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**DETERMINANTS AND CONSEQUENCES OF ORGANIZATIONAL
COMMITMENT: A COMPARISON BETWEEN VALUE COMMITMENT AND
CONTINUANCE COMMITMENT**

City University of New York

PH.D. 1985

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DETERMINANTS AND CONSEQUENCES OF ORGANIZATIONAL COMMITMENT:

A COMPARISON BETWEEN VALUE COMMITMENT AND

CONTINUANCE COMMITMENT

by

URSULA K. WITTIG

**A dissertation submitted to the Graduate Faculty in
Business in partial fulfillment of the requirements
for the degree of Doctor of Philosophy, The City
University of New York.**

1985

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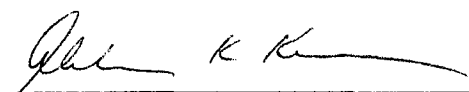
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Abstract

DETERMINANTS AND CONSEQUENCES OF ORGANIZATIONAL COMMITMENT:
A COMPARISON BETWEEN VALUE COMMITMENT AND
CONTINUANCE COMMITMENT

by

URSULA K. WITTIG

Advisor: Professor Abraham K. Korman

This study investigated the antecedents and consequences of organizational commitment and provided a comparison between two prevalent conceptions labelled value commitment and continuance commitment. The former views commitment as a positive, affective involvement with the organization, and the latter views it as a conscious decision to stay with an employer as a result of structural constraints. Reports of inconsistent findings derived from these two approaches and their respective measures tend to argue for the existence of two different types of attachments to the organization.

A two-step model was proposed with antecedents grouped into four variable categories including (1) work experiences, (2) organizational characteristics, (3) personal/demographic characteristics, and (4) personality characteristics and hypotheses predicting differential associations between individual antecedents and the two commitment types were formulated. Also, a conceptualization of commitment as an organizational maintenance function was offered and the

consequences were selected accordingly. They included (1) organization serving behavior, (2) psycho-somatic complaints, (3) personal and social alienation, and (4) intention to stay with the organization.

Questionnaire responses were obtained from 270 MBA students supplemented with independent observational data from a co-worker in 57 percent of the cases. The participants occupied a variety of managerial and technical/professional jobs at various organizations.

In general, the results of this study support the view of two different types of attachments to the organization. Value commitment was found to be predicted by intrinsic and extrinsic job satisfaction, low levels of role conflict, organizational size, inability to leave, the Protestant work ethic, the self-growth ethic, and lack of belief in the materialistic ethic. Continuance commitment was predicted by intrinsic job satisfaction, span of control, length of employment, and lack of belief in the self-growth ethic. From among the ten hypothesized differences in antecedent-commitment relationships, five were found to be significant.

With respect to the consequences, negative outcomes of an affective nature, such as personal alienation and psychological symptoms of stress, were found to be more strongly inhibited by value commitment than by continuance commitment.

The implications of these findings for theory development and management practice were discussed.

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Ursula K. Wittig
August 1985

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CHAPTER 1

Statement of the Problem

In recent years, interest in the study of organizational commitment has been increasing. This heightened interest can, in part, be viewed as a reaction to preceding popular research trends. There have been many reports about changing attitudes toward work, such as declining work interests (Bacon, 1975), the waning of traditional work values (Yankelovich, 1981), and widespread alienation among workers as well as professionals (Gooding, 1972; Korman & Korman, 1980; Shostak, 1980). These writings have called attention to potential problems for the work place. It has been argued that these changing attitudes imply decreased quality of work products and services, diminished viability of work institutions and, over time, a possible undermining of modern industrial society at large (Yankelovich, 1981).

The conscious development of organizational commitment among employees appears to be part of a solution. Among many researchers and practitioners alike, it is believed that dedicated and responsible employees, who are actively committed to the mission and goals of the organization, provide the needed resources for effective organizational performance. Although the belief in organizational commitment as a key to organizational effectiveness is one of long standing (Buchanan, 1974; Lee, 1969; Schein, 1970; Steers, 1975), concerns with changing work attitudes and the increased importance of leisure have contributed to the

proliferation of writing on organizational commitment.

Much is conjecture about the direct relationship between organizational commitment and organizational effectiveness, however, there are a number of studies which have offered support for these beliefs. On the empirical level, organizational commitment has shown itself to be a relatively stable predictor of turnover (Arnold & Feldman, 1982; Hom, Katerberg, & Hulin, 1979; Porter, Crampon, & Smith, 1976; Porter, Steers, Mowday, & Boulien, 1974) with its predictive utility exceeding that of the traditional factor of job satisfaction (Koch & Steers, 1978; Parasuraman, 1982; Porter, et al., 1974). This finding is important because turnover has been considered one of industry's most costly personnel expenses (Schneider, Hall, & Nygren, 1971).

Although not consistently, organizational commitment has been found to correlate negatively with absenteeism (Steers, 1977) and positively with performance on both the individual level (Mowday, Steers, and Porter, 1979) and organizational level of analysis (Mowday, Porter, & Dubin, 1974). In addition, factors creating commitment in organizations have been found to avert psychological detachment among its members (Knoke, 1981) and are proposed to counteract alienation (Kanter, 1968).

With the accumulation of research findings, organizational commitment has been increasingly recognized as an important factor in the understanding of work related

behavior (Angle & Perry, 1981; Morris & Sherman, 1981; Mowday, et al., 1979) and the maintenance of organizational systems (Kanter, 1968). Since organizations differ in the levels of commitment they create among their members, and individuals differ in the levels of commitment to their organization, trying to assess the factors which determine these differences presents itself as an important research task.

Over the years, research involving organizational commitment has not proceeded along uniform lines of thought. There exists no general agreement on how to conceptualize it or measure it. However, two basic approaches to the study of commitment can be identified, each worthy of consideration (Angle & Perry, 1983; Stevens, Beyer, & Trice, 1978). One way to distinguish between these two approaches is in terms of the type of commitment studied, such as value commitment and continuance commitment (Angle & Perry, 1981; Stebbins, 1970).

Value commitment describes a situation where the individual identifies with the organization and has accepted its mission and goals as his or her own (Sheldon, 1971). It reflects an individual's affective attachment to the organization apart from the purely instrumental worth of the relationship (Buchanan, 1974) and the individual's willingness to give his or her energy and loyalty to the organization (Kanter, 1968).

Continuance commitment, on the other hand, describes a situation where the individual wants to stay with the

organization as a result of individual-organizational transactions and alterations in "side-bets" or "investments" over time (Hrebiniak & Alutto, 1972). Commitment is viewed primarily in terms of continuation of membership because of the individual's vested interests in the organization. For example, when "side-bets" are made in terms of pension plans or profit sharing (Sheldon, 1971), the individual perceives increased costs in leaving the organization and is thus more likely to stay.

The importance of distinguishing between these two types of commitment stems from the recognition that maintaining membership in an organization may not always be associated with the positive orientation which is implied in the definition of value commitment. Value commitment has been referred to as a positive, affective or moral attachment to the organization (Gould, 1979), while continuance commitment has been interpreted as an instrumental-cognitive (Wiener & Vardi, 1980) or calculative (Hrebiniak, 1974; Kidron, 1978) attachment to the organization. Past research involving the continuance commitment construct has often treated this type of commitment as a structural phenomenon and ignored the nature of the affect toward the organization associated with it. Since it is possible for an individual to feel "locked-in" or "entrapped" by his or her organization through structural arrangements, a positive affect toward the organization cannot be automatically assumed. As a result, value

commitment and continuance commitment should not be treated as equivalent types of commitment since they may have potentially different implications for organizational attitudes and behavior.

The major purpose of this study is to increase our understanding of the development of value commitment and continuance commitment in work organizations, and examine their relative implications for organizational attitudes and behavior. Specifically, this study examines (1) the contributions of different groups of variables, such as organizational experiences, organizational characteristics, personal/structural characteristics, and personality characteristics, in predicting organizational commitment of both types, and (2) the extent to which value and continuance commitment are associated with favorable responses in organizations, such as low levels of psychosomatic complaints and alienation, and high levels of work efforts in the service of the organization.

The significance of this study can be found on both the theoretical and applied level. First, this study proposes value commitment and continuance commitment as two separate constructs worthy of investigation. It offers a conceptual clarification of the terms, and examines their relevance for an understanding of attitudinal and behavioral responses in organizations.

Second, this study intends to be more comprehensive in scope than previous investigations of organizational commitment. It takes into consideration both antecedents

and consequences of commitment as well as two commitment types. Previous studies have investigated either the preconditions of organizational commitment or its consequences. Yet, research is needed that comparatively analyzes the preconditions and consequences of both value commitment and continuance commitment. To the extent to which such differential effects can be demonstrated, this research can aid in the clarification of the meaning of existing empirical findings.

Third, on the practical level, this research seeks to gain a better understanding of those factors which lead to commitment in organizations, and those factors which inhibit it. Knowledge of these factors can aid in the conscious and planned development of commitment in organizations.

CHAPTER 2

Review of the Literature

The following review of the literature will discuss past findings involving the antecedents and consequences of organizational commitment, clarify the differences between the concept of value commitment and continuance commitment, and conclude with the evidence yielded by research studies which have comparatively investigated the correlates of the two commitment types. The antecedents will be discussed in the context of the mechanisms used to explain their effects on organizational commitment.

The Antecedents of Organizational Commitment

Need Satisfaction Paradigm

The selection of independent variables for inclusion in organizational commitment models has been guided by varying theoretical considerations. Earlier studies have explained organizational commitment on the basis of need satisfaction (e.g., Brown, 1969). Specifically, the satisfaction of higher order needs has been argued to lead to commitment. Schneider et al. (1971), who have treated commitment synonymous with identification, have described the latter as a process whereby the individual's self-image becomes related to or vested in the organization. This attachment is proposed to take place to the extent to which the organization is experienced as rewarding. Higher order needs relating to job autonomy and job challenge and their satisfaction through work experiences, it is argued, lead to this type of attachment.

Research, in general, has supported this proposition. Individuals with challenging jobs have been found to exhibit higher levels of organizational commitment (Hall & Schneider, 1972; Patchen, 1970; Buchanan, 1974; Lee, 1971). Brown (1969) concluded from his findings that individuals identify with their organization to the extent to which the same provides opportunities for satisfying achievement related symbolic motives. Brown's (1969) measure of identification was positively correlated with task characteristics such as task autonomy, opportunity for achievement, utilization of skills, and the opportunity to determine one's own time limits.

Yet, organizational commitment has also been found to correlate with the satisfaction of lower level needs (Alutto & Acito, 1974; Hall & Schneider, 1972; Howell & Dorfman, 1981). Parasuraman (1982) found all subscales of the JDI (work, supervision, co-workers, pay, promotion) to be positively correlated with organizational commitment. In response to these findings, Angle and Perry (1983) have suggested that the type of need satisfaction may be related to the job level of the employee. Intrinsic need satisfaction may play a more important role in commitment formation among professionals, whereas extrinsic rewards may aid in its development among blue-collar workers. Their findings tended to support this contention.

Reciprocation and Cost-Benefit Analyses

Angle and Perry (1983) offered the concept of

"reciprocation" to explain how satisfaction leads to organizational commitment. This mechanism is activated as part of the psychological contract which the individual forms with the organization. To the extent to which the individual experiences his or her organization as rewarding, he or she is willing to reciprocate. The contributions to the organization, on part of the individual, can include his or her loyalty to the organization, conformity to its goals and values, and continued membership as part of the exchange process.

The concept of "reciprocation", introduced by Angle and Perry (1983), is a broader concept than need satisfaction. It includes need satisfaction but goes beyond it in that it points out the social relevance of the commitment process. As such, reciprocation links the individual process of need satisfaction with a general conceptual framework of social exchange processes. The mechanism of "reciprocation", as part of the more general exchange framework, offers an explanation for why positive experiences within the organization lead to commitment. These positive experiences may be related to intrinsic as well as extrinsic rewards.

Within a social exchange framework, the mechanism of "cost-benefit analysis" has also been used to explain a wide range of experiences on organizational commitment. In social situations, individuals are assumed to engage in cost-benefit analyses. They would tend to interpret positive experiences as rewards or benefits and negative experiences as costs in their assessment of their

relationship with the organization (Hrebiniak & Alutto, 1972).

In addition to job satisfaction, other positive experiences found to affect organizational commitment are the opportunity to have input into the decision making process (Alutto & Acito, 1974), control over job methods (O'Reilly & Caldwell, 1980; Patchen, 1970; Porter & Steers, 1973; Steers, 1977; Steers & Spencer, 1977), met expectations and job security (Arnold & Feldman, 1982), personal importance, organizational dependability, first year job challenge, and group norms and attitudes (Buchanan, 1969).

Organizational experiences with cost factors, emotional or otherwise, have been found to affect commitment negatively. For example, level of experienced job tension (Alutto & Acito, 1974), stress (Parasuraman, 1982), lack of interpersonal trust (Alutto & Acito, 1974; Hrebiniak, 1974), conflicting standards (Arnold & Feldman, 1982), and role conflict and role ambiguity (Howell & Dorfman, 1981; Morris & Snyder, 1979) have had an inhibitory effect on organizational commitment.

Exchange processes have also been used in the explanation of the effects of organizational characteristics on organizational commitment. For example, Morris and Steers (1980) found decentralization, functional dependence, and formalization to be positively correlated with organizational commitment. The authors explained their

findings by pointing out that these characteristics provide the opportunity for decision making, and make the individual aware of his or her own importance and contributions to the organization.

Characteristics of the leadership environment have also been studied as an influence on organizational commitment. Initiating structure has been found to have a significant and negative effect on identification (Brown, 1969). Supportive and instrumental leadership behaviors, as perceived by the subordinate, were found to be positively correlated with organizational commitment by Howell and Dorfman (1981). These instrumental leader behaviors referred to such aspects as work assignments, specifications of procedures, and role clarification.

Becker's "Side Bet" Theory

Organizational commitment, when viewed in terms of an exchange relationship, is determined by two similar, but analytically distinct mechanisms. The first mechanism, described above, refers to the individual's perceptions of the ratio of inducements to contributions (Barnard, 1938; March & Simon, 1958) or his or her perceptions of the outcomes of a reward-cost analysis (Homans, 1958; Gouldner, 1960). Based on this mechanism, it is assumed that the more favorable the exchange relationship, from the individual's perspective, the greater the organizational commitment, that is, willingness to stay with the organization. The benefits and costs affecting the individual's attitude toward the organization are thought to be of an immediate nature.

The second mechanism refers to perceptions of accrued investments, or what Becker (1960) called "side bets". Becker's notion of side bets introduces a time element into the explanation of commitment. Commitment, in Becker's interpretation, refers to a "...specific mechanism of constraint of behavior through previously placed side bets..."(p.40). Becker's (1960) theory implies that an individual who decides not to change the organization, in spite of offers for better salary or working conditions, is constrained by alternative rewards attached to his or her present job, these rewards might not be immediately realizable, but could be too costly to forego. The side bets which can lock the individual into a particular organization can take the form of pension plans, profit sharing, privileges attached to seniority and other tangible and intangible rewards. These investments accrue over time and exert increasingly more influence on the individual's decisions as his or her membership in the organization progresses.

The exchange framework, and specifically, Becker's side bet theory have been used to explain the effects of personal/demographic characteristics on commitment formation. Factors such as age, sex, marital status, and tenure are proposed to affect commitment to the organization by influencing an individual's perception of his or her investments in the organization or employment alternatives.

Age. Increasing age is proposed to affect an

individual's commitment to the organization through the accumulation of investments in a particular organization and a possible decrease in alternative employment opportunities. Age has been found to correlate with organizational commitment across a range of different occupational groupings. For example, the relationship was significant for a group of factory workers (Cook & Wall, 1980), accountants (Arnold & Feldman, 1982), civil service managers (Buchanan, 1974), and research scientists (Sheldon, 1971). Further, single correlational support for the age-organizational commitment relationship was obtained by Lee (1969, 1971), Hrebiniak and Alutto (1972), Steers and Spencer (1977), and Stevens et al. (1978). In general though, a potential problem with age as a predictor is that it correlates with many other variables commonly included in commitment research (e.g., tenure), and does not make a significant contribution in multi-variate designs (Hrebiniak & Alutto, 1972; Stevens et al., 1978).

Sex. Differential expectations associated with sex and other characteristics are proposed to affect an individual's assessment of his or her employment situation (Hrebiniak & Alutto, 1972). It has been argued, in exchange terms, that married individuals, especially women with dependents, would see it as more costly to leave the organization than single, unattached individuals (Hrebiniak & Alutto, 1972).

Although the findings have not been consistent, some support exists. Arnold and Feldman (1982) found that among a group of accountants, males were more committed than

females. And in a multi-variate design by Hrebiniak and Alutto (1972), sex was found to yield a significant effect indicating that among a group of teachers and nurses, females were less committed than males.

Other Demographic Characteristics. Family responsibilities, as assessed by marital status and number of dependents, have been found to be associated with decreased turnover (Federico, Federico, & Lundquist, 1976; Marsh & Mannari, 1977). Single teachers and nurses were found to be less committed to their organization, however, marital status did not evolve as a significant predictor in a multi-variate design (Hrebiniak & Alutto, 1972).

A significant relationship between social class status and organizational commitment was found by Hrebiniak & Alutto (1972). Teachers and nurses from blue-collar backgrounds indicated less commitment than participants from households headed by self-employed individuals, white-collar or managerial employees and professionals.

Tenure. In line with Becker's (1960) arguments, length of service or seniority should be positively correlated with commitment. As the individual's length of service increases, side bets or investments tend to increase as well and become more difficult to give up as time progresses. Grusky (1966) has suggested that privileges, as a result of seniority, facilitate the obtaining of additional rewards thus making it more costly for the individual to leave the organization.

The association between organizational tenure and commitment was highlighted in a study by Hrebiniak and Alutto (1972) who found that years of experience were positively correlated with organizational commitment even for individuals who were experiencing high tension or stress. Since tension and stress are generally predictive of a greater willingness to leave the organization, the individual who is willing to stay, in spite of these negative influences, would tend to be bound to the organization by other investments.

Also, Stevens et al. (1978) found that years with the organization was positively related to organizational commitment.

Value-Congruence Model

The importance of personality characteristics for the development of commitment in organizations has been noted in the commitment research since the early 70's. Yet, few attempts have been made to explicate the theoretical importance of these findings. Their inclusion into organizational commitment models has been justified based on various rationales. For example, the concept of need satisfaction has been used to explain why certain personality factors lead to commitment (Mowday et al., 1982). It has been argued that individuals join an organization with certain needs, desires, skills, and abilities and will become committed to the same to the extent to which these needs are being met. Yet, this mechanism fails to capture the notion of commitment

propensity which certain individuals may bring to the organization and others may not bring to it. The framework of value congruence is offered here to explain the influence of individual differences on commitment formation.

