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Plateauism and its effect on strain as moderated by career motivation and personal resources

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PLATEAUISM AND ITS EFFECT ON STRAIN AS MODERATED BY CAREER MOTIVATION AND PERSONAL RESOURCES

by

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PH.D. THESIS

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CHAPTER I

INTRODUCTION

The literature is filled with case histories and statistics of businesses having to reduce their work force. Mostly, this is the result of companies growing slowly, or not growing at all (Bardwick, 1983). While layoffs have been the product of unfavorable economic conditions in the past, increasingly they occur despite relative economic growth and low unemployment (Tomasko, 1987). Even the "blue-chip" organizations such as IBM, AT&T, General Motors, Unisys, Eastern Airlines, General Electric, American Motors are not immune to worker cutbacks (Isabella, 1987; Ropp, 1987; Ulrich, 1987).

Competition, both from abroad and locally, has fueled the emergence of various organizational plans, out of which restructuring has become one of four standard competitive survival strategies (Porter, 1987). The restructured organization is most frequently trimmed of excess middle management through such processes identified as "downsizing", "delayering", "outplacement", "derecruiting", "rightsizing", "resizing" and "demassing." As organizations downsize in order to increase business competitiveness and

reposition themselves for future growth, they often show huge savings. Companies such as Union Carbide and Du Pont have saved between $230 million and $250 million through downsizing procedures that, have in part, involved cutting sizable numbers of employees, including many managers. In the next 20 years, businesses are expected to have only half the number of levels of management while utilizing a third as many managers as today (Drucker, 1988).

This reduction in management positions combined with the declining rate of newly created jobs, will mean increased plateauism, whereby opportunities for hierarchical mobility will be severely limited. While plateauism has traditionally been viewed in terms of hierarchical movement, this viewpoint can be expanded to include factors such as lateral immobility, the lack of change in responsibilties or job content and personal factors as lack of skills or desire for promotions.

The shift in the American economy caused by the phenomenal rise of the service-oriented industries (where managerial hierarchy is flat/limited) paralleled by a decline in the matured, manufacturing industries (structurally complex, management-laden and hierarchically taller) has also contributed to the likelihood of plateauism (Stout, Slocum, & Cron, 1988; U.S. General Accounting Office Report, 1986). In fact the number of manufacturing jobs

have steadily decreased since 1970. While assembly line jobs currently account for twelve percent of the labor force, this figure is forecasted to be only five percent by the year 2000 (U.S. Department of Labor, 1986). With the decrease in lower level positions, there are accompanying expectations of cuts in managerial staff and by hiring freezes. The flattening trend, in conjunction with corporate restructuring has accounted for the elimination of over one million managerial and professional jobs between 1982 and 1987 (Little, 1989). Furthermore, technological innovations may close certain career paths while opening new avenues for which employees and managerial staff are unprepared (Abdelnor & Hall, 1981).

To compound the problem of plateauism in the U.S., the coincidence of two phenomena have further contributed to this situation. It involves the influx of baby-boomers (the largest segment of the population) competing for the limited managerial positions as these management jobs are being eliminated via downsizing and mergers. Even economic expansion will not alleviate the promotion problem because of the ever-increasing entry of well-educated individuals into the work-force (Bardwick, 1986). The competition for management posts among the baby-boom population has further ballooned with the introduction of Affirmative Action Programs and accompanying growth of non-traditional

entrants, namely women and minorities (Slocum, Cron, & Yows, 1987).

The plateauism "problem" has accelerated as a result of changes in the legal arena. The repeal of the "mandatory retirement age" requirement in tandem with longer life expectancies have perhaps retarded the creation of openings through a predictable source of turnover (Abdelnor & Hall, 1981; Evans & Gilbert, 1984; Sonnenfeld, 1978). The Age Discrimination in Employment Act of 1967 set legal retirement at the age of sixty-five and this was later extended to seventy in 1978. The 1986 amendment to the Age Discrimination in Employment Act has in effect removed the retirement cap, making mandatory retirement illegal. This enactment has translated into longer tenures for incumbents while clogging and preventing younger, promising candidates from progressing in the organizational hierarchy. It is estimated by the Congressional Budget Office that the elimination of the age cap will affect 800,000 workers out of which 200,000 will still be in the work force in the year 2000 (Little, 1989). It can be safely assumed that a sizable number of managers will be among the non-retirees.

Therefore the old adage should be altered to state that, "Nothing is certain except for death, taxes and the fact that most of us will plateau." To illustrate the breadth of the problem, a recent survey of seventy-two

functional and human resource managers revealed that sixty percent of their managers were plateaued (Near, 1980). This problem is compounded by the frustrated desires of the managers. First, people aspire to advance up the pyramid shaped organizational structure. Unfortunately qualified, aspiring candidates almost always outnumber the available positions, resulting in plateaued individuals. With the top of the pyramid rarely expanding and much of the middle segment downsizing, a disproportionately larger base of lower level managers exist, creating a much flatter organization. Lower level managers are waiting to advance to fewer existing positions. Second, the modified organizational structure has resulted in a wider, managerial span of control, with more people reporting to one manager and individuals having less opportunity for promotion (Warren, Ference, & Stoner, 1975). In what Bardwick (1986) calls "The rule of ninety-nine percent", she states that, "The number of positions at the highest decision-making level in every large and complex organization, is always less than one percent of the number of employees" (p. 36). While traditionally this condition/rule may have existed for a long time in companies having numerous layers and levels of management, the general belief among managers was that promotions were the rewards for good performance. Plateauism was hardly identified or perceived as being a

serious issue with negative ramifications. However, the current organizational and environmental climates in tandem with the factors previously mentioned, have made plateauism an issue to be considered.

Often plateauism is mistaken for or equated with the Peter Principle. While the Peter Principle reflects a condition in which people rise to their level of incompetence, plateauing occurs as able people are "restricted" from rising to the levels at which they can function competently (Peter & Hull, 1969). "Peter Principling" may have been prevalent during the economic boom periods of the 1950s and the 1960s. This was a period when the economy was expanding, managerial talent was in short supply, middle and upper management positions were in abundance and job security was prevalent. The plateauism phenomenon challenges frequent hierarchical mobility and the concept of job security as middle management jobs are eliminated and may very well be the albatross of the 1990s (Isabella, 1989).

Summary of Introduction

As a career related issue having organizational implications, plateauism is rapidly gaining prominence. Corporate restructuring, downsizing and mergers resulting from increased competion have contributed to leaner organizational hierarchies leading to the increasing

prevalence of plateauism. Shifts in the economy from manufacturing to service oriented industries have also contributed to the rising levels of plateaued individuals since service oriented organizations are generally flatter in their structure than are manufacturing organizations. This results in less layers/levels within the organization for individuals to be promoted to. Other causes of plateauism include the large segment of babyboomers competing with increased numbers of nontraditional aspirants (women and minorities) for limited managerial positions.

Need for the Study

This study will examine plateauism, its effect as a stressor (stress-inducing factor) and the manifestation of the resulting stress (strain) among middle and lower level managers (those most susceptible to plateauism), in organizations. Plateauism as a topic of study is quickly gaining in popularity since the seminal piece by Ference, Stoner and Warren (1977). Recent research reflects the importance and implications of the plateauism phenomenon: causes and sources of plateauism (Carnazza, Korman, Ference, & Stoner, 1981; Chao, 1990; Elsass & Ralston, 1989); individual and organizational factors that reflect aspirational, motivational, skill, selection, training and feedback deficiencies (Feldman & Weitz, 1988; Ference, Stoner, & Warren, 1977; Near, 1980; Slocum, Cron, & Yows,

1987); coupled with the adverse effects of plateauism such as psychiatric illness (Arthur & Gunderson, 1972); sense of failure and guilt (Bardwick, 1983, 1986; Schein, 1978); job dissatisfaction (Erickson, Pugh, & Gunderson, 1972); lowered effectiveness (Erickson, Edwards, & Gunderson, 1973); stress/burnout (Feldman & Weitz, 1980; Latack, 1984); increased absenteeism from work, greater health problems, withdrawal from work (Near, 1980); lower job performance (Near, 1985).

While some form of career plateauing has always existed, there is escalating concern as it becomes an increasingly common occurrence (Slocum, Cron, & Yows, 1987). Plateauism has a negative connotation in the minds of most managers because it seems to suggest failure and defeat and organizational culture appears to reinforce this belief (Jennings, 1970, 1971; Maccoby, 1976; Peter & Hull, 1969). Terms such as "deadwood", "shelf-sitter", "window gazer", "empty suit", "deadender" are commonly used to describe plateaued managers and it stems from a lack of understanding combined with the inability to manage this aspect of the career stage on an individual and organizational level. Organizations have lagged in terms of effective interventions to alleviate the negative effects of plateauism. Beyond the structural and demographical realities of why and how plateauism occurs (as discussed

earlier), lies a basic psychological issue; the need for success. Success, especially in corporate America, has been defined in terms of money, prestige and power. If greater levels of success are to be achieved by climbing the organizational ladder, then promotions become the vehicle for attaining success. While the definition of success may not be inherently wrong, the established set of expectations for young, success-oriented managers cannot be met as well today because of the various, changed circumstances. This is reflected in the shifting optimism among managers as observed in a survey in 1979 where seventy-five percent of middle managers felt confident about their continued advancement within the organization whereas the level of confidence regarding promotion opportunities fell to thirty-three percent by 1987 in a separate by similar survey (Little, 1989).

The career plateau has been cited as a factor that can lead to undesirable outcomes, having an impact on individuals and organizational well-being (Bardwick, 1983; Near, 1980, 1983). Researchers (Bardwick, 1986; Elsass et al., 1989; Latack, 1984; Little, 1989; Near, 1983), suggest a diverse spectrum of negative experiences among employees (discussed below) in the plateaued category. Plateaued workers have a tendency to get bored with their "dead-end" jobs and with work having a limited scope. They become

frustrated and angry as their climb up the corporate ladder becomes retarded or blocked altogether. Some plateaued men feel a sense of failure tinged with guilt over the lack of time spent with their families in the pursuit of their career. Women, on the other hand, may experience betrayal as they have traded marriage and family for a plateaued career. The implications here are that plateaued employees become angry, frustrated, stagnant, less motivated or involved in their work. Ultimately this anger and frustration will manifest itself in the form of increased individual stress/strain (felt stress), resulting in performance deterioration (Bardwick, 1986).

Ference et al. (1977), suggest that plateauism in itself may not be inherently bad because it tells us nothing about the individual's level of motivation, morale, productivity or any other behavioral attribute. Plateauism merely describes the career status that an individual is currently experiencing within the organizational structure. Individuals who are plateaued have the potential to be very productive. Results from recent studies (Carnazza et al., 1981; Ference et al., 1977; Veiga, 1981) show that not all managers are adversely affected by plateauism. Some managers continue to be productive inspite of their plateaued status (solid citizens) while others show a steady decline in performance when plateaued (deadwood). The

reasons for these differences need to be explored further and these will be detailed in Chapter II of this study. A logical starting point for the answers to questions regarding both the organization and individual differences, may lie: (1) in the awareness and understanding of the plateauism phenomenon; (2) effective career planning and management; (3) appropriate coping strategies; 4) support within the organization (Elsass et al., 1987; Greenhaus, 1987; Pearlin & Schooler, 1978). Steps should be taken to identify individuals who are potentially susceptible to the adverse effects of plateauism. Such timely action is critical to both individual and organizational well-being. These endeavors could facilitate the creation and successful implementation of intervention programs across organizations.

Identifying the causes of plateauism and the individuals susceptible to the negative effects of career plateauism are issues that warrants attention. However, the career plateauism process leading to strain is an equally important facet of this study. The model as depicited in Figure 1 needs to be explored in some detail and the effect of career plateauism on strain needs to be empirically tested. Thus far, the limited research findings in the area of plateauism are inconsistent and claims of plateauism-induced stress/strain are anecdotal. Researchers have

presented theoretical models of career stress but these have not been subjected to the rigors of empirical testing (Elsass & Ralston, 1989; Latack, 1989). Complementary to the issue of untested career stress/strain models, is the inconsistency of results in the area of plateauism. In certain studies, differences exist between plateaued and nonplateaued individuals on matters of: (1) career aspiration and inclination for advancement; (2) satisfaction with superiors; (3) job performance; (4) absenteeism (Near, 1983, 1985); (5) job history tenures (Near, 1983; Veiga, 1981). Yet, other studies examining similar issues, failed to discriminate between the two groups (plateaued versus non-plateaued) in the terms of: promotion aspirations; job performance (Carnazza et al., 1981), job satisfaction; perception of the work environment (Slocum, Cron, Hansen & Rawlings, 1985) and satisfaction with need fulfillment and organizational rewards (Evans & Gilbert, 1984). These contradictory findings have been attributed to the nature of career plateaus and the manner in which the career plateau measure has been operationalized in previous research studies.

Typically, plateauism has been operationalized using job tenure as a proxy. Even with this use of the job tenure operationalization, there is wide variance of opinions as to what constitutes the plateaued status. Particular studies

have accorded plateaued status on individuals with current job tenure of greater than five years (Bardwick, 1986; Slocum et al., 1985; Slocum et al., 1987; Stout, Slocum, & Cron, 1988); seven years in other studies (Gould & Penly, 1984; Veiga, 1981); or ten years in another case (Gerpott & Domsch, 1987). Other studies have used age as a cut-off point for plateaued/nonplateaued status ranging from 40 years old (Bardwick, 1986; Veiga, 1981); 45 years as cut-off for being plateaued in the study by Evans and Gilbert (1984), with the nonplateaued were determined as being 39 and 34 years old for assistant managers and superintendents respectively. Single-item ratings on the likelihood of future promotions were utilized by Carnazza et al. (1981); Near (1981). Feldman, & Weitz (1988) have suggested the use of measures of size of budget, number of employees supervised or levels of assets managed as the basis for determining career plateaus. It is clearly evident that incongruencies exist in the operationalization process.

The limitations resulting from previous research is evident (Chao, 1990). Rather than measuring the actual construct, the operationalization of the plateauism construct has been achieved through subjective cutoffs. Previous studies tend to dichotomize employees as either plateaued or nonplateaued without any regard for consistency/stability of the cutoffs applied in the proxy

measures used (eg. where age was used, cutoffs were applied at three years, five years or 20 years in the position in determining plateaued status in three different studies). This would explain the confounding results between career plateaus and the various individual and organizational variables of past research. As advocated by Chao, (1990), any examination of the consequences of plateauism must be based on a conceptual definition of a plateau. For example age has been used as a proxy measure of plateauism (Evans & Gilbert, 1984) when age in of itself is not necessarily a good indicator of plateaued status. The use of a perceptual measure that treats plateauism as a continuous variable would rectify the above mentioned limitations as it directly taps the conceptual meaning of a plateau. Additionally, the literature is devoid of any instrument to measure plateauism across studies. There is a need for such an instrument that will consolidate the above mentioned conceptual definition expanded to include: in addition to the hierarchical measure of career mobility within the organization, a focus on the content of an individual's work in terms of whether a person learns new skills and undertakes new and different responsibilities; career mobility outside of the current organization; factors pertaining to nonwork aspects affecting one's career (Bardwick, 1986; Chao, 1990; Feldman, & Weitz, 1988). As one researcher stated recently, "It is

time for the empirical literature to incorporate ... a better measure of career plateauism" (Chao, 1990).

The sparse body of empirical research in the study of plateauism (Carnazza et al., 1981; Chao, 1990; Evans & Gilbert, 1984; Near, 1985; Slocum et al., 1985; Veiga, 1981), coupled with inconsistent measures yielding incongruous results, in the absence of tested career stress models (Elsass & Ralston, 1989; Latack, 1989) have left a void that is requiring attention. An integrative model that takes into consideration the impact of career plateauism and its effect on strain (the manifestation of stress) needs to be examined.

Purpose of the Study

The purpose of this study is three-fold. A crucial portion of the overall analysis lies in the ability to measure the construct of plateauism. With this objective as a major concern, the initial operation is logically one that pertains to the operationalization process. In the model (refer to Figure 1), the plateauism construct is operationalized as a perceptual measure whereby the individual may already be aware of progress as it relates to his/her career path. Organizational cues and other work related events may facilitate the recognition and/or reinforcement of the plateaued or nonplateaued status within the work or organizational context. Of primary importance

is the individual's recognition and acceptance of his/her plateaued status. Until such time that the individual makes this perceptual distinction, the effects of plateauism manifested in the form of strain (in the model) cannot take root or be attributed to the plateauism phenomenon. Given that certain individuals will perceive themselves to be plateaued, the next stage of the study is to test a model of plateauism induced career stress/strain. This would be facilitated by examining the relationship of plateauism to strain while incorporating and empirically testing certain ideas from a previous model of plateauism related stress by Elsass and Ralston (1989) and other pertinent models of stress by Latack (1989) and Matteson & Ivancevich (1979). With career plateauism serving as the independent variable in the model, the final goal of the study would involve an attempt to explain individual differences (in terms of coping mechanisms) acting as moderators of strain (dependent variable) levels.

Being cognizant of their plateaued condition and its repercussions on an individual's career can be potentially stressful. When the personal individual stress threshold level is exceeded, individuals experience strain. Since stress is a transitory experience, an issue of interest is in the manifestation of that stress, in the form of strain (sometimes referred to as felt-stress). In this study,

particular attention is also directed to the individual and organizational moderators of strain. The moderators, which influence the relationship between two variables (independent plateauism and dependent strain variables in this study) should provide an explanation as to why certain plateaued individuals experience significantly greater amounts of strain than other plateaued persons. Furthermore, the moderators will provide the bridge between the career and stress aspects of this study. While the comprehensive, "all encompassing" model of stress by Matteson and Ivancevich (1979) will be too extensive to test in a limited study of this nature, certain moderators were selected to explain individual differences and coping mechanisms. Emphases are placed on moderating variables such as career motivation, personal resources such as social support and various other coping techniques. The rationale being that if these factors prove to be effective, it allows for the adoption and intervention of such measures to alleviate strain among plateaued individuals. Certain moderators such as personality facets, locus of control and heredity are trait oriented or inherent to a person and may be beyond individual modification. However, there are other moderators which can be altered individually and hence it is logical to examine coping mechanisms that can potentially serve as practical intervention techniques. Coping

mechanisms here imply interventions or preventive measures that are taken or possessed by individuals that help regulate the adverse effects of strain.

The moderators that will be examined include such variables as career motivation and personal resources. Career motivation is measured through three dimensions: career resilience, career insight, and career identity. Career identity reflects the direction of career motivation while career insight and resilience indicates the arousal, strength and persistence of the motivation (London, 1983). The centrality of career to an individual's identity is measured by career identity. Career insight examines the accuracy of perception that individuals have of their abilities and how this translates into career goals. The ability to cope with a negative work situation and resist career disruptions is gauged by career resilience. Personal resources include such measures as social support, recreation, physical and rational/cognitive coping. Social support is assessed through the extent to which the individual feels support and help from those around him/her. Recreational coping involves endeavors that are centered around pleasurable and relaxing activities. Physical coping entails self care methods that result in reduction of stress. Individuals possessing cognitive skills to face work-related stresses are utilizing what is referred to as

rational/cognitive coping.

The second purpose of this study involves the introduction of a more comprehensive measure of plateauism. Since plateauism is hypothesized to be a major contributory factor in career stress/strain, a reliable measure of the construct is a prerequisite for research. In Chao's (1990) study, the perceptual measure of plateauism based on items related to promotion opportunities and respondent's career future was found to be superior to the traditional proxies of the plateauism construct, such as tenure. The perceptual measure incrementally accounted for greater degrees of explained variance in four dependent measures (internal & external satisfaction, career planning, company identification). In advocating her point, Chao (1990) suggested that future work in the area should focus on the other aspects of plateauism besides hierarchical movement. Others have suggested looking at the content of work and the opportunity for inter-organizational movement (Bardwick, 1986; Feldman & Weitz, 1988). This suggestion coincides with the definition of plateauism by Bardwick (1986) whereby plateauism can occur both structurally and in terms of the work content. The perceptual measure employed in the study will include these multi-dimensional components: job content, hierarchical and inter-organizational movement. The successful application (tapping of the various

constructs suggested in current plateauism literature) of the measure could serve as the basis for the operationalization of plateauism in related research of the future.

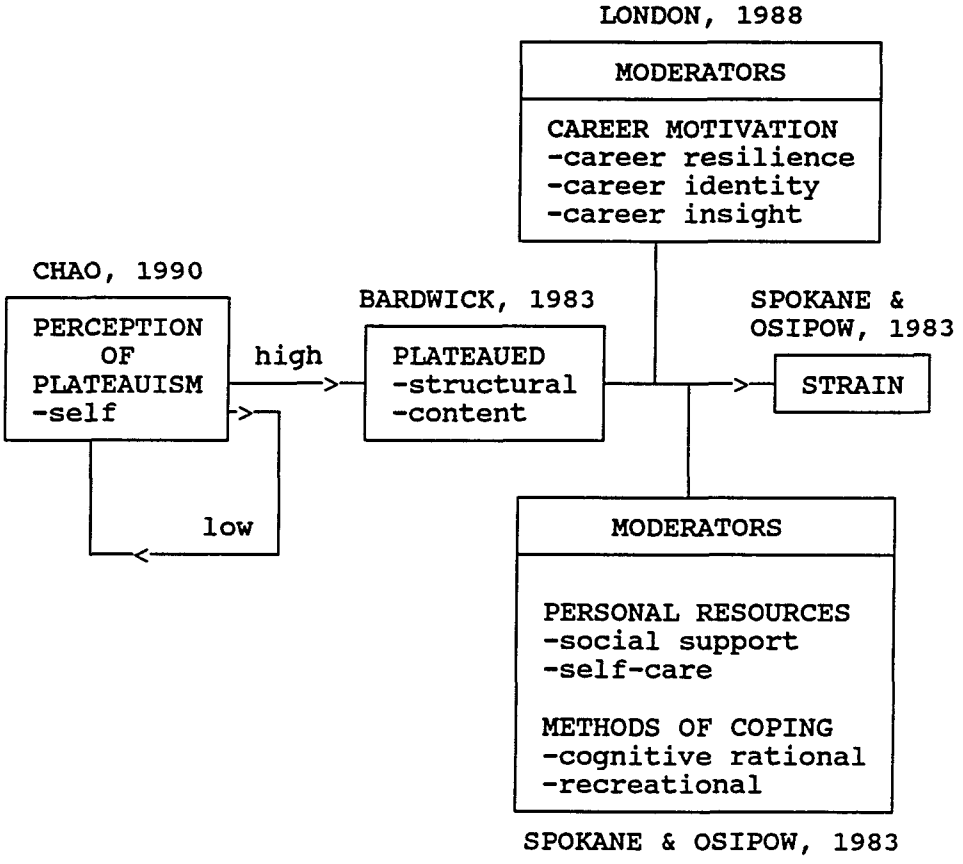

Figure 1. Model of plateauism induced strain.

Definition of Terms

In the interest of clarity and consistency, the terminology used in this study is defined in the section below. This section was deemed necessary because some of the terms are unique to the studies in career and may not be common knowledge. Where terms are used frequently in academic context, some of these definitions have been sources of conflicting and inconsistent meanings.

CAREER IDENTITY:	The extent to which one defines oneself by work
CAREER INSIGHT:	The ability to be realistic about oneself and one's career and to put these perceptions to use in establishing goals
CAREER RESILIENCE:	The ability to be positive and withstand career related adversity
COMERS:	Refer to LEARNERS
CONTENT PLATEAUED:	Condition where work is mastered to the point of being devoid of any challenge and anything new to learn
DEADWOOD:	Individuals who are low on both the dimensions of performance and promotability
GENERAL ADAPTATIVE SYNDROME:	Three stage reaction to a stressor that is characterized by alarm reaction, resistance and exhaustion
LEARNERS:	Individuals who are low on the performance dimension and high on the dimension of promotability
ORGANIZATIONALLY PLATEAUED:	See STRUCTURAL PLATEAUING

PERSONAL PLATEAUING:	Individuals who are plateaued as a result of either lacking the criteria necessary for promotion or voluntarily refusing promotions
PETER PRINCIPLE:	Individuals who rise to their level of incompetence or rather rise to the point where they are no longer able to perform competently
PLATEAUISM:	The condition that individuals face in an organization whereby they can no longer expect promotions
RATIONAL-COGNITIVE COPING	Method of preventing and reducing excessive anxiety reactions via attention-diversion tactics, mentally relaxing imagery and replacing self-defeating thoughts with optimistic self-talk
RECREATIONAL COPING:	Actions that focus on relaxation and the use of free time towards (community and participant) activities that are fulfilling and enjoyable (eg. attending concerts, participation in sports, hobbies)
SELF-CARE:	Activities that are geared toward a healthy physical and mental lifestyle in terms of diet and exercise
SOCIAL SUPPORT:	The degree to which an individual's need for approval, belonging and security are met by significant others, usually at work and at home
SOLID CITIZEN:	Individual who is high on the performance dimension but low in terms of promotability
STARS:	Individual who is high on both the performance and promotability dimensions
STRAIN:	The manifestation of stress, in the form of psychological, physical and behavioral effects

STRESS:	The adaptive response that is a consequence of a stressor situation, action or event that places special demands upon an individual
STRESSOR:	The antecedent/cause of stress
STRUCTURALLY PLATEAUED:	Individual who may be competent but unable to secure promotion in the organization because of limited numbers of positions within each successive stage of the hierarchy

Hypotheses

To facilitate the purposes of this study, the following hypotheses were developed and examined. Further explanation of the hypotheses and the methodology utilized for testing them are provided in the third chapter.

Hypothesis 1

There exists separate structural and content plateauism constructs within the plateauism measure.

Hypothesis 2(i)

Strain varies as a function of structural plateauism. Individuals who perceive themselves as being more structurally plateaued are more likely to experience greater levels of strain than individuals who do not perceive themselves as being more structurally plateaued.

Hypothesis 2(ii)

Strain varies as a function of content plateauism. Individuals who perceive themselves as being more content

plateaued are likely to experience greater levels of strain than individuals who do not perceive themselves as being more content plateaued.

Hypothesis 3(i)

The relationship between structural plateauism and strain varies as a function of the degree to which individuals employ coping mechanisms such as social support, recreational coping, self-care/physical coping and rational/cognitive coping. Structurally plateaued individuals employing greater amounts of personal resources can be expected to experience less strain than those not employing greater amounts of personal resources.

Hypothesis 3(ii)

The relationship between content plateauism and strain varies as a function of the degree to which individuals employ coping mechanisms such as social support, recreational coping, self-care/physical coping and rational/cognitive coping. Content plateaued individuals employing greater amounts of personal resources can be expected to experience less strain than those not employing greater amounts of personal resources.

Hypothesis 4(i)

The relationship between structural plateauism and strain varies as a function of the extent to which

individuals possess career motivation mechanisms such as career resilience, career identity and career insight. Structurally plateaued individuals possessing greater amounts of career motivation experience less strain than those individuals not possessing greater amounts of career motivation.

Hypothesis 4(ii)

The relationship between content plateauism and strain varies as a function of the extent to which individuals possess career motivation mechanisms such as career resilience, career identity and career insight. Content plateaued individuals possessing greater amounts of career motivation experience less strain than those individuals not possessing greater amounts of career motivation.

Limitations of the Study

The limitations of this study are addressed in two forms: in terms of the limitations in the intended scope of the study; and the limitations imposed by the methodology chosen and any conclusions that are drawn as a result.

Limitations in Scope

This study in career stress and the model examined, does not intend to construct a cumulative list of all possible moderators that could possibly influence strain. Under ideal circumstances it would be advantageous to study

the final impact of strain on the organization, in terms of cost due to the loss in productivity, absenteeism and turnover. Such information being of a sensitive nature, may be difficult to obtain from organizations and hence is not within the scope of this study.

Limitations of Methodology

The nature of stress and the manner in which it manifests itself over time, proposes that a longitudinal design would be optimal. This study is limited however, to a design that utilizes cross-sectional data since the data are collected over a one month period and there are no opportunities for follow-up collection of data from the same individuals at various points in time in order to conduct any type of longitudinal analysis. Furthermore this study is based on data collected from one questionnaire and one source (self-report),therefore the extent to which the relationship established between plateauism and the strain, due to method variance cannot be fully determined. Method variance occurs as a result of collecting data, both the dependent and independent measures in this study, from the same source without another source of information to confirm the accuracy and validity of the perceptions. As this suggests, the results could simply be due to common bias reflected in both sets of measures.

Summary

In summary, this study proposes to test a model of career stress with plateauism as the antecedent of interest. Plateauism is viewed as an issue that is quickly gaining prominence. This is due to a variety of factors such as: (1) competitive restructuring strategies like downsizing and layoffs; (2) shift in the economy from manufacturing to service oriented industries; (3) rapid technological changes that are causing worker obsolescence; (4) large influx of baby-boomers and nontraditional entrants into positions of management; (5) repeal of mandatory retirement age requirements.

The importance of the study in plateauism lies in its potentially negative impact both on individuals and the organization's inability to contend with the condition. The examination of various moderators and coping mechanisms will contribute to a better understanding of the plateauism phenomenon, add to the existing body of literature and shed some light into how managers can effectively cope with it. In the words of Warren et al., (1975), "Plateauing poses a Damoclean threat to an ever growing number of organizations and their managers ... and it demands the attention and discussion of farsighted executives."

CHAPTER II

LITERATURE REVIEW

Plateauism

Definition

While plateauism is defined in a variety of ways, it has generally been accepted as the point in a career where opportunity for further promotion is limited and unlikely (Bardwick, 1986; Carnazza, et al., 1981; Elsass & Ralston, 1989; Ference et al., 1977; Feldman & Weitz, 1988; Stout, Slocum, & Cron, 1988). One operational definition views plateauism in terms of job tenure (Evans & Gilbert, 1984; Near, 1985; Veiga, 1981). From this perspective, the longer an individual is in a particular job without accompanying changes in responsibilities, the more plateaued he or she becomes. An alternative perspective adopted in this study views plateauism from the individual's perception of his or her career, that is what she/he views the likelihood for future promotion to be. This definition is consistent with that offered by Chao (1990), where career plateauism occurs when an individual discerns that the future likelihood for promotion is low. The important distinction here is that it is the individual's perception rather than the assessment of

others, that accounts for the operationalization of the plateauism construct. This definition moves away from the traditional use of job tenure as a measure of plateauism. The advantage of the perceptual measure lies in its universal applicability unlike those used in previous studies mentioned in the literature review that applied sample specific cutoff in determining plateaued status. Further Chao (1990) showed in her study that perceptual measures which were measured by two items related to promotion opportunites and career future, were superior to traditional measures (eg. tenure, age) in explaining greater variation in the dependent measures studied. Chao's (1990) percetual measures were in the form of two questions that asked the respondents whether promotion opportunities had been limited in their organization and if they felt that they were getting ahead in their organization. Her four dependent measures were (1) **internal job satisfaction**, focusing on pay and supervision as measured by six items (alpha = .81) from the Minnesota Satisfaction Questionnaire (Weiss, Davis, England & Lofquist, 1967), (2) **company identification**, gauging strength of association between individual and organization (alpha = .86) as measured by the Index of Organizational Reactions (Smith, 1976), (3) **external job satisfaction**, focusing on work itself, individual's skills, knowledge and abilities as measure by

11 items (alpha = .84) from the Minnesota Satisfaction Questionnaire (Weiss, Davis, England & Lofquist, 1967), and (4) **career planning**, assessing individual's career objectives, plans, strategy for achieving career goals as measured by a six item instrument (alpha = .87) by Gould (1979).

Research (Theoretical)

The limited body of career plateauism literature has emphasized the theoretical aspect of plateauism. Individuals may plateau in a variety of ways. The initial, best known and commonly cited theoretical model (Ference, Stoner, & Warren, 1977), provided the framework for the study of plateauism. In a 2x2 matrix, Ference et al. (1977) created the dimensions of promotability and level of performance. "Stars" are individuals who have proven to be good performers with the potential for promotion. "Comers" are new to the organization and still in the learning process. While their performance is low, their potential to learn and opportunities for promotions are high. The plateaued workers are categorized in terms of their current performance. "Deadwood" are individuals whose performance have fallen below the satisfactory level due to a lack of ability, personal problems or motivational reasons. They are perceived as ineffective plateauees and a problem to the organization. Deadwood are usually either fired, forced or

phased into retirement or rehabilitated via retraining programs. The "solid citizens" on the other hand are considered to be effective plateauees with low promotability, making up the bulk of the organizational work-force. They may be organizationally plateaued whereby having the competency to perform at a higher level but are prevented from doing so because of the constricting nature of the organizational pyramid. Competition (both within and outside the organization), age (preference for youth and longer organizational life-span), organizational needs (value at current position) and organizational restructuring activities (downsizing) determine organizational plateauing. Personal plateauing occurs either as a result of the individual currently performing well but lacking the criteria (knowledge, skills, abilities) necessary for promotion into the next higher position. It could also be due to non-work commitments (dual careers, family obligations). Conversely it may be due to a lack of desire for any kind of movement (hierarchical or lateral). The trade-off between positional status and the extra responsibilities entailed in the move, are not perceived to be desirable.

Bardwick (1986) categorizes plateauing in three ways: structural plateauing, content plateauing and plateauing in life. Structural plateauing is identical to organizational

plateauing in that it involves the limitation of opportunities for hierarchical mobility. With structural plateauing, the career track has retarded to a slow halt. Content plateauing is the stage where an individual has mastered the job, that is, beyond the point of proficiency and is devoid of any challenge or chance for promotion. With content plateauing, the job ceases to motivate or excite since the tasks are no longer novel or challenging. Lateral movement manifested in new job titles without accompanying changes in duties and responsibilities is an example of content plateauing. Content plateauing, while seemingly easy to remedy, is an increasing concern as millions of people are rapidly becoming "de-skilled" as their jobs become archaic and their skills obsolete with the proliferation of new technologies (Nussbaum, 1983). A person can be structurally plateaued without being content plateaued if the job while not offering advancement is challenging with opportunities to learn new skills and tasks. When an individual's work predominates life to the exclusion of all other activities, plateauing at work results in <u>life plateauing</u>. Life plateauing occurs because there is no development or enjoyment in the non-work aspect of life. Plateauing in life is more serious than either structural or content plateauing (Bardwick, 1986).

Research (Empirical)

The theoretical research, especially the work by Ference et al. (1977), has provided the framework for much of the empirical research. While the empirical studies that have been conducted are limited in number (Carnazza et al., 1981; Chao, 1990; Evans & Gilbert, 1984; Near, 1985; Slocum et al., 1985; Veiga, 1981), this trend should soon reverse itself as companies are increasingly resorting to corporate restructuring and the related issue of career plateauism is becoming pronounced.

A summary of the empirical studies will be reviewed as follows. Veiga (1981) in his study examined plateauism in terms of career patterns and attitudes, utilizing the Ference et al. (1977) career classification. Career patterns were reflected in the Career Concerns Inventory by Super, Zelkowitz, and Thompson (1981), which is designed to measure the various, distinct career stages. The study contrasted between the plateaued (solid citizens and deadwood) and nonplateaued managers and also examined the differences within the plateaued category (between solid citizens and deadwood). Tenure measured through the length of time in each position served as the proxy for plateauism (the promotability dimension) while pay increase gauged by the average increase in salary for the past year, reflected the performance dimension. His findings showed that

deadwood managers moved into their plateaued position as early as their third move and these positions were characterized with low visibility and exposure to top management. The deadwood managers when assessed on their career attitudes, believed that they were less marketable, were less satisfied with their advancement and feared career stagnation more than their nonplateaued counterparts.

Carnazza et al. (1981) employed a portion of the Ference et al. model. An assessment measure of "the likelihood for promotion," dichotomized managers basically into highly promotable and highly unpromotable categories for this study. This was done by matching supervisory opinions (as to who was promotable and who was not) with the self-belief of individual managers surveyed. Where the opinions and self-belief were congruent, employees were correspondingly categorized as plateaued or nonplateaued. Plateaued status determined differences in experiences, opinions and attitudes associated with job performance. It was found that plateaued managers, when assigned challenging, satisfying and clearly defined jobs that were perceived as important to the company, continued to maintain high performance. Within the plateaued group, the deadwood (less effective performers) had the tendency to believe that promotions were based on reputation, personality and educational background. Irrespective of plateaued

(promotability classification) status, managers showed no differences in promotion aspiration which suggest satisfaction levels would not differ due to the type of plateauism.

Evans and Gilbert (1984) compared the need satisfaction and reward/pay satisfaction levels between plateaued and nonplateaued managers. Need Satisfaction was determined by Porter's Need Satisfaction Questionnaire (1961) while pay satisfaction was evaluated via a three-item composite measure.

In this study, plateauism was determined through a combination of age and organizational rank. The sample was comprised of Superintendents and Assistant Managers. Superintendents over 45 years old in age were considered plateaued while those under 34 years were assumed to be nonplateaued. Assistant Managers who were under 39 years of age were considered nonplateaued while those over 45 years were considered to be plateaued. Those in the intermediate age groups were excluded from the analysis. The researchers felt when the determination of the plateauism measure in previous research was simply by age, it was insufficient. They feel that any conceptualization of plateauism is relatively arbitrary and depends upon one's understanding of the organization and its unique pattern of career history which was determined by the pace of hierarchical and

horizontal movement in a job. There were no differences in need (security, social, esteem and self-actualization) satisfactions between the plateaued and nonplateaued groups. Regardless of their career state, older managers were less satisfied with their pay, future benefits and advancement opportunities than their younger counterparts. The lack of significant differences between plateaued and nonplateaued managers were due to the manner in which the plateauism measure was operationalized, whereby age confounded the results.

Near's (1985) study examined the differences between plateaued and nonplateaued managers through discriminant analysis. Plateaued status was determined by an arbitrary, cut-off point whereby managers in the sample who had not been promoted in the last twenty years were considered to be plateaued. Nonplateaued managers considered themselves more important to their jobs although self ratings (9 item measure) of their performance did not vary greatly from that of plateaued managers. They rated their supervisors more favorably than did the plateaued managers. In behavioral terms, the nonplateaued reported less absenteeism than their plateaued counterparts. As to be expected, nonplateaued managers had shorter tenures than the plateaued managers. In terms of nonwork variables, nonplateaued managers reported better medical health currently than their

plateaued counterparts, although in the same questionnaire they had rated their health five years previously as being less favorable. Demographically, plateaued managers were more likely to be married than nonplateaued managers.

Slocum, Cron, Hansen, and Rawlings (1985) studied the relative occurrences of plateauing in firms adopting different business strategies towards their environment. They utilized the Ference et al. (1977) classification in combination with the strategic typology developed by Miles and Snow (1978) for comparison purposes. In their sample consisting of salespersons within the same organization, job change was perceived to be the most salient variable in determining when plateauing occurs. Salespersons who had not been promoted or laterally transferred in the last five years were considered plateaued. While tenure (time spent in a position) served to distinguish plateaued status, sales volume figures were used as the proxy measure of performance (which distinguishes between the effective and ineffective employees). Results indicated that, a significantly higher incidence of plateaued individuals existed in "defender" (lean, efficient, predictable, self-reliant) companies than was evident in "analyzer" (new products, changing markets, cybernetic controls linking subcultures) companies. The performances of the plateaued in analyzer firms were greater than that of the plateaued in defender firms.

In defender firms, the ineffectively plateaued (deadwood) employees showed more job moves than the comers (also referred to as learners since they are new to the organization and still in the learning process whereby performances are low while their potential to learn and opportunities for promotions are high) and solid citizens (considered to be effective plateauees with low promotability). While stars (those doing outstanding work with potential for advancement) felt more strongly than their plateaued (solid citizen and deadwood) counterparts, that supervisors were supportive, the nonplateaued were less satisfied with their supervisors than plateaued employees. Supervisory support was measured by a five item subscale by Newman (1977) while job satisfaction was measured by the scales from the Job Descriptive Index developed by Smith, Kendall, and Hulin (1969). Solid citizens reported greater psychological success than either the comers or deadwood. Psychological success was assessed by using 15 Likert-type questions by Hall (1983) that reflected success in three dimensions: company specific success; professional-growth success; personal success. In terms of career attitudes, questions about marketability; propensity to leave; propensity for relocation; promotional aspiration, taken from Veiga's (1981) study were replicated. Plateaued employees when compared to the nonplateaued were unlikely to

leave the company for better paying jobs elsewhere, unwilling to relocate for promotions, were unsure of their desire for promotion and had longer time frames for promotions when desired. In analyzer firms, the nonplateaued were less involved in their jobs than the plateaued employees. Job involvement was measured using a 4-item Likert scale developed by Hall, Goodale, Rabinowitz, and Morgan (1978). In terms of career attitudes, the nonplateaued were more likely to leave the organization, relocate geographically if it resulted in promotions, and in general desired more promotions.

In the study by Stout, Slocum, and Cron (1988), the dynamics of the plateauing process was examined on a sample of salespersons via a longitudinal design. Three groups of (plateaued, recently plateaued and nonplateaued) employees were categorized by means of a self-report information. A questionnaire was administered at two points in time, three years apart. Respondents who perceived themselves as unlikely to be promoted (in the proceeding 5 years) at both points in time, were classified as plateaued. The five year cut-off was justified by confirming with managers in the organization about the appropriateness of the cut-off point. Conversely respondents who saw themselves as likely to be promoted at both points in time were classified as nonplateaued. Finally, those who perceived themselves as

likely to be promoted at time 1 and reversed their opinions at time 2, three years later, were classified as nonplateaued-plateaued.

There were no significant changes over time for nonplateaued or recently plateaued salespersons in terms of career issues (measures using the Career Concerns Inventory by Super, Zelkowitz, and Thompson, 1981), while the plateaued category were found to have changes in career issues. In terms of career intentions, which were assessed by questions from various studies (Slocum et al., 1985, 1987; Veiga, 1981), all three groups showed considerable change in responses three years later. The Organizational Commitment Questionnaire by Porter, Mowday, and Bouleau (1974) was utilized in the study and it measured commitment through the individual's identification and involvement with the organization. While the extent of organizational commitment did not change for the nonplateaued, performance levels (measured via sales volume) increased significantly and also the belief that their marketability had decreased, as to be expected. Among the plateaued, career issues, intentions and attitudes changed considerably over the two points in time. They were less committed to the organization, desiring relocation in the belief that their chances for promotion within their job setting had decreased. They also had lowered aspirations and felt that

they were less marketable. The "recently plateaued" group showed similar characteristics in that they rightfully perceived a diminished opportunity and aspirations for promotion.

Chao's study (1990) compared a perceptually based operationalization of the career plateau versus the traditional measure of job tenure. Results for the general measure (intrinsic job satisfaction and career planning) and organizational measure (extrinsic job satisfaction and company identification) showed that the perceptually based measure of career plateau accounted for greater variance than the job tenure measure.

The findings from past research are riddled with inconsistencies. In the Slocum et al. (1985) research, nonplateaued individuals were found to have shorter tenure (job history - length of time in a position) in the various stages/positions throughout their career which runs contradictory to the results of Veiga (1981) that show the nonplateaued as having longer tenure (career history - length of time in each position) than the plateaued, in positions earlier on in their career. On matters of career aspirations (desire to be promoted), while Carnazza et al. (1981) found no difference between plateaued and nonplateaued individuals, Slocum et al. (1985) reported lower levels of career aspiration (desire for promotion)

among the plateaued group.

These contradictory findings have also been attributed to the nature of career plateaus and the operationalization of the career plateau measure. Where job tenure has been used, there is a variance of opinions as to the onset of plateaued status. Certain studies have used a 5-year tenure in a position as the measure of plateaued status (Bardwick, 1986; Slocum et al., 1985; Slocum et al., 1987; Stout, Slocum, & Cron, 1988); 7 years (Gould & Penly, 1984; Veiga, 1981); 10 years (Gerpott & Domsch, 1987). Where age has been used as a proxy as stated earlier, 40 years has been a common cut-off point for plateaued/nonplateaued status (Bardwick, 1986; Veiga, 1981); 45 years as cut-off for plateaued while the nonplateaued were determined as being 39 and 34 years old for assistant managers and superintendents respectively (Evans & Gilbert, 1984).

For the purpose of this study, perceptual measures of plateauism are applied, through the inclusion of questions by Chao (1990) and a modified version of related questions suggested by Bardwick (1986). This method of defining plateauism removes some of the shortcomings of studies using traditional tenure and/or age measures (Evans & Gilbert, 1984; Near, 1985; Slocum et al., 1985; Stout et al., 1988; Veiga, 1981). The literature reveals that there is no agreement across studies as to when plateauism occurs,

neither in age nor in the use of tenure cutoffs. For example as stated earlier, Veiga (1981) in his study categorized plateaued status through the use of a seven year position criterion whereas Bardwick (1986) would suggest a five year criterion and on the extreme, Near (1985) used twenty years as the cutoff point for her study. This shows the subjective nature and difficulty enccountered in measuring the occurrence of objective tenure-related plateauism in past research. By operationalizing plateauism through perceptual measures, this study focuses on the individual's assessment of when plateauism occurs and hence remove some measurement problems resulting from proxy inadequacy. This is important because conceptually the individual's self recognition of the plateaued state acts as the catalyst in bringing on the effects of plateauism. Organizational assessments are quite meaningless because up to that point of individual recognition, plateauism is or may not be an issue in the individual's life and hence does not effectively become a stressor. Furthermore, the Carnazza et al. (1981) study showed only a fifty percent congruence between individual and supervisory/organizational assessments (belief of promotability) of plateauism. Finally the proposed use of perceptual measures of plateauism will help overcome the inconsistency of utilizing tenure or age as a proxy for plateauism (Evans & Gilbert,

1984).

The introduction of the perceptual measure into the study of plateauism offers another alternative to the Ference et al. model. While the Ference et al. model has provided an initial framework for researchers, it has confined past research in defining plateauism along the dimensions of promotability and performance rather than investigating the dimensionality of plateauism itself. This study proposes to test empirically the existence of two separate plateauism constructs (structural and content plateauism) as developed by Bardwick (1986). Structural plateauism refers to the lack of hierarchical movement/ mobility in an organization while content plateauism refers to the lack of challenge in a job. None of the previous empirical studies have examined this aspect of plateauism and yet others (Chao, 1990; Latack, 1988) have called for the expansion of the conceptual definition to include and focus on the content of an individual's work. The inclusion of additional dimensions and expansion of the plateauism construct may aid in the development of a more reliable and valid measure which in turn may help explain the previously, inconsistent results.

While the Ference et al. model may allow for the dichotomization of plateaued and nonplateaued individuals, an earlier criticism raised by Chao (1990) concerning

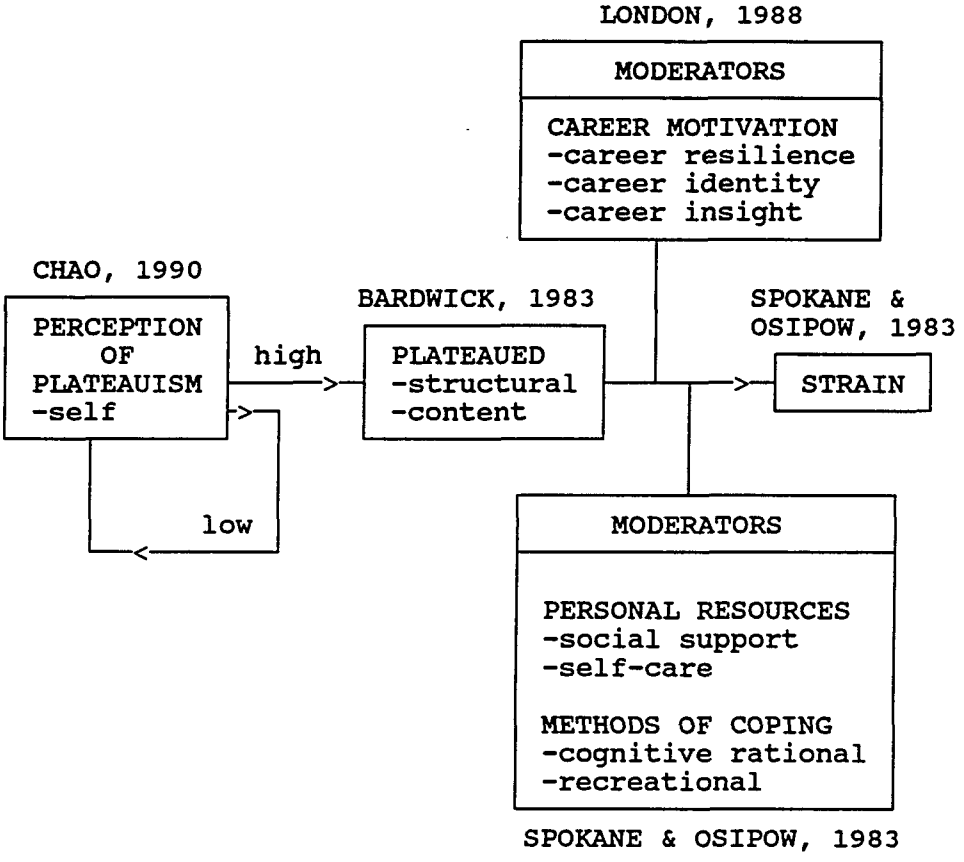

Figure 2. Model of plateauism induced career strain.

degrees of plateauism within each group, remains an unsolved issue. By treating plateauism as a continuous variable in this study, the limitation of the previous model resulting in the loss of information due to dichotomization is overcome. Another critical issue with the Ference et al model lies in the manner in which performance is measured. The use of salary raises (Veiga, 1981) or sales volume

(Stout et al., 1988) may not necessarily be reflective of performance and acquiring salary data would be difficult since in most organizations, this information may be of a sensitive nature. Through the conceptualization of plateauism applied in this study, the limitations of previous studies discussed above are minimized.

Stress/Strain

Latack (1989) reaffirms the unprecedented importance of career related change and adjustments. The author sees technological changes, shifts in corporate strategic direction and the balancing of career and family responsibilities as being the forces responsible for heightening occurrences of career transitions such as plateauing. These career transitions are in turn responsible for career stress.

The stress literature has been researched extensively with regards to the negative impact of stress/strain on the work-force. Strain has been linked to mental and physical health (Cobb, 1976; Kornhauser, 1965; Morris & Snyder, 1979); to coronary heart disease (House, 1974; Matteson & Ivancevich, 1979; Steffy & Jones, 1988); to absenteeism (Gupta & Beehr, 1979; Margolis, Kroes, & Quinn, 1974); to job dissatisfaction (Beehr, 1976; Johnson & Stinson, 1975; Lyons, 1971; Miles, 1975); to turnover (Brief & Aldag, 1976; Gupta & Beehr, 1979; Porter, Steers, Mowday, & Boulian,

1974) at an estimated annual cost of around ten to twenty billion dollars (Jick & Payne, 1980).

Many of these undesirable effects have also been attributed to the stress resulting from plateauism (Bardwick, 1983; Near, 1980, 1983). Others have shown plateauism to be responsible for lowered effectiveness (Erickson, Edwards, & Gunderson, 1973) and morale problems (Slocum, Cron, Hansen, & Rawlings, 1985). According to Elsass and Ralston (1989), plateauism has been connected to stress and various other adverse effects such as psychiatric illness, job dissatisfaction, sense of failure and guilt. It can be construed that plateauism induced stress/strain leads to unfavorable consequences.

In order to clarify matters, it is necessary to state that researchers in the field tend to use the terms "stress" and "strain" interchangeably. Industrial and organizational psychologists along with academicians have not agreed on the meaning and process of stress in work organizations. In fact, Ivancevich and Matteson (1980) termed stress as, "the most imprecise term in the scientific dictionary." Stress has been referred to as an aversive stimulus event, a specific physiological or psychological response, or a special type of transaction between the person and environment. In order to avoid confusion, the distinction is made between stressors (or stress events) and the

psychological state of stress (i.e., feelings of threat, harm or loss, or challenge), and stress response on physiological, psychological, or social levels (Lazarus & Launier, 1978). Stress in the context of this study refers to the state of excitement arising from an actual or perceived demand-capability imbalance. In conjunction with the central theme in this study, plateaued individuals upon perceiving their career status as not coinciding with expectations may experience feelings of loss, anger, frustration and other psychological conditions which translate into strain.

An earlier view of stress was explained by the General Adaptative Syndrome (Seyle, 1956, 1983), which suggests that individuals undergo an innate "flight or fight" reaction to any stressor. The three stages associated with this syndrome of individual stress are an alarm reaction followed by a stage of resistance leading to exhaustion. This initial first level response to the stressor is, commonly referred to as stress. While stress may elicit feelings of uneasiness leading to apprehension, anxiety, pressure, and depression, it is only a transitory, psychological state. A variety of responses are induced in reaction to the stressor. Individuals may choose to tackle the stressor head-on, deflect it or totally ignore it in the hope that the situation correct itself. In the failure to resist the

stressor, the occurrence of strain is synonymous to the exhaustion stage. In light of the model presented earlier, explaining plateauism induced strain, the individual upon perceiving a state of being plateaued undergoes a state of uneasiness. Plateauism acts as a stressor leading to a transitory state of unrest which is manifested in the form of strain with its unfavorable end results or dealt with by the individual through some coping mechanism(s).

Lazarus (1966) has provided an alternate viewpoint on stress. The interactive process that he proposed, looks upon stress as the result of an imbalance that arises from "perceived demand" and "perceived response" capability. Incongruencies in career expectations (current & future, self versus organizational) may result in stress-inducing situations slowly in the initial stages. An individual unable to remove the stressor may experience a cumulative amount of stress exceeding personal tolerance levels, resulting in strain. This viewpoint coincides with the one offered by Parker and DeCotiis (1983) where job stress is seen as a first-level outcome quite distinct from the second-level outcomes which are manifested as the consequences of stress. While a certain amount of stress (referred to as "eustress") is healthy in maintaining a positive level of performance, excessive amounts or a continuous duration of stress can result in detrimental

outcomes. Individuals unable to cope effectively with the stressor will experience strain, which is the second-level outcome. Strain is found to detrimentally manifest itself in three different emphases: physiological, sociological and psychological health. This results in diseases such as cardiovascular disease, bronchial maladies, gastrointestinal malfunctions, higher levels of absenteeism, productivity loss and turnover and also psychiatric disturbances (Margolis et al., 1974; Seyle, 1976). The proposed model can be reinforced through this explanation offered by Lazarus. Upon perceiving themselves as being plateaued, individuals may experience career related incongruencies in terms of their expectations and actual achievements. The outcome could be strain if there is inadequate personal coping or organizational intervention.

Pertinent to this study, is a model of career stress advanced by Elsass and Ralston (1989) that draws on the Parker and DeCotiis (1983) and Lazarus (1966) definition of stress. The model is based on the integration of both the plateauism and stress literature. The resulting premises are that: (a) the recognition of a career plateau is a source of stress to many individuals, (b) coping responses are developed by individuals as a result of the career plateau stress which can be behavioral and, (c) the personal and organizational variables unique to each individual will

moderate the selection of specific coping responses to the plateau.

The stress model used in this study draws on both the Elsass et al. model and the various theories of stress previously discussed (Lazarus, 1966; Parker & DeCottis, 1983) since they are highly compatible. The model advanced in this study is represented in Figure 2 by key variables that include recognition of the potential stressor situation, the stressor itself (plateauism), strain (stress reactions/manifestation), and various coping strategies, and individual levels of career motivation that moderate the effect of plateauism on the overall career stress/strain process.

According to Schuler (1980), the stressor situation can be activated by a constraint or demand placed on an individual or even by situations of opportunity. The stressor can be either externally or internally generated. In the case of corporate mergers, acquisitions or take-overs, conditions usually brought about by economic downturns and competition, excess middle managers are most likely to experience job insecurity. In such instances, the career stressor is externally generated while in cases of a mid-career adjustment caused by plateauism the stressor is internally generated. In this model "perception of plateauism" is similar to the "cognition" term used by Beehr

and Bhagat (1985), which refers to the perception of the circumstances or outcomes in question. This will also explain in part, the differences among individuals in relation to their varying susceptibility to stress. What may appear as a potential stressor to most people may have no effect on certain individuals because it may not be perceived as stress inducing. In the career stress model the perceptions also involve the extent to which current career status correspond to past and future expectations. Since stress is a transitory state of excitement, the resulting conclusion is either successful coping or strain because of the lack of ability to cope (refer to model in Figure 2).

The career plateau stress model in this study progresses beyond the theoretical model advanced in the study by Elsass et al. (1989). This model accounts for the manifestation of excessive stress (ie. strain) that is not successfully deflected via coping mechanisms. Furthermore this study empirically tests the model (which Elsass and Ralston failed to do with their model) through the stated hypotheses.

Moderators

There is anecdotal evidence to the effect that not all individuals are equally affected by career induced plateauism. It is the contention of this study that in the

plateauism - strain relationship individual differences exist that account for the unequal levels of strain among plateaued individuals. Within the limited scope of this study part of the individual differences can be ascertained by certain moderators that will help to alleviate the level of strain experienced by individuals as a result of plateauism. The moderators that are to be examined in this study consist of career motivation, and personal resource variables. The career motivational construct as defined by London (1985) is a multidimensional measure clustered into the apriori domains of career resilience, career insight and career identity. Personal resource measures include; social support, self-care activities, rational-cognitive and recreational coping.

Career Motivation

In the extensive Management Progress Study carried out by the Bell company, the various aspects of successful managers were examined. Over time, managers expressed a decline in their drive for promotions while the desire for challenge in work and greater autonomy increased. A strong link was found between career management and managerial success. Noe (1990), suggests that in order for development programs to be successful, they need to build on the motivations that are salient for the managers' age and level in the organization they have attained. He further states

that effective career management is critical in ensuring that organizations can effectively utilize human resources when mobility opportunities (promotions, transfers, lateral moves, mergers and acquisitions) occur. While recent literature has focused on the identification of the characteristics in successful career planning programs (Granrose & Portwood, 1987; Hall, Hall, & Hinton, 1978; Rhodes & Doering, 1983), little attention has been directed at the motivating factors concerning the individuals involved. London (1983) proposed the theory of career motivation to include both personal and work environment characteristics. In addition to the maintenance characteristics of work motivation as suggested by Steers and Porter (1975), career motivation concept encompasses career decisions and behaviors which include job searches, revision of career plans, and setting career goals.

The career motivational dimensions are appropriate for the study of plateauism because they can potentially explain individual differences among plateaued individuals; why some people are gainfully employed inspite of their plateaued status while others allow their productivity levels to decline steadily. Career motivation may also be very useful in explaining voluntary/personal plateauing; why some individuals choose to remain in their plateaued dead-end jobs while others strive to move up the organizational/

career ladder through promotions, transfers and inter-organizational movement. Also of interest would be the recurring levels of stress experienced by persons in the various situations, worker choosing plateaued status versus plateaued worker having restricted options. The motivational moderators along with personal resources variables have similarities to certain traditional moderators which are used in the stress model by Matteson and Ivancevich (1985). Latack, stated it best that, "studying the stress coping process as it relates to career motivation ... represents a logical integration point between career theory and job stress research" (p. 262).

Career Motivational Dimensions

According to London (1988), based on earlier research by London and Bray (1984) and their findings on work done in collaboration with various assessment centers, have resulted in the creation of a set of situational variables. These variables constitute the career motivational dimensions which will be the focus of discussion in this section. As stated by London (1988), the situational variables are based on widely accepted concepts regarding leadership styles, job designs, goal setting, performance appraisal and feedback. These variables have important implications that extend beyond goal setting and career planning in that they include factors relating to the nature of supervision (eg. feedback

provided), nature of the work/job (eg. level and extent of challenge), and organizational conditions (eg. recognition and promotion opportunities). The career motivational dimensions as described by London (1988), includes:

Career Resilience

Career resilience refers to the ability of individuals to overcome disruptions and barriers affecting their careers. The sub-dimensions covered under career resilience are listed below and include: belief in oneself; need for achievement; willingness to take risks; working independently or cooperatively as needed.

The importance of building career resilience among employees stems from some of the trends mentioned earlier. These include the need for increased training and retraining for individuals in order to keep with spiraling technological changes and the pressures that accompany change in job content in order to maintain and raise job satisfaction. Programs that are tailored to enhance career resilience will identify key skills and competencies required for the job and help individuals deal with increased uncertanties in the workplace.

Self Belief

Individuals having self-belief in their abilities see themselves as competent in their jobs whereby conveying a

certain self-assurance in the performance of their work and also promoting career progress. These individuals can easily adjust to various changes in technology, work rules and procedures. In fact they have enough self confidence even to the point of expressing ideas that may not be particularly popular in the organization.

Achievement Needs

Career resilience includes within its dimensions, a need for achievement. This implies the degree to which the individual desires to excel at work, performing to the best ability at all tasks. It also means, taking the initiative in doing whatever it takes to achieve career goals. This can include actively seeking various projects that would require the learning of new skills beneficial in advancing ones career.

Risk Taking

Career resilience encompasses the concept of risk. In particular it covers, the willingness to take risks which is the degree to which individuals embark on actions having outcomes that are not easily predictable. This includes the expressions of ideas even to the extent of contradicting ones superiors and being unafraid to let others know when a mistake/mistakes have been made. It also means being innovative and committing to one's beliefs.

Work Flexibility

Working independently or cooperatively as required implies the degree to which one is equally comfortable working alone or within the context of a group. This means having the flexibility in character to work and take sole responsibility as an individual or make group level decisions as a team member in organizational settings.

Career Insight

Career insight describes the extent to which individuals are able to see themselves within the career context; their strengths and weaknesses in relation to their career goals. These individuals are able to set and optimize their goals. The sub-dimensions covered by career insight are listed below and include: establishing career goals; knowledge of self strengths and weaknesses.

The need that individuals may have for career insight is a function of the types and number of job opportunities and flexibility within the work and job context. The development of such career insight can be facilitated by those in supervisory roles in terms of feedback on performance and opportunities/potential for advancement. Co-workers, friends and family can also enhance a person's understanding on skills, needs, abilities relating to career oppotunities and ambitions/goals. It is quite clear that career insight plays an important role in career development

especially in terms of the potential "limitations" placed by plateauism.

Career Oriented

Individuals having career insight to the extent of establishing career goals are ones who have to some degree, predetermined career objectives and plans on achieving them. Besides possessing pre-set goals and plans, having insight implies the willingness to modify goals as career interests and circumstances (personal and organizational) change. This means welcoming changes in jobs and work assignments in order to enhance career opportunities.

Self Knowledge

Part of career insight is the knowledge that the individual has of his or her strengths and weaknesses to the extent of being familiar with personal strong and weak points relating to career objectives. By utilizing feedback from others and from personal perception, one should be able to see oneself as others do. It also means having the foresight to determine ones ability to perform/accomplish any given task.

Career Identity

Career identity is the degree to which individuals define themselves by the type of work they do. They have a high level of involvement to their jobs, professions, career

and loyalty towards their employers. It reflects the future aspirations of individuals. The sub-dimensions covered by career identity include as listed below: job, organizational and professional involvement; need for advancement, recognition and a leadership role.

Career identity is an integral part of the stability required in times of uncertainty within the workplace. With traditional structures in organizations giving way to work teams, committees, matrix organizations, task forces and other temporary work groups, individuals are less likely to identify themselves by the work that they do. This phenomenon combined with decreasing levels of loyalty among employee and changing work values, desire for more balance life-styles with less emphasis on work, (Opinion Research Corporation, 1980) have contributed to the drop in career identity. This facet of career motivation relates to the study in that career identity reflects the individual goals that have traditionally meshed with organizational rewards, centering on desires for advancement, recognition needs and money. The lack of career identity may also explain differences in career aspirations and as to why some persons may not be adversely affected by career plateauism or may choose to be plateaued.

Involvement Levels

The first of the career identity variables to be

examined focuses on the involvement levels. The level of involvement displayed by individuals shows the extent to which they identify with the work they perform. Job involvement implies treating the job as a fascinating aspect of life, more important than any other activity so that working hard at it via long days and weekends are easily justified. A different measure, organizational involvement is manifested in organizational pride and equating personal success along with organizational success. Professional involvement is accomplished through perceptions of being a representative of a given profession which involves playing an active role in the appropriate professional organizations and encouraging membership among the relevant fellow workers.

Advancement Needs

Career identity also includes the various needs for advancement recognition and leadership. Advancement needs are usually exhibited by individuals desiring rapid advancement as their career goals and the desire to make as much money as possible.

Recognition Needs

Individuals having recognition needs look for the prestige that accompanies advancement/promotion and praise for good performance.

Leadership Needs

The need for leadership role is yet another facet of career identity. Individuals desire positions of leadership usually wanting to hold some elective office within the organization or emerge as a leader in group situations.

In summary, the application of career motivation variables in an empirical study is fairly recent. The variables were the result of London's (1984) various studies involving the AT&T assessment centers. Empirically, the measures have not been tested extensively. Theoretically, they have intuitive appeal.

Personal Coping Resources

Various models on stress have recognized the important role coping plays in the overall stress cycle, in alleviating the negative impact of various stressors (Beehr & Newman, 1978; Burke & Weir, 1980; Cooper & Marshall, 1977; Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964; Newman & Beehr, 1979; Parasuraman & Cleek, 1984). Coping has been defined and conceptualized in a variety of ways (Burke & Weir, 1980; Monat & Lazarus, 1977; Parasuraman & Cleek, 1984). A prevalent definition of coping is the notion that it refers to the behaviors and mental processes by individuals who seek to deal with or resolve stressful situations that are encountered. In this study, coping behaviors are defined as actions taken by individuals to

alleviate or respond to stressful conditions. Furthermore, the focus of this study is on the coping strategies directed mainly at the management of stress rather than the prevention (stress reduction) aspect. In this section on coping skills and resources, attention is also aimed at possible interventions that can be initiated either individually or by the organization. Within this umbrella of what is collectively referred to as personal resources there will be a description of the individual components that comprise social support, physical (self-care), recreational and cognitive-rational coping. One objective of this study is to commprehend the role of each personal coping mechanism and test its respective moderating effect in the plateauism - strain relationship.

Social Support

Social support can range from the structure imbedded within social systems such as friends (quantity) to family (family size and marital status). The conceptualization in this study is directed at the extent and feelings of support provided by the social network (Beehr, 1985; Hammer, 1981). Generally social support is defined in four areas: <u>emotional concern/self-esteem support</u> as communicated in attachment, reassurance, love, esteem, valued part of a team; <u>instrumental aid/tangible support</u> in the form of direct aid such as loans, gifts, doing work, taking care of things;

information support/supportive communication through the actions of giving feedback, advice and providing information; social companionship/diffuse support involving time spent with others in leisure and recreational activities (Cobb, 1976; Cohen & Willis, 1985; House, 1981; Nelson, 1987; Newman & Beehr, 1979; Schaeffer, Coyne, & Lazarus, 1982).

The implication for stress research lies in the fact that several studies have concluded that social support, usually from supervisors, helps lower psychological stress (Beehr, 1985; Etzion, 1984) and moderates job stress through the fostering of coping strategies (Newton & Keenan, 1985; Seers, McGee, Serey, & Graen, 1983). Mansfield (1972) found that new recruits forming friendships with peers in the same position reduced work related stress. While overwhelmingly studies show that social support reduces stress (Beehr, 1985; Cohen & Willis, 1985; Etzion, 1984), there are a couple of studies where social support has paradoxically exacerbated stress levels. The supposed buffer from stress becomes the source of stress (Beehr, 1985; Kaufman & Beehr, 1985). This explanation is consistent with the explanation from Mechanic's (1962) findings where doctoral students preparing for examinations would seek the relative support of fellow students and instead experience greater anxiety from the social contact with the realization or perceptions

of insufficient exam readiness.

Stress can also be exacerbated by current economic and competitive strategies/trends whereby organizations experiencing downsizing activities are putting plateaued managers at risk of being laid off. The importance of social support as a moderator in this study is underscored by Gore's (1974) research on employees affected by permanent plant shutdowns. She concluded that employees who were well supported socially tolerated more stress than those without social support. Increasingly the focus of social support research is being directed towards the nonwork aspects of life since these roles impinge on or spillover from/to work roles and vice-versa (Bailyn & Schein, 1976; Evans & Bartholome, 1981). While social support in nonwork related areas play an important role, work related support is equally important to the study of career stress. In particular, the stress buffering effect of supervisory support has been substantiated in various studies (Kasl & Wells, 1985; Kirmeyer & Dougherty, 1988; Schlossberg & Leibowitz, 1980). For the purposes of this study social support is defined in terms of both work and nonwork dimensions.

Cognitive-Rational Coping/Self-Care/Recreation

In what was considered a state-of-the-art approach to work-related stress intervention, Ganster, Mayes, Sime and

Tharp (1982), reported significant reduction in measured employee stress as a result of a well-controlled field experiment consisting of cognitive and relaxation (self-care) training. The coping strategies comprised of both management skills or cognitive management training and relaxation/meditation/biofeedback methods. Cognitive management training is a category/type of program based on Meichenbaum's (1975) work on behavioral coping methods. The types of cognitive management training include and focus on such activities as goal setting, time management, positive imagery, problem articulation, and conflict resolution.

The second category, is broadly classified as "relaxation" because it requires a learned response for loosening up and/or releasing tension. In the Manuso (1983) study of workers in an insurance company, muscle relaxation and biofeedback were used as stress management techniques and reported to reduce stress among the treated population. Steinmetz, Kaplan & Miller (1982) reported a positive effect of their stress management program on corporate workers. The positive effects included relaxation, cognitive change and increased communication skills. Similar results were reported on the effectiveness of biofeedback and relaxation by Murphy (1983, 1984) and Peters, Benson, & Porter (1977). Drazen's (1982) study showed decreases in stress related symptoms where interventions utilized cognitive behavioral

and anxiety management skills of white collar workers at General Motors. Likewise Forman (1981) in her study of school psychologists, employed a combination of cognitive and relaxation training programs and found a significant effect of the stress management program on self-reported anxiety and other work related stress.

Another category is loosely termed as exercise but can be used to encompass recreational activities. Exercise programs generally involve increased physical conditioning mainly via aerobic activities. Kreitner (1976) has reported the effectiveness of physical fitness in managing stress although his descriptive article contains no hard evidence to supporrt his conclusion. Others (Kiev, 1974; Oates, 1971; Seyle, 1974; Wright, 1975) have suggested that a healthy lifestyle or adopting such a philosophy of life could intervene the ill-effects of stress. Much of the evidence is based on personal experiences and anecdotal evidence that is considered to be speculative (Newman & Beehr, 1979).

Summary

The plateauism phenomenon is occurring earlier among successive generations of individuals (Murray, 1977; Bardwick, 1986; Slocum, Cron, & Yows, 1987), exacerbated by increased occurrences of organizational de-layering and downsizing (Isabella, 1989; McCune, Beatty, & Montagno,

1988; Tomasko, 1987). Success-cum-status in life within the organizational context is measured by the level that one attains in the hierarchy. Promotions, endemic to the American culture, have become the vehicle by which success is measured (Carnazza, et al, 1981). Managers expecting to move in the "fast track" (i.e., moving up the career ladder at a relatively rapid rate) are caught unprepared to cope psychologically with the realities of the plateauism restricted career. This has contributed to work-related stress leading to strain.

Plateauism for the purpose of this paper is viewed as a stressor (stress-inducing factor). Since plateauism is a condition experienced through a combination of predominantly personal intuition and some measure of both social and organizational cues, the cognizance of being plateaued may not be immediate. The stress intensity increases with time as the gap in career expectations widen and personal intuition becomes compatible with the organizational cues about an individual's plateaued state. The outcome of this stressor and its impact on the consequent level of strain by an individual is moderated by that person's level and type of career motivation and personal coping abilities.

CHAPTER III

METHODOLOGY

Introduction

The objectives of this study are; (a) to identify the possible existence of a multidimensional construct of plateauism, (b) to examine the role of plateauism as the independent, predictive variable in a career strain model and, (c) its effect upon strain as moderated by career motivation (career resilience, career identity and career insight) and personal resources (self-care, social support, recreational and rational-cognitive coping).

This chapter is divided into various sections and discussed in the following order; it commences with the description of the subject pool proceeded by a detailed explanation of the data collection methods. There is a discussion of the specific instruments to be employed. The preceding sections is followed by a reiteration of the complete set of hypotheses (as discussed in Chapter I) that are to be tested along with a more detailed discussion of specific methods that are to be used to test the various hypotheses.

Subjects

The study targeted exempt employees mainly at the supervisory and middle management level from a large multinational, maufacturing organization with plants located throughout the country. The subjects were predominantly from the Sales and Marketing departments (see Appendix D for details). The organization has recently experienced restructuring and this is expected to continue in the form of labor downsizing. Upper-level management have concerns in the career development of the survivors and in their ability to function within the context of the newly defined organization and its changing values. The sample of supervisors and managers were found to be ideally suited for the purposes of this study, since the literature suggests that this segment of management is most susceptible to plateauism and its negative outcomes especially in the aftermath of a restructuring process (Bardwick, 1986, Feldman & Weitz, 1988). This study was performed under the auspices of a larger organizational survey to assess career related issues, and as such there was little difficulty in building a subject pool.

Demographics

All subjects were required to respond to items pertaining to demographical information including such aspects as age, sex, tenure, marital status, academic

attainment, level in the organizational management hierarchy (referred to as career bands). Presented in Appendix C, Tables 11, 12, 13, 14, 15, 16 and 17 are brief summaries of the demographics for the subjects who participated in the study. For instance, the sample comprised of 78 percent male and 22 percent female (see Appendix C, Table 11 or 16). The participants were mainly from the Sales department as evidenced by a composition of approximately 83 percent. About 10 percent of the participating sample were from the Marketing department and the remainder were from Manufacturing and Finance (see Appendix C, Table 17). Other demographics of interest include educational status and most of the participants were college graduates who were predominantly Bachelor degree holders - 72 percent of the sample (see Appendix C, Table 11). In addition Appendix C, Tables 14, 15 and 12, 13, 15 represent marital status, career bands groupings respectively, broken down in various categories. These tables allow for a quick and convenient view of the sample.

Data Collection Procedure

Field Study

The process of gaining knowledge concerning research issues is facilitated via various methodological strategies. The manner in which McGarth (1972) views the different

"strategies" are based on what he calls three desiderata. Desideratum A (external validity) is concerned with the degree of generalizability to the general population. Precision with regard to measurement, manipulation and control of behavior variables form the bases for desideratum B (statistical validity). Desideratum C (internal validity) deals with the degree of realism in context. It is the contention of McGarth (1972) that there is no best method or even a correct set of methodological choices that can guarantee successful research. In fact, there is not even a best method or strategy for conducting research for any given problem situation. Often what is considered a strength with regard to one area/desideratum may function to be a serious weakness with regard to other equally important areas/desiderata.

This research is conducted through the process of a field study. With reference to the three desiderata, field studies are characterized as taking place in settings that are existentially "real" for the participants. Field studies are unobtrusive to the point that while desideratum C (realism) is at a maximum, it is performed at the expense of desiderata A (generalizability) and B (precision). For example, in this study the topic of plateauism was researched using actual managers with career related concerns in an organization with limited hierachical

opportunities as a result of continual downsizing activities. The ability to measure the potential strain relating from plateaued status was available under realisitc conditions. On the other hand, generalizability is somewhat limited to perhaps organizations with similar career oportunities as a result of downsizing. Precision is regulated to the extent of time and effort expended by the organization and subjects in question. Towards this objective of maintaining a high degree of precision, effort was made by the organization to allow time for employees to fill out the questionnaires on company time and a letter from top management encouraging the need for the information was also included in the package. Finally, in justification of the use of the approach taken in this study, the nature of the research topic lends itself to the use of the field study because it is necessary to acquire the type of information that is required from actual job incumbents. As a result, the use of other commonly employed research/data collection methods such as simulations, experimental studies, etc. were not appropriate.

The collection of data was facilitated through the mailing of questionnaires to a randomly selected sample of managers of a business group/division within a large multinational organization. The questionaires were distributed to managers of at least 50 different locations

spread over 40 states from as far away as Hawaii and also from offices in Puerto Rico. The organization facilitated the dissemination of 1,000 questionnaires consisting of two formats (A & B), in equal proportion of 500 each. Both questionnaires A and B included the independent (plateauism) measure and dependent (strain) variable. The difference between the two types of questionnaires lay in the fact that Format A was used to collect personal resource measures that serve as the moderating variable in the model while Format B consists of career motivation measures as the moderating variable. The reason for the creation of two separate formats was due to the fact that the total number of questions that were included on a single format was seen by management to be overly time consuming. It was their perception that individuals would not bother to fill questionnaires that exceeded 100 questions. This was based on their past experiences with organizational studies. The subjects were mailed a copy of the questionnaire, an envelope addressed to the principal researcher of the study, along with a cover letter explaining the purpose of the study (which was to assist in long-term organizational sponsored career interventions and programs) and its importance to the organization. The organization was concerned with career related issues of which plateauism was an area of interest. Findings revealing empirically the

relationship between plateauism and strain would hasten orgnizational efforts to plan intervention and related training programs.

The initial mailing yielded 515 questionnaires for a return rate of 51.5 percent. One questionnaire was considered to be unusable. Of the completed questionnaires that were returned 394 were of Format A while 120 were of Format B. The discrepancy between the return rates in Format A and Format B cannot be easily explained away as a chance occurrence. The mailing of questionnaires was handled by the organization and every assurance given by the coordinators interacting between the investigator and top management, that the mailing would be done in randomly in that 500 copies of Format A and 500 copies of Format B were to be mailed to in an indiscriminate manner across various company locations (see Appendix B). Organizational constraints in the form of expenses and organizational willingness, prevented any additional mailing(s) intended to increase the response rate beyond that which was achieved through the initial mailing effort.

Instrument/Measures

The measures and instruments employed in this study are described in this section.

Plateauism

The instrument to measure plateauism consisted of a questionnaire with eleven items (see Table 4.5) that reflected a longer, modified version of the two item measure used by Chao (1990). Chao's (1990) instrument comprised of two items that were intended to construct a perceptual conceptualization of plateauism. Her questions asked respondents if they felt that promotion opportunities had been limited in their organization and if they felt whether thay were getting ahead in their organization. These two items were included in the survey and of the eleven questions, six were intended to measure the constructs of structural and content plateauism. The first three questions (comprising of Chao's two items) were intended to reflect structural plateauism or the generic manner in which plateauism is viewed (from a hierarchical perspective). Item 1 (PLA01) was taken from the survey used by Chao (1990) but the remaining two items were developed using definition terms from various researchers (Ference et al., 1977; Bardwick, 1986). The next three items were intended to reflect content plateauism, a newer definition posed by Bardwick (1983, 1986). Content plateauism reflects challenge within the job and issues surrounding lateral movement. The five remaining items were included in the plateauism instrument to possibly measure types of

plateauism that have not been labeled in the literature but only mentioned in passing. For example, there is the idea of voluntary plateauism which occurs when individuals make a personal choice to plateau because of family reasons and the stress associated with advancement opportunities (Ference et al., 1977). There is also plateauism that occurs as a result of individuals being deficient in the skills, abilities, training and motivation required for promotion (Feldman & Weitz, 1988; Near, 1980; Slocum et al., 1987).

Strain

Stress/strain can usually be measured in a variety of ways; observation, self-report, biochemical assessment and performance. Biochemical assessments (systolic & diastolic blood pressure readings, uric acid & high density lipid measures, serum & blood cholesterol levels) would appear to be the most objective method since individuals cannot subjectively influence the results unlike the other measures of stress/strain. However, Steffy & Jones (1988) showed that in their study, subjective self-report predictors of stress/strain explained a greater variation in strain than did the objective measures mentioned above. This lower explanatory power of seemingly objective measures can be attributed in part to the fact that current biochemical measures are not stable enough to provide reliable values/indicators of strain.

While the use of multiple assessment methods are ideally desirable, self-report measures of stress/strain continue to be popular for a variety of reasons; they are economical to use while maintaining high validity, amenable to actuarial scoring procedures, brief and cost effective, and provides the only data from the person as to how he/she experiences the stress/strain.

In light of the findings the decision was made to use self-report measure(s) of strain. The choice of the standardized version, of the Personal Strain Questionnaire (PSQ), Form E-2 (Osipow & Spokane, 1981) is an appropriate inclusion as an instrument to measure strain. The reason for this is the fact that the 40-item, self-report questionnaire measures strain as a syndrome of physical, psychological, vocational and interpersonal symptoms that are elicited, to varying degrees, by disruptions that an individual experiences on the job. It was stated earlier in Chapter I that plateauism is manifested in all of these ways (Bardwick, 1983, 1986; Elsass et al., 1989; Latack, 1984; Little, 1989; Near, 1980, 1983;). Furthermore, the instrument has relatively high internal consistency with alpha coefficient values ranging from .71 to .89 (Osipow & Spokane, 1981) for the four sub-scales (physical, vocational, interpersonal and psychological) that make up the Personal Strain Questionnaire (PSQ) while the overall

PSQ has an alpha coefficient of .94 (Osipow & Spokane, 1981). Temporal stability of the scales was demonstrated by satisfactory levels of test-retest reliability, ranging from .56 to .94 (Osipow & Spokane, 1981) for the four sub-scales while the overall Personal Strain Questionnaire (PSQ) viewed as a single measure of strain, had test-retest reliability of .94 (Osipow & Spokane, 1981). Unfortunately due to space and item limitations imposed by the targeted organization, it was decided that the vocational sub-scale comprising of 10 items, would be retained and serve as the dependent strain variable. The reason to retain the vocational sub-scale was influenced by the fact that vocational strain measures the impact of work-related outcomes and also because plateauism as defined in this study is associated to job and organizational factors. In terms of construct validity, the vocational strain scale was found to have a correlation of .556 ($p<.000$) with the Vocational Strain Scale (Parasuraman, 1979).

Personal Resources

Personal resources as mentioned in this study relate to coping techniques applied by individuals to alleviate strain. These potential interventions can be applied either by the individuals or initiated at the organizational level. While coping include a variety of interventions, for the purpose of this study, the focus was placed on social

support and other forms of coping to include self-care/physical and recreational coping. Execrise and healthy dietary habits have long been recognized for their ability to help regulate strain (Kiev, 1974; Kreitner, 1976; Seyle, 1976; Wright, 1975).

The Personal Resources Questionnaire - PRQ (Osipow & Spokane, 1981) was utilized as the instrument to measure an individual's ability to cope with strain. The 40-item, self-report questionnaire measures the extent to which resources are available to individuals to counteract the effects of strain experienced on the job. The instrument has relatively high internal consistency with alpha coefficient ranging from .71 to .83 (Osipow & Spokane, 1981) for the four sub-scales (recreation, self-care, rational-cognitive and social support) of the Personal Resources Questionnaire (PRQ) while the overall PRQ has an alpha coefficient of .88 (Osipow & Spokane, 1981). Test-retest reliability measures taken at two week intervals demonstrated satisfactory levels of stability represented by Pearson r-correlations, ranging from .78 to .89 (Osipow & Spokane, 1981) for the sub-scales while the overall Personal Resources Questionnaire, which is the combination of the sub-scales into a single measure of strain, had a test-retest reliability of .88 (Osipow & Spokane, 1981).

Career Motivation

Career motivation represents three key elements, career resilience, career identity and career insight, that have career related implications for individuals. These include the ability to withstand adversity and setbacks, the ability to see themselves within the context of their jobs and the ability to optimize their goals based on personal strength and weakness. Career motivation can potentially moderate the effect of strain since it involves career related issues such as plateauism. The career motivation dimensions will be measured using the CMI (Career Motivation Inventory) developed by London (1988). This inventory comprises of forty-seven questions that incorporate the three motivational dimensions (career resilience, career insight and career identity). As of this writing limited information was available on the psychometric properties of the instrument. Reliabilities measures were obtained and reported in Appendix E. A factor analysis was performed to observe if in fact the 47 items loaded on to the three separate measures of career motivation. Since many of the sub-measures that constitute career resilience, career identity and career insight appear to gauge seemingly parallel concepts, it is not surprising that the factor analysis reveals item loadings that are not consistent with the instrument (see Appendix F).

Statistical Analysis Procedures

The same hypotheses that were presented in Chapter I are repeated for review. The entire set of hypotheses as listed below are divided into three groups aimed at fulfilling the purposes stated above. The first hypothesis addresses the issue of the dimensionality within the plateauism construct. The second set of hypotheses, 2(i) and 2(ii) examine the predictive role of each measure of plateauism in the career strain model. Hypotheses 3(i), 3(ii), 4(i) and 4(ii) reflect the study of moderating variables (personal resources and career motivation) as they pertain to each measure of plateauism in the plateauism-strain model. These individual hypotheses, from the fourth through twelfth reflect the role of each unique moderator in the plateauism-strain model.

In order to test each of the previously stated hypotheses, the following methods and techniques were employed. Once again for the sake of maintaining lucidity, each hypothesis was reiterated, followed by a description of the analytical technique to be applied to the respective hypothesis.

In the list of objectives stated earlier in the chapter, one of the goals was to examine the plateauism instrument for the existence of two separate constructs (structural plateauism and content plateauism). It has been

suggested (Chao, 1990; Latack, 1989) that the future measures of the plateauism construct in addition to its definitional focus on opportunities for mobility, should include aspects of job content. In this vein, the first hypothesis deals with the initial need to examine the possibility of two distinct and distinguishable constructs of plateauism being measured by the plateauism questionnaire. As a source of interest beyond the scope of the study, additional items were included in the questionnaire in the hope of identifying constructs beyond structural and content plateauism. Researchers (Ference et.al, 1977; Nussbaum, 1983; Veiga, 1981) have attributed plateauism to variety of reasons and causes which this study will refer to as; personal/voluntary reasons (family, lack of desire for promotions, dislike for new responsibilities) and skill-related factors (inability to master new duties or responsibilities, lack of knowledge, skills, abilities, education or experience). These additional constructs are incidental to the first of three objectives of the study, which is to identify the distinct entity of the structural and content measures of plateauism.

Hypothesis 1

There exists separate structural and content plateauism constructs within the plateauism measure.

The initial use of exploratory factor analyses reveals

the nature of the factor structure and if in fact the items load on to two distinct factors. As common rules of thumb, items are expected to load >.30 on the appropriate theoretical factor and should not load on other factors. It is also imperative that the factor structure coincides with the theoretical representations hypothesized to be structural and content plateauism constructs. This will be tested through the application of confirmatory factory analysis using the LISREL VI (Linear Structural Relationships) package (Joreskog & Sorbom, 1984). The remaining set of hypotheses, 2(i) to 4(ii) are to be tested on the premise that hypothesis 1 will verify the existence of the two distinct constructs, structural and content measures of plateauism. This enables individuals to be identified to the degree to which they may be structurally and/or content plateaued.

The existence of the two distinct constructs of interest (structural and content plateauism) allows for the testing of hypotheses 2 through 4 for each of the two types of plateauism. If the sample in this study fails to distinguish between the constructs, the items will be combined for a composite measure of plateauism. The reliability of the resulting instrument is be tested and this reveals its internal consistency. Hypotheses 2(i) through to 4(ii) deals with the relationship of plateauism

to strain in general. In particular, hypotheses 3(i) through 4(ii) focus on the moderating effects of various coping techniques while hypotheses 2(i) and 2(ii) reflect the general belief that plateauism leads to strain.

These hypotheses are tested using various techniques and methods so as to draw a conclusion on the model of plateauism induced career stress/strain.

Hypothesis 2(i)

Strain varies as a function of structural plateauism. Individuals who perceive themselves as being more structurally plateaued are more likely to experience greater levels of strain than individuals who do not perceive themselves as being more structurally plateaued.

Hypothesis 2(ii)

Strain varies as a function of content plateauism. Individuals who perceive themselves as being more content plateaued are likely to experience greater levels of strain than individuals who do not perceive themselves as being more content plateaued.

Data Analysis: $Y = b_0+b_1PL+b_2X_1+b_3PL*X_1$

The regression of plateauism on strain is examined to see if in fact b_1 and b_2 are significant for main effects and if b_3 is significant for interaction effect. Hypotheses 3(i) through 4(ii) have very common features insofar as the method of data analysis to be applied. To examine the effects of plateauism given these coping mechanisms involving personal resources (hypotheses 3i and 3ii) and career motivation measures (hypotheses 4i and 4ii), the

relevant linear regression analyses is performed. In hypotheses 3i and 3ii, the beta coefficients b_1, b_2, b_3, b_4, and b_5 are tested to see if they are significant for main effects. The coefficients b_6, b_7, b_8, and b_9 are tested for significance as interaction effects. This is represented in its general form in the following page. The statistical significance of the regression coefficient for plateauism is tested using the F-statistic.

Hypothesis 3(i)

The relationship between structural plateauism and strain varies as a function of the degree to which individuals employ coping mechanisms such as social support, recreational coping, self-care/physical coping and rational/cognitive coping. Structurally plateaued individuals employing greater amounts of personal resources can be expected to experience less strain than those not employing greater amounts of personal resources.

Hypothesis 3(ii)

The relationship between content plateauism and strain varies as a function of the degree to which individuals employ coping mechanisms such as social support, recreational coping, self-care/physical coping and rational/cognitive coping. Content plateaued individuals employing greater amounts of personal resources can be expected to experience less strain than those not employing greater amounts of personal resources.

Data Analysis: $Y = f(PL, SS, SC, RC, R, PL*SS, PL*SC, PL*RC, PL*R)$ $R^2_{Y.PL,SS,SC,RC,R,PL*SS..PL*R}$

$Y = f(PL, SS, SC, RC, R)$ $R^2_{Y.PL,SS,SC,RC,R}$

$$Y = b_0+b_1PL+b_2SS+b_3SC+b_4RC+b_5R+b_6PL*SS+b_7PL*SC+b_8PL*RC+b_9PL*R$$

While hypotheses 3(i) and 3(ii) investigate the moderating effects of personal resources variables, hypotheses 4(i) and 4(ii) tests the moderating effects of specific components of career motivation in the plateauism induced strain relationship.

Hypothesis 4(i)

The relationship between structural plateauism and strain varies as a function of the extent to which individuals posses career motivation mechanisms such as career resilience, career identity and career insight. Structurally plateaued individuals possessing greater amounts of career motivation experience less strain than those individuals not possessing greater amounts of career motivation.

Hypothesis 4(ii)

The relationship between content plateauism and strain varies as a function of the extent to which individuals posses career motivation mechanisms such as career resilience, career identity and career insight. Content plateaued individual possessing greater amounts of career motivation experience less strain than those individuals not possessing greater amounts of career motivation.

Data Analysis: $Y = f(PL, CR, CI, CD, PL*CR$ PL*CI, PL*CD) $R^2_{Y.PL,CR,CI,CD,PL*CR..PL*CD}$

$Y = f(PL, CR, CI, CD)$ $R^2_{Y.PL,CR,CI,CD}$

$$Y = b_0+b_1PL+b_2CR+b_3CI+b_4CD+b_5PL*CR+b_6PL*CI+b_7PL*CD$$

Summary

The thrust of this chapter, is to reiterate the

hypotheses that are examined in this study, and to provide the procedures and precise descriptions for the statistical testing of the proposed model of plateauism induced career strain. A detailed report of the experimental subjects and data collection methods is provided along with lengthy descriptions of the measures/instruments utilized in this study.

To reiterate, the objectives of the study are three-fold. The initial interest is in identifying and confirming the existence of different measures of plateauism. To achieve this end factor analyses (both exploratory and confirmatory) are utilized. This allows for distinct factors to be identified if indeed they existed. This initial stage is crucial to the remainder of the study. The lack of separate measures of plateauism would force the clumping of all the items into a singular, global measure. The evidence of distinct measures of plateauism allows for separate studies that could perhaps reveal more insights into the overall plateauism phenomenon.

The second objective is to examine the role of plateauism as a predictive variable in the career strain model. Regression analysis is suggested as an appropriate methodology to test the model. This reveals the predicitive power and also establishes the role of plateauism as a contributory variable in the career strain model, while

confirming empricially ancedotal evidence of the detrimental impact of strain. The final objective involves the study of two different sets of moderators; "personal resources" and "career motivation". The proposed methodology here involves the use of mutliple regression analysis with special attention paid to the interaction of the independent variable measures (assuming that these are "discovered" in the initial portion of the study) in combination with the various main effects (as represented by the different measures of the two moderators).

CHAPTER IV

FINDINGS

In this chapter, the results and findings of the hypotheses mentioned earlier are discussed. Prior to the discussion of the findings, the subjects used in the study and some brief demographical description are examined.

Description of Subjects

The subjects for the study were surveyed as part of a larger organizational effort to examine career related issues and its effects upon the employees concerned. A particular business division within this large multinational organization was targeted for the study. The size and nature of the business division allowed for an extensive sample of employees distributed throughout the country to include slightly over 100 locations which included Puerto Rico and Hawaii. The locations are given as seen in Appendix B.

The initial survey information included questions created expressly for this study and also those from standardized questionnaires. These were circulated among upper management for their approval and after slight changes, were distributed randomly to 1,000 exempt/

supervisory employees mainly within the Sales and Marketing section of the division. Of the 1,000 questionnaires distributed, 515 useable forms were returned while one survey was discarded because much of the critical information was left out. The resulting response rate of 51.4 percent was considered to be an adequate sample to perform the study despite the organizational constraints that limited the collection of data to a single mailing without any follow-ups. The questionnaires comprised of two formats A and B. Format A was similar to format B in that they both comprised of the dependent (strain) and independent (plateauism) measures. The only difference between the 2 formats lay in the distinct set of moderators that were contained in each: **Personal Resources** (Format A) and **Career Motivation** (Format B). There were a total of 90 items on format A of the questionnaire while there were 98 items on format B (see Appendix A). The questionnaires were addressed and mailed randomly to various locations by the personnel department at the divisional level. Along with each questionnaire, a self-addressed envelope was included that was to be mailed to the investigator of the study at the University of Iowa. Included also in the packet was letters from the Vice-President of Sales for the division and the General Manager of Marketing, explaining the reasons for the study while eliciting the cooperation of the

participants). Of the 515 questionnaires that were returned, 395 comprised of Format A (79% return rate) and 120 (24% return rate) comprised of Format B. There were no plausible explanations for this disproportinate discrepancy in return rates except that either mailings were nonrandomly distributed and managers and or employees in locations receiving the questionnaires (Format B) were not receptive or favorably predisposed to the survey.

Table 1 listed in the following page(s) provides a zero order correlation, means and standard deviation of the various demographic variables and the measures used in the study. It was interesting to observe the fairly high correlation of .55 between the two measures of plateauism (structural and content). Regardless of the high correlation, it is the objective of this study to show that the two measures of plateauism are separate and quite distinctly different. But this will be explained later in this chapter with the testing of hypothesis 1. The other area of concern arose from the high correlation of the career motivation measures. Career resilience and career identity were highly correlated at .80, while career career insight and career resilience were correlated at .61 ans career identity and career insight had a correlation of .55. The rather high correlation among the career motivation variables could be accounted for by the sub-scales in each

of the measures of career motivation. For instance, the career resilence sub-scale referred to as "achievement needs" coincides with "recognition needs" and "advancement needs" that are sub-scales of the career identity measure. Likewise, "leadership needs" that are present in the career identity measure may be highly related to the "risk-taking" element present in career resilence. As for the relationship between career resilience and career insight, "self-belief" and "self-knowledge" may have been viewed as fairly similar. The fact that the measures of career motivation were tapping into comparable constructs as evidenced earlier, could explain the high correlation values that are reported in Table 1. The next portion of the study involves the testing of the various hypotheses, crucial to the objectives of this study.

Hypotheses Testing

The hypotheses which have been previously mentioned in Chapters I and III were tested and the respective results are discussed in this section. The methodologies that are used to test the hypotheses are examined in detail and the results explained. The development of the first hypothesis was to establish the existence of two distinct and separate factors that are referred to as structural and content plateauism. This was consistent with one of the major objectives of the study which was to facilitate a more

Table 1
Means, Standard Deviations and Correlations*

N	MEAN	S.D.	VAR	AGE	SEX	RAC	MAS	EDU	CAB	YRP	YRG	FUN
511	4.09	2.21	AGE		-24	-01	38	-31	30	53	81	-16
512	1.22	0.41	SEX	-24		-01	-10	-14	-31	-18	-21	20
511	1.23	0.83	RAC	-01	-01		04	00	00	-06	-04	-07
511	1.90	0.72	MAS	38	-10	04		-23	08	17	29	-12
511	3.72	0.97	EDU	-31	-14	00	-23		23	-18	-31	05
312	2.37	0.95	CAB	30	-31	00	08	23		00	33	13
278	4.09	4.31	YRP	53	-18	-06	17	-18	00		55	-12
494	11.47	10.27	YRG	81	-21	-04	29	-31	33	55		-11
503	2.60	1.58	FUN	-16	20	-07	-12	05	13	-12	-11	
511	3.48	0.93	STR	04	08	-02	-01	11	10	-06	04	13
512	2.51	0.84	CON	-02	12	-01	-06	-02	-08	08	-01	09
120	4.26	0.37	CRES	05	06	04	06	-13	-10	-02	02	13
120	3.78	0.48	CAID	07	-01	13	-04	-07	-07	-01	-05	17
120	3.89	0.48	CINS	17	16	05	09	-20	08	-03	14	07
394	2.89	0.57	RECR	05	-01	02	00	-04	-01	04	00	-05

Table 1 (cont'd)

N	MEAN	SD.	VAR	STR	CON	CRES	CAID	CINS	RECR	PHYC	SOCI	COGN	VSTR
393	2.67	0.58	PHYC	12	14	-00	-00	-04	-09	10	03	03	
392	3.99	0.69	SOCI	-16	14	-11	-10	02	-02	-10	-15	-08	
392	3.69	0.50	COGN	-10	08	-06	-01	06	17	-06	-11	-01	
514	1.89	0.47	VSTR	-14	03	-03	-11	07	-06	-05	-07	13	
511	4.09	2.21	AGE	04	-02	05	07	17	05	12	-16	-10	-14
512	1.22	0.41	SEX	08	12	06	-01	16	-01	14	14	08	03
511	1.23	0.83	RAC	-02	-01	04	13	05	02	-00	-11	-06	-03
511	1.90	0.72	MAS	-01	-06	06	-04	09	00	-00	-10	-01	-11
511	3.72	0.97	EDU	11	-02	-13	-07	-20	-04	-04	02	06	07
312	2.37	0.95	CAB	10	-08	-10	-07	08	-01	-09	-02	17	-06
278	4.09	4.31	YRP	-06	-08	-02	-01	-03	04	10	-10	-06	-05
494	11.47	10.27	YRG	04	-01	02	-05	14	00	03	-15	-11	-07
503	2.60	1.58	FUN	13	09	13	17	07	-05	03	-08	-01	13
511	3.48	0.93	STR		55	08	13	23	-20	-11	-26	03	30
512	2.51	0.84	CON	55		13	17	21	-14	-10	-18	01	37

Table 1 (cont'd.)

N	MEAN	SD.	VAR	STR	CON	CRES	CAID	CINS	RECR	PHYC	SOCI	COGN	VSTR
120	4.26	0.37	CRES	08	13		80	61					-15
120	3.78	0.48	CAID	13	17	80		55					-17
120	3.89	0.48	CINS	23	21	61	55						-01
394	2.89	0.57	RECR	-20	-14					44	39	28	-29
393	2.67	0.58	PHYC	-11	-10				44		29	30	-25
392	3.99	0.69	SOCI	-26	-18				39	29		27	-32
392	3.69	0.50	COGN	03	01				28	30	27		-26
514	1.89	0.47	VSTR	30	37	-15	-17	-01	-29	-25	-32	-26	

*Decimal points are omitted for correlation coefficients

AGE - Age
SEX - Sex
RAC - Race
MAS - Marital Status
EDU - Educational Attainment
CAB - Career Band
YRP - Years in Position
YRG - Years in Organization
FUN - Functional Area

STR - Structural Plateauism
CON - Content Plateauism
CRES - Career Resilience
CAID - Career Identity
CINS - Career Insight
RECR - Recreational Coping
PHYC - Physical Coping
SOCI - Social Support
COGN - Cognitive/Rational Coping

Hypothesis 1

There exists separate structural and content plateauism constructs within the plateauism measure.

In order to determine the factor structure, as to the number of factors and which items from the plateauism questionnaires (refer to Tables 3 and (4) load the various constructs of interest (content versus structural plateauism), exploratory factor analysis using an orthogonal rotation as a statistical methodology was applied to achieve this end. While exploratory factor analysis reveals the nature of the factor structure and if, in fact, the items do load on to at least two distinct factors, confirmatory factor analysis is used to test the eventual factor structure for optimal "fit". Confirmatory factor analysis was performed with the aid of the LISREL VI computer program (Joreskog & Sorbom, 1984). As part of the analysis, certain statistical indicators are used to determine optimal models and or factor structure. One such indicator, the goodness-of-fit statistics signifies the likelihood that the hypothesized model could yield the data that is observed. Three important goodness-of-fit statistics provided by the program are (1) the overall chi-square value which is based on the difference between the observed and estimated covariance matricies, (2) the rho value which is the non-normed fit index (Bentler & Bonett, 1980) and (3) the root-mean-square residual (RMS) which measures the overall degree

to which the covariances generated by the hypothesized model approximate the observed covariances (Vance & Colella, 1990). Rho compares the ratio of the model chi-square relative to its degree of freedom to the same ratio representing two other models that serve as reference points, for instance: (a) a null, or worst case model that is unrepresentative of the population versus (b) the idealized model that reflects the population. Thus, rho serves as an index of where the hypothesized model lies in the continuum from the null to the idealized model (Vance & Colella, 1990). Values of rho in excess of .90 are generally regarded to be an indication of a good-fitting model (Bentler & Bonett, 1980). As for the root-mean-square (RMS) residual indicator, values of .10 or less are generally considered to be good (Vance & Colella, 1990).

It is also imperative that the factor structure coincides with the theoretical representations hypothesized to be structural and content plateauism constructs. At some point there will inevitably be some discussion that may offer explanations beyond that which is required for this study in terms of the other types of plateauism (voluntary and skills-based) that may exist and the decision to examine the hypothesized measures of plateauism. In so doing it serves to offer some rationale for the events to follow and also facilitate a smooth transition between the hypotheses

to be discussed here.

Listed on the following page is Table 2 representing the mean, standard deviation and correlation values for the various plateauism items.

The **"scree"** test (refer to Figure 3) provides a rough rule of thumb method of establishing the appropriate number of factors appeared in this study to suggest a factor structure involving five factors. However applying factor analysis on this assumption of a five-factor model resulted in the fifth factor having only one item (see Table 3). This five-factor model was deemed unsuitable since the fifth factor as a single item was inadequate in offering any theoretical explanation. Only with the introduction of extra items (to the 11 items used here) in a separate study of this nature where addition items load onto the "fifth factor", can a better understanding be reached as to what that factor represents. Theoretically it made more sense to perform an exploratory factor analysis on the assumption of a four factor structure (see Table 4). This appeared to be a logical option since a confirmatory factor analysis could be used to strengthen the assumption of the four factor model while revealing the viability (in terms of goodness-of-fit indicators) of the various (one through five) factor models to indicate the optimal factor structure. The results/loadings of the four factor structure are presented

Table 2
Means, Standard Deviations and
Correlations of Plateauism Items

	Mean	S.D.	PLA01	PLA02	PLA03	PLA04	PLA05	PLA06
PLA01	3.611	1.067	**1.000**	.626	.644	.322	.165	.403
PLA02	3.237	1.105	.626	**1.000**	.607	.404	.172	.494
PLA03	3.596	1.054	.644	.607	**1.000**	.378	.212	.432
PLA04	2.168	0.960	.322	.404	.378	**1.000**	.243	.538
PLA05	3.708	0.948	.165	.172	.212	.243	**1.000**	.185
PLA06	2.369	1.100	.403	.494	.432	.538	.185	**1.000**
PLA07	2.992	1.103	.293	.396	.290	.341	.088	.476
PLA08	4.055	0.830	.022	.025	.019	.018	.144	.036
PLA09	2.864	1.194	-.100	.012	-.025	-.046	-.040	-.064
PLA10	2.333	1.198	-.268	-.236	-.228	-.143	-.158	-.275
PLA11	2.329	1.063	.130	.107	.098	-.008	-.100	.053

Table 2 (cont'd.)

	Mean	S.D.	PLA07	PLA08	PLA09	PLA10	PLA11
PLA01	3.611	1.067	.293	.622	-.100	-.268	.130
PLA02	3.237	1.105	.396	.025	.012	-.236	.107
PLA03	3.596	1.054	.290	.019	-.025	-.228	.098
PLA04	2.168	0.960	.341	.018	-.046	-.143	-.008
PLA05	3.708	0.948	.088	.144	-.040	-.158	-.100
PLA06	2.369	1.100	.476	.036	-.064	-.275	.053
PLA07	2.992	1.103	**1.000**	.039	.019	-.073	.043
PLA08	4.055	0.830	**.039**	**1.000**	-.046	-.176	-.095
PLA09	2.864	1.194	**.019**	**-.046**	**1.000**	.301	-.016
PLA10	2.333	1.198	**-.073**	**-.176**	**.301**	**1.000**	.125
PLA11	2.329	1.063	**.043**	**-.095**	**-.016**	**.125**	**1.000**

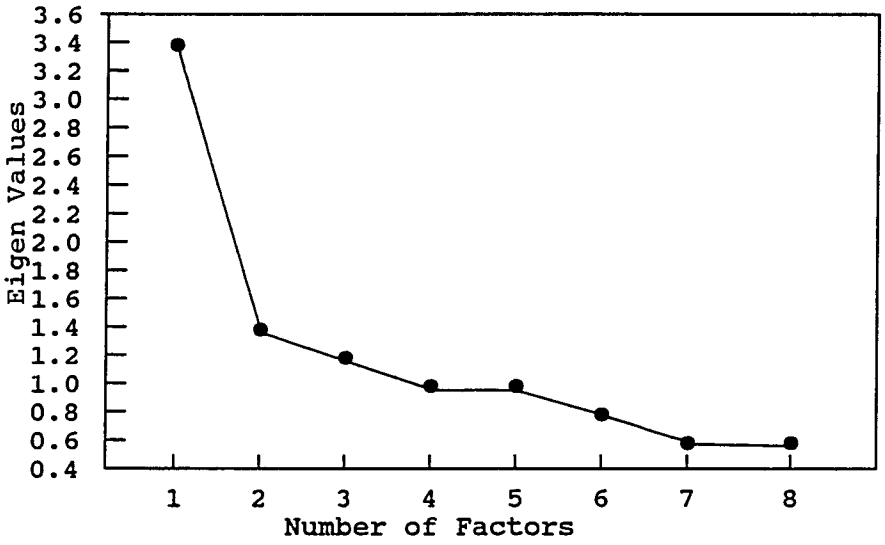

Figure 3. SCREE test. Plot of Eigen values vs. number of factors.

Table 3
Exploratory Factor Analysis Orthogonally
Rotated 5 Factor Pattern

	(Structural) Factor 1	(Content) Factor 2	(Choice) Factor 3	(Skills) Factor 4	(Transfer) Factor 5
PLA01	**0.831**	0.184	-0.148	0.047	-0.000
PLA02	**0.744**	0.388	-0.009	0.011	0.019
PLA03	**0.826**	0.222	-0.039	-0.053	-0.015
PLA04	0.271	**0.684**	-0.047	-0.227	-0.085
PLA06	0.331	**0.758**	-0.152	-0.051	0.008
PLA07	0.117	**0.808**	0.064	0.115	0.101
PLA9	0.043	-0.006	**0.877**	-0.101	0.047
PLA10	-0.258	-0.081	**0.692**	0.233	-0.184
PLA05	0.335	0.031	0.016	**-0.636**	0.177
PLA11	0.280	-0.043	0.073	**0.786**	0.039
PLA08	-0.016	0.027	-0.075	-0.085	**0.971**

Table 4
Exploratory Factor Analysis Orthogonally
Rotated 4 Factor Pattern

	(Structural) Factor 1	(Content) Factor 2	(Personal Choice) Factor 3	(Job Skills) Factor 4
PLA01	**0.796**	0.253	-0.156	0.089
PLA02	**0.706**	0.440	-0.017	0.103
PLA03	**0.759**	0.316	-0.048	0.149
PLA04	0.172	**0.746**	-0.052	0.112
PLA06	0.293	**0.759**	-0.156	0.050
PLA07	0.156	**0.722**	0.063	-0.044
PLA09	0.021	0.017	**0.876**	0.118
PLA10	-0.186	-0.120	**0.700**	-0.324
PLA05	0.136	0.185	0.009	**0.632**
PLA08	0.067	-0.163	-0.076	**0.703**
PLA11	0.516	-0.211	0.075	**-0.497**

in Table 4 and the actual items as they appear worded in the questionnaires are also represented in the four factor groupings as seen in Table 5.

From the table above (Table 4), it is evident that the items have loaded onto the four factors accordingly as distinguished by the values in bold print. So items PLA01, PLA02 and PLA03 load onto Factor 1, items PLA04, PLA06 and PLA07 load onto Factor 2, items PLA09 and PLA10 load onto Factor 3 while items PLA05, PLA08 and PLA11 load onto Factor 4 (please refer to Table 5 for items as they are worded in the questionnaires). Item PLA11 could have just as conveniently loaded on Factor 1, but upon closer examination it was felt that conceptually it made more sense to have it be part of Factor 4. The reason for this is that item PLA11 reads as follows, "I have not advanced to the next level either because I or my supervisors feel that I do not have the necessary skills or qualifications for a promotion." While this item could load on Factor 1 as shown by the exploratory factor analysis since it deals with advancement, which is a structural plateauism concern, the other point intended was the issue plateauim caused by the lack of abilities and skill. A rule of thumb sometime applied in exploratory factor analysis is to discard the item when there are almost identical loadings. Interestingly PLA11 loaded with PLA05 as Factor 4 in the 5 factor model lending

more credence to the belief that it probably belongs with items PLA05 and PLA08 as Factor 4 in the 4 factor model. Except for this one item loading that had to be decided on the basis of theoretical/conceptual criteria, the other loadings were very distinct. Furthermore each factor can be conceptually explained. The items that have loaded onto Factor 1 clearly form the **"structural"** plateauism measure while Factor 2 is ostensibly the **"content"** plateauism measure. Factor 3 and Factor 4 represent measures of plateauism that can be termed as **"personal choice"** and **"job-skill"** respectively (please refer to Table 5). While Factors 3 and 4 are not of immediate interest in terms of the hypotheses testing, researchers (Bardwick, 1986; Ference, Stoner & Warren, 1977; Nussbaum, 1983; Veiga, 1981) have alluded to their contribution to the collective cause(s) of plateauism, as mentioned earlier. So it is appropriate to mention them as other or complementary measures of plateauism. A confirmatory factor analysis using the LISREL VI package (Joreskog & Sorbom, 1984) has provided statistical indicators that refer to the goodness-of-fit of each hypothesized model. This "goodness-of-fit" is represented by such indicators as the chi-square, rho and root-mean-square (RMS) residual values which act as yardsticks used to gauge the validity of the factor structure and its general fit as hypothesized by the various

models. A discussion of these statistical indicators is not warranted here as it has been discussed at great length previously. The various factor models are represented with their corresponding chi-square, rho, and root-mean-square (RMS) residual values in Table 4.6. It is apparent from the information provided that the 4 factor model has the smallest Chi-square value of all possible models hypothesized. Furthermore the 4 factor model has a rho value of .95 which is greater than the .90 benchmark provided by Bentler & Bonett (1980) as an indication of a good-fitting model. Finally, the RMS (root-mean square residual value for the 4 factor model is .066, where the yardstick for good model fits are RMS values below .10. All of these statistical indicators point to the optimal structure and the justification of the 4 factor model given the current data and item measures tested.

From the evidence presented earlier in both Table 3 and Table 4, the question of primary interest is answered. It is clear in the case of either a four or five factor structure, that separate measures of plateauism exist very distinctly in the form of "structural" and "content" constructs (refer to Table 5 for items).

In reference to an earlier concern about the relatively high correlation between the structural and content measures of plateauism as evidenced in Table 1 have been addressed by

Table 5
Items on Plateauism Measures

FACTOR 1	STRUCTURAL
PLA 01	Promotion opportunities have been limited in my organization.
PLA 02	I am not getting ahead in my company.
PLA 03	I am presently limited in my promotions and progressions due to the organizational structure.
FACTOR 2	CONTENT
PLA 04	I know everything about my job to the extent that there is nothing more to know.
PLA 06	My job is no longer challenging.
PLA 07	My current job has remained relatively the same.
FACTOR 3	PERSONAL CHOICE
PLA 09	I can advance in the organization if I transfer to another location but I choose not to do so for personal and family reasons.
PLA 10	I choose to remain at my current position, not desiring further promotion because I am happy with my job/responsibilities as it is.
FACTOR 4	JOB SKILLS
PLA 05	I have remained current/up to date technically in my work or job skills (eg. through seminars, personal reading, extra training).
PLA 08	My job skills are transferable to other kinds of work or to other organizations.
PLA 11	I have not advanced to the next level either because I or my supervisors feel that I do not have the necessary skills or qualifications for a promotion.

Table 6
LISREL Analysis on Factor Models

	rho	chi-square	df	RMS
Null Model	.660	1003.24	55	.257
1 Factor Model	.895	240.68	44	.083
2 Factor Model	.906	214.39	43	.085
3 Factor Model	.914	194.50	41	.079
4 Factor Model	.950	114.21	38	.066
5 Factor Model	.920	123.35	35	.096

the confirmation of hypothesis 1 concerning the existence of separate and distinct plateauism. To further substantiate the distinctive nature of structural and content plateauism, the six items that comprise the scales (PLA01, PLA02, PLA03, PLA04, PLA06 and PLA07) were orthogonally factor analyzed using the varimax rotation. The results as presented in Table 7 reaffirmed that structural and content plateauism were distinctly different. Hypothesis 2 to 4 were originally set up to be tested on the premise that the earlier Hypothesis 1 would differentiate between the two distinct constructs. This would enable individuals to be identified by the degree to which they may be structurally and/or content plateaued, (since these types of plateauism were assumed to be different). With the results confirming

the stated belief (with regards to Hypothesis 1) concerning separate constructs, it is now necessary to test Hypotheses 2 to 4 accordingly.

The second objective of this study was to examine the relationship between plateauism and strain. This would discriminate the effect that each distinct form of plateauism (structural and content) would have upon strain as reflected by the respective hypothesis below and on the following page.

Hypothesis 2(i)

Strain varies as a function of structural plateauism. Individuals who perceive themselves as being more structurally plateaued are more likely to experience greater levels of strain than individuals who do not perceive themselves as being more structurally plateaued.

Hypothesis 2(ii)

Strain varies as a function of content plateauism. Individuals who perceive themselves as being more content plateaued are likely to be experience greater levels of strain than individuals who do not perceive themselves as being more content plateaued.

To test hypotheses 2(i) and 2(ii), regression analysis utilizing the general linear model procedure in the SAS computer package was applied in the generic form listed below. The relationship between plateauism and strain are studied and the residuals (difference between the predicted and fitted values) plotted against the independent variable (plateauism) to see if in fact the relationship between

plateauism and strain is linear. The statistical significance of this relationship was tested using the F statistic.

Data Analysis: $Y = b_0+b_1PL+b_2X_1+b_3PL*X_1$

The results from the regression analyses for both hypotheses resulted in significant findings as evidenced in Table 8. Both structural and content plateauism were found to significantly ($p<.001$) affect the levels of strain. These findings substantiated Hypotheses 2(i) and 2(ii) as they were stated earlier. The relevance of these findings lie in the viability of both types of plateauism (structural and content) as potential predictors of strain.

Hypotheses 3 and 4 were extensions of Hypotheses 2(i) and 2(ii). These hypotheses (3 & 4) were designed to test the plateauism-strain relationship as moderated by career motivation (tested in Hypotheses 4) and personal resources (tested by Hypotheses 3). The testing of these hypotheses are almost identical in that they share duplicate procedures and the same sets of independent (content and structural plateauism) and dependent (strain) variables.

Hypothesis 3(i)

The relationship between structural plateauism and strain varies as a function of the degree to which individuals employ coping mechanisms such as social support, recreational coping, self-care/physical coping and rational/cognitive coping. Structurally plateaued

Table 7
Factor Analysis of Structural
and Content Plateauism

	Factor 1	Factor 2
PLA01	**0.87**	0.17
PLA02	**0.76**	0.37
PLA03	**0.84**	0.22
PLA04	0.23	**0.74**
PLA06	0.33	**0.77**
PLA07	0.12	**0.77**

Table 8
Results of Regression Analysis of
Plateauism-Strain Model

Variables	Strain[1]	*R^2	Strain[2]	Strain[3]
Structural	.113**	.058	.113**	
Content	.142**	.092		.142**
R^2	.150		.058	.092
F	44.390**		30.910**	51.220**

**p<.001

N = 514

1. Full model that includes both measures of plateauism.

2. Partial model that reflects hypothesis 2(i).

3. Partial model that reflects hypothesis 2(ii).

Numbers under the strain^X columns are beta values

individuals employing greater amounts of personal resources can be expected to experience less strain than those not employing greater amounts of personal resources.

Hypothesis 3(ii)

The relationship between content plateauism and strain varies as a function of the degree to which individuals employ coping mechanisms such as social support, recreational coping, self-care/physical coping and rational/cognitive coping. Content plateaued individuals employing greater amounts of personal resources can be expected to experience less strain than those not employing greater amounts of personal resources.

The testing of the various components of Hypothesis 3 involved the use of multiple regression analysis utilizing the general linear models procedure in the SAS computer package. The approach of analysis involved entering the independent plateauism variables first, followed by the moderators mentioned and finally by the interaction terms (which are the multiplicative effects of the independent and moderating effects). This is represented in its general form listed below. The statistical significance of the regression coefficient for plateauism was tested using the F-statistic.

Data Analysis: $Y = b_0+b_1PL+b_2SS+b_3SC+b_4RC+b_5R$

$+b_6PL*SS+b_7PL*SC+b_8PL*RC+b_9R$

PL = plateauism; structural, content
SS = social support
SC = self-care/physical coping
RC = rational/cognitive coping
R = recreational coping

Table 9
Results of Regression Analysis of Plateauism-Strain Model with Personal Resources Measure as Moderating Variables

Variables	Strain[1]	*R^2	Strain[2]	*R^2	Strain3	*R^2
STRU	-0.092**	0.049	-0.164**	0.049		
CONT	0.243**	0.073			0.217**	0.070
RECR	-0.070**	0.049	-0.078**	0.060	-0.086**	0.068
PHYC	-0.075**	0.019	-0.084**	0.023	-0.079**	0.021
SOCI	-0.101**	0.026	-0.131**	0.035	-0.119**	0.036
COGN	-0.137**	0.020	-0.122**	0.016	-0.127**	0.016
STRU*RECR	0.011	0.000	-0.004	0.001		
STRU*PHYC	0.007	0.000	0.007	0.000		
STRU*SOCI	0.019	0.001	0.039	0.003		
STRU*COGN	0.021	0.000	0.017	0.000		
CONT*RECR	0.029	0.000			0.026	0.000
CONT*PHYC	0.028	0.000			0.036	0.000
CONT*SOCI	-0.065	0.008			-0.060	0.006
CONT*COGN	-0.010	0.000			-0.014	0.000
R^2	0.246		0.188	0.218		
F	8.65**		9.65**	11.63**		

*p<.05
**p<.01
N = 394

STRU = structural plateauism
CONT = content plateauism
RECR - recreational coping
PHYC = physical/self-care coping
SOCI = social support
COGN = cognitive/rational coping

1. Full model that includes both measures of plateauism, personal resources and appropriate interaction terms.

2. Partial model that reflects hypothesis 3(i); structural plateauism, personal resources and corresponding interaction terms.

3. Partial model that tests hypothesis 3(ii); content plateauism, personal resources and matching interaction terms.

Numbers under the Strain[X] columns are beta values.

Numbers under the *R^2 columns represent variational change in strain accounted for by each variable.

The compilation of the regression analyses in Table 9 show three separate sets of results. Starting from the left, the first column represents the full model utilizing the two measures of plateauism (structural and content) along with the moderating effects of personal resources measures (social support, recreational, physical/self-care and rational/cognitive coping) and their respective interaction effects. The middle column reveals the effects of structural plateauism as the independent variable while the column on the right indicates the effects of content plateauism as the independent measure. So the middle column relates to the testing of hypothesis 3(i) while the results of testing hypothesis 3(ii) are reflected in the column on the right. While the main effects are similar in both hypotheses, the interaction terms are unique to the independent variable used in testing either hypothesis. In all cases, the moderating (social support, recreational, physical/self-care and rational/cognitive coping) effects and the independent variable measures were significant. The full model explained 24.6 percent of the variation in the dependent strain measure.

With regards to hypothesis 3(i), the personal resources variables (social support, recreational, physical/self-care and rational/cognitive coping) did not moderate the relationship between structural plateauism and strain.

However, structural plateauism and the personal resources variables were found to have a significant relationship with the dependent strain variable. They explained 9.65 percent of the variation in strain after accounting for plateauism.

The results of testing hypothesis 3(ii) were similar to that of hypothesis 3(i). While the moderator variables did not significantly moderate the relationship between content plateauism and strain, they did have a significant direct effect on strain. Content plateauism also had a significant effect on strain and this model explained 11.63 percent of the variation in strain.

Hypothesis 4(i)

The relationship between structural plateauism and strain varies as a function of the extent to which individuals posses career motivation mechanisms such as career resilience, career identity and career insight. Structurally plateaued individual possessing greater amounts of career motivation experience less strain than those not individuals possessing greater amounts of career motivation.

Hypothesis 4(ii)

The relationship between content plateauism and strain varies as a function of the extent to which individuals posses career motivation mechanisms such as career resilience, career identity and career insight. Content plateaued individual possessing greater amounts of career motivation experience less strain than those not individuals possessing greater amounts of career motivation.

The testing of the Hypotheses 4(i) and 4(ii) involved the use of mutliple regression analysis utilizing the general linear model procedure in the SAS computer package

was applied in the generic form listed below. This process was identical to that used in Hypotheses 3(i) and 3 (ii). It was facilitated by first entering the independent plateauism variables followed by the moderators mentioned and finally by the interactions terms (which are the multiplicative effects of the independent and moderating effects). This general form is represented below. The statistical significance of the regression coefficient for plateauism was tested using the F-statistic and corresponding degrees of freedom were reported for hypotheses 3 and 4.

Data Analysis: $Y = f(PL, CR, CD, CI, PL*CR)$

$R^2_{Y.PL,CR,CD,CI,PL*CD..PL*CI}$ $PL*CD, PL*CI)$

$Y = f(PL, CR, CD, CI)$

$R^2_{Y.PL,CR,CD,CI}$

$Y = b_0+b_1PL+b_2CR+b_3CI+b_4CD+b_5PL*CR+b_6PL*CI+b_7PL*CD$

PL = plateauism; structural, content

CR = career resilience

CD = career identity

CI = career insight

The results of the regression analyses in Table 10 reflects the testing of hypotheses 4(i) and 4(ii). There are four separate sets of analyses from the left to right columns representing: (a) the full model involving both measures of plateauism (structural and content), (b) the

Table 10
Results of Regression Analysis of
Plateauism-Strain Model with
Career Motivation Measures
as Moderating Variables

Variables	Strain[1]	*R^2	Strain[2]	*R^2	Strain[3]	*R^2	Strain[4]	*R^2
STRU	0.507**	0.070	0.294*	0.070				
CONT	-0.171**	0.122			-0.330**	0.125	-0.646**	0.125
CRES	-0.121*	0.039	-0.102	0.025	-0.226*	0.042		
CAID	-0.152	0.015	-0.135	0.010	-0.160	0.010		
CINS	0.012	0.001	0.065	0.007	0.091	0.004	-0.119	0.006
STRU*CRES	-0.058	0.010	-0.044	0.003				
STRU*CAID	-0.187	0.004	-0.212	0.008				
STRU*CINS	0.155	0.013	0.220	0.018				
CONT*CRES	-0.308	0.000			-0.287	0.002		
CONT*CAID	0.215	0.015			0.198	0.001		
CONT*CINS	0.215*	0.034			0.249**	0.047	0.208*	0.044
R^2	0.323		0.141		0.24		0.175	
F	4.55**		2.56*		5.00**		7.99**	

*p<.05

**p<.01

N = 120

STRU = structural plateauism
CONT = content plateauism
CRES = career resilence
CAID = career identity
CINS = career insight

1. Full model that includes both measures of plateauism, personal resources and appropriate interaction terms.

2. Partial model that reflects hypothesis 3(i); structural plateauism, personal resources and matching interaction terms.

3. Partial model that tests hypothesis 3(ii); content plateauism, personal resources and matching interaction terms.

4. Reduced model that further examines the significant interaction term.

Numbers under the Strain[X] columns are beta values

Numbers under the *R^2 columns represent variational change in strain accounted for by each variable

partial model with structural plateauism and corresponding three career motivation variables and all possible interaction combinations, (c) the partial model with content plateauism as the independent variable along with its moderating and interaction terms, and (d) the partial model with content plateauism and the moderating and interaction effects of career insight.

The full model had an R^2 value of .323 which indicated that the independent, moderating and interaction variables explained 32.3 percent of the variation in the strain measure. Structural and content plateauism were significant at the $p<.01$ level while career resilence and the interaction of the content and career insight variables were significant at the $p<.05$ level. In responding to hypothesis 4(i), the relationship between structural plateauism and strain was not influenced by career motivation. However, structural plateauism was significant at the $p<.01$ level. This model explained 14.1 percent of the variation in strain. With regards to hypothesis 4(ii), the evidence partially supported the existence of an interaction effect between content plateauism and strain through the moderating effect of career insight. This interaction was significant at the $p<.05$ level. The model explained 24.3 percent of the variation in strain. In order to better understand the impact of the interaction effect on strain, further analyses

were performed by dropping the other main effects from the partial model so as to examine content plateauism, career insight and the corresponding interaction effect. The results of this new reduced model is reflected in column 4 (far right). The interaction (content plateauism * career insight) was significant at the $p<.05$ level. In this analysis content plateauism was significant at the $p<.01$ level.

Summary

The findings reported here provide some answers to the questions and hypotheses posed in the earlier chapters. In doing so the objectives of this study can be accomplished. Demographically, a brief summary/cross-section of the participants reveals a sample composed predominantly of men possessing Bachelors degrees, younger (25-29 years old), married and working mainly in the Sales Department.

As for the first objective, hypothesis 1 revealed the existence of four distinct measures of plateauism that were labeled as "structural", "content", "skills" and "personal choice". A confirmatory factor analysis revealing a rho value of .95 and a root-mean-square residual of .066 as goodness-of-fit indices, established the integrity of the four factor model. Save for one item, factor loadings were greater than .60, well above the .30 criterion for factor loadings, further reinforcing the belief in the appropriate

fit of the factor structure.

The existence of separate structural and content measures of plateauism allowed for separate sets of analyses within the plateauism-strain model. This was the second objective of the study; to measure the predictive nature of plateauism as it relates to strain. Both forms of plateauism were significantly related to strain, explaining 15 percent of the variation in strain when included together in the model. Taken separately, structural plateauism explained 5.8 percent variation in strain while content plateauism explained 9.2 percent variation in strain.

The third and final objective of this study was to examine the moderating effects of personal resources and career motivation. Personal resources was a collective term used to describe various personal coping techniques such as recreational and rational/cognitive coping, physical/self-care activities and social support. While the personal resource variables did not moderate the effects of plateauism induced strain, they did linearily and significantly ($p<0.001$) impact strain. Each of the personal resource variables were negatively related to strain. This occurred when either measure of plateauism was used as the predictive independent variable. Both independent variable measures were significantly related to strain. However, structural plateauism had a negative relationship to strain,

contrary to conventional wisdom and expectations. Content plateauism was as predicted, positively related to strain in the model where it was the predictive independent variable.

Career resilience, career identity and career insight were measures associated with career motivation. In the model utilizing career motivation as a set of the moderating variables, both measures of plateauism were found to be significantly related to strain at the $p<0.001$ level. None of the career motivation variables (career resilience, career identity and career insight) were found to moderate the plateauism-strain relationship where structural plateauism was the predictive independent variable. This model explained 14.1 percent of the variation in the dependent strain variable. In the model where content plateauism was the independent variable, the results did partially support the Hypothesis 3(ii). Career insight was found to moderate the relationship between content plateauism and strain. In fact career insight reduced the content plateauism induced strain. This model explained 24 percent of the variation in strain. Further analysis confirmed the significance of career insight in moderating the content plateauism-strain relationship.

CHAPTER V

CONCLUSIONS

This chapter focuses on the discussion resulting from the analysis of data in the previous chapter (Chapter IV). The findings are a conclusion to the original questions posed in Chapter I and reiterated in Chapter III. The extent to which the findings have been proven consistent with the hypotheses stated in Chapters I and III, by the various analyses, are discussed in detail. Other points that are to be discussed in this chapter include measurement issues and matters involving method of data collection. Finally in this chapter, a section is devoted to the recommendations for future research.

Conclusions from Hypotheses Tests

It is imperative to reiterate the focus of this study before arriving at the conclusions. The three stage approach taken by this research involved an initial determination of a better measure of plateauism followed by the testing of a plateauism induced stress model and the use of intervention variables to moderate the relationship between plateauism and strain. The first step was achieved by distinguishing separate content and structural

constructs, followed by the testing of the hypotheses (hypothesis 2(i) and 2(ii)) surrounding the plateauism-stress model incorporating these new measures. The final two sets of hypotheses (hypothesis 3(i & ii) and 4(i & ii)) will examine how well the personal resources and career motivational variables help in regulating the effects of the plateauism and strain relationship. The following sections addresses each focus of the study.

Conclusions Regarding the Plateauism Measure

Towards the end of ascertaining a more comprehensive measure of plateauism, hypothesis 1 which stated that there exists separate measures of content and structural plateauism was tested and found to be true. Through the use of factor analyses (both exploratory and confirmatory) it was ascertained that the items do load on to four distinct factors. Keeping in mind that our first objective was to distinguish structural from the content measure of plateauism, the remaining two factors ("personal" and "skill") were assigned a secondary and minor role. Regarding the factor analysis, the rather high factor loadings (except for item PLA11, all other items loaded at .60 or greater, see Table 5) for each item as it attached to its respective measure of plateauism was indicative of a lucid factor structure. The various goodness-of-fit

indices; rho value of 0.95, root-mean-square of .066 and significant chi-square, confirmed the viability and optimal characteristics of the four factor model that was presented. As stated elsewhere, the purpose of the study was to identify if in fact there were distinct structural and content measures. This was found to be the case when only items PLA01, PLA02, PLA03, PLA04, PLA06 and PLA07 were factor analyzed using exploratory factor analysis utilizing orthogonal rotation. These items clearly loaded on two distinct factors. Items PLA01, PLA02 and PLA03 loaded on the "structural factor" while the remaining items PLA04, PLA06 and PLA07 loaded on the "content" factor. When the initial exploratory factor analysis had been performed on the eleven items on the assumption of a four factor model (based on the results of the scree test), beyond the two factors of interest (structural and content), items loaded on to two other factors that were referred to as the "skill", and "personal choice" factors. The eleven items include the six items that factored into the "structural" and "content" and the remaining five items statements were created in the process of the study to reflect causes/ reasons for plateauism. While the use or testing of these two other (skill and personal choice) factors were beyond the scope of this study, these measures add to our understanding of plateauism and have potential for future

research.

Conclusions Regarding the Plateauism-Strain Relationship

The conclusions surrounding the plateauism related strain model was supported by the testing of the second hypothesis. Utilizing regression analysis, it was possible to conclude the fact that the relationship between structural plateauism ($F=30.19$, $p<.0001$), content plateauism ($F=51.22$, $P<0.0001$) and strain was significant. As hypothesized 2(i) and 2(ii), increasing levels of plateauism contributed to increasing levels of strain. The model that examined the relationship of both forms of plateauism, structural and content in its relationship with strain accounted for 15 percent of the variation in the dependent strain variable. When both structural and content plateauism were added to the model, they were both significant ($F=34.18$, $p<0.0001$; $F=54.59$, $p<0.0001$ respectively). This relationship held true for both content and structural plateauism. As predictive variables, structural plateauism accounted for 5.8 percent of the variation in strain, while content plateauism accounted for 9.2 percent of the variation in strain. These findings verify the anecdotal evidence relating to the belief that plateauism has a deleterious effect on health, manifested in the form of strain. So now it is possible to show a

relationship between plateauism and strain. Hence the existence of the plateauism-strain relationship summons the earnest study of interventions to moderate the detrimental effects of strain. The intervention of moderating effects requires closer examination and this is the focus of the next portion of this chapter.

If structural and content plateauism are separate constructs as evidenced by the earlier findings in the study, the implications for managers are profound. The reason for this, according to Bardwick (1986), is that while structural plateauism relates to organizational hierarchy that cannot be remedied except under unique circumstances, content plateauism need not be permanent and can be alleviated. Content plateauism is brought about by conditions that take away challenge from the job. For example, the routine nature of a job devoid of any new experiences, where each day of work is predictable, contributes to content plateauism. It is also a condition where the common familiarity with the job and its respective duties reach a point that a person feels that there is nothing new to learn about the job. But content plateauism can be effectively eliminated from most jobs. Organizations have implemented such programs as job enlargement, job rotation, job enrichment and work redesign in part to reduce the monotony of certain types of jobs, in part to increase

the scope of duties performed, occasionally increasing employee autonomy and job satisfaction. These same principles can be successfully applied to content plateaued jobs. Content plateauism can be reduced by adding new responsibilities to the job, requiring employees to keep abreast of technological changes by invoking attendance to seminars and lectures or providing skill-upgrading training courses. Besides the training implications, knowledge based compensation systems can also be instituted whereby employees will be rewarded for the depth of skill in their speciality or for the breadth of expertise acquired. Interestingly enough, with reference to Tables 7, 8 and 9, one would notice that the models utilizing content plateauism as the main explanatory variable accounts for a greater percentage of variation in the dependent strain measure relative to the corresponding models that employ structural plateauism as the predictive variable. This finding in itself should underscore the importance of eliminating or at the very least, reducing the negative impact of content plateauism from the workplace whenever possible.

In conclusion, plateauism need not necessarily remain as a negative outcome but can be viewed as a progression to a new phase in one's career. While almost all individuals reach a stage in their careers where future promotions are

not forthcoming (structurally plateaued), their jobs can be enriched, enlarged or redesigned so as to prevent content plateauism. Hence the transition to a system or a stage in the career where the rewards are measured and doled out in the form of new challenges, new duties and skills that are to be acquired would certainly add an interesting dimension to a job that most organizations can easily deliver.

Conclusions Regarding the Moderator Effects on the Plateauism-Strain Relationship

While it has been determined that plateauism has an impact on the level of strain experienced by individuals, this portion of the discussion deals with its influence on strain as moderated by career motivation and personal resources. The examination of these moderators are important in terms of their positive impact as potential interventions to be applied both on an individual and organizational basis with regards to strain.

The general focus of hypothesis 3 was on the use of "personal resources" (social support, recreational, physical/self-care and rational/cognitive coping) as moderating variables. The general model including both types of plateauism with personal resources as moderators explained 24.6 percent of the variation in the dependent strain variable. Specifically these moderating variables were examined relative to the structural plateauism-strain

relationship in hypothesis 3(i) while in hypothesis 3(ii) the content plateauism-strain relationship was studied. The model utilizing structural plateauism in hypothesis 3(i) explained 18.8 percent of the variation in the dependent, strain measure while hypothesis 3(ii) involving content plateauism explained 21.8 percent of the variation in strain (see Table 9). Since neither of these hypotheses was supported, the conclusion drawn is that, personal resource variables do not moderate the relationship between plateauism and strain. That is, personal resource variables do not specifically alleviate strain experienced by plateaued individuals. As individual main effects, the personal resource variables had a bearing on strain. Increasing levels of social support, self-care/physical activities, recreational and rational/ cognitive coping were each specifically responsible for lowering the level of strain experienced by individuals (see Table 9). In all cases, each variable was significant at the $p<.001$ level. So while the presence of personal resource variables impact strain directly so as to reduce its adverse effect on individuals, this study was unable to confirm the belief that personal resource variables moderate the relationship between plateauism (structural or content) and strain. So while personal resources may alleviate the negative impact of strain, it is not possible to conclude from the results

of this study, that personal resources would interact with plateauism to relieve plateauism induced strain.

Hypothesis 4 similar to hypothesis 3, looked at the plateauism-strain relationship. However the set of moderator variables focused upon were collectively referred to as "career motivation." The full model which included both types of plateauism as predictor variables along with the respective moderating and interaction variables explained 32.3 percent of the variation in the dependent, strain variable. On testing the separate hypotheses, the results did not support hypothesis 4(i). Structural plateauism had a significant ($F=22.71$, $p<.001$) impact on strain and the model explained 14.1 percent of the variation in strain. The career motivation variables failed to moderate the impact of structural plateauism induced strain. None of the individual career motivation variables such as career resilience, career identity or career insight had any significant effect on the structural plateauism-strain relationship. The career motivation variables did not significantly impact strain as individual main effects either. This would suggest that career motivation variables in the model involving structural plateauism cannot be shown to have any interventional importance. So for such individuals who fit the typical "mold" of structurally plateaued employees, higher levels of career motivation will

bring little or no relief. Bardwick (1986) showed in her case studies classic examples of plateaued persons who strove to work harder with the onslaught of structural plateauism, only to become frustrated, disappointed and experience severe stress upon failing to achieve further promotion. The results obtained here perhaps verify the anecdotal evidence surrounding this issue.

The results partially supported the testing of hypothesis 4(ii). Career insight moderated the effect of content plateauism induced strain. The interaction (content*career insight) was significant ($F=6.73$, $p<0.01$). According to the model tested here, the implication would be that an individual possessing increasing levels of career insight would be the beneficiary of reduced levels of strain brought about by content plateauism.

Individuals having career insight recognize their strengths and weaknesses in relation to their career goals. While they generally have pre-set goals and plans, they are willing to modify goals as career interests and circumstances (personal and organizational) change. This means welcoming changes in jobs and work assignments in order to enhance career opportunities. While there may be some predisposed perceptual abilities, according to London (1983, 1985), career insight is amplified by utilizing feedback from others. From an organizational standpoint,

the effects of content plateauism can be moderated through the enhancing efforts of career insight among individuals. Individuals have to be shown that their careers can continue to grow in productive avenues primarily through horizontal expansion as opposed to hierarchical promotions. This can be accomplished especially so through the change of the reward structure whereby promotions are de-emphasized and lateral job opportunities with challenging assignments being advanced as part of the culture.

In either hypothesis, it was interesting to note that career resilience (the abilty to weather setbacks and barriers affecting their careers) and career identity (the extent to which individuals identify themselves with the organization and the job they do) were negatively related to strain as one would predict. However, career insight (the ability to see themselves within the contexts of their careers) was positively related to strain in the overall model and the reduced model with structural plateauism serving as the independent variable. So an individual with increasing levels of career insight would experience more strain. Now this could be in essence due to the personal and organizational factors. Rather than operating in seemingly "blissful ignorance", individuals with career insight who are plateaued may recognize the fact that their career options and paths are limited in this particular

sample. Such realization may raise the level of emotional reactions leading to increased for stress and strain. Once again there is a need to stress a move towards job enrichment and challenge in positions susceptible to content plateauism.

Conclusions Regarding the Career Plateauism-Strain Model

This section of the chapter deals with some conclusions concerning the model that has been presented in the study. From the conclusions mentioned in earlier sections it is evident that the plateauism-strain relationship does exist. It is only appropriate to mention at this juncture that it is not possible to make any conclusions about the direction of the relationship as to whether plateauism leads to strain or vice-versa. The experimental design employed in this study precluded the ability to make any conclusions about directional relationships.

The personal resources and career motivational variables were used in the model as potential moderators of the relationship between plateauism and strain. Career insight was found to affect the relationship between plateauism and strain. No evidence was found to support the ability of the other variables (social support, self-care/physical coping, rational/cognitive coping, recreational activities, career resilience and career

identity) in influencing the relationship between plateauism and strain.

Given these findings, the model that was presented in the study cannot be fully supported at this time. A link between plateauism and strain does exist although at this time, given the limitations of the employed experimental design, it is not possible to conclude the direction of the relationship. Except in a single case the personal resources and career motivation variables failed to support the model. The model can be partially retained subject to further research to establish the true relationship between plateauism and strain. New sets of variables need to be included for closer scrutiny and examination as intervening variables in the relationship between plateauism and strain. Given these suggestions the basic model in its general form should be retained.

Measurement Issues

The separate conclusions concerning the model in its various relationships have been discussed. In this section the discussion centers on the issues involving measurement. While the results of the factor analyses (exploratory and confirmatory) supported hypothesis 1 and the existence of distinct types of plateauism measures, it is felt that with more items reflecting adaptability and transfer of skills a potential for a fifth measure of plateauism may exist in

addition to the other two (skill and personal choice). In this study the "skill" and "personal choice" factors were not examined in any detail and the item loadings did not support a fifth factor. Additional items may support a fifth potential measure which could address the issue of marketability/transferability. More items relating to this type of plateauism is a minimal requirement in order to support and substantiate its viability as a distinct factor. This was evident in the earlier exploratory five factor analysis (see Table 4) where the five factor model could have potential if the fifth factor comprised of more than just one item.

Method Issues

Data collection for both the independent and dependent variables focused on perceptual measures that utilized self report information which was obtained from the same singular source, the job incumbent. While this type of information may potentially over-estimate the relationship between the variables, under the circumstances, organizational contraints did not allow for a more rigorous methodology. A more ideal method of measuring plateauism would have been to utilize dual perceptions of both the incumbent and that of his/her immediate supervisor. This multiple source of information would more readily distinguish the plateaued from the non-plateaued. Unfortunately time, logistical and

personal constraints prevented the application of the methodology just mentioned.

Suggestions for Future Research

The concluding comments in this study would be to retain parts of the model while suggesting certain modifications and other avenues of related research. As stated previously, future research could focus on the addition of more items to create at least a five factor structure to test the viability of such a model and existence of such distinct constructs. The potential for a measure of plateauism gauging the "transferability" and/or "marketability" issue(s) appears to be legitimate given the attempt made earlier (see Table 5). A five factor model could also clear the issue of where item PLA11 really belongs. In the four factor structure PLA11 loaded almost evenly between the "structural" factor and the "job skills" factor. Given the dual loading potential other deciding criteria were the the conceptual factor and its stability as evidenced in the five factor model. The resolution to include PLA11 as a "job skills" factor (refer to Table 4) was driven by the judgement that conceptually it fit the factor structure and other items better. Belief in the previous judgement was strengthened by how clearly PLA11 had loaded on to the "skills" factor in the five factor model. Additional items and potentially more factors may clear this

matter.

Another issue to consider as future research may be the study of the additional measures of plateauism (skill and personal choice) that were mentioned in the four factor structure that was established (see Table 5). Within these untapped measures may lie more answers to the plateauism phenomenon and contributions that can be made to the sparse body of current literature.

In terms of collecting data, the methodology that may be favored would be to study groups of individuals in work units small enough that perceptual measure of plateauism can be gathered from both the individuals in question and their immediate supervisors in a feasible and timely manner. The supervisor's perception of each individual level of plateauism would validate the accuracy of the individual's self perception. As for the ideal experimental setting(s), the use of longitudinal research designs would enable in part to establish and confirm the direction of the plateauism-strain relationship. It would also allow for a stable measure of strain over time as opposed to a singe measure of a somewhat unstable phenomenon.

In terms of dependent measures, it may be of interest to study other potential manifestations of plateauism such as turnover, absenteeism and satisfaction levels. Future research should examine more comprehensive measures of

strain that will incorporate both vocational and socialmeasures of strain that have items not affected by socially desirable content/responses.

The effect of various other moderating effects should also be closely examined. While it was not within the scope of this study to explore all possible sets of potential moderators, future work in this area could look towards the possibility of replicating this study with moderators from the stress model by Matteson and Ivancevich (1979).

APPENDIX A

FORMAT A AND B QUESTIONNAIRES

CAREER DEVELOPMENT SURVEY

(FORM A)

When answering these questions, please notice that any reference to the term "organization" should be dealt with at the level which you would most identify with (ie. plant, division or corporate).

Please fill-in or circle one of the following.

1.	Age	a. under 25 d. 35 - 39 g. 50 - 54 j. 65 - 69	b. 25 - 29 e. 40 - 44 h. 55 - 59 k. over 69	c. 30 - 34 f. 45 - 49 i. 60 - 64
2.	Sex	a. Male	b. Female	
3.	Race	a. White d. Native American	b. Black e. Pacific Islander	c. Hispanic f. Asian/Other
4.	Marital Status	a. Single d. Divorced	b. Married e. Widowed	c. Separated
5.	Educational Level	a. High School (HS) d. Bachelors Degree	b. HS + some College e. Masters Degree	c. Vocational College f. Other _____
6.	Career Band	a. Level 75 d. Level 78	b. Level 76	c. Level 77
7.	Years in	G.E. _____	present position _____	
8.	Functional Area	a. Manufacturing d. Marketing g. Accounting	b. Sales e. Finance h. Other _____	c. Human Resources f. Mgmt Info. Systems
9.	Plant Location	_____ / _____ (City) (State)		

STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
5	4	3	2	1

10.	Promotion opportunities have been limited in my organization.	5	4	3	2	1
11.	I am not getting ahead in my company.	5	4	3	2	1
12.	I am presently limited in my promotions and progressions due to the organizational structure.	5	4	3	2	1
13.	I know everything about my job to the extent that there is nothing more to know.	5	4	3	2	1
14.	I have remained current/up to date technically in my work or job skills (eg. through seminars, personal reading, extra training).	5	4	3	2	1
15.	My job is no longer challenging.	5	4	3	2	1
16.	My current job has remained relatively the same.	5	4	3	2	1
17.	My job skills are transferable to other kinds of work or to other organizations	5	4	3	2	1
18.	I can advance in the organization if I transfer to another location but I choose not to do so for personal and family reasons.	5	4	3	2	1
19.	I choose to remain at my current position, not desiring further promotion because I am happy with my job/responsibilities as it is.	5	4	3	2	1
20.	I have not advanced to the next level either because I or my supervisors feel that I do not have the necessary skills or qualifications for a promotion.	5	4	3	2	1

STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
5	4	3	2	1

70.	I can have a rewarding career without going into management.	5	4	3	2	1
71.	Career planning is primarily my responsibility.	5	4	3	2	1
72.	My immediate manager spends adequate time and effort helping me establish career goals.	5	4	3	2	1
73.	Upper management considers my career development to be part of my immediate manager's job.	5	4	3	2	1
74.	All in all, I am satisfied with my job.	5	4	3	2	1
75.	In general I do not like my job.	5	4	3	2	1
76.	In general I like working here.	5	4	3	2	1

QUESTIONS 77 TO 79 SHOULD BE ANSWERED BY MANAGERS/SUPERVISORS WITH EMPLOYEES UNDER THEIR SUPERVISION

77.	I have the ability to help my subordinates with their career development.	5	4	3	2	1
78.	I coach my subordinates to be more effective and develop successful careers.	5	4	3	2	1
79.	More training would be helpful in knowing how to coach my subordinates to be more effective and develop successful careers.	5	4	3	2	1

80. What are the 2 things you like best about your job?

a. _____

b. _____

81. Please recommend 2 things that would significantly improve the likelihood that people would be able to build productive and satisfying careers for themselves.

a. _____

b. _____

The following statements express various "feelings" that people experience concerning their jobs. Please indicate how often you experience the feelings described in each statement by circling the response which most accurately describes how you feel.

ALL OF THE TIME	USUALLY	OFTEN	OCCASIONALLY	RARELY OR NEVER
5	4	3	2	1

82.	A feeling that you carry job problems home with you.	5	4	3	2	1
83.	A feeling that your job makes you upset.	5	4	3	2	1
84.	A feeling that your job makes you frustrated.	5	4	3	2	1
85.	A feeling that you are under strain on the job.	5	4	3	2	1
86.	A feeling that your job makes you tense.	5	4	3	2	1
87.	A feeling that the amount of work you have to do interferes with how well it gets done.	5	4	3	2	1
88.	A feeling that your job places you under a great deal of stress.	5	4	3	2	1
89.	A feeling that your job makes you jumpy and nervous.	5	4	3	2	1
90.	A feeling that your job puts you under a lot of pressure.	5	4	3	2	1

CAREER DEVELOPMENT SURVEY

(FORM B)

When answering these questions, please notice that any reference to the term "organization" should be dealt with at the level which you would most identify with (ie. plant, division or corporate).

Please fill-in or circle one of the following.

1.	Age	a. under 25 d. 35 - 39 g. 50 - 54 j. 65 - 69	b. 25 - 29 e. 40 - 44 h. 55 - 59 k. over 69	c. 30 - 34 f. 45 - 49 i. 60 - 64
2.	Sex	a. Male	b. Female	
3.	Race	a. White d. Native American	b. Black e. Pacific Islander	c. Hispanic f. Asian/Other
4.	Marital Status	a. Single d. Divorced	b. Married e. Widowed	c. Separated
5.	Educational Level	a. High School (HS) d. Bachelors Degree	b. HS + some College e. Masters Degree	c. Vocational College f. Other _____
6.	Career Band	a. Level 75 d. Level 78	b. Level 76	c. Level 77
7.	Years in	G.E. _____	present position _____	
8.	Functional Area	a. Manufacturing d. Marketing g. Accounting	b. Sales e. Finance h. Other _____	c. Human Resources f. Mgmt Info. Systems
9.	Plant Location	_____ / _____ (City) (State)		

STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
5	4	3	2	1

10.	Promotion opportunities have been limited in my organization.	5	4	3	2	1
11.	I am not getting ahead in my company.	5	4	3	2	1
12.	I am presently limited in my promotions and progressions due to the organizational structure.	5	4	3	2	1
13.	I know everything about my job to the extent that there is nothing more to know.	5	4	3	2	1
14.	I have remained current/up to date technically in my work or job skills (eg. through seminars, personal reading, extra training).	5	4	3	2	1
15.	My job is no longer challenging.	5	4	3	2	1
16.	My current job has remained relatively the same.	5	4	3	2	1
17.	My job skills are transferable to other kinds of work or to other organizations	5	4	3	2	1
18.	I can advance in the organization if I transfer to another location but I choose not to do so for personal and family reasons.	5	4	3	2	1
19.	I choose to remain at my current position, not desiring further promotion because I am happy with my job/responsibilities as it is.	5	4	3	2	1
20.	I have not advanced to the next level either because I or my supervisors feel that I do not have the necessary skills or qualifications for a promotion.	5	4	3	2	1

STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE
5	4	3	2	1

78.	I can have a rewarding career without going into management.	5	4	3	2	1
79.	Career planning is primarily my responsibility.	5	4	3	2	1
80.	My immediate manager spends adequate time and effort helping me establish career goals.	5	4	3	2	1
81.	Upper management considers my career development to be part of my immediate manager's job.	5	4	3	2	1
82.	All in all, I am satisfied with my job.	5	4	3	2	1
83.	In general I do not like my job.	5	4	3	2	1
84.	In general I like working here.	5	4	3	2	1

QUESTIONS 85 TO 87 SHOULD BE ANSWERED BY MANAGERS/SUPERVISORS WITH EMPLOYEES UNDER THEIR SUPERVISION

85.	I have the ability to help my subordinates with their career development.	5	4	3	2	1
86.	I coach my subordinates to be more effective and develop successful careers.	5	4	3	2	1
87.	More training would be helpful in knowing how to coach my subordinates to be more effective and develop successful careers.	5	4	3	2	1

88. What are the 2 things you like best about your job?

a. _____

b. _____

89. Please recommend 2 things that would significantly improve the likelihood that people would be able to build productive and satisfying careers for themselves.

a. _____

b. _____

The following statements express various "feelings" that people experience concerning their jobs. Please indicate how often you experience the feelings described in each statement by circling the response which most accurately describes how you feel.

ALL OF THE TIME	USUALLY	OFTEN	OCCASIONALLY	RARELY OR NEVER
5	4	3	2	1

90.	A feeling that you carry job problems home with you.	5	4	3	2	1
91.	A feeling that your job makes you upset.	5	4	3	2	1
92.	A feeling that your job makes you frustrated.	5	4	3	2	1
93.	A feeling that you are under strain on the job.	5	4	3	2	1
94.	A feeling that your job makes you tense.	5	4	3	2	1
95.	A feeling that the amount of work you have to do interferes with how well it gets done.	5	4	3	2	1
96.	A feeling that your job places you under a great deal of stress.	5	4	3	2	1
97.	A feeling that your job makes you jumpy and nervous.	5	4	3	2	1
98.	A feeling that your job puts you under a lot of pressure.	5	4	3	2	1

APPENDIX B

COVER LETTER AND LOCATIONS

CAREER DEVELOPMENT SURVEY
PLANT LOCATIONS

1. Birmingham, Alabama
2. Mobile, Alabama

3. Phoenix, Arizona
4. Tucson, Arizona

5. North Little Rock, Arkansas

6. El Monte, California
7. Fremont, California
8. Fresno, California
9. Los Angeles, California
10. Ontario, California
11. Sacramento, California
12. San Diego, California

13. Denver, Colorado

14. Bridgeport, Connecticut
15. Meriden, Connecticut
16. Plainville, Connecticut

17. Jacksonville, Florida
18. Lake Worth, Florida
19. Mmiami, Florida
20. Orlando, Florida
21. Tampa, Florida
22. Winter Park, Florida

23. Atlanta, Georgia
24. Macon, Georgia

25. Honolulu, Hawaii

26. Bloomington, Illinois
27. Chicago, Illinois
28. Oak Brook, Illinois
29. Peoria, Illinois

30. Evansville, Indiana
31. Indianapolis, Indiana

32. Bettendorf, Iowa
33. Burlington, Iowa
34. Des Moines, Iowa

35. Overland Park, Kansas
36. Wichita, Kansas

37. Lexington, Kentucky
38. Louisville, Kentucky

39. Baton Rouge, Louisiana
40. Harahan, Louisiana
41. Shreveport, Louisiana

42. Portland, Maine

43. Baltimore, Maryland
44. Columbia, Maryland
45. Salisbury, Maryland

46. Waltham, Massachusetts

47. Detroit, Michigan
48. Grand Rapids, Michigan
49. Royal Oak, Michigan
50. Southfield, Michigan

51. Minneapolis, Minnesota

52. Jackson, Mississippi

53. St. Louis, Missouri

54. Omaha, Nebraska

55. Cedar Knolls, New Jersey
56. Cherry Hill, New Jersey

57. Albuquerque, New Mexico

58. Albany, New York
59. Buffalo, New York
60. Rochester, New York
61. Rye, New York
62. Syracuse, New York

63. Charlotte, North Carolina
64. Mebane, North Carolina
65. Raleigh, North Carolina

66. Blue Ash, Ohio
67. Cincinnati, Ohio
68. Cleveland, Ohio
69. Columbus, Ohio
70. Dayton, Ohio
71. Independence, Ohio

72. Oklahoma City, Oklahoma
73. Tulsa, Oklahoma

74. Portland, Oregon

75. Allentown, Pennsylvania
76. Erie, Pennsylvania
77. Pittsburgh, Pennsylvania

78. Catano, Puerto Rico

79. Charleston, South Carolina
80. Columbia, South Carolina
81. Greenville, South Carolina

82. Sioux Falls, South Dakota

83. Chattanooga, Tennessee
84. Memphis, Tennessee
85. Nashville, Tennessee

86. Austin, Texas
87. Beaumont, Texas
88. Corpus Christi, Texas
89. Dallas, Texas
90. El Paso, Texas
91. Houston, Texas
92. Lubbock, Texas
93. San Antonio, Texas

94. Salt Lake City, Utah

95. Lynchburg, Virginia
96. Roanoke, Virginia
97. Williamsburg, Virginia

98. Seattle, Washington
99. Spokane, Washington

100. Charleston, West Virginia

101. Appleton, Wisconsin
102. Brookfield, Wisconsin

COVER LETTER

May 15, 1991

Dear ED&C Sales Associate:

The recent Employee Practices Survey identified career development issues as current concerns that are important to the majority of you. I would like to help you sort through what is an important topic to you and a critical business issue to the organization.

To help us, we have contracted with the Department of Management of The University of Iowa. They will help us further define the issues and develop programs to help address them.

To begin, they would like for us to provide them with additional information on how we think/feel about our jobs and careers. I would appreciate your candidly filling out the attached copy of the Iowa survey. After completion, please put it in the self-addressed envelope (also attached) and put it in the GE mail. The results will be processed by the University. Individual anonymity will be completely protected.

ED&CC Sales results will be compiled and shared with you as together we examine ways to improve career development in our organization.

D. M. Engelman

DME/mig
Attachments

APPENDIX C

ADDITIONAL TABLES

Table 11
Sex vs. Education

	SEX		
EDUCATION			TOTAL
	MALE	FEMALE	
HIGH SCHOOL	8	11	19
HS + COLLEGE	51	17	68
VOCATIONAL	4	2	6
BACHELOR'S	289	73	362
MASTER'S	42	8	50
OTHER	4	1	5
	398	112	510

Table 12
Sex vs. Career Band

	SEX		
CAREER BAND			TOTAL
	MALE	FEMALE	
EXECUTIVE?	7	6	13
75	20	15	35
76	93	23	116
77	112	7	119
78	26	3	29
	258	54	312

Table 13
Career vs. Education

			CAREER			
EDUCATN						TOTAL
	EXECS?	75	76	77	78	
HS	1	4	5	0	1	11
HS+COL	3	11	13	13	2	42
VOCAT	0	1	0	4	0	5
BA/BS	8	18	86	84	20	216
MASTER'S	1	1	11	15	6	34
OTHER	0	0	1	2	0	3
	13	35	116	118	29	311

Table 14
Marital Status vs. Sex

			MARITAL			
SEX						TOTAL
	SINGLE	MARRIED	SEPARAT	DIVORCE	WIDOWED	
MALE	73	301	3	19	2	398
FEMALE	52	47	2	10	1	112
VOCAT	125	348	5	29	3	510

Table 15
Marital Status vs. Career Band

CAREER	MARITAL					TOTAL
	SINGLE	MARRIED	SEPARAT	DIVORCE	WIDOWED	
EXECS?	5	6	0	2	0	13
75	10	21	3	1	0	35
76	30	78	0	7	1	116
77	9	106	0	3	1	119
78	3	24	0	2	0	29
	57	235	3	15	2	312

Table 16
Sex vs. Age

AGE	SEX		TOTAL
	MALE	FEMALE	
<25	22	26	48
25-29	78	33	111
30-34	62	15	77
35-39	55	10	65
40-44	58	12	70
45-49	55	6	61
50-54	25	5	30
55-59	28	5	33
60-64	13	0	13
65-69	0	0	0
>69	2	0	2

Table 17
Sex vs. Function

	SEX		
FUNCTION			TOTAL
	MALE	FEMALE	
MANUFACTURE	4	0	4
SALES	336	79	415
MARKETING	36	12	48
FINANCE	1	1	2
OTHER	16	17	33
	393	109	502

APPENDIX D

SURVEY DEMOGRAPHICS SUMMARY

Table 18
Career Development Survey
FORM A (N = 394)

When answering these questions, please notice that any reference to the term "organization" should be dealt with at the level which you would most identify with; i.e., plant, division, or corporate.

Please fill-in or circle one of the following:

1.	Age (N = 391)	a.	under 25 (15)	b.	25-29 (61)	c.	30-34 (66)
		d.	35-39 (58)	e.	40-44 (60)	f.	45-49 (59)
		j.	65-69 (70)	k.	over 69 (2)		
2.	Sex (N = 393)	a.	Male (336)	b.	Female (57)		
3.	Race (N = 393)	a.	White (361)	b.	Black (16)	c.	Hispanic (7)
		b.	Native American (5)	c.	Pacific Islander	f.	Asian/ Other (4)
4.	Marital Status (N = 392)	a.	Single (63)	b.	Married (298)	c.	Separated (4)
		d.	Divorced (24)	e.	Widowed (5)		
5.	Educational Level (N = 319)	a.	High School (16)	b.	HS+Some College (59)	c.	Vocat (4)
		d.	Bachelor's (263)	e.	Master's (44)	f.	Other (5)
6.	Career Band (N = 277)	a.	Level 75 (27)	b.	Level 76 (105)	c.	Level 77 (110)
		d.	Level 78 (26)				

Table 18 (cont'd.)

7. Years in (N = 385)	G.E. (N = 380) <1 (1) 1-5 (130) 6-10 (130) 11-20 (94) >20 (100)	Present Position (N = 220) <1 (2) 1-5 (156) 6-10 (39) 11-20 (20) >20 (3)	
Functional Area (N = 389)	a. Manufacturing (4)	b. Sales (334)	c. Human Resources
	d. Marketing (47)	e. Finance (5)	f. Mgmt Info Systems
	g. Accounting	h. Other (4)	

Table 19
Career Development Survey
FORM B (N = 120)

When answering these questions, please notice that any reference to the term "organization" be dealt with at the level which you would most identify with; i.e., plant, division, or corporate.

Please fill in or circle one of the following:

1.	Age (N = 120)	a. under 25 (33)	b. 25-39 (51)	c. 30-34 (11)
		d. 35-39 (7)	e. 40-44 (10)	f. 45-49 (2)
		g. 50-54 (2)	h. 55-59 (4)	i. 60-64
		j. 65-69		
2.	Sex (N = 119)	a. Male (64)	b. Female (55)	
3.	Race (N = 118)	a. White (99)	b. Black (5)	c. Hispanic (8)
		d. Native American	e. Pacific Islander	d. Asian/ Other (6)
4.	Marital Status (N = 119)	a. Single (62)	b. Married (51)	c. Separa (1)
		b. Divorced (5)	e. Widowed (0)	
5.	Educational Level	a. High School (3)	b. HS+Some College	c. Vocat (2)
		d. Bachelor's (99)	e. Master's (6)	f. Other
6.	Career Band	a. Level 75 (8)	b. Level 76 (11)	c. Level 77 (9)
		d. Level 78 (3)	e. Executive (4)	

Table 19 (cont'd.)

7. Years in Present	G.E. (N = 92) 1-5 (83) 6-10 (9) 11-26 (11) >20 (6)	Present Position (N = 60) 1-5 (59) 6-10 (0) 11-20 (1) >20 (0)	
8. Functional Area (N = 114)	a. Manufacturing	b. Sales (81)	c. Human Resources
	d. Marketing (1)	e. Finance (2)	f. Mgmt Info Systems
	g. Accounting	h. Other (830)	

APPENDIX E

REPORT ON RELIABILITY VALUES

Report on Reliability (Conbrach's Alpha) Values

Variable	#of Items	# of Subjects	Alpha	Standard Alpha
PLATEAUISM				
STRUCTURAL	3	514	.8271	.8276
CONTENT	3	514	.7041	.7089
CHOICE	2	514	.4427	.4429
SKILL	3	514	.2750	.2850
STRAIN				
VST	10	514	.7320	.7160
PERSONAL RESOURCES				
REC	10	394	.7287	.7192
PHY	10	394	.7418	.7481
SOS	9	394	.8105	.8304
COG	10	394	.7370	.7678
CAREER MOTIVATION				
CRE	21	120	.8677	.8861
INS	7	120	.6615	.7178
CID	19	120	.8416	.8576

APPENDIX F

FACTOR ANALYSES

Factor Analysis of Recreational Activity Items

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
REC01	**.48**	.14	.09	-.13
REC02	**.76**	.10	.09	-.12
REC03	**.80**	.13	.03	-.04
REC04	-.12	-.12	-.00	**-.32**
REC05	**.27**	**.26**	-.08	.17
REC06	**.54**	.06	-.01	.11
REC07	-.13	.21	.09	**.35**
REC08	**.40**	.13	-.03	.22
REC09	**.74**	.11	-.00	.16
REC10	**.31**	.01	-.02	.17

Factor Analysis of Physical Coping Items

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
PHY01	.28	.20	.08	**.50**
PHY02	-.11	.15	.15	**.52**
PHY03	-.03	.05	.15	.23
PHY04	.37	.02	-.03	**.50**
PHY05	.15	-.10	.05	**.73**
PHY06	**.45**	.15	.20	.15
PHY07	.13	.07	.08	**.44**
PHY08	.00	-.13	-.03	**.68**
PHY09	.09	-.11	.01	**.65**
PHY10	**.69**	.14	.06	.20

Factor Analysis of Social Support Items

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
SOS01	.14	**.60**	.17	-.03
SOS02	.05	**.50**	-.01	.01
SOS03	.22	**.52**	.02	.07
SOS04	.12	**.73**	.13	.07
SOS05	.18	**.73**	.11	-.01
SOS06	.09	**.77**	.11	.08
SOS07	.06	**.80**	.08	.04
SOS09	-.09	**.34**	-.01	**.37**

Factor Analysis of Cognitive/Rational Coping Items

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
COG01	**.53**	.02	.14	.02
COG02	-.03	-.00	**.29**	-.10
COG03	.06	.17	**.40**	-.04
COG04	.26	.15	**.60**	.13
COG05	.21	.03	**.59**	.13
COG06	.17	.11	**.63**	.18
COG07	.01	.05	**.69**	.03
COG08	-.06	-.03	**.68**	.14
COG09	-.05	.00	**.73**	.02
COG10	.02	.13	**.64**	.12

Factor Analysis of Career Resilience Items

	FACTOR 1	FACTOR 2	FACTOR 3
CRE01	.35	.14	.34
CRE02	.24	.48	.38
CRE03	.34	.49	.08
CRE04	.15	.55	.07
CRE05	.14	-.01	.36
CRE06	.53	.23	.19
CRE07	.44	.34	.34
CRE08	.60	.20	.17
CRE09	.44	.05	.58
CRE10	.37	.51	.27
CRE11	.64	.16	.11
CRE12	.23	.35	.53
CRE13	.39	.13	.41
CRE14	.03	.52	.22
CRE15	-.17	.31	.32
CRE16	.50	.16	.13
CRE17	.21	-.02	.60
CRE18	.29	.43	.30
CRE19	.32	.14	.61
CRE20	.34	.20	.65
CRE21	.52	.29	.30

Factor Analysis of Career Insight Items

	FACTOR 1	FACTOR 2	FACTOR 3
INS01	**.44**	**.44**	.12
INS02	**.40**	**.47**	.06
INS03	.27	**.34**	.27
INS04	.29	**.31**	-.18
INS05	**.35**	.13	.18
INS06	.25	**.41**	.15
INS07	-.07	**.40**	.24

Factor Analysis of Career Identity Items

	FACTOR 1	FACTOR 2	FACTOR 3
CID01	.10	**.57**	.16
CID02	**.45**	.19	**.37**
CID03	.27	**.36**	-.08
CID04	**.66**	.00	.07
CID05	**.68**	.16	.08
CID06	-.17	.22	**.66**
CID07	.05	**.74**	.07
CID08	-.24	**.31**	**.60**
CID09	**.54**	.23	**.30**
CID10	**.71**	.07	-.19
CID11	.17	**.58**	.15
CID12	**.43**	.13	**.47**
CID13	.10	**.51**	.16
CID14	.24	**.63**	.09
CID15	-.06	.17	**.64**
CID16	.27	.24	**.51**
CID17	**.65**	.17	.17
CID18	.16	**.75**	.00
CID19	**.61**	.10	.16

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