamed for some of the problems around here.
   1  2  3  4  5  6  7
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VITA AUCTORIS

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