The value congruence hypothesis holds that individuals become committed to their organization to the extent to which it supports the individuals' central values. The importance of a person-organization fit in the development of commitment has been advanced by Hall, Schneider, and Nygren (1970) and Wiener (1982). It has been argued that individuals who value the goals of their employing organization are more likely to identify with it (Hall, 1976). Support for the value-congruence hypothesis has been obtained in studies investigating the commitment among employees of the U.S. Forest Services (Hall et al., 1970; Hall & Schneider, 1973). Valuing public service and working for an organization which pursues such goals facilitates the development of organizational identification. Similarly, Stevens et al. (1978) predicted a positive relationship between job involvement and organizational commitment by arguing that work organizations provide the job involved person the opportunity to act out "internalized values about the goodness of work" (p.384, cited from Lodahl & Kejner, 1965).

Schneider et al. (1971) have pointed out that some individuals show a particular "proneness" or "readiness" to become committed to their organization. Over the years,

research studies have revealed that personality characteristics such as need for achievement (Morris & Snyder, 1979; Steers, 1977), job involvement (Morris & Snyder, 1979; Parasuraman, 1982; Stevens et al., 1978), intrinsic job motivation (Cook & Wall, 1980), work as a central life interest (Dubin, Champoux, & Porter, 1975), and higher order need strength (Cook & Wall, 1980) facilitate the development of organizational commitment. While other personal characteristics, such as need for autonomy (Morris & Snyder, 1979), and a positive attitude toward change (Stevens et al., 1978) tend to inhibit it.

These findings indicate that the meaning attached to work plays an important role in commitment formation.

Organizational Commitment Outcomes

The outcomes of organizational commitment have received less attention than its determinants on both the conceptual and empirical level. Steers (1977) provided some supportive data for the following commitment consequences: desire to remain, intent to remain, attendance, retention, and job effort. The outcome behavior most often investigated is turnover. As reported above, the negative relationship between commitment and turnover has been documented in several studies (e.g., Angle & Perry, 1981; Steers, 1977; Morris & Snyder, 1979). Also, Arnold and Feldman (1982) found organizational commitment to be negatively correlated with intention to search and intention to change. The positive relationship between commitment and intention to stay with the organization would be expected simply because

the desire to remain with the organization is often, by definition, an aspect of the commitment construct itself.

The relationship between absenteeism and organizational commitment has not been consistently documented. Steers (1977) found that committed scientists and engineers but not hospital employees showed better rates of attendance due to their identification with the organization. Further, tardiness was found to be significantly related to organizational commitment in the negative direction (Angle & Perry, 1981).

Individual performance has been found to correlate with organizational commitment for quantity but not for quality of work produced (Steers, 1977). Also, committed individuals were perceived by their supervisors as showing a greater promotion readiness than their less committed co-workers.

In general, the investigation of performance as an outcome of organizational commitment has yielded discouraging results. It has been argued by Mowday et al. (1982) that effort rather than performance should be considered the more logical outcome.

Value Commitment and Continuance Commitment

A persistent problem characterizing the literature on organizational commitment is the lack of agreement on how to conceptualize it and measure it. Two differing conceptions and corresponding measures dominate the research. One conception stresses the psychological characteristics of commitment as an affective, positive attachment to an

organization at large (e.g., Porter et al., 1974) and the other views commitment as an individual's calculative decision to stay with the organization (e.g., Hrebiniak & Alutto, 1972). These two conceptions of commitment will be referred to as value commitment and continuance commitment respectively. What is needed is an understanding of the two constructs in relation to the proposed antecedents and consequences of commitment.

The conception of organizational commitment which stresses its psychological characteristics has its roots in the concept of organizational identification. In fact, organizational commitment became the preferred construct and displaced the concept of organizational identification in the literature. The reason for this preference may have been the perception of commitment as a more dynamic construct. Commitment was defined more broadly than identification by adding an action component (Hall, 1976). Individuals described as committed were also imbued with a propensity for work effort.

Porter et al. (1974) have defined organizational commitment as the strength of an individual's identification with and involvement in a particular organization. On the behavioral level, this psychological attachment of the employee to the organization is characterized by (a) a strong belief in and acceptance of an organization's goals and values, (b) a willingness to exert considerable effort on behalf of the organization, and (c) a definite desire to maintain organizational membership. In Porter et al.'s

(1974) conception, three components define commitment. One of the three is the individual's propensity to stay with the organization.

This global view of commitment has been questioned in the literature (e.g., Mobley, Griffith, Hand, & Meglino, 1979). It is argued that a better understanding of the commitment process can be achieved with a more microanalytic treatment of these proposed dimensions. In particular, the value congruence component of organizational commitment may vary independently from the continuance commitment component. For example, the individual who internalizes the values and performance goals of the organization may not necessarily be committed to stay with it. An individual could identify with the organization's goals and values and put forth effort on its behalf yet decide to leave his or her employment because of other circumstances. A dedicated office worker, for example, may decide to take a better job elsewhere in spite of his or her positive regard for the organization. On the other hand, an individual who stays with the organization may not necessarily have internalized the values and goals of the organization. While his or her job performance may be adequate, this individual may not show the dedication and willingness to put forth effort beyond the call of duty that might be expected from a value committed individual.

While support for a separate consideration of these two commitment dimensions comes from several sources (e.g.,

Angle & Perry, 1981; Kanter 1968; Kidron,197 ; Mobley et al., 1979) little effort has been devoted to their conceptual clarification. In distinguishing between value commitment and continuance commitment, the following definitions have been adapted from the literature.

The concept of value commitment refers to a person's affective involvement with his or her employing organization. It is concerned with feelings of attachment to the organization at large. Specifically, these feelings of attachment express themselves in the acceptance of organizational values and goals, pride in the organization, and the individual's willingness to exert personal effort on behalf of the organization. The present conception of value commitment seeks to maintain the components of identification and personal effort set forth by Porter et al. (1974), however, it also seeks to stress that the personal effort of the value committed individual is directed primarily toward furthering the goals of the organization.

With respect to continuance commitment, it has been proposed by Kanter (1968) that the decision to remain a member of a social system involves primarily an individual's cognitive orientations. This type of commitment is characterized by an individual's appraisal of the employment situation in terms of cost-benefit notions. To the extent to which the cost of leaving the system would be greater than the cost of remaining, profit compels continued participation.

Along these lines of reasoning, Hrebiniak and Alutto (1972) have defined commitment as an attitude that deals with the "perceived utility of continued participation in the employing organization" (p.560). Respondents are asked to indicate their propensity to leave their organization given the opportunity for slight increases in inducements without perceived greater required contributions. Evolving from an inducements-contributions paradigm, continuance commitment is concerned primarily with the level of a respondent's calculative involvement in his or her organization (Hrebiniak & Alutto, 1972).

While value commitment would be predominantly influenced by positive experiences with the organization, the most important contributors to continuance commitment would be the accrued investments in one's organizations in terms of pension plans, seniority rights, etc., and the constraints resulting from such structural arrangements. Thus defined, value commitment and continuance commitment are treated as analytically independent organizational attitudes and operationalized differently.

As documented by the review of the literature above, much has been learned about organizational commitment. However, for several of the antecedent and outcome variables studied, the literature reports inconsistent results. While some of these inconsistencies may be due to the differences in constructs and measures used, a valid assessment of this claim cannot be unambiguously obtained

from a comparison of these various independent studies. Differences in findings cannot be automatically attributed to the differences in measures used since other factors such as the nature of the sample, the specific research methodology, or the combination of variables considered in a particular research design may also account for them.

Few studies have investigated the differences between the two types of commitment. Yet, those investigations which have included a measure for each have yielded evidence suggesting that a differentiation between these two types of commitment is warranted, especially as far as the consequences of commitment are concerned. Also, in considering groups of variables rather than individual antecedents, some tentative comparisons between two independent studies involving different commitment types can be made.

On the antecedent side, variables representing the process of reciprocation have been found to make a more sizeable contribution to the prediction of value commitment than the indices of Becker's side bet mechanism (Angle & Perry, 1983). Also, Shoemaker, Snizer, and Bryant (1977) established the superiority of social psychological factors over structural factors in the prediction of value commitment. On the other hand, Hrebiniak and Alutto (1972) who employed a measure of continuance commitment found factors such as years of total experience and gender, which are generally considered indices of the side bet theory, to make a greater contribution to continuance commitment than

dissatisfaction with organizational rewards, recognition, and policies.

Kidron (1978) found that an individual's work orientation affects the type of commitment he or she may form in an organization. Individuals who adhere to the values of the Protestant Ethic tend to become morally but not calculatively committed to their work organization. Moral and calculative commitment, as conceived by Kidron (1978), are comparable to value and continuance commitment as described above.

A comparison of value commitment and continuance commitment and their effects on different outcomes showed that continuance commitment was more strongly related to intention to quit than value commitment, while tardiness rates were found to be significantly correlated with value commitment but not with continuance commitment (Angle & Perry, 1981).

In general, these findings call attention to differences in the strength of different groups of antecedents in influencing these two proposed commitment types and subsequent differences in consequences. Thus, these findings support the need for a more extensive study of the differences between value commitment and continuance commitment.

CHAPTER 3

Theoretical Framework and Hypotheses

This chapter discusses the theoretical framework used to guide this research, provides rationales for the antecedent variables to be included in the model, proposes a conceptualization of the outcomes of commitment and presents the specific hypotheses to be tested in this study.

Investigations of the preconditions of organizational commitment have found them to be a function of both the internal organizational context and the external environmental context. In fact, the influences on organizational commitment derive from two major sources: (1) the personal characteristics, attitudes and beliefs which the individual brings to the organization as a member of an extra-work social structure and a unique personal history, and (2) the characteristics of the organization, relating to its structural, task, and human environment, which the individual experiences as a member of the organization.

A major concern of past research has been to group the preconditions of commitment into meaningful categories of antecedents. Steers (1977), for example, proposed the following categories of variables as determinants of commitment: (1) personal characteristics, (2) job or role-related characteristics, and (3) work experiences. More recent models have also included organizational-structural variables as predictors of organizational commitment (Morris & Steers, 1980; Mowday et al., 1982; Stevens et al. 1978). Yet, a weakness of this classificatory scheme consists in

its failure to accommodate the theoretical mechanisms proposed to explain the linkage between the antecedent categories and commitment.

The classificatory scheme employed in the present study attempts to provide such linkages. It consists of the following variable categories: (1) work experiences, (2) organizational characteristics, (3) personal/structural characteristics, and (4) personality characteristics. This framework combines the previous categories of work experiences and role related factors but differentiates between personality and demographic characteristics (See Exhibit 1). The reason for this reorganization is that it better accommodates the recent research on commitment formation, provides a classification of the variables along conceptual lines, and permits a distinction between variable groups concerning their relative importance for the prediction of value commitment and continuance commitment.

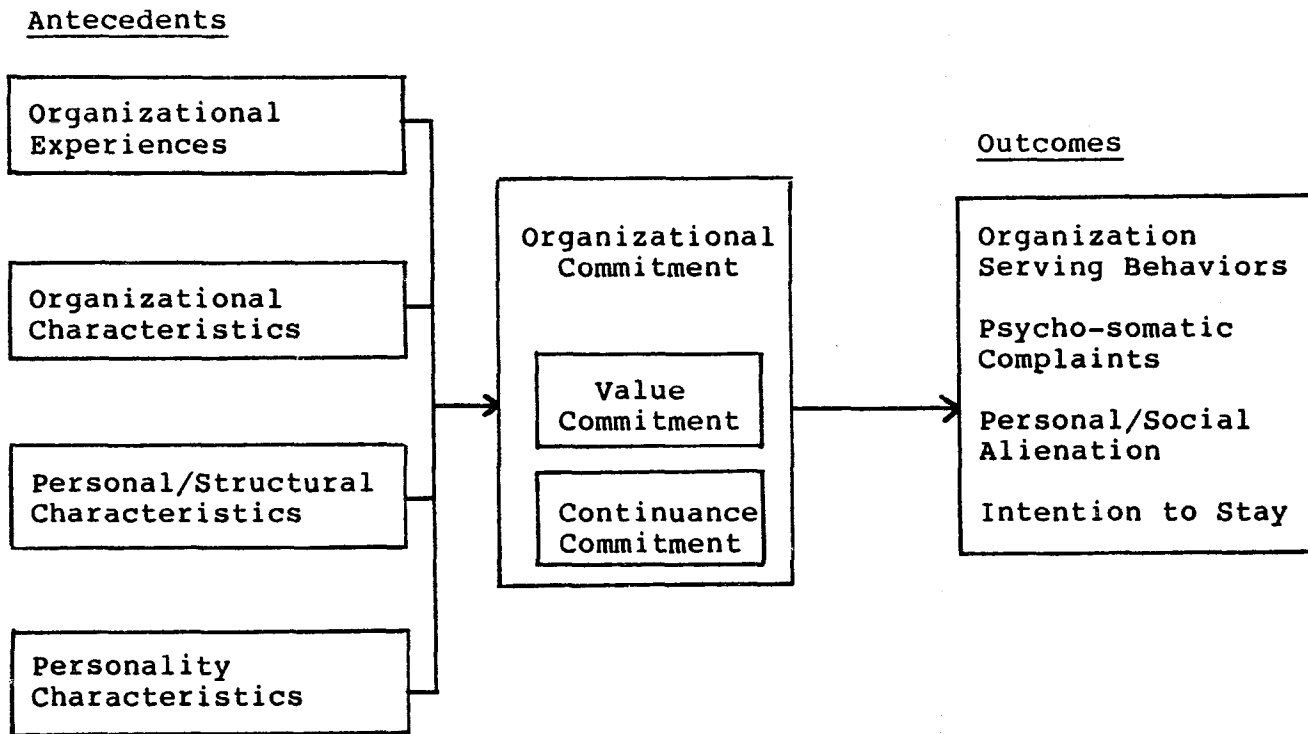
Following is a discussion of each antecedent category and the variables chosen to represent it. An effort has been made to include variables which index a particular variable category and have the potential to distinguish between value and continuance commitment.

Work Experiences

The first variable category used in the present study, work experiences, is broadly defined. It includes an individual's experiences within his or her work organization relating to the job, role, supervision, and organizational

Exhibit 1

Hypothesized Antecedents and Outcomes of Organizational Commitment Types



policies and practices at large. The process of reciprocation is proposed to explain how positive experiences with these aspects of work increase commitment and, maintaining that the compliment of this process also holds true, how negative experiences inhibit it.

According to the process of reciprocation, which is derived from the more general exchange approach, individuals become committed to their work organization to the extent to which their experiences with the same are positive and rewarding. Exchange theorists contend that the operation of reciprocity norms invoked by the use of rewards is a general phenomenon (Tedeschi, Schlenker, & Lindskold, 1972). In fact, Gouldner (1960) posits that the norm that one should help those who help one is universal. While different individuals may perceive their role and contributions in an exchange relationship differently, some of the typical contributions to the organization in return for organizational inducements can include commitment behaviors such as loyalty, dedication, adoption of goals and values, and work effort. Thus employees can offer their commitment in return for equitable treatment by the organization.

Job Satisfaction: One of the central work experiences to elicit reciprocating behavior is the individual's satisfaction with various aspects of his or her work and organization. A disagreement exists in the literature regarding the type of satisfaction to influence commitment. According to some (e.g., Antonovsky & Antonovsky, 1974; Buchanan, 1974), intrinsic rewards are considered to have

the dominant influence on commitment, while others (e.g., Angle & Perry, 1983) maintain that extrinsic rewards present a stronger influence on commitment under certain circumstances. The relative importance of extrinsic versus intrinsic rewards for value commitment and continuance commitment needs to be ascertained. Therefore, satisfaction with both the extrinsic and intrinsic aspects of the job will be included as variables in this study.

Leadership: A characteristic of work organizations proposed to affect commitment through the process of reciprocation relates to the nature of supervision. Leaders, through their ability to affect performance reward contingencies can influence the individual-organizational exchange process and the individual's perception of his or her treatment by the organization. Employees enter an organization with the willingness to invest their skills, effort and time in exchange for economic and psychological rewards. The fairness with which such efforts and performances are compensated determines how satisfied an employee may feel. Leaders differ in their ability and practice to engage in rewarding and punishing behaviors toward their subordinates. Subordinates who perceive their leaders to be generally rewarding would tend to be more satisfied with their job and organization (Szilagyi, 1980) and more likely to become committed to them. On the other hand, punitive behaviors by leaders would tend to have an adverse effect on the development of commitment by

increasing an employee's perceived costs in continued organizational membership.

Role Perceptions: While satisfying experiences tend to foster commitment behaviors, experiences that are perceived as costly, emotionally or otherwise, tend to inhibit them. Stability in expectations has been found to increase commitment (Buchanan, 1974). Role conflict and role ambiguity have been found to inhibit the development of organizational commitment (Howell & Dorfman, 1981; Morris & Snyder, 1979). It would appear that perceived clarity and stability of the exchange process affects organizational commitment. Yet, the evidence to date regarding these effects has not been entirely consistent. To some extent, these inconsistencies may be a function of the different commitment constructs used in the literature. Therefore, this study tries to ascertain the differential effects of role conflict and role ambiguity on value and continuance commitment.

Organizational Characteristics

The second variable category, organizational characteristics, includes structural variables pertaining to the organization at large as well as the immediate work situation. These structural variables can influence commitment via the nature of the experiences they provide for the individual worker. Structural aspects of the organization can facilitate or hinder the satisfaction of salient needs.

Size of Organization and Span of Control: Size of

organization can be viewed in terms of its reward potential such that the larger the organization the greater the opportunities for rewarding experiences such as growth opportunities, career development, and job security. Similarly, greater span of control can involve greater freedom for individual decision making and increased individual responsibility.

The research evidence regarding size of organization and span of control has not been entirely consistent. The present study, by drawing participants from a wide range of differently sized organizations, provides a better assessment of these two variables than previous studies have been able to.

Supervisory Status/Responsibility: This antecedent variable is included among the organizational characteristics as an index of supervisory versus non-supervisory level within the organization. It can be argued that supervisory status affords access to a greater share of the organizational reward systems, such as greater opportunities for advancement, greater compensation, and more privileges than non-supervisory status and thus facilitates commitment to the organization of both an affective and cognitive nature.

Reciprocation offers itself as the mechanism to explain the effects of organizational characteristics on commitment.

Personal/Structural Characteristics

The third antecedent category, personal/structural

characteristics, includes demographic characteristics and other factors indexing constraints in the individual's relationship with his or her organization. These constraints may represent investments which are not transferable to other organizations and for which the returns cannot be realized until some future point in time. Becker's notion of side bets provides the theoretical rationale for the effects of these variables on commitment.

According to Becker's (1960) "side bet" theory, organizational commitment is the result of past investments or locked-in interests in one's position within the organization. The freedom to leave one's organization for a position elsewhere is curtailed because the costs of leaving may be too high. Various personal characteristics have been used in the literature to index potential costs of leaving the organization.

The present study uses variables such as age, marital status, number of dependents, length of employment with the present organization, and whether or not the company absorbs the costs of a graduate education to index this category of personal/structural characteristics. To the extent to which the individual is affected by these structural influences, the cost of leaving the organization increases, and the individual is more likely to maintain membership in his or her present organization.

Inability to Leave: Other constraints imposed on the individual through structural arrangements include pension funds and medical insurance, stock options, bonuses, one's

status within the organization, opportunities for promotion, limited alternate employment opportunities, and other personal considerations.

In general, the importance of these structural constraint variables has been in dispute. However, previous studies have not comparatively analyzed the importance of personal/structural characteristics in relation to both value and continuance commitment.

Work Group Integration: The variable work group integration is included to index possible psychological constraints which may tie the individual to the organization. Friendship ties with members of one's organization are believed to represent such constraints. Individuals may be reluctant to leave their organization because of personally satisfying relationships with their co-workers.

In general, based on the notion of side-bets, personal/structural characteristics are expected to have a stronger effect on continuance commitment than on value commitment.

Personality Characteristics

The fourth category, personality characteristics, represents factors which psychologically predispose the individual for forming an attachment to the organization. For the present study, this category includes individual value orientations which stress the importance of work and work related rewards which the individual seeks to realize

as a member of a work organization. To the extent to which the individual sees his or her central work values supported by the organization he or she is more likely to develop an affective attachment to the same.

Research studies examining the relationship between personality characteristics and organizational commitment have found that general attitudes toward work, including needs, values, beliefs which individuals hold with respect to work, influence their commitment to their employing organization. It appears that work values predispose the individual to want to identify with the same.

In a recent paper, Korman et al. (1983) proposed the influence of three different work ethics on people's attitudes toward their jobs and work in general. These work ethics include the Traditional (Protestant) Work Ethic, the Materialistic Ethic, and the New (Self-Growth) Work Ethic. These different ethics represent societal views of work to which individuals and different groups of individuals subscribe in varying degrees. They are defined as frameworks for evaluating work experiences by providing the criteria, in terms of norms and values, which individuals use in making their assessments. They are expected to predict attitudes within organizations. Since they are anticipated to influence an individual's affective reactions within organizations, they would be expected to relate to value commitment more strongly than to continuance commitment.

The three work ethics identified by Korman et al.

(1983) can be distinguished from one another in terms of the different values they espouse.

The Protestant Work Ethic. Central to the Traditional Ethic is the belief that work is something good in and of itself. It represents the virtues of industriousness, ambition, and an ascetic life, while it condemns laxity and laziness (Wollack, Goodale, Wijting, & Smith, 1971). The predominant rewards are seen in work itself. Any job is considered better than no job at all. Also, work itself is thought to be rewarding when done well because of a feeling of self-respect and dignity which it bestows.

The Materialistic Ethic. Within the materialistic ethic, work as such assumes no intrinsic value. It takes on value by way of its outcomes and payoffs. The valued outcomes are generally those of a concrete and materialistic nature such as prestige and income relative to other positions.

The Self-Growth Ethic. Adherence to the self-growth ethic entails the quest for meaningful work (Yankelovich, 1981), the desire to do the type of work one wants to do, not out of a sense of duty, but because it is thought to be enjoyable. The orientation of this work ethic is to strive for the satisfaction of one's desires. It is believed that work should be an expression of one's personal values and needs and a source of personal meaning in life.

The inclusion of work ethics in a model of organizational commitment is meaningful for several reasons.

Organizational commitment is not only a function of the internal organizational context, but also of the external societal context. That is, organizational commitment is influenced by the predispositions which individuals bring to their organization as part of their educational and home-life experiences. A commitment to an organization is formed, in part, to the extent to which prevalent societal beliefs and values espouse such involvements as appropriate and desirable. Adherence to the values of a work ethic, as such, means seeing value in work whatever the nature of the particular value may be.

Work ethics are expected to contribute to the explanation of commitment, specifically, to the explanation of value commitment.

Outcomes of Organizational Commitment

The importance of distinguishing between value commitment and continuance commitment increases when considering the consequences of commitment. The effects of continuance commitment may be confined to the individuals' decisions to maintain membership in their employing organization. In order to conduct a valid test of the differences between value commitment and continuance commitment in relation to their consequences, these consequences need to be conceptually compatible with the theory underlying the commitment constructs.

In general, the attitudes and behaviors studied as a consequence of commitment have been few. Also, few attempts have been made to conceptualize the effects of commitment in

work organizations. The research literature to date, regarding the effects of organizational commitment on performance, is inconclusive. Organizational commitment has been found to be related to turnover and intention to stay with a high degree of consistency (Clegg, 1983; Hom et al., 1979; Mowday et al., 1979; Porter et al., 1974; Steers, 1977; Wiener & Vardi, 1980). However, the evidence relating commitment to performance has not been consistent (Mowday et al., 1974; Rotondi, 1975a; Steers, 1977; Wiener & Vardi, 1980).

Inconclusive evidence regarding the relationship between commitment and performance may mean that this particular outcome is poorly conceived. Performance is a multi-dimensional construct, resulting from an individual's level of ability, external circumstances, and numerous other behaviors, only some of which may be the result of organizational commitment. The construct commitment, as either value commitment or continuance commitment, offers a weak theoretical rationale for predicting increased performance, especially on the individual level. The kind of behaviors which are considered indicative of value commitment involve personal sacrifice, persistence, and preoccupation in thinking about one's employing organization (Wiener, 1982). Similarly, enhanced individual performance cannot be automatically anticipated on the basis of an individual's greater desire to stay with the organization. The nature of commitment and its corresponding behaviors may

be such that they contribute to the maintenance of organizational systems over time. Commitment may be viewed as a maintenance factor in an overall organizational context. Its presence may not necessarily increase performance, but, its absence may be deleterious to performance over time. The presence of commitment may provide an important support function for the system at large. Organizational commitment and its behavioral manifestations on the individual level may not provide the impetus for increased organizational achievement, but they may provide the organization with the ability and resources to withstand crises and threats from within and without the organization. The importance of commitment in the maintenance and continuance of organizational systems has been demonstrated by Kanter's (1968) study of utopian communities.

In general, the empirical findings and theoretical discussions suggest that organizational commitment may be interpreted as an organizational maintenance function. The presence of value commitment accounts for a resource pool of favorable attitudes toward the organization. Member identification with organizational goals and values can, in the long run, facilitate the subjection of personal interests of members to the needs of the organization. The presence of continuance commitment, on the other hand, has the function of preserving membership. Within this conceptual framework, the outcomes expected for value commitment, on the individual level are: greater frequency

of organization serving behaviors, lower rates of psychosomatic complaints, and lower levels of personal and social alienation. The anticipated outcomes for continuance commitment are stronger intentions to stay with the organization.

Organization Serving Behaviors

Organization serving behaviors are considered those work related activities which demand a little extra of the employee in terms of time expenditure, personal inconvenience, and personal discomfort and sacrifice. Further, these behaviors are carried out voluntarily and without extra material compensation. Value commitment, it has been argued, represents a positive attitude toward the organization which predisposes the individual to invest something of him or herself in order to help the organization achieve its goals. Organization serving behaviors, as a dependent variable, has been included to test this proposition which also implies that these investments are made by the individual without the need for external financial justification. Thus, the inclusion of organization serving behaviors as an outcome of value commitment will aid in the clarification of the nature of this type of commitment.

Psycho-somatic Complaints

Psychosomatic complaints are considered symptoms of strain which can be brought about by stressful situations at work. The reduction and prevention of these symptoms are

considered desirable since symptoms such as tiredness, headaches, irritability, and depression can affect an individual's work performance adversely (Jamal, 1984).

A recent study has shown (Jamal, 1984) that organizational commitment can moderate the stress-performance relationships. It appears that being positively involved with the organization aids the individual in coping with stressful events. Role overload, for example, had a significant negative impact on performance and work motivation among individuals with low levels of organizational commitment but not among individuals with high levels of organizational commitment. It can be argued that organizational commitment, as a positive attitude, tends to affect individuals' perceptions of their organization and influence the interpretation of stressful events by making them appear less aversive and more benign. As such, organizational commitment may operate as a buffer against or deflector of adverse happenings at work. As a result, the committed individual may be less often bothered by symptoms such as headaches, irritability, or tiredness.

The inclusion of psycho-somatic complaints as an outcome of organizational commitment serves to examine its ability to counteract symptoms of strain and as such support its nature as a maintenance function in organizations.

Personal and Social Alienation

Personal alienation can be understood as a state of self-estrangement that results from an individual's recognition that one often cannot meet one's own needs or

those of others. The individual who is feeling self-estranged, tends to perceive a gap between his or her self-image and everyday behavior and feels less "real" as a result of it. Social alienation, on the other hand, reflects a state where the individual feels separated from others and experiences a sense of aloneness.

In a work setting, individuals who feel self-estranged would not perceive their work and daily activity as a reflection of their values, norms, or personality. And individuals who feel socially alienated would not feel as true members of a work group or have a sense of belonging to the organization.

The inclusion of personal and social alienation, as outcomes of organizational commitment, further serves to clarify the nature of value commitment. By definition, organizational commitment represents a state of value congruence and sense of personal identification with a larger social system. The presence of these kinds of attitudes would negate the experience of estrangement of either a personal or social nature.

The prevention of self-estrangement among employees would be desirable as this state appears to be a precursor of alcohol dependency as well as a promoter of more permissive attitudes toward theft (Markowitz, 1981).

Intention to Stay

What distinguishes continuance commitment from value commitment is the individual's stronger desire to maintain

organizational membership and the nature of his or her attachment as being cognitive rather than affectively positive. The variable, intention to stay, is included here to further validate the membership maintaining function of continuance commitment.

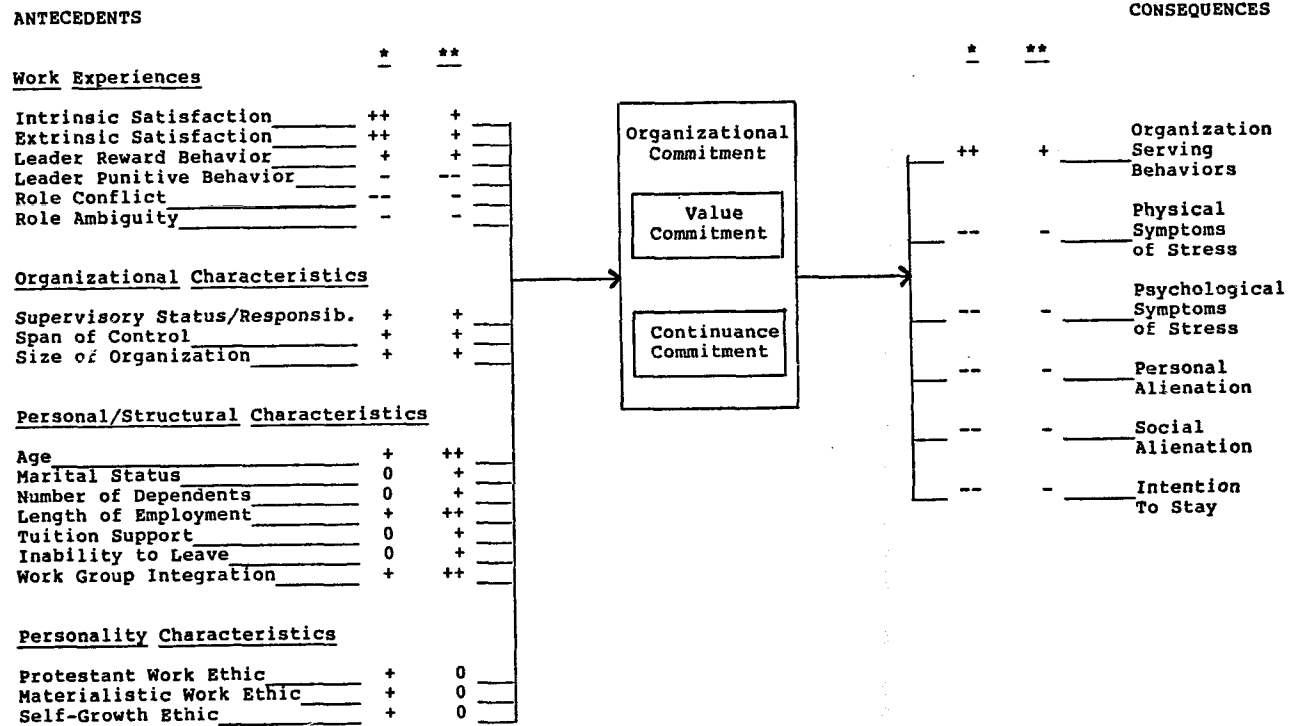
Organizational commitment has been established as an important predictor of employee turnover (Arnold & Feldman, 1982; Hom et al., 1979; Porter et al., 1974, 1976). However, detailed studies of the turnover process (Michaels & Spector, 1982; Mobley, 1977; Mowday, Koberg, & McArthur, 1984) have identified intention to leave, or its converse, intention to stay, as a mediating variable in the job attitude-turnover behavior process. Rather than organizational commitment predicting turnover behavior directly, it has been found to only have an indirect linkage. It is related to intention to stay, which, as part of an individual's set of withdrawal cognitions, has been found to consistently predict turnover behavior.

Since actual turnover is not being assessed as part of this study, intention to stay is used as a dependent variable. While intention to stay cannot be used interchangeably with a measure of turnover behavior, it can serve as a valid indicator of membership maintenance behavior in organizations.

The variables to be included in this study and the nature of their proposed relationships with organizational commitment, in terms of both value commitment and continuance commitment, are outlined in Exhibit 2.

Exhibit 2

Hypotheses Involving Organizational Value Commitment and Continuance Commitment



*hypothesized relationship to Value Commitment
 **hypothesized relationship to Continuance Commitment

Hypotheses

The foregoing discussion provided an outline of the antecedents and predicted consequences of commitment to be included in this study. The proposed relationships of these variables have been indicated in Exhibit 2. Thus, the model to be tested in this research will include antecedents from the different variable categories proposed to influence commitment and the proposed consequences of commitment.

The Role of Job Satisfaction in the Development of Organizational Commitment

Job satisfaction has been defined as "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (Locke, 1976, p.1300). Although not entirely consistently, satisfaction with various aspects of the job has been found associated with several attitudes and work behaviors (Locke, 1970).

According to the principles of exchange theory, job satisfaction tends to affect individuals' contributions-inducements balance with their employing organization. Individuals who are experiencing their organization as rewarding have been found to reciprocate these positive experiences by becoming committed to their organization (Angle & Perry, 1983).

The influence of job satisfaction on the development of organizational commitment has been established in the literature; however, it has been argued that the nature of the satisfaction differentially influences organizational commitment (e.g., Brown, 1969). A difference has been

proposed between the effects of extrinsic and intrinsic satisfaction. Satisfaction with pay, job security, social environment, and supervision have been referred to as satisfactions with the context of work or extrinsic satisfaction, while satisfaction with growth and development at work has been considered intrinsic satisfaction (Hackman & Oldham, 1975).

In general, past findings regarding the relative strength of intrinsic versus extrinsic satisfaction on the development of commitment have been inconsistent. Consistent with the ideas of reciprocation, Angle and Perry (1983) have proposed the superiority of extrinsic satisfaction over intrinsic satisfaction in affecting commitment. The argument is that commitment is the result of an exchange process between the individual and the organization in which the individual reciprocates for the rewards obtained from the organization. Extrinsic rewards, since they are more strongly controlled by the organization, are believed to also more strongly affect the individual's tendency to reciprocate than intrinsic rewards which are, to a greater extent, under the individual's own control. Angle and Perry (1983) found support for this argument when studying the commitment among a group of bus drivers. Yet, the authors acknowledge the possibility that extrinsic needs may have been particularly salient among this group of blue collar workers. Among professional employees, intrinsic needs may be more salient.

Yet another factor to be considered is the type of commitment under study. Job satisfaction has been found to influence value commitment and continuance commitment with different strengths. Angle and Perry (1983) found job satisfaction to have a dominant effect on value commitment in a multi-variate design, while Hrebiniak and Alutto (1972) observed that the effects of satisfaction assumed a role of lesser importance in predicting continuance commitment. It appears that individuals who are committed to stay with the organization are bound to the organization for reasons other than their satisfying work experiences. And individuals who identify with the values and goals of their organization are strongly influenced by a satisfying job.

In line with these arguments it is hypothesized that:

Hypothesis 1:

Intrinsic and extrinsic job satisfaction are positively related to organizational commitment.

Specifically,

Hypothesis 1A:

Intrinsic satisfaction is more strongly positively related to value commitment than continuance commitment.

Hypothesis 1B:

Extrinsic satisfaction is more strongly positively related to value commitment than continuance commitment.

With these hypotheses it is argued that job satisfaction of either type plays a more significant role in

the development of an individual's affective attachment rather than cognitive attachment to his or her organization.

The Role of Leader Reward/Punitive Behavior

Leader reward/punitive behavior, as investigated here, conceives of leadership as a process of reinforcement. By managing the reinforcement contingencies, that is, by being responsive to subordinates' performance, leaders can influence the attitudes and behaviors of subordinates (Sims, 1977).

Support for the prediction that rewards and satisfaction are positively related to commitment, and costs negatively related to commitment, can be found in several studies (e.g., Buchanan, 1974; Dubin et al., 1975; Hrebiniak & Alutto, 1972). With respect to leader behavior, the evidence indicates that perceived positive reward behavior by leaders influences employees' satisfaction and performance (Szilagyi, 1980).

Within an exchange framework it is argued that employees tend to reciprocate their positive experiences with organizational commitment. Leaders, who are perceived as recognizing and compensating the good performance of subordinates, are experienced as rewarding which, in turn tends to positively influence an employee's organizational commitment. In line with these arguments it is predicted:

Hypothesis 2:

Perceived leader reward behavior is positively related to organizational commitment.

Specifically:

Hypothesis 2A:

Perceived leader reward behavior is positively related to value commitment.

Hypothesis 2B:

Perceived leader reward behavior is positively related to continuance commitment.

The evidence regarding the relationship between perceived leader punitive behavior and subordinates' attitudes and behavior is less consistent. Prior research has shown positive (Sims & Szilagyi, 1975), neutral (Sims, 1977), as well as negative (Szilagyi, 1980) relationships between punitive leader behavior and subordinates' responses. It has been suggested by Sims and Szilagyi (1975) that punitive behavior, at higher organizational levels, can serve to reduce role ambiguity, and effect positive subordinate attitudes.

Yet, while punitive behavior may have such positively structuring effects on employees' work behavior, the general trend of the research suggests negative rather than positive attitudes in response to leader punitive behavior for sub-standard performance. It is therefore argued that the perception of a leader as being punitive would adversely influence employees' attitudes toward the organization and inhibit the development of organizational commitment.

Hypothesis 3:

Perceived leader punitive behavior is negatively related to organizational commitment.

Specifically:

Hypothesis 3A:

Perceived leader punitive behavior is negatively related to value commitment.

Hypothesis 3B:

Perceived leader punitive behavior is negatively related to continuance commitment.

Further, punitive leader behavior is expected to adversely affect the development of continuance commitment more strongly than value commitment by altering the perceptions of the costs of leaving the organization. Individuals who experience their leader as punitive are likely to devalue the benefits of their present employment and upgrade the attractiveness of leaving the same. More importantly, individuals are more likely to accrue investments and lock-in interests in environments that are benign. Punitive leader behavior, however, would prevent the perception of the environment as benign. Therefore it is predicted that:

Hypothesis 4:

Perceived punitive leader behavior is more strongly negatively related to continuance commitment than to value commitment.

The Role of Role Conflict and Role Ambiguity

The perception of one's role as either conflict laden or ambiguous is proposed to affect organizational commitment. Role conflict involves an incompatibility of demands (Rizzo, House, & Lirtzman, 1970). For example, organizational demands may be in conflict with an individual's own values or conflict may exist between obligations to other people and multiple tasks. It is hypothesized that:

Hypothesis 5:

Role conflict is negatively related to organizational commitment.

Specifically,

Hypothesis 5A:

Role conflict is negatively related to value commitment.

Hypothesis 5B:

Role conflict is negatively related to continuance commitment.

It is argued that the experience of role conflict tends to inhibit the development of value commitment or positive affect toward the organization. Role conflict, by generating a sense of futility, frustration, and stress may lead the individual to devalue the organization, its purpose and goals, and inhibit identification with it.

Further, the individual who experiences role conflict would not only fail to identify with the organization but would also show little desire for continuous membership. Role conflict, with its resulting negative emotions, would

tend to increase an individual's perceived cost of participation in the system.

Yet, the effects of role conflict on organizational commitment would tend to express themselves more strongly in value commitment than in continuance commitment. It is hypothesized that:

Hypothesis 6:

The relationship between role conflict and value commitment is significantly stronger than the relationship between role conflict and continuance commitment.

Individuals who find themselves in stressful situations of role conflict may distance themselves psychologically from the goals and purpose of the organization in an attempt to adjust to the organization and avoid identification with the same. Yet, this psychological distance may not necessarily lead to a physical separation from the firm. The economic costs of leaving the organization could outweigh the psychological costs of staying, especially when alternate employment opportunities are not readily available.

Role ambiguity is defined in terms of the predictability of the outcomes of one's behavior and the absence of environmental guidelines to provide knowledge that one is behaving appropriately (Rizzo et al., 1970). Similar to role conflict, role ambiguity has been recognized as a source of stress among employees (Schuler, 1975, 1977;

Szilagyi, Sims, & Keller, 1976). As such, role ambiguity can be compared to an aversive state that would tend to inhibit the development of a positive affective attachment to the organization. It is hypothesized that:

Hypothesis 7:

Role ambiguity is negatively related to organizational commitment.

Specifically,

Hypothesis 7A:

Role ambiguity is negatively related to value commitment.

Hypothesis 7B:

Role ambiguity is negatively related to continuance commitment.

It is argued that role ambiguity, through its ability to undermine an individual's sense of security within a social system, would tend to decrease the likelihood for individuals to identify with the organization as well as make conscious investments in the same.

The Role of Supervisory Responsibility

In general, organizational commitment would be expected to be stronger among supervisory personnel than among non-managerial personnel. Stevens et al. (1978) concluded from their findings that commitment to the organization centers on issues of organizational participation. Supervisors, as a result of their increased responsibility and skill requirements, are provided with greater opportunities for influencing organizational decisions. It is the

responsibility of supervisors to coordinate the work of others, to encourage cooperation and see to the timely and satisfactory completion of the tasks. Thus supervisors' greater importance to the organization and the opportunity to exert personal influence is likely to lead to greater commitment among them. It is hypothesized that:

Hypothesis 8:

Supervisory responsibility is positively related to organizational commitment.

Specifically,

Hypothesis 8A:

Supervisory responsibility is positively related to value commitment.

Hypothesis 8B:

Supervisory responsibility is positively related to continuance commitment.

A positive relationship is predicted for both dimensions of organizational commitment because supervisors are not only more likely to identify with the organization but are also more likely to stay with it because of the greater opportunities for investments the organization accords to employees on supervisory levels.

The Role of The Size of the Organization and Span of Control

Previous investigations of the relationships between organizational structural variables and organizational commitment have yielded inconsistent results. Yet, previous research has failed to comparatively analyze their effects

on both value commitment and continuance commitment.

The organizational variables to be included here are size of the organization (total number of employees) and span of control (total number of employees who report directly to respondents' supervisor or manager). According to Stevens et al. (1978), large organizations offer opportunities to the employee which would be expected to increase organizational commitment. These include increased chances for promotion, larger groups of peers which offer additional opportunities for interpersonal interaction, as well as better benefits and greater job security. As such, larger organizations may be able to offer higher levels of intrinsic as well as extrinsic rewards. Therefore it is hypothesized that: Hypothesis 9:

Size of organization is positively related to organizational commitment.

Specifically,

Hypothesis 9A:

Size of organization is positively related to value commitment.

Hypothesis 9B:

Size of organization is positively related to continuance commitment.

Span of control is expected to affect organizational commitment through changes in closeness of supervision it accords to subordinates. To the extent to which increased span of control leads to decreased supervision and greater autonomy and decision making opportunities for the employee,

a positive relationship between span of control and organizational commitment is expected. It is hypothesized that:

Hypothesis 10:

Span of control is positively related to organizational commitment.

Specifically,

Hypothesis 10A:

Span of control is positively related to value commitment.

Hypothesis 10B:

Span of control is positively related to continuance commitment.

The Role of Personal/Structural Variables

Characteristics of the individual and employment situation such as employee age, length of employment, marital status, number of dependents, and company tuition support, can play a role in organizational commitment formation. According to Becker's (1960) side bet theory, these characteristics affect employees' cognitive appraisal of their continued organizational membership. Individuals who desire to stay with an organization may do so because of perceived costs associated with leaving the same. Rather than fostering active identification with the organization, these characteristics may operate as constraints leading to continuation of membership.

The mechanisms through which these characteristics can

affect continuance commitment are the following:

age: through decreased opportunity for alternate employment;
length of employment: through possible anticipated loss of privileges, perquisites, and acquired influence;
marital status and number of dependents: through possible anticipated loss of job security due to changing jobs;
tuition support: through employees' reluctance to sacrifice financial supports.

In line with these arguments it is hypothesized that:

Hypothesis 11:

Age, length of employment, marital status, number of dependents and tuition support make a greater contribution to the prediction of continuance commitment than to the prediction of value commitment.

In general, employees who perceive themselves as unable to leave the organization because of lack of alternate employment opportunities or limited transferability of skills are inclined to stay with their employing organization, but not necessarily become actively involved with it. It is hypothesized that:

Hypothesis 12:

The relationship between inability to leave and continuance commitment is significantly stronger than the relationship between inability to leave and value commitment.

The Role of Work Group Integration

In addition to structural constraints, friendship

relationships may operate as psychological constraints and influence organizational commitment. Close personal ties that are maintained and strengthened not only through contacts within the office but also through regular interaction outside of the office can influence the employees' commitment to their organization. Friendship ties within the organization may constitute a constraint on the person's voluntary mobility but also a source of satisfaction with the work place. Employees who perceive themselves as working with their friends and sharing a common set of experiences and beliefs are more likely to develop personal attachments to their organization. These individuals are more likely to identify with the organization as well as stay with it. Therefore, it is hypothesized that:

Hypothesis 13:

Work group integration is positively related to organizational commitment.

Specifically:

Hypothesis 13A:

Work group integration is positively related to value commitment.

Hypothesis 13B:

Work group integration is positively related to continuance commitment.

However, employees' attachments to the organization through their personal ties with co-workers is expected to

express itself more strongly in their desire to continue membership than organizational identification. Therefore it is hypothesized that:

Hypothesis 14:

The relationship between work group integration and continuance commitment is significantly stronger than the relationship between work group integration and value commitment.

Friendship relationships involve personal investments and emotional comfort which individuals may be reluctant to give up. They are seen as costs in the decision to leave the organization.

The Role of Personal Work Ethics

Evidence that personality characteristics, values and beliefs play a role in the development of commitment can be found in several studies (e.g., Stevens, Beyer, & Trice, 1978). The mechanism of value congruence can aid in the explanation of this relationship. Adherence to general work values, irrespective of the nature of the rewards the individual expects to derive from work, is likely to dispose individuals favorably toward work. Job involvement has been found to be a strong positive predictor of organizational commitment, a finding which would underline the importance of psychological predispositions toward work (Stevens, et al., 1978). Adherence to a particular work ethic can effect such a favorable predisposition. Therefore it is predicted that:

Hypothesis 15:

Work ethics, including the protestant ethic, materialistic ethic, and self-growth ethic are positively related to organizational commitment.

Specifically:

Hypothesis 16:

Work ethics, including the protestant ethic, materialistic ethic, and self-growth ethic are positively related to value commitment and unrelated to continuance commitment.

It is argued that positive work orientations tend to foster a positive attitude and identification with the organization but not necessarily continuation of membership.

While a favorable predisposition toward work, in and of itself, is expected to influence organizational commitment, the strength of the influence would be dependent on the nature of the rewards received from the organization. Work ethics identify the rewards that are important to the individual. The central value of the Protestant ethic is work itself, irrespective of its content. The materialistic ethic is characterized by the desire for material rewards and status, while the self-growth ethic has at its core the quest for self-development and personal satisfaction through challenging work.

Based on the differential availability of these rewards in work organizations, it is hypothesized as follows:

Hypothesis 17:

From among the work ethics tested, the protestant ethic is significantly more strongly positively related to value commitment than either the materialistic ethic or self-growth ethic.

The Consequences of Organizational Commitment

A central proposition of this study is that value commitment and continuance commitment are differentially related to predicted outcomes of commitment. The reasoning behind this proposition is derived from the two different conceptualizations of value and continuance commitment. As a state of involvement, the two types of commitment have been proposed to differ in terms of their depth and intensity (Etzioni, 1975). Value commitment, which implies an affective, moral or normative orientation, represents a more intense involvement than continuance commitment which has been described as instrumental, cognitive, or calculative. Further, value commitment entails a positive affective orientation to the organization at large involving pride and positive regard. Continuance commitment, on the other hand, does not assume such positive affect but recognizes that the individual may be under constraints in his or her decision to stay with the organization.

Based on the characteristics of value commitment versus continuance commitment, the following hypotheses are proposed:

Hypothesis 18:

Value commitment is more strongly positively related to organization serving behavior than continuance commitment.

This hypothesis proposes differential relationships between the two types of attitudes toward the organization and specific work behaviors. It is argued that employees who have accepted the values and goals of the organization as their own, rather than merely wanting to maintain membership in it, are more likely to serve the organization beyond the call of duty. They are more inclined to sacrifice their personal convenience and self-interest for the good of the organization

Hypothesis 19:

Value commitment is more strongly negatively related to physical symptoms of stress than continuance commitment.

Hypothesis 20:

Value commitment is more strongly negatively related to psychological symptoms of stress than continuance commitment.

Highly value committed individuals have a positive affective attachment to their organization. These positive attitudes and relationships to the organization, and the feeling of being part of it, would tend to lessen the experience of tension. Instead, it would increase a sense of physical and psychological well-being, and decrease the likelihood of general fatigue and uneasiness.

Hypothesis 21:

Value commitment is more strongly negatively related to personal alienation than continuance commitment.

Hypothesis 22:

Value commitment is more strongly negatively related to social alienation than continuance commitment.

Being committed to one's work organization describes a state of personal involvement with the values and goals of a social system. This involvement is predicted to inhibit a sense of personal and social remoteness. By nature of this involvement, the individual is provided with an increased sense of purpose and the opportunity to be part of a social system.

With respect to continuance commitment, the following hypothesis is proposed:

Hypothesis 23:

Continuance commitment is more strongly positively related to intention to stay with the organization than value commitment.

The motivation to want to stay with the organization, whether by choice or constraint, is implied in this commitment construct.

CHAPTER 4

Methodology

Pretest

A pretest was conducted to establish the internal consistency and temporal stability of the measures which were specifically developed for this study or for which this information was not documented in the literature. The participants in this pretest were part-time working undergraduate students enrolled in an introductory management course. The questionnaires were administered during regular class sessions with a three-week interval separating the times of data collection.

At Time 1, 84 students completed questionnaires. The questionnaire contained items asking for demographic characteristics and three scales, an "Organization Serving Behavior" scale developed for the study, a modified version of an "Inability to Leave" index developed by Martin and Schermerhorn (1983), and a "Psycho-somatic Complaint" scale (Patchen, 1970). Students were assured that the information they provided was strictly confidential and used for research purposes only. All students recorded their social security number for later matching of the questionnaires.

The pretest sample consisted of 33 male students and 51 female students. They ranged in ages from 18 to 51 years with a mean age of 22 years. They worked an average of 21 hours per week, and had been employed at their current job for an average of one year and seven months.

Table 1 presents a summary of the pretest results.

Table 1
 Summary of Pretest Results including Alpha Reliabilities
 and Test-Retest Coefficients

<u>Scale</u>	<u>Number of Items</u>	<u>Alpha Relia bility Time 1 (N=84)</u>	<u>Alpha Relia bility Time 2 (N=62)</u>	<u>Test- Retest Coef- ficient</u>
Organization Serving Behavior	11	.73	.74	.79
Psycho-somatic Complaints	6	.72	.75	.81
Physical Symptoms	3	.67	.61	.70
Psychological Symptoms	3	.64	.74	.78
Inability to Leave (Version 1)	5	.42	-	-
Inability to Leave (Version 2)	9	-	.85	-

As indicated in Table 1, all measures had acceptable alpha coefficients with the exception of the "Inability to Leave" index, which had an Alpha reliability coefficient of no more than 0.42. A coefficient of 0.67 and 0.64 for the "Physical-" and "Psychological Symptoms" subscales respectively, was deemed adequate because of the shortness of these scales. For the second administration, the "Inability to Leave" index was replaced with an alternate measure specifically developed for this study.

After the second administration, the data of 62 students could be successfully matched based on their social security number. The difference in response rate at Time 2 is a result of student absences, change in course schedules or change in employment status.

As indicated in Table 1, alpha reliabilities, and test-retest correlation coefficients of the scales were sufficiently high to assure their internal consistency and temporal stability. The new "Inability to Leave" scale had an alpha coefficient of .85. However, the temporal stability of this scale was not established. The individual scales examined in the pretest are discussed in detail below.

Sample

The participants of this study were 270 full-time employed MBA students attending classes at a large state supported business school in New York City. Questionnaires were distributed and completed during regular class session. A total of 381 students from 25 different MBA level courses completed questionnaires. Data from 111 persons were discarded for one or more of the following reasons: The respondent (a) was self-employed or worked only part-time, (b) was not a matriculated student of the MBA program, (c) had been employed with his or her organization for less than three months (these people were excluded because of the presumed lack of familiarity with their current organization), and/or (d) held a job involving unskilled or semi-skilled type of work.

The 270 MBA students included in the analysis comprise a group of managerial and professional/technical employees from various types and sizes of organizations in the New York Metropolitan area. Based on their reported jobtitles, approximately 30 percent of the participants can be classified as managerial with representative titles such as Operations or Production Manager, Office or Personnel Manager, Manager of a specific department, function, or individual store, Project Administrator, and Account Manager. The majority of the participants, approximately 70 percent, occupy professional/technical types of positions. Some representative titles include, Accountant, Auditor, Engineer, Financial Analyst, Market Research Analyst,

Systems Analyst, and Computer Programmer.

Table 2 presents the demographic characteristics of the study sample.

The participants of this study represent a group of relatively young (median age 27 years), career oriented individuals who have been working for their current employer an average of 3.3 years and have occupied their current position an average of two years. Their median salary is 25,000 dollars, and the majority of them (78%) work for a private business organization. The remaining 21 percent are employed with either a governmental agency, a hospital, an educational institution, or another non-profit organization. Approximately 40 percent of them are married, and the others are still single or divorced. Their family obligations appear limited since only eleven percent of them report responsibility for the financial support of two or more family members.

These demographic characteristics and the participants' status as MBA students limits the generalizability of the findings in that they more clearly describe individuals with a higher level of achieved educational status, who are career oriented and who find themselves in the early phases of their career development. Also, the range of their salaries indicates an occupational status at the lower and middle level of the organization.

Table 2
Demographic Characteristics of Study Sample
(N=270)

<u>Sex</u>	<u>n</u>	<u>Percent*</u>
Male	134	49.6
Female	136	50.4
<u>Marital Status</u>		
Unmarried	162	60.0
Married	107	39.6
<u>Age</u>		
21-25	92	34.1
26-30	110	40.7
31-35	44	16.3
36-40	11	4.1
41 and older	8	3.0
<u>Number of Dependents</u>		
0	153	56.7
1	83	30.7
2	19	7.0
3 or more	12	4.4
<u>Annual Salary</u>		
13,000-19,999	56	20.7
20,000-29,999	127	47.0
30,000-39,999	61	22.6
40,000-and above	20	7.4
<u>Type of Job</u>		
Managerial	82	30.4
Professional/Technical	188	69.6
<u>Type of Organization</u>		
For Profit Organization	211	78.2
Non-Profit Organization	35	12.9
Governmental Agency	24	8.9
<u>Size of Organization (Number of Employees)</u>		
5- 100	48	17.8
101- 500	52	19.3
501- 2000	40	14.8
2001- 5000	31	11.5
5001-10000	23	8.5
10001 and more	53	19.6

*Missing values have been omitted from this table, percentages do not total to 100.

Procedure

Students were informed that their participation in the study was voluntary, that their responses were anonymous and confidential, and that the information was used for research purposes only.

In addition to completing a questionnaire in class, students were asked to assist in recruiting one of their co-workers to provide some observational data. Each participant received a second questionnaire which he or she was asked to give to a person with whom he or she worked and interacted on a daily basis in a face to face relationship. This second questionnaire asked the respective co-worker to answer some questions about the student participant's behavior at work. It contained the "Organization Serving Behavior" scale and the "Psychological/Behavioral Symptoms" measure in a format suitable to record observations of others. The student questionnaire and the co-worker questionnaire were given identical numerical codes for later matching.

Each student participant was asked to hand this second questionnaire to the co-worker personally and ask for it to be returned directly to the investigator. A stamped, addressed envelope was provided for this purpose.

Measures were taken to ensure the validity and reliability of this procedure. Each co-worker was given a statement explaining the purpose of the study and an assurance that the data were used for research purposes only, and treated with strictest confidentiality. Each co-worker

was asked to sign the questionnaire upon its completion and provide a telephone number where he or she could be reached for verification. This last request was made optional.

From among the 270 participants, 155 co-workers returned the observational data. This constitutes a return rate of 57 percent. From among the 155 co-workers, 94, or a rate of 61 percent, provided a name and telephone number for a possible contact. From among the 94 co-workers who provided their telephone numbers, 20 percent were actually contacted based on random selection. All individuals remembered filling out the questionnaire and stated that they had done so independently. This procedure served to verify the independent co-worker ratings of participants' behavior at work.

T-tests with two-tailed tests of significance were computed on all demographic and study variables to see whether any differences existed between those participants with co-worker data and those without. With the exception "work group integration", none of the variables showed significant differences in mean values between the two groups. It appears that personal ties to other employees slightly facilitated the recruitment of a co-worker participant. Yet, the actual difference in mean values is small, 3.026 for the participants with co-worker data, and 2.567 for those without. This observed difference is not believed to have introduced a bias into the results of the study. The study participants had been instructed to choose

a co-worker who knows them well and with whom they interact on a regular basis.

Measures

Organizational Commitment

Organizational Commitment was measured with a scale developed by Porter et al., who defined this construct as "the strength of an individual's identification with and involvement in a particular organization" (Porter et al., 1974, p. 604). Organizational commitment is conceived as an attitude with behavioral implications consisting of three components (a) the internalization of the organization's values, (b) a willingness to focus strong effort toward helping the organization achieve its goals, and (c) a strong desire to maintain membership. The item content of this scale reflects a view of commitment that goes beyond a passive loyalty, and taps the individuals' willingness to give something of themselves in order to contribute to the organization (Cook, Hepworth, Wall, & Warr, 1981).

This instrument consists of 15 items, six items of which are negatively phrased and reverse scored. Item responses are scored on a 7-point scale ranging from strongly disagree to strongly agree; scored 1 to 7 respectively. Item scores are summed to yield a single commitment index.

The reliability and validity data pertaining to this scale have been summarized and reported in several sources (Cook et al., 1981; Mowday, Porter, & Steers, 1982; Mowday et al., 1979). As reported by Mowday et al. (1982), coefficient alpha has been found to be consistently high, ranging from 0.82 to 0.93 with a median of 0.90. Similarly,

test-retest reliabilities showed acceptable levels ranging from $r=0.53$ to $r=0.75$ over periods between 2 to 4 months. As indicated in Table 3, coefficient alpha, for the present sample, was found to be 0.89.

Evidence for convergent validity has been found in several studies. Consistent with the underlying theory of this measure, it has been found to correlate as predicted with the Sources of Organizational Attachment Questionnaire (Mowday et al., 1974), intention to remain with the organization, intrinsic motivation (Mowday et al., 1982), the work as a Central Life Interest scale (Dubin et al., 1975), and independent commitment ratings by supervisors among a group of retail employees (Mowday et al., 1982).

Discriminant validity of the organizational commitment scale, that is, evidence that it is uniquely different from other work related attitude scales, has also been documented (Mowday et al., 1982). Correlations between organizational commitment and other attitudes such as job involvement, career satisfaction, and job satisfaction, have been found to be positive and statistically significant, however, sufficiently low to consider it a construct in its own right. The percentage of common variance shared by the organizational commitment scale and the other measures generally ranged between 15 to 25 percent.

The predictive validity of the organizational commitment scale is indicated by relatively consistent patterns of relationships with employee turnover,

Table 3
Summary of Scale Characteristics including Number of Items, Means,
Standard Deviations, and Reliability Coefficients

Scale	n	Number of Items	Mean	SD	Reliability Coefficient
Organizational Commitment	(268)	15	3.9	1.2	.89
Value Commitment	(268)	9	4.1	1.3	.90
Continuance Commitment	(266)	4	1.9	.6	.85
General Job Satisfaction	(268)	14	4.5	1.1	.87
Intrinsic Satisfaction	(270)	4	4.3	1.5	.87
Extrinsic Satisfaction	(268)	10	4.6	1.1	.81
Leader Reward Behavior	(260)	9	4.9	1.3	.91
Leader Punitive Behavior	(262)	5	4.5	1.1	.71
Role Conflict	(267)	8	3.9	1.3	.81
Role Ambiguity	(267)	6	3.3	1.2	.84
Work Group Integration	(267)	3	2.8	1.1	.55
Inability to Leave	(263)	9	3.5	1.1	.75
Protestant Work Ethic	(267)	19	3.6	.6	.77
Materialistic Work Ethic	(269)	9	2.5	.6	.68
Self-Growth Ethic	(270)	6	6.4	.7	.85
Organization Serving Beh.	(270)	11	3.5	.5	.72
Physical Complaints	(265)	3	2.6	1.3	.66
Psychological Complaints	(269)	3	2.5	.8	.69
Personal Alienation	(267)	8	2.8	.8	.79
Social Alienation	(266)	10	3.2	.6	.67
Intention to Stay	(268)	2	2.6	1.5	.81
Psychological Complaints Rated by Co-worker	(155)	3	1.9	.8	.73
Organization Serving Beh. Rated by Co-worker	(154)	11	3.6	.5	.75

absenteeism, and tenure in the organization (Mowday et al., 1982).

Value Commitment

Value commitment is defined as a positive, affective involvement with the organization which expresses itself in the individual's acceptance of organizational values and goals, and a strong willingness to put forth effort on behalf of the organization. This construct was measured with a subset of items from Porter et al.'s (1974) organizational commitment scale.

Evidence from previous studies has shown that when subjected to a factor analytic procedure, the Porter scale yields a two-factor solution reflecting a value commitment and a commitment to stay dimension (e.g., Angle & Perry, 1981). When treated as two variables, these two dimensions have been found to yield differences in correlational patterns with outcome variables such as turnover, intention to quit, tardiness, and operating expense ratios (Angle & Perry, 1981).

A principal components analysis with varimax rotation was used to establish the factor structure of the organizational commitment scale for the present sample. Table 4 presents the results of this analysis.

As indicated in table 4, the analysis yielded a three factor solution with nine items loading on the first factor having a factor loading of 0.59 or higher. None of the items which loaded at these levels on the first factor, had similarly high loadings on the other two factors; the

smallest difference between factor 1 and factor 2 for a given item was 0.21. In examining the content of these items, it appears that those statements which express the individual's identification with and positive affect toward the organization load sizeably on this factor.

Thus, the first factor was labeled value commitment. Its nine items (items 1, 2, 5, 6, 8, 10, 13, 14, and 15) with loadings above 0.50 were summed and averaged for each participant to yield a single value commitment index. Their internal consistency was found to be 0.90, as indicated by coefficient alpha.

Continuance Commitment

Continuance commitment was measured with a 4-item scale developed by Hrebiniak and Alutto (1972). The authors view commitment in terms of the perceived utility of continued participation. Commitment, as defined by the authors, involves a state of attachment to the organization independent of affect. Individuals are asked to indicate on a three-point scale (ranging from Yes definitely; Uncertain; to No definitely not, whether they would change their employing organization for (a) a slight increase in pay; (b) slightly more freedom to be professionally creative; (c) slightly more status; and (d) to work with people who are a little friendlier. The unwillingness to leave the organization for these rewards is taken to indicate that the individual is bound to the organization by other accrued investments and perceived costs of leaving.

Table 4
 Rotated Factor Matrix of the Organizational Commitment
 Scale by Porter et al. (1974)
 (N=268)

<u>Scale Item</u>	<u>Factor 1</u>	<u>Factor 2</u>	<u>Factor 3</u>
Item 2	.77	.32	.11
Item 6	.74	.34	.06
Item 10	.73	.35	-.01
Item 13	.69	.23	.17
Item 8	.67	.43	-.03
Item 14	.64	.43	.15
Item 15	.63	.39	-.12
Item 5	.63	.35	.22
Item 1	.59	.02	-.06
Item 10	.29	.76	.09
Item 12	.26	.70	.00
Item 9	.18	.68	.07
Item 3	.27	.58	.08
Item 4	.35	-.06	.73
Item 7	-.19	.18	.73

As reported by the authors, Spearman-Brown reliability estimate for the four-item scale was found to be 0.79 with the original sample. Later studies, by other authors, have yielded internal consistency estimates ranging from a high of 0.91 (Alutto & Vredenburgh, 1977) to a low of 0.75 (Kidron, 1978) with a median coefficient of 0.88. For the present sample, alpha coefficient was found to be 0.85, which is in line with previous findings.

Evidence testifying to the construct validity of this scale has been documented in several studies. Consistent with its conception as a continuance commitment dimension, it has been found to correlate with turnover intentions as well as turnover behavior (Parasuraman, 1982). As an index of Becker's (1960) side bet theory, it has yielded support for hypothesized relationships with variables such as age (Alutto et al., 1973; Hrebiniak, 1974; Stevens et al., 1978), seniority (Hrebiniak, 1974), and length of employment (Alutto et al., 1973; Stevens et al., 1978). These factors are taken to indicate that the individual is bound to the organization by accrued investments which make leaving too costly.

Job Satisfaction

Job satisfaction was measured with a scale developed by Hackman and Oldham (1975) as part of their work with the JDS. This measure consists of 14 items and taps five specific satisfactions: Pay (two items), Job security (two items), Social (three items), Supervisory (three items), and Growth Satisfaction (four items). A seven-point response

dimension, ranging from Extremely dissatisfied, Dissatisfied, Slightly dissatisfied, Satisfied, to Extremely satisfied, and scored 1 to 7 respectively, has been used with this measure. Scores are summed within each subscale and averaged.

Psychometric data pertaining to this measure have been reported in several studies (e.g., Hackman & Oldham, 1975, 1980). A comprehensive study (Oldham, Hackman, & Stepina, 1978) involving 6930 employees from 56 organizations indicated satisfactory psychometric properties of this scale. Spearman-Brown reliability from the individual subscales was found to range from 0.64 to 0.87 (Pay, 0.84; Security, 0.73; Social, 0.64, Supervisory, 0.87; Growth, 0.84). Within the four Context Satisfactions the median intercorrelation was 0.42. They ranged from 0.28 to 0.47. The Growth Satisfaction subscale was found to correlate: 0.43, 0.51, 0.57, and 0.55 with Pay, Security, Social, and Supervisory Satisfaction respectively.

The reason for choosing this scale is the fact that it was developed specifically to differentiate between job context and job content, that is, between extrinsic and intrinsic job satisfaction. These two dimensions have been of theoretical concern for the study of organizational commitment.

Thus, the two satisfaction indices, intrinsic and extrinsic satisfaction were employed in the present study. Intrinsic satisfaction, which is expressed in the Growth

Satisfaction sub-scale, and consists of 4 items, had an alpha coefficient of 0.87. Extrinsic Satisfaction, which consists of ten items and is made up by the context satisfactions, including Pay, Security, Social, and Supervisory Satisfaction, was found to have an internal consistency of 0.81. The intercorrelation between these two dimensions was 0.60, which is somewhat high.

Leader Reward and Punitive Behavior

Leader reward and punitive behavior was measured with a shortened version of the 22-item instrument developed by Johnson, Scott, and Reitz (cited in Sims, 1977). This instrument measures the degree to which subordinates perceive the rewarding and punitive behaviors of their superior to be contingent upon good and poor performance respectively.

The shortened version of this scale consists of 14 items and is composed of three subscales, Positive Reward Behavior (six items), Advancement Reward Behavior (three items), and Punitive Behavior (five items). Positive Reward Behavior taps the extent to which the employee perceives his or her good performance to be rewarded with recognition. Advancement Reward Behavior focuses on promotion recommendations, while Punitive Leader Behavior assesses the extent to which substandard performance is met with reprimands and corrective action.

The three subscales, identified through factor analysis, were found to have satisfactory internal reliability (alpha), yielding coefficients of 0.92, 0.81,

and 0.86 for the three subscales respectively.

As reported by Sims (1977), Punitive Behavior was independent of both positive and advancement reward behavior (mean correlation $r = 0.11$), but positive and advancement reward behavior were highly related ($r = 0.75$). In some samples studied, a factor analysis with the 22-item version of the measure yielded a two factor solution in that positive reward behavior and advancement reward behavior collapsed into one single factor (e.g., Greene, 1976; Keller & Szilagyi, 1976; Sims & Szilagyi, 1975).

A factor analysis conducted for the present sample, using a principal components analysis with varimax rotation, yielded a two-factor structure with items tapping positive reward behavior loading unambiguously on factor one and the items tapping leader punitive behavior on factor two. Table 5 below presents the results of the principal components analysis.

Alpha coefficient was found to be 0.91 for the Leader Reward Behavior subscale and 0.71 for the Leader Punitive Behavior sub-scale. The correlation between these scales was -0.02 which indicates that the two perceived leadership dimensions are independent from one another.

Role Conflict and Role Ambiguity

Role conflict and role ambiguity were measured with instruments developed by Rizzo, House and Lirtzman (1970). These scales have been used widely for research purposes and a substantial amount of information exists regarding their

Table 5
 Rotated Factor Matrix of the Perceived Supervisory Reward
 and Punitive Behavior Scale (Sims & Szilagyi, 1975)
 (N=260)

<u>Scale Item</u>	<u>Factor 1</u>	<u>Factor 2</u>
Item 13	.83	.02
Item 11	.82	-.05
Item 8	.82	.00
Item 4	.80	.10
Item 2	.76	-.12
Item 6	.76	.14
Item 1	.75	-.06
Item 12	.75	.01
Item 7	.62	-.04
Item 10	-.05	.75
Item 11	.07	.73
Item 5	.03	.67
Item 14	.13	.64
Item 3	-.23	.62

psychometric properties.

The role conflict and role ambiguity scales consist of eight and six items respectively. Responses to the individual items are assessed on a seven-point, false-true dimension. Participants are asked to indicate the extent to which the items are descriptive of their job situation.

Several factor analytic studies have established the conceptual independence of the two role dimensions (Rizzo et al., 1970; Schuler, Aldag, & Brief, 1977; Szilagyi et al., 1976). Intercorrelations between the scales have been found to be 0.25 and 0.01 for two sub-samples (Rizzo et al., 1970). Other researchers found the intercorrelations between the two dimensions to be somewhat higher and to vary between different groups of professionals (Cook et al., 1981). For the present sample, the intercorrelation between role conflict and role ambiguity was found to be 0.37.

The internal consistency of these two scales has been confirmed as acceptable. A summary of the reported reliability data (Cook et al., 1981) indicates that the majority of coefficients fall into the high 70's and 80's ranges. For the present sample, the alpha coefficients for role conflict and role ambiguity were 0.81 and 0.84 respectively. Similarly, test-retest reliability data summarized by Cook et al. (1981) indicate the scales' temporal stability within a four month period (Miles, 1975). The correlations were 0.65 and 0.71 for ambiguity and conflict respectively.

Significant correlations with other constructs

indicating the predictive validity of these scales include: negative correlations with job satisfaction, positive correlations with anxiety-stress, and tension (Cook et al., 1981).

Supervisory Responsibility, Span of Control, Size of Organization

Supervisory responsibility, span of control, and size of organization were measured with single item statements as follows: "Does your job involve supervising the work of others? If yes, how many employees report directly to you?", "How many employees, including yourself, report directly to your supervisor?", and "To the best of your knowledge, about how many people work for your company (organization) altogether?".

For the analysis, supervisory responsibility was scored 1 and 2, with the lower score indicating the absence of supervisory responsibility and the higher score the presence of supervisory responsibility.

Work Group Integration

Work group integration was measured with a three-item index which was adapted by Thompson and Terpening (1983) from a set of measures developed by Price and Bluedorn (1977) and Martin (1979). This index is designed to assess the extent of close friendship relationships an individual has in his or her work environment, and the frequency with which these ties are reinforced inside and outside of the organization. Responses are scored on a 5-point dimension,

summed and averaged to provide an integration index. The internal consistency of the integration index employed by Martin (1979) was found to have a coefficient alpha of 0.83. Thompson and Terpening (1983) did not specify the reliability value of this index, but reported the range of coefficients for all their scales as running from 0.66 to 0.88. The internal consistency of the work group integration index, for the present study, was found to be 0.55, which is lower than the lowest estimate found by Thompson and Terpening. Although low, this estimate is defensible in view of the three-item length of the scale.

Demographic Characteristics

Demographic characteristics including age, marital status, number of dependents, length of employment, and tuition support were assessed with single item statements asking respondents to provide the respective information.

For the analysis, marital status was scored dichotomously with category 1 including all single, never married, divorced and widowed individuals, and category 2 including all currently married ones. Tuition support was also scored dichotomously, such that 1=No and 2=Yes.

Inability to Leave

Inability to leave was measured with a nine-item scale specifically developed for this study. The individual items comprising this scale represent factors or reasons for which an individual might be inclined to stay with his or her organization. For example, these factors include Pension Benefits, Status in the Organization, the Likelihood of a

Promotion, Limited Alternative Job Opportunities, or Personal or Family Considerations. These factors represent constraints as well as investments which individuals commonly accrue in organizations. They are not easily transferrable to other organizations and become costs when the individual weighs the benefits and costs of leaving.

The individual is asked to indicate on a 7-point scale, ranging from 1=No Importance to 7=Utmost Importance, the extent to which these factors have played a role in the individual's decision to stay with the organization. The individual responses are summed across all factors and averaged to establish an overall Inability to Leave index. The internal consistency was found to be 0.75 for this scale.

This scale was developed to operationalize the reasons for staying with an organization expressed in Becker's (1960) side-bet theory. In the past, accrued investments in an organization have been inferred from demographic characteristics such as age and tenure with the organization. Inability to leave, as conceived in the present scale, would be expected to correlate with factors such as age, length of employment, and intention to stay with the organization.

The construct validity of the inability to leave scale was examined with data collected from a group of 54 Executive MBA students. Inability to leave was found to be positively correlated with age ($r=.33$, $p<.01$), with the

number of years at the present organization ($r=.27$, $p<.05$), with the number of years at the present job ($r=.28$, $p<.05$), with work group integration ($r=.34$, $p<.01$), and intention to stay with the organization ($r=.26$, $p<.05$). Also, inability to leave was found to be negatively correlated with the number of organizations the individual had worked at during the past 10 years ($r=-.40$, $p<.01$). This pattern of correlational findings tends to support the inability to leave scale as a measure of perceived organizational mobility constraints.

Protestant Work Ethic

The Protestant Work Ethic was measured with Mirels and Garrett's (1971) Protestant Ethic scale. This scale is a 19-item instrument in which respondents use a 7-point scale to indicate the extent of their agreement or disagreement with various statements endorsing Protestant Ethic values. Representative items include: "There are few satisfactions equal to the realization that one has done one's best at a job"; "If one works hard enough one is likely to make a good life for oneself"; and "People who fail at a job have usually not tried hard enough." Whenever necessary, items were modified to avoid the usage of male pronouns only.

As reported by Mirels and Garrett (1971), Cronbach Alpha reliability, based on data from a sample of 222 students was 0.79 indicating a satisfactory internal consistency for the test as a whole. For the present sample, Cronbach Alpha was found to be 0.77.

Materialistic Work Ethic

The Materialistic Work Ethic was measured with the Attitudes Toward Earnings sub-scale of Wollack et al.'s (1971) Survey of Work Values. This sub-scale consists of nine items, two of which are negatively worded and reverse scored. Representative items of this measure are: "A person should choose the job which pays the most"; "A good job is a well paying job"; or "When someone is looking for a job, money should not be the most important consideration" (R). The response categories to these items are: Strongly disagree, Moderately disagree, Neither agree nor disagree, Moderately agree, and Strongly agree, scored 1 to 5 respectively.

The psychometric properties of the Survey of Work Values instrument were established with a group of 495 employees in seven occupational groups (Wollack et al., 1971). The Attitude Toward Earnings sub-scale was found to have acceptable reliability indicators, an alpha coefficient of 0.63 and a test-retest correlation coefficient of 0.65 with a one month interval. Coefficient alpha, for the present sample was found to be 0.68.

Self-Growth Ethic

The self-growth ethic was measured with an index of Individual Growth Need Strength developed by Hackman and Oldham (1975). This measure was designed to assess "the strength of the respondent's desire to obtain growth satisfaction from his or her work" (Hackman & Oldham, 1975, pp. 162-163).

This measure consists of six items and has a seven-point response dimension ranging from "Would like having this only a moderate amount (or less)" to "Would like having this extremely much." In an attempt to lessen extreme responding toward the upper end of the scale, point values assigned to the response dimensions do not start with 0 or 1 but with 4 and end with a 10. For scoring purposes, 3 points are subtracted from each dimension score to provide a range of 1 to 7. Item scores are summed and averaged to provide an index value.

As reported by the authors, internal reliability was found to be 0.88 (Spearman-Brown formula applied to median inter-item correlation) with a sample of 658 varied employees. Rousseau (1978) reported an alpha coefficient of 0.85 and a test-retest correlation, over three months, of 0.76 based on a study involving 271 employees from two organizations. Further evidence for the satisfactory internal consistency of this scale has been provided by Pierce, Dunham and Blackburn (1979) and Stone, Ganster, Woodman, and Fusilier (1979). The obtained alpha coefficients were 0.86 and 0.85 respectively. For the present sample, alpha coefficient was found to be 0.85.

Psycho-somatic Complaints

Psycho-somatic complaints were measured with two indices developed by Patchen (1970). One index is a three-item measure of psychological symptoms of stress which asks respondents to indicate the frequency with which they

experience feelings of depression, tiredness and tenseness on a 6-point response dimension. The other index is a three-item measure of physical symptoms of stress which assesses the frequency with which respondents experience sleeping problems, headaches, and stomach problems. Responses are scored on a 6-point scale ranging from several weeks to almost never, scored 6 to 1 respectively. Patchen's index of physical symptoms consists of four items but only three were considered appropriate for the present study. The fourth item, which asks about the frequency of occurrence of physical problems such as "Gas or bloated feelings", was excluded from the scale prior to the pre-test because it was considered an inappropriate item for an observer rating scale.

As reported by Patchen (1970), correlations between psychological and physical symptoms of stress and other measures show positive relationships with overload of work (0.28 and 0.32 respectively), negative relationships with general job interest (-0.56 and -0.25 respectively), and interest in innovation (-0.25 and -0.22 respectively).

For the present sample, the internal consistency of the Physical Symptoms and Psychological Symptoms scale was found to be 0.66 and 0.69 respectively. Also, the Psychological Symptoms scale was found to correlate significantly ($r=0.31$) with independent ratings by co-workers of subjects' psychological (behavioral) symptoms of stress, thus showing some criterion validity.

Organization Serving Behaviors

Organization serving behaviors were measured with an instrument developed for this study. According to Wiener (1982), the behaviors which describe the committed individual reflect sacrifice, persistence, and preoccupation. Thus, a measure consisting of nine items was constructed to tap these dimensions. Two of the items were negatively worded and reverse scored. Respondents were asked to indicate on a 5-point scale, with response dimensions ranging from Never = 1 to Nearly all the time = 5, the frequency with which they engage in various behaviors. Some representative items are: "Going out of your way to help a co-worker who is having some sort of difficulty in his or her job"; "Taking a day off to just relax" (R); and "Changing your vacation plans or scheduled day off, in spite of personal inconvenience, to better meet the needs of your organization." For the present sample, the internal consistency of this scale was found to be 0.72. Also, the data indicated some criterion validity of this scale as it correlated significantly ($r=0.37$) with an independent co-worker rating scale of organization serving behavior.

Intention to Stay

An intention to stay index was derived from two questions recently employed by O'Reilly and Caldwell (1980) to measure tenure intentions. One of the questions which asks respondents to indicate, on a 5-point scale, the likelihood of working for their present organization in

three years, has previously been used by Kraut (1975) as a one item index of intention to stay. The other item asks respondents to provide an estimate, on a 7-point scale ranging from less than one year to more than ten years, of how long they planned to remain with the organization. Since the intercorrelations among these two items was .78 at Time 1 and .81 at Time 2, they were combined by O'Reilly and Caldwell to form an index of tenure intention. For the present sample, the Spearman-Brown split-half coefficient was found to be 0.81.

Personal and Social Alienation

The variables personal and social alienation were measured with the Philosophy of Life scale used by Korman, Wittig-Berman and Lang (1981). This measure consists of 18 items, 8 of which refer to personal alienation and 10 to social alienation. A total of 5 of the items are negatively worded and reverse scored.

Participants are asked to indicate, on a 5-point scale, the extent to which a particular statement describes their personal views. Response categories range from 5 = very descriptive to 1 = very non-descriptive. Scores are summed and averaged for the analysis.

Research has indicated satisfactory psychometric properties of these scales. The test-retest reliability coefficient was found to be 0.92 (Korman et al., 1981). Coefficient alpha for the personal alienation scale was found to be 0.60 and 0.55 based on a sample of Alumni and

MBA students. The social alienation scale yielded alpha coefficients of 0.68 and 0.76 for these two samples respectively. For the present study, coefficients alpha for personal and social alienation were found to be 0.79 and 0.67 respectively. Data supporting the construct validity of these two scales have been reported in Korman et al. (1981).

Co-Worker's Ratings of Psychological Symptoms

The Psychological Symptoms scale by Patchen (1970) was adapted for the use of a co-worker's assessment of participants' psychological symptoms of depression, tiredness and tenseness at work. Its internal consistency as a co-worker rating scale was found to be 0.73.

Co-Workers' Ratings of Organization Serving Behavior

The Organization Serving Behavior scale, which was specifically developed for this study, was used in the assessment of co-workers' observations of participants' behavior at work. Written in a format which lends itself to record observations of others, it was found to have an alpha coefficient of 0.75.

Exhibit 3 presents a summary table of the variables used in this study and their respective measures.

Exhibit 3

Research Variables with Corresponding Measures and Sources

<u>Variables</u>	<u>Measures and Sources</u>
Organizational Commitment	Organizational Commitment scale; Porter et al. (1974)
Value Commitment	Subscale of the Organizational Commitment scale by Porter et al. (1974)
Continuance Commitment	Organizational Commitment scale; Hrebiniak & Alutto (1972)
Job Satisfaction	Specific Satisfactions scale; Hackman & Oldham (1975)
Leader Reward and Punitive Behavior	Leader Reward Behavior scale; Sims & Szilagyi (1975)
Role Conflict and Role Ambiguity	Role Conflict and Role Ambiguity scale; Rizzo et al. (1970)
Supervisory Responsibility	Single item measure
Span of Control	Single item measure
Size of Organization	Single item measure
Work Group Integration	Group Integration Index; Thompson & Terpening (1983)
Age	Single item measure
Marital Status	Single item measure
Number of Dependents	Single item measure

Exhibit 3 (contn'd)

<u>Variables</u>	<u>Measures and Sources</u>
Length of Employment	Single item measure
Tuition Support	Single item measure
Inability to Leave	Developed for present study
Protestant Work Ethic	Protestant Ethic scale; Mirels & Garrett (1971)
Materialistic Work Ethic	Attitudes toward Earnings, Sub- scale of the Survey of Work Values scale; Wollack et al. (1971)
Self-Growth Ethic	Individual Growth Need Strenth; Hackman & Oldham (1975)
Psycho-somatic Complaints	Psychological and Physical Symptoms of Stress Indices; Patchen (1970)
Organization Serving Behaviors	Developed for present study
Intention to Stay	Tenure Intentions index; O'Reilly & Caldwell (1980)
Personal and Social Alienation	Personal and Social Alienation scale; Korman et al. (1981)

Data Analyses

The data were analyzed using the updated version of SPSS (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975) as well as its revised version SPSSX (1983).

The demographic characteristics of the study sample were described in terms of percentages, mean values and median values.

Alpha reliability coefficients were computed for each measure and presented together with each scale's mean value and standard deviation. The value commitment scale was identified as a subscale of the Porter et al. (1974) measure of organizational commitment using a principal components analysis with varimax rotations. The leader reward behavior scale (Sims, 1977) was confirmed as consisting of two conceptually independent subscales (leader reward and leader punitive behavior) on the basis of a principal components analysis with varimax rotation.

The hypotheses of this study were tested using correlational analyses including simple correlations and partial correlations.

Intercorrelation matrices for all independent variables and dependent variables were constructed. These matrices were examined for multicollinearity among the variables.

Zero-order and partial correlations with listwise deletion of missing cases were used in the testing of the hypotheses. The hypothesized relationships between antecedents and commitment types were tested by controlling for the other commitment type and those antecedents which

showed an intercorrelation coefficient of 0.40 or higher with the antecedent under consideration. This method was used to control for the shared variance of one commitment type with the other, and also to protect against capitalizing on common method variance as well as redundancy in predictor variance.

Similarly, for the relationships involving the commitment types and the predicted consequences, partial correlations were used to control for the effects of one commitment type on the other as well as those consequences showing intercorrelations of 0.37 or higher.

A t-test formula, developed by Humphreys (1978), was used to test the significance of the difference between two partial coefficients. These partial coefficients involve the hypothesized bivariate relationships between the antecedents and the commitment types, and the commitment types and the consequences. Humphreys developed this formula for the testing of the difference between two correlation coefficients when the two are correlated, that is, when the two are obtained from the same group of individuals. This formula is similar to the Hotelling t-test which also tests the difference between two correlated coefficients, but is slightly more conservative in its application because of its assumption of random effects rather than fixed effects variables.

Humphreys formula was not developed specifically for the testing of the difference between two partial

correlations. However, it has been applied by Hom, Katerberg, and Hulin (1979) in the testing of the difference between correlated r 's as well as part correlations.

Since no formula is available for the testing of the difference between the types of partial coefficients used here to test the hypotheses, the t -test by Humphreys was used as an approximation. The drawback of this formula, as well as the Hotelling t -test for correlated correlations, is that it fails to provide an estimate of the intercorrelation between the partial coefficients. The use of the zero-order correlation coefficient in its place could result in a somewhat inflated estimate of the significant difference between the two partial coefficients.

Stepwise multiple regression analyses with listwise deletion of missing cases were employed to determine the joint effects of all antecedent variables on value commitment and continuance commitment.

Additional correlational analyses were conducted to examine the proposed two-step model for possible confounding effects. Simple correlations were computed testing the direct relationships between the antecedents and the consequences. Partial coefficients were computed to examine the changes in coefficient size once the effects of value commitment and alternately, continuance commitment were removed from these direct antecedent-consequence relationships. Significant changes in coefficient size as a result of partialling would indicate that the consequences

are indeed associated with value commitment or continuance commitment and not equally well explained by the antecedents directly.

A procedure developed by Stoline (1972) permits the testing of a significant difference between a zero-order coefficient and a first-order partial coefficient from which the effects of a third variable were removed. While this test is appropriate for determining the significance of the shrinkage in coefficient size as a result of the partialling of either value commitment or continuance commitment from the antecedent-consequence relationship, a drawback of this formula is its extreme leniency. When applied to the present results, the Stoline procedure can yield significance at the .05 level (two-tailed test) for differences in coefficient sizes of no more than 0.06. For large samples, for which this formula is considered appropriate, the significance of small coefficients is anticipated. For an average n of 250, as it is the case in the present study, and generally low to moderate intercorrelation coefficients, a more conservative interpretation of the findings is called for. Thus, the test developed by Stoline was not rigorously applied to the present data. No differences in coefficient size below 0.10 were acknowledged as noteworthy.

Limitations of the Study

Limitations of this study are set by the method of data collection, nature of research design, and nature of sample.

For one, data are assessed primarily through self-reports of participants. The implications are several. Responses can be biased because of voluntary as well as involuntary distortions by participants. Some of the information provided by the respondents may also lack accuracy because of insufficient knowledge. This problem applies to questions involving organizational size and span of control for which subjects provided their own estimates rather than actual figures based on company records. Inaccurate estimates lessen the reliability of the data.

Further, the method of data collection through self-reports can also affect the validity of ascertained statistical relationships. Questionnaire data, collected at one point in time, can capitalize on common method variance and yield inflated correlation coefficients.

The nature of the research design also limits this study. A cross-sectional design fails to yield information about the causal priority of the variables. The ascertainment of the causal relationships between antecedents and consequences of commitment would require a longitudinal design.

In addition, the nature of the sample and method of data collection also limit the generalizability of the results.

CHAPTER 5

Results

This chapter reports the findings of the study. They will be presented following the order of the stated hypotheses. The first set of hypotheses, hypothesis 1 through 17, specify the relationships between the antecedents and the commitment types. Partial correlations were used to test these proposed bivariate relationships, and a t-test, developed by Humphreys (1978), was used to test the difference between two correlation coefficients.

Table 6 presents the intercorrelation matrix of all antecedent variables included in the study.

As indicated in Table 6, with a few exceptions, the predictor variables show a fairly high degree of independence from one another. Among the six work experience factors, only four coefficients indicate moderate to high interrelations. And among the seven constraint factors, two of the coefficients can be considered of high magnitude. Both the organizational characteristics and the personality characteristics are reasonably independent from one another and from all other antecedents.

In testing the bivariate relationships, it was thought important to account for possible common method variance and spurious relationships by partialling out the effects of other antecedents which showed moderate or high intercorrelations with the respective predictor. A coefficient of 0.40 was used as a cutoff score.

Further, the correlation between value commitment and

Table 6
 Intercorrelation Matrix of Antecedents
 1
 (N=270)

Antecedents	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1 Intrinsic Satisfact.																		
2 Extrinsic Satisfact.	.60																	
3 Leader Reward Behav.	.46	.68																
4 Leader Punitive Beh.	-.01	-.03	-.02															
5 Role Conflict	-.15	-.28	-.25	.12														
6 Role Ambiguity	-.27	-.46	-.33	.04	.37													
7 Supervisory Responsib.	.23	.06	.08	.17	.21	-.03												
8 Span of Control	.02	.05	-.01	-.03	.20	.15	.14											
9 Size of Organization	.01	.01	-.01	.03	.00	-.03	-.02	-.02										
10 Work Group Integrat.	.04	.25	.09	-.08	-.04	-.06	.01	.05	.03									
11 Age	.10	-.02	-.02	-.04	.05	-.06	.14	.19	-.02	-.18								
12 Marital Status	.13	.02	.01	-.01	.05	.03	.07	.10	.02	.12	.18							
13 Number of Dependents	.09	.02	.00	-.04	.01	.02	.04	.06	-.06	-.03	.16	.52						
14 Length of Employment	.06	.05	-.02	-.04	.04	-.04	.01	-.01	-.01	.09	.56	.06	.03					
15 Tuition Support	.14	.12	.09	-.03	-.17	-.02	-.02	-.09	.11	-.04	-.03	.11	-.03	-.04				
16 Inability to Leave	.02	.08	.06	-.10	-.01	.08	.01	-.02	.19	.12	-.02	.03	.02	.02	.07			
17 Protestant Work Ethic	.06	.10	.03	.18	.11	-.02	.02	-.05	-.01	-.05	-.06	.05	.05	-.05	.05	-.03		
18 Materialistic Ethic	-.13	-.13	-.16	-.02	.03	-.03	-.05	-.01	-.03	-.10	.08	-.15	-.02	.02	.02	.06	.12	
19 Self Growth Ethic	.10	.06	.07	.16	-.09	-.05	.05	.03	.02	-.04	-.09	.02	-.02	-.11	.03	-.10	.13	-.18

correlation coefficients of .11 are significant at $p < .05$

correlation coefficients of .14 are significant at $p < .01$

(1) The number of observations vary somewhat among the coefficients because of missing values.

continuance commitment was found to be 0.54 which yields a coefficient of determination of 0.29. Because of the sizable amount of variance shared by the two commitment types, it was thought to be more meaningful to control for one in the other when testing the strength of their relationship with each antecedent.

Table 7 and Table 8 summarize the zero-order correlation and partial correlation coefficients indicating the strength of the relationships between the antecedent variables and the commitment types.

Table 7 presents zero-order coefficients for all antecedents and organizational commitment, and partial coefficients for only those antecedents which showed intercorrelations with other antecedents of 0.40 or higher. The variables partialled out for a particular antecedent are listed in the footnotes.

Table 8 presents zero-order and partial coefficients for all antecedents and value commitment and continuance commitment. The partial coefficients describe the relationships with the effects of either commitment type and those antecedents removed showing intercorrelations of 0.40 or higher. The control variables are listed in the footnotes.

Role of Job Satisfaction and Commitment Types

A positive relationship between intrinsic satisfaction and extrinsic satisfaction and organizational commitment had been predicted. And, specifically it was argued that either type of job satisfaction would show a stronger association

Table 7
Zero-Order and Partial Correlation Coefficients Indicating Bivariate Relationships
between Antecedents and Organizational Commitment

Antecedent	N	Organizational Commitment Zero-Order	DF	Organizational Commitment Partial
Intrinsic Satisfaction	(256)	.63**	(254)	.42** (a)
Extrinsic Satisfaction	(254)	.58**	(251)	.23** (b)
Leader Reward Behavior	(256)	.44**	(254)	.03 (c)
Leader Punitive Behavior	(261)	.05		
Role Conflict	(264)	-.25**		
Role Ambiguity	(263)	-.29**	(262)	-.02 (d)
Supervisory Responsibility	(268)	.10		
Size of Organization	(245)	.09		
Span of Control	(261)	.02		
Age	(261)	.11*	(260)	.09 (e)
Marital Status	(262)	.10	(261)	.08 (f)
Number of Dependents	(262)	.05	(261)	.01 (g)
Length of Employment	(261)	.06	(260)	.00 (h)
Tuition Support	(268)	.09		
Inability to Leave	(261)	.21**		
Work Group Integration	(266)	.01		
Protestant Work Ethic	(265)	.15**		
Materialistic Ethic	(267)	-.15**		
Self-Growth Ethic	(268)	.15**		

* $p < .05$

** $p < .01$

(a) The control variables include: Extrinsic Satisfaction, Leader Reward Behavior;
(b) Intrinsic Satisfaction, Leader Reward Behavior, Role Ambiguity; (c) Intrinsic
Satisfaction, Extrinsic Satisfaction; (d) Extrinsic Satisfaction; (e) Length of
Employment; (f) Number of Dependents; (g) Marital Status; (h) Age.

Table 8
Zero-Order and Partial Coefficients Indicating Bivariate Relationships
between Antecedents, Value Commitment and Continuance Commitment

Antecedent	N	Value Commitment	Contin- uance Commitment	DF	VC Controlling for CC	CC Controlling for VC	Total Difference Between Partial	T-Value
Intrinsic Satisfaction	(262)	.65**	.50**	(259)	(a) .38**	.20**	.18**	-3.063
Extrinsic Satisfaction	(261)	.57**	.38**	(257)	(b) .20**	.03	.17**	-2.876
Leader Reward Behavior	(254)	.42**	.29**	(251)	(c) .02	.01	.01	
Leader Punitive Behavior	(256)	.07	.05	(255)	.06	.01	.05	
Role Conflict	(259)	-.21**	-.11*	(258)	(d) -.18**	-.00	.18**	-3.057
Role Ambiguity	(260)	-.26**	-.14**	(258)	-.01	.05	.06	
Supervisory Responsibility	(262)	.14**	.16**	(261)	.07	.09	.02	
Size of Organization	(240)	.11*	-.02	(239)	.15**	-.09	.24**	-3.979
Span of Control	(256)	.02	.11*	(255)	(e) -.04	.12*	.16**	2.691
Age	(257)	.14**	.15**	(255)	(f) .10	.01	.09	
Marital Status	(261)	.12*	.14**	(259)	(g) .06	.07	.01	
Number of Dependents	(259)	.05	.09	(257)	(h) -.03	.03	.06	
Length of Employment	(262)	.07	.17**	(260)	-.08	.14**	.22**	3.785
Tuition Support	(262)	.10	.07	(261)	.08	.02	.06	
Inability to Leave	(257)	.21**	.12*	(256)	.17**	.02	.15**	-2.523
Work Group Integration	(260)	.01	.03	(259)	-.01	.03	.04	
Protestant Work Ethic	(259)	.19**	.02	(258)	.22**	-.10	.32**	-5.662
Materialistic Ethic	(261)	-.16**	-.11*	(260)	-.12*	-.04	.08	
Self-Growth Ethic	(262)	.15**	-.05	(261)	.21**	-.16**	.37**	-6.729

* p<.05 ; ** p<.01

(a) Additional Control Variables include: Extrinsic Satisfaction, Leader Reward Behavior; (b) Intrinsic Satisfaction, Leader Reward Behavior, Role Ambiguity; (c) Intrinsic Satisfaction, Extrinsic Satisfaction; (d) Extrinsic Satisfaction; (e) Length of Employment; (f) Number of Dependents; (g) Marital Status; (h) Age.

with value commitment than continuance commitment.

It was stated that:

Hypothesis 1:

Intrinsic and extrinsic job satisfaction are positively related to organizational commitment.

Hypothesis 1A:

Intrinsic satisfaction is more strongly related to value commitment than continuance commitment.

Hypothesis 1B:

Extrinsic satisfaction is more strongly related to value commitment than continuance commitment.

As indicated in Table 7, both intrinsic and extrinsic satisfaction show significant relations to organizational commitment, $r=0.63$ ($p<.01$), and $r=0.59$, ($p<.01$), respectively. With the effects of extrinsic satisfaction and leader reward behavior controlled for, the relationship between intrinsic satisfaction and organizational commitment remained significant at $r=.42$ ($p<.01$). Similarly, with the effects of intrinsic satisfaction, leader reward behavior and role ambiguity controlled for, the relationship between extrinsic satisfaction and organizational commitment remained significant ($r=.23$ $p<.01$). Thus, hypothesis 1 was found to be supported.

As indicated in Table 8, intrinsic satisfaction was found to be significantly related to both value commitment and continuance commitment, $r=.65$ ($p<.01$) and $r=.50$ ($p<.01$), respectively. With partialling, some shrinkage in coefficient size occurred. The removal of the effects of

continuance commitment, extrinsic satisfaction and leader reward behavior changed the correlation between intrinsic satisfaction and value commitment from 0.65 to 0.38. The relationship between intrinsic satisfaction and continuance commitment, when controlling for the effects of value commitment and the same two antecedents, was reduced to 0.20 from 0.50. The total difference between these two partial coefficients (.18) yielded a statistically significant t-value ($t=-3.063$, $p<.01$). Thus, these data support hypothesis 1A. There is a significantly stronger relation between intrinsic satisfaction and value commitment than intrinsic satisfaction and continuance commitment.

As indicated in Table 8, the zero-order coefficients between extrinsic satisfaction and the two commitment types were found to be 0.57 ($p<.01$) and 0.38 ($p<.01$) respectively. With the effects of continuance commitment, intrinsic satisfaction, leader reward behavior, and role ambiguity removed, the correlation between extrinsic satisfaction and value commitment shrank to 0.20 ($p<.01$) but remained significant. For continuance commitment, the correlation was reduced to $r=0.03$ (n.s.) after controlling for the effects of value commitment, intrinsic satisfaction, leader reward behavior, and role ambiguity. The difference in coefficient size, 0.17, yielded a t-value of -2.876 which is significant beyond the 0.01 level.

Thus, these findings support hypothesis 1B. Extrinsic satisfaction is more strongly associated with value

commitment than with continuance commitment, however, their association is weaker than that for intrinsic satisfaction and value commitment.

Role of Perceived Leader Reward and Leader Punitive Behavior

As stated in Hypotheses 2, 2A and 2B, positive relationships between perceived leader reward behavior and organizational commitment types were expected, such that:

Hypothesis 2:

Perceived leader reward behavior is positively related to organizational commitment.

Hypothesis 2A:

Perceived leader reward behavior is positively related to value commitment.

Hypothesis 2B:

Perceived leader reward behavior is positively related to continuance commitment.

As indicated in Table 7, perceived leader reward behavior is positively correlated with organizational commitment, $r=0.44$, $p<.01$. However, the coefficient shrinks to zero when the effects of intrinsic satisfaction, and extrinsic satisfaction are controlled for. Thus, hypothesis 2 was not supported.

Table 8 shows that the zero-order coefficients between leader reward behavior and value commitment, and leader reward behavior and continuance commitment are significant for both relationships, 0.42 ($p<.01$) and 0.29 ($p<.01$) respectively. However, with the other commitment type controlled for, both coefficients were reduced to zero.

Thus, hypotheses 2A and 2B were not found to be supported by the data.

Hypotheses 3, 3A, and 3B predicted negative relationships between perceived leader punitive behavior and organizational commitment types, such that:

Hypothesis 3:

Perceived leader punitive behavior is negatively related to organizational commitment.

Hypothesis 3A:

Perceived leader punitive behavior is negatively related to value commitment.

Hypothesis 3B:

Perceived leader punitive behavior is negatively related to continuance commitment.

As indicated in Table 7 and Table 8, the respective zero-order and partial correlation coefficients between perceived leader punitive behavior and organizational commitment ($r=0.05$), value commitment ($r=.06$), and continuance commitment ($r=0.01$) are not significantly different from zero. Perceived leader punitive behavior appears to be unrelated to any type of organizational commitment. Thus, hypotheses 3, 3A, and 3B were not found to be supported.

Consequently, no support exists for Hypothesis 4 which states that:

Perceived leader punitive behavior is significantly more strongly related, in a negative direction, to continuance commitment than to value commitment.

The absence of any significant relationships between these variables obviates the determination of significant differences in correlation coefficients.

The Role of Role Conflict and Role Ambiguity.

Hypotheses 5, 5A and 5B predict negative relationships between role conflict and organizational commitment types, such that:

Hypothesis 5:

Role conflict is negatively related to organizational commitment.

Specifically,

Hypothesis 5A:

Role conflict is negatively related to value commitment.

Hypothesis 5B:

Role conflict is negatively related to continuance commitment.

Table 7 shows that role conflict is negatively correlated with organizational commitment, $r=-0.25$, ($p<.01$). This finding supports hypothesis 5.

As presented in Table 8, role conflict shows significant zero-order correlations with value commitment, $r=-0.21$ ($p<.01$); and with continuance commitment, $r=-0.11$ ($p<.05$). After removing the effects of continuance commitment, the correlation coefficient between role

conflict and value commitment was reduced in size ($r=-0.18$, $p<.01$), but remained statistically significant. The relationship between role conflict and continuance commitment, however, lost its statistical significance once the effects of value commitment were removed.

Based on these data, hypothesis 5A can be considered supported but not hypothesis 5B. Role conflict is significantly, negatively correlated with value commitment, but is unrelated to continuance commitment.

Hypothesis 6 which states that:

The relationship between role conflict and value commitment is significantly stronger than the relationship between role conflict and continuance commitment.

was found to be supported by the data. The difference (.18) between the role conflict-value commitment and the role conflict-continuance commitment correlations was found to be statistically significant ($t=-3.057$, $p<.01$). Role conflict has a stronger negative relation with value commitment than with continuance commitment, however, this relation is of low magnitude.

Negative relationships were also predicted concerning the association between role ambiguity and the commitment types such that:

Hypothesis 7:

Role ambiguity is negatively related to organizational commitment.

Hypothesis 7A:

Role ambiguity is negatively related to value commitment.

Hypothesis 7B:

Role ambiguity is negatively related to continuance commitment.

As indicated in Table 7, the simple correlation coefficient between role ambiguity and organizational commitment is -0.29 ($p < .01$). With the effects of extrinsic satisfaction controlled for, the coefficient was reduced to zero, $r = -0.02$. Thus, hypothesis 7 was not supported.

Table 8 shows negative and significant zero-order correlations between role ambiguity and value commitment and role ambiguity and continuance commitment, $r = -0.26$ ($p < .01$) for value commitment, and -0.14 ($p < .01$) for continuance commitment. However, with the effects of the other commitment type and extrinsic satisfaction controlled for, both coefficients were reduced to zero. Thus, hypotheses 7A and 7B were not supported. Role ambiguity is unrelated to value commitment as well as continuance commitment.

The Role of Supervisory Responsibility

Positive relationships between supervisory responsibility and organizational commitment types had been predicted, such that:

Hypothesis 8:

Supervisory responsibility is positively related to organizational commitment

Hypothesis 8A:

Supervisory responsibility is positively related to value commitment

Hypothesis 8B:

Supervisory responsibility is positively related to continuance commitment

As indicated in Table 7, supervisory responsibility is positively related to organizational commitment ($r=0.10$), however, the coefficient failed to reach statistical significance. Supervisory responsibility was not found to be associated with organizational commitment. Thus, hypothesis 8 was not substantiated.

Table 8 shows that the simple correlations between supervisory responsibility and value commitment ($r=0.15$, $p<.01$), and supervisory responsibility and continuance commitment ($r=0.17$, $p<.01$) are positive and statistically significant. However, with the effects of continuance commitment removed from the former, and value commitment removed from the latter relationship, the coefficients were reduced to a statistically nonsignificant level. Thus, hypotheses 8A and 8B were not found to be supported.

The Role of Size of Organization

Size of organization was predicted to be positively correlated with organizational commitment types, such that:

Hypothesis 9:

Size of organization is positively related to organizational commitment

Hypothesis 9A:

Size of organization is positively related to value commitment

Hypothesis 9B:

Size of organization is positively related to continuance commitment

As indicated in Table 7, the relationship between size of organization and organizational commitment is not statistically significant ($r=0.09$, n.s.). Hypothesis 9 was not found to be supported.

As indicated in Table 8, size of organization has a weak but significant association with value commitment. The zero-order correlation between size of organization and value commitment ($r=0.11$, $p<.05$) is statistically significant and increases slightly when the effects of continuance commitment are removed ($r=0.15$, $p<.01$). The relationship between size of organization and continuance commitment is not significant across coefficients. Thus, hypothesis 9A was found to be supported, but not hypothesis 9B.

Although not predicted, a significant difference was found in the strength of the relationships between organizational size and value commitment and organizational size and continuance commitment. The total difference between these two coefficients (.24) was found to be significant ($t=-3.979$, $p<.01$).

The Role of Span of Control

Positive relationships had been predicted between span

of control and organizational commitment types, such that:

Hypothesis 10:

Span of control is positively related to organizational commitment.

Hypothesis 10A:

Span of control is positively related to value commitment.

Hypothesis 10B:

Span of control is positively related to continuance commitment.

As indicated in Tables 7 and 8, neither hypothesis 10 nor 10A were found supported by the data. No relationship was found between span of control and organizational commitment ($r=.02$, n.s.) or span of control and value commitment ($r=.02$, n.s.). However, the relationship between span of control and continuance commitment was found to be statistically significant, $r=.12$, ($p<.05$). Thus, hypothesis 10B was found to be supported. Span of control is significantly, positively related to continuance commitment, but unrelated to either organizational commitment or value commitment.

Although not predicted, a significant difference (.16) in correlation coefficients between span of control and value commitment, and span of control and continuance commitment was found, $t=2.691$ ($p<.01$). Yet, the association between span of control and continuance commitment is weak.

The Role of Personal Structural Variables

Personal structural variables were predicted to have a stronger positive effect on continuance commitment than value commitment, in that:

Hypothesis 11:

Age, length of employment, marital status, number of dependents and tuition support make a greater contribution to the prediction of continuance commitment than to the prediction of value commitment.

As indicated in Table 8, two of the five personal/structural variables, age and marital status show positive and statistically significant simple correlations with value commitment, 0.14 ($p < .01$) and 0.12 ($p < .05$) respectively. Number of dependents, length of employment and tuition support show no relationship with value commitment. For continuance commitment, three of the possible five personal/structural variables show significant relationships, age ($r = .15$, $p < .01$), marital status ($r = .14$, $p < .01$), and length of employment ($r = .17$, $p < .01$).

Yet, as indicated by the partial coefficients, none of the personal/structural characteristics remained significantly associated with value commitment when the effects of continuance commitment and the intercorrelated antecedents were controlled for. For continuance commitment, length of employment remained statistically significant at 0.14 ($p < .01$) with the effects of value commitment and age controlled for. However, length of employment accounts for only two percent of the variance in

continuance commitment. Thus, these data yield some but weak support for the hypothesis that personal/structural characteristics have a stronger effect on continuance commitment than value commitment.

Structural constraint factors, as measured by the "Inability to Leave" scale, had also been predicted to be more strongly, positively associated with continuance commitment than value commitment. As stated in hypothesis 12:

The relationship between inability to leave and continuance commitment is significantly stronger than the relationship between inability to leave and value commitment.

As indicated in Table 8, Pearson correlation coefficients for the relationship between inability to leave and value commitment and inability to leave and continuance commitment were found to be $r=.21$ ($p<.01$) and $r=.12$ ($p<.05$) respectively. However, with the effects of the other commitment type controlled for, the relationship between inability to leave and value commitment was reduced to 0.17 ($p<.01$), while the relationship between inability to leave and continuance commitment was reduced to a nonsignificant level ($r=.02$). The difference (.15) between these two correlation coefficients was found to be significant, $t=-2.523$ ($p<.01$), however, this difference was in the direction opposite that predicted.

Hypothesis 12 was not found to be supported by the

data. Inability to leave is not more strongly, positively associated with continuance commitment than with value commitment.

The Role of Work Group Integration

Psychological constraints or work group integration was expected to be positively correlated with all commitment types, and to be more strongly associated with continuance commitment than with value commitment. It was hypothesized that:

Hypothesis 13:

Work group integration is positively related to organizational commitment.

Specifically, Hypothesis 13A:

Work group integration is positively related to value commitment.

Hypothesis 13B:

Work group integration is positively related to continuance commitment.

As indicated in Tables 7 and 8, none of the correlation coefficients computed to test these relationships were found to be significant. Thus, hypothesis 13, 13A and 13B were not found to be supported.

Consequently, no support exists for hypothesis 14 which states that:

The relationship between work group integration and continuance commitment is significantly stronger than the relationship between work group integration and value commitment.

Work group integration was found to be unrelated to commitment to the organization.

The Role of Work Ethics

Work ethics were expected to correlate positively with organizational commitment such that,

Hypothesis 15:

Work ethics, including the Protestant ethic, materialistic ethic and self-growth ethic are positively related to organizational commitment.

As indicated in Table 7, all three work ethics were significantly related to organizational commitment, however, only the Protestant ethic and the self-growth ethic showed relationships in the positive direction, $r=.15$ ($p<.01$) and $r=.15$ ($p<.01$) respectively. The materialistic ethic was found to be negatively related to organizational commitment, $r=-.15$ ($p<.01$).

Thus, hypothesis 15 received only partial support. The Protestant ethic and the self-growth ethic but not the materialistic ethic are positively correlated with organizational commitment.

Also, hypothesis 16 received only partial support. It states that:

Work ethics, including the Protestant ethic, materialistic ethic, and self-growth ethic are positively related to value commitment and unrelated to continuance commitment.

As indicated in Table 8, the Protestant ethic and the

self-growth ethic are significantly related to value commitment in a positive direction, $r=.19$, $p<.01$, and $r=.15$, $p<.01$ respectively. The materialistic ethic, however, shows a significant correlation with value commitment in the negative direction, $r=-.16$ ($p<.01$).

All three relationships remained significant when the effects of continuance commitment were controlled for. The partial coefficient for the Protestant ethic is 0.22 ($p<.01$), for the materialistic ethic -0.12 ($p<.05$), and for the self-growth ethic 0.21 ($p<.01$).

As indicated by the zero-order correlations for the work ethics and continuance commitment, only the materialistic ethic showed a low, but statistically significant negative correlation with continuance commitment, ($r=-.11$, $p<.05$). With the effects of value commitment controlled for, the relationship between the materialistic ethic and continuance commitment was reduced to zero. However, the partialling of the effects of value commitment, resulted in the self-growth ethic showing a low but significant correlation with continuance commitment in the negative direction ($r=-.16$, $p<.01$). It would appear that value commitment has a suppressor effect on the relationship between the self-growth ethic and continuance commitment. Thus, the hypothesis, as stated above, holds true for the Protestant ethic, but not for the materialistic ethic or self-growth ethic. Although unrelated to continuance commitment, the materialistic ethic is negatively related to value commitment. And, while

positively and significantly related to value commitment, the self-growth ethic is negatively and significantly related to continuance commitment.

In general, it was found that work ethics are more strongly related to value commitment than to continuance commitment. As indicated in Table 8 the difference in coefficient size between the Protestant ethic and value commitment and the Protestant ethic and continuance commitment is 0.32 which is significant ($t=-5.662$, $p<.01$). And the difference in coefficient size between the self-growth ethic and value commitment and the self-growth ethic and continuance commitment is 0.37 which is significant ($t=-6.729$, $p<.01$). Yet, the difference in correlations of 0.08 between the materialistic ethic and value commitment and the materialistic ethic and continuance commitment failed to reach statistical significance.

Hypothesis 17 states that:

From among the work ethics tested, the Protestant ethic is significantly more strongly, positively related to value commitment than either the materialistic ethic or the self-growth ethic.

This hypothesis was not found to be supported. As indicated in Table 8, the differences in the strength of the partial correlations between the Protestant ethic and value commitment ($r=.22$) and the self-growth ethic and value commitment ($r=.21$) are negligible, and the materialistic ethic shows a relationship with value commitment that is

opposite that predicted.

Multivariate Analyses of Commitment Antecedents

Stepwise multiple regression analyses were conducted to competitively analyze the antecedent variables as well as establish their joint effects on value commitment and continuance commitment. To control for the effects of the commitment types on the other antecedent variables, continuance commitment was forced to enter the equation on the first step when value commitment was used as the criterion, and value commitment was forced into the equation on the first step when continuance commitment was used as the criterion. On the subsequent steps, all antecedent variables were permitted to enter the equation freely. This method of entry enables an assessment of the amount of variance accounted for by the antecedent variables over and above the variance accounted for by one commitment type in the other. And further, it indicates whether variables from all four antecedent categories uniquely contribute to the prediction of either value commitment or continuance commitment.

Table 9 presents the results of the multiple regression analyses. For both value commitment and continuance commitment, the significant predictor variables, as indicated by the standardized regression coefficients, are listed in the order of entry into the equation. The beta weights as well as the changes in variance added are recorded to indicate the unique variance in the criterion associated with a particular antecedent. The multiple R and

R^2 show the amount of variance predicted by a particular significant set of predictors (including the control variable). And R^2 changes indicate the increases in variance added with each predictor.

As indicated in Table 9, the antecedents predicting value commitment include, beginning with step two, intrinsic satisfaction, extrinsic satisfaction, organization size, the Protestant ethic, the self-growth ethic, and inability to leave. The antecedents, by themselves, explained 30 percent of the variance in value commitment.

With the effects of value commitment controlled for, continuance commitment was predicted by two antecedents, intrinsic satisfaction and the self-growth ethic which entered the equation with a negative sign. Intrinsic satisfaction and the self-growth ethic by themselves, explained only 5 percent of the variance in continuance commitment.

These results indicate that the proposed antecedents of commitment explain a good portion (30 percent) of the variance in value commitment. Significant predictors were found in all four of the proposed variable categories. From among the work experience factors, intrinsic and extrinsic satisfaction were the best predictors. From among the three organizational characteristics, organization size evolved as a significant predictor. From among the personality characteristics, the Protestant and the self-growth ethic were found to be significant. And from the

Table 9
 Results of Stepwise Multiple Regression Analyses for all Antecedents on
 Value Commitment and Continuance Commitment

Antecedents	Value Commitment		Continuance Commitment			
	Contr. For CC Beta Final Equation	RSQ Changes	Contr. For VC Beta Final Equation	RSQ Changes		
	Continuance Commitment	.264	.2843	Value Commitment	.389	.2843
Intrinsic Satisfaction	.343	.2061	.243	.0346		
Extrinsic Satisfaction	.253	.0429				
Organization Size	.107	.0164				
Protestant Ethnic	.115	.0171				
Self-Growth Ethnic	.119	.0098	-.128	.0160		
Inability to Leave	.103	.0095				
df	7/203		3/207			
F	41.0753		34.7369			
R	.77		.58			
RSQ	.59		.34			

organizational investment/constraint factors, inability to leave made a small but significant contribution to the prediction of value commitment. Only two of the antecedents contributed to the prediction of continuance commitment, explaining only a small portion (5 percent) of the variance.

The Consequences of Organizational Commitment

The second set of hypotheses, hypothesis 18 through hypothesis 23 specify the relationships between value commitment and continuance commitment and the proposed consequences. Table 10 presents the intercorrelation matrix of these consequences. As indicated in Table 10, from among the 15 intercorrelation coefficients produced by the six self-report measures, four were found to be near or above the 0.40 cut off score which was used in the previous analyses as the decision rule for the partialling of the effects of other variables to control for common method variance and spurious relationships. It was thought important to apply similar controls to the analysis of the consequences of the commitment types.

From among the four unacceptably high intercorrelation coefficients, two represent the intercorrelations of subscales. Physical symptoms of stress and psychological symptoms of stress, as two dimensions of the psycho-somatic complaint scale, were found to correlate 0.53. And the personal and social alienation measures correlated 0.42. The other two coefficients involve personal alienation and its relationship with psychological symptoms of stress of 0.48, and intention to stay of -0.37. The 12 remaining

coefficients range in magnitude from 0.02 to 0.29, with a median correlation of 0.23. Thus, the bivariate relationships between the commitment types and commitment consequences were computed with the control of the effects of the other commitment type and those consequences removed which showed a coefficient of 0.37 or higher with the particular consequence under consideration.

Value commitment and continuance commitment were predicted to have different effects on behavioral, attitudinal, and emotional outcomes in organizations. It was proposed that:

Hypothesis 18:

Value commitment is more strongly positively related to organization serving behavior than continuance commitment.

Table 11 presents a summary of the relationships between the commitment types and the proposed outcomes. Zero-order correlations and partial correlation coefficients are shown. Control variables in addition to either value commitment or continuance commitment are indicated in the footnotes.

As indicated in Table 11, both value commitment and continuance commitment correlated positively, and with almost equal strength, with organization serving behavior, $r=.32$, $p<.01$, and $r=.31$, $p<.01$, respectively. With the effects of continuance commitment removed, the correlation between value commitment and organization serving behavior

Table 10
Intercorrelation Matrix of Dependent Variables

Consequences	1	2	3	4	5	6	7
1 Organization Serving Beh.							
2 Physical Symptoms	.08						
3 Psychological Symptoms	-.04	.53**					
4 Personal Alienation	-.29**	.28**	.48**				
5 Social Alienation	-.10	.18**	.24**	.42**			
6 Intention to Stay	.23**	-.28**	-.28**	-.37**	-.02		
7 Organization Serving Beh. (Co-Worker Ratings)	.37**	.18*	-.05	-.14*	.09	.06	
8 Psychological Symptoms (Co-Worker Ratings)	-.06	.10	.31**	.04	-.01	-.09	-.30**

* p<.05
** p<.01

Table 11
Correlations and Partial Correlations between Commitment Types
and Behavioral and Attitudinal Consequences

Consequences	N	Value Commitment	Continuance Commitment	DF	Value Commitment controlling for CC	Continuance Commitment controlling for VC	Total Difference between Partials	T-Value
Organization Serving Behavior	(262)	.32**	.31**	(261)	.19**	.17**	.02	n.s.
O-S Behavior Rated by Co-worker	(148)	.20**	.15*	(147)	.14*	.05	.09	n.s.
Physical Symptoms	(257)	-.20**	-.18**	(255)	(a) .04	-.02	.06	n.s.
Psychological Symptoms	(254)	-.43**	-.34**	(251)	(b) -.17**	-.11*	.06	n.s.
Psy. Symptoms Rated by Co-worker	(149)	-.16*	-.04	(148)	-.16*	.05	.21**	2.711
Personal Alienation	(256)	-.49**	-.31**	(252)	(c) -.25**	-.04	.21**	3.548
Social Alienation	(258)	-.12*	-.10*	(256)	(d) .11*	-.02	.13*	2.180
Intention to Stay	(258)	.62**	.55**	(256)	(e) .40**	.34**	.06	n.s.

* p<.05; ** p<.01

(a) Additional control variables include: Psychological Symptoms; (b) Physical Symptoms, Personal Alienation; (c) Psychological Symptoms, Social Alienation, Intention to Stay; (d) Personal Alienation; (e) Personal Alienation.

was reduced to 0.19 ($p < .01$). The correlation coefficient between continuance commitment and organization serving behavior shrank to 0.17 ($p < .01$) after the effects of value commitment were controlled for. Although the association between value commitment and organization serving behavior is slightly stronger than that between continuance commitment and organization serving behavior, the difference in correlation coefficients of 0.03 is negligible and not statistically significant. Organization serving behavior is not more strongly, positively related to value commitment than to continuance commitment.

Also, as indicated in Table 11, the independent assessment of organization serving behavior through co-worker's ratings showed no difference between commitment type and the likelihood to engage in organization serving behavior. Value commitment was found to correlate at 0.20 ($p < .01$) with organization serving behavior as measured by co-workers' observations, and continuance commitment at 0.15 ($p < .05$). With the effects of the other commitment type controlled for, value commitment was found to correlate with organization serving behavior as reported by co-workers at 0.14, while the relationship between continuance commitment and the same measure of organization serving behavior was reduced to a nonsignificant level, $r = .05$. However, the difference between these two partial correlation coefficients was not found to be statistically significant.

Thus, hypothesis 18 was not found to be supported. Both value commitment and continuance commitment were found to be

positively correlated with organization serving behavior when assessed with a self-report measure. While the correlation between value commitment and organization serving behavior as measured by the independent observations was found to be positive and significant and that between continuance commitment and organization serving behavior was not, the former failed to be significantly stronger than the latter.

Value commitment was anticipated to lessen the experience of stress and tension in organizations and express itself in fewer psycho-somatic complaints.

According to hypotheses 19 and 20:

Value commitment is more strongly negatively related to physical symptoms of stress than continuance commitment.

and

Value commitment is more strongly negatively related to psychological symptoms of stress than continuance commitment.

Zero-order correlation coefficients testing these relationships were found to be of similar strength. As indicated in Table 11, value commitment and continuance commitment correlated negatively with physical symptoms of stress, $r = -.20$ ($p < .01$) and $r = -.18$, ($p < .01$), respectively. With the effects of continuance commitment and psychological symptoms of stress removed, the correlation between value commitment and physical symptoms was reduced to near zero,

$r=.04$. When controlling for value commitment and psychological symptoms of stress, the partial correlation coefficient indicating the relationship between continuance commitment and physical symptoms of stress was also reduced to near zero, $r=-.02$.

Neither value commitment nor continuance commitment were found to be associated with physical symptoms of stress. Therefore, hypothesis 19 which proposed a significant difference in strength of association between the two commitment types and physical symptoms of stress was not found to be supported by these data.

As indicated in Table 11, the relationships between value commitment and psychological symptoms of stress and continuance commitment and psychological symptoms of stress were $r=-.43$ ($p<.01$) and $r=-.34$ ($p<.01$) respectively. Controlling for the effects in each other as well as physical symptoms of stress and personal alienation, the respective partial coefficients for value commitment and continuance commitment changed to $-.17$ ($p<.01$) and $-.11$ ($p<.01$) respectively. The total difference between these partial correlations is 0.06, which is not statistically significant.

In contrast, evidence for the difference in association between the two commitment types and psychological symptoms of stress is provided when these behaviors are assessed by co-worker ratings. As indicated in Table 11, the relationship between value commitment and co-worker's observations of psychological symptoms of stress was found

to be significant ($r = -.16$, $p < .05$). No significant relationship was found between continuance commitment and psychological symptoms of stress as measured by co-worker's observations ($r = -.04$, n.s.). With the removal of the effects of the other commitment type, the relationship between value commitment and psychological symptoms of stress, as rated by co-workers, remained unchanged. The relationship between continuance commitment and psychological symptoms of stress was changed from -0.04 to 0.05 . The total difference between these two correlation coefficients was found to be statistically significant, $t = 2.711$ ($p < .01$).

Thus, hypothesis 20 was found to be supported with the assessment of psychological symptoms of stress through independent observational data. No difference in the strength of the relationships was found with psychological symptoms assessed through a self-report measure.

Value commitment was also expected to counteract the experience of alienation more strongly than continuance commitment, such that,

Hypothesis 21:

Value commitment is more strongly negatively related to personal alienation than continuance commitment. And

Hypothesis 22:

Value commitment is more strongly negatively related to social alienation than continuance commitment.

As indicated in Table 11, the relationship between

value commitment and personal alienation is stronger than the relationship between continuance commitment and personal alienation ($r=-0.49$, $p<.01$, and $r=-0.31$, $p<.01$ respectively).

With the effects of continuance commitment, psychological symptoms of stress, social alienation, and intention to stay controlled for, the relationship between value commitment and personal alienation was reduced to -0.25 from -0.49 . With the control of the effects of value commitment and the other three consequences, the relationship between continuance commitment and personal alienation was no longer found to be significant ($r=-.04$). The total difference between these two partial correlation coefficients was found to be significant as indicated by the corresponding t -value, $t=3.548$ ($p<.01$).

Thus, hypothesis 21 was found to be supported. Value commitment is more strongly negatively related to personal alienation than continuance commitment. Continuance commitment was found to be unrelated to personal alienation.

As indicated in Table 11, zero-order correlations between value commitment and social alienation and continuance commitment and social alienation were statistically significant but of low magnitude and pointed in the negative direction, $r=-.12$ ($p<.05$) and $r=-.10$ ($p<.05$) respectively. With the effects of the other commitment type and personal alienation controlled for, the relationship between value commitment and social alienation changed from negative to positive, with a borderline significant

coefficient of 0.11 ($p < .05$), while the relationship between continuance commitment and social alienation was reduced to near zero ($r = -.02$). The total difference between these two partial coefficients was found to be statistically significant, $t = 2.180$ ($p < .05$).

The positive relationship between value commitment and social alienation is contrary to prediction. No support was found for hypothesis 22 which stated that value commitment is more strongly negatively related to social alienation than continuance commitment.

An individual's intention to stay with the organization had been expected to be more strongly associated with continuance commitment than with value commitment. It was proposed that:

Hypothesis 23:

Continuance commitment is more strongly positively related to intention to stay with the organization than value commitment.

As indicated in Table 11, both value commitment and continuance commitment were positively correlated with intention to stay, $r = 0.62$ ($p < .01$) and $r = 0.55$ ($p < .01$), respectively. Contrary to the prediction, value commitment showed a stronger association with intention to stay than continuance commitment. However, with the effects of continuance commitment and value commitment removed from these relationships respectively as well as personal alienation, the coefficient of 0.62 changed to 0.40, and the

coefficient of 0.55 changed to 0.34. As indicated in Table 11, the total difference between these two coefficients was not statistically significant.

Thus, hypothesis 23 was not found to be supported by these data. Value commitment and continuance commitment are not related to intention to stay with different strengths.

Post Hoc Analysis of the Data Examining the Proposed Two-Step Model for possible Confounding Effects

Tables 12 through 17 present the results of the post hoc analysis. These results provide information on the direct relationships between antecedents and outcomes and the changes in these relationships after controlling for value commitment and continuance commitment. To the extent to which it can be shown that value commitment or continuance commitment sizeably change the direct relationship between an antecedent and a consequence, possible confounding effects in the commitment-consequence relationships can be ruled out.

Tables 12 through 17 report the zero-order correlations and first-order partials, which control for the effects of continuance commitment and value commitment, for all possible antecedent-consequence correlations. However, the reporting of these relationships in the text will be limited to those antecedents which have been found to be correlated significantly with either one of the commitment types and the particular consequence under consideration. The examination will be limited to these relationships because concern for possible confounding effects would tend to be

more relevant for those relationships which have been reported to be significant. In accordance with these criteria, the examination of the relationships will be focused on the following set of antecedents: intrinsic satisfaction, extrinsic satisfaction, role conflict, size of organization, span of control, length of employment, inability to leave, the Protestant work ethic, the materialistic ethic, and the self-growth ethic. These antecedents represent the significant predictor set identified through partial correlational analyses (see Table 8). The results of these analyses will be presented following the order of the proposed consequences of commitment.

As indicated in the analysis section above, no individual significance tests were performed to determine the statistical significance of the differences between a particular zero-order correlation coefficient and a partial correlation coefficient. Although such a test was developed by Stoline (1972) it is more appropriately applied to large samples. Its extraordinary leniency in ascertaining statistical significance tends to overstate the significance of the findings. For the present sample size and magnitude of correlations, the Stoline (1972) procedure can recognize a difference between correlation coefficients of 0.06 as significant at the 0.05 significance level (two-tailed test). For the reporting of the present results a somewhat more conservative interpretation was thought appropriate.

Only changes in coefficient size of above 0.10 were recognized as noteworthy.

Organization Serving Behavior

As indicated in Table 8, three of the work experience factors, intrinsic satisfaction, extrinsic satisfaction, and role conflict show significant partial coefficients with value commitment. Only one factor, intrinsic satisfaction, was found to be significantly related to continuance commitment. As shown in Table 12, from among these work experience factors, the job satisfaction indicators as well as role conflict correlate significantly with organization serving behavior.

With the effects of value commitment, and continuance commitment controlled for, the correlation coefficients between the job satisfaction indicators and organization serving behavior were reduced in size. Intrinsic satisfaction and extrinsic satisfaction were found to correlate with organization serving behavior 0.34, and 0.14, respectively. Controlling for value commitment had a slightly greater impact on the relationship between intrinsic satisfaction and organization serving behavior than controlling for continuance commitment. With value commitment controlled for, the coefficient of 0.34 between intrinsic satisfaction and organization serving behavior was reduced to 0.18. Controlling for continuance commitment in the same relationship led to a smaller reduction in coefficient size, from 0.34 to 0.23.

For extrinsic satisfaction and organization serving

Table 12
Zero-order Correlations and First-Order Partial Correlations between All Antecedents and
Organization Serving Behavior, Controlling for Value Commitment
and Continuance Commitment

Antecedents	N	Zero-Order Correlations	Controlling For VC	Controlling For CC
1 <u>Intrinsic Satisfact.</u>	252	.34**	.18**	.23**
2 <u>Extrinsic Satisfact.</u>	252	.14**	-.05	.03
3 Leader Reward Behav.	246	.03	-.12*	-.07
4 Leader Punitive Beh.	246	.11*	.10	.10
5 <u>Role Conflict</u>	248	.19**	.27**	.24**
6 Role Ambiguity	248	-.00	.09	.04
7 Supervisory Responsib.	247	.28**	.25**	.25**
8 <u>Span of Control</u>	247	.05	.05	.02
9 <u>Size of Organization</u>	231	-.00	-.04	.01
10 Work Group Integrat.	250	.06	.06	.06
11 Age	243	.01	-.03	-.04
12 Marital Status	243	.05	.01	.01
13 Number of Dependents	243	.00	-.01	-.03
14 <u>Length of Employment</u>	243	-.02	-.04	-.08
15 Tuition Support	249	.06	.04	.05
16 <u>Inability to Leave</u>	249	.02	-.05	-.02
17 <u>Protestant Work Ethic</u>	249	.19**	.13*	.19**
18 <u>Materialistic Ethic</u>	252	-.13*	-.09	-.10*
19 <u>Self-Growth Ethic</u>	252	.24**	.20**	.27**

* p<.05

** p<.01

(1) The antecedents which are underlined have been found significantly correlated with either commitment type.

behavior, the control of either commitment type reduced the coefficient from 0.14 to a nonsignificant level, that is, to -0.05 with the control of value commitment and 0.03 with the control of continuance commitment.

Thus, changes were noted when the effects of value commitment and continuance commitment were partialled out from the job satisfaction-organization serving behavior relationship, with value commitment incurring greater changes in coefficient size than continuance commitment.

While intrinsic satisfaction retained a small but significant association with organization serving behavior, the weak but significant association between extrinsic satisfaction and organization serving behavior was eliminated with the effects of either commitment type.

Role conflict was found to correlate with value commitment as well as organization serving behavior, $r = -.18$ ($p < .01$) and $r = .19$ ($p < .01$), respectively. Controlling for value commitment in the role conflict-organization serving behavior relationship raised the coefficient from 0.19 to 0.27. Since the coefficients are very small, these relationships have little practical significance. However, the direction of the change is of interest. Value commitment appears to have a suppressor effect on the role conflict-organization serving behavior relationship. When removed, it tends to increase the positive relationship between role conflict and organization serving behavior.

As indicated in Table 12, none of the constraint

factors were related to organization serving behavior. However, all three personality factors showed significant, but small correlations with organization serving behavior. Yet, as indicated by the partial coefficients, little change in coefficient size occurred with the removal of the effects of value commitment and continuance commitment. The Protestant work ethic and the self-growth ethic have a weak but direct and positive relation to organization serving behavior, while the materialistic ethic has a very low but direct and negative correlation with the same.

In general, these findings rule out the satisfaction indices as possible confounding effects in the commitment-organization serving behavior relationships and indicate that the direct associations between the antecedents and organization serving behavior are of small magnitude.

Physical Symptoms of Stress

Table 13 presents the relationships between the antecedents and physical symptoms of stress.

As indicated in Table 13, the work experience factors found to be significantly correlated with value commitment also showed significant correlations with physical symptoms of stress. Intrinsic satisfaction, extrinsic satisfaction, and role conflict correlated with physical symptoms, -0.14 , -0.19 , and 0.25 respectively. The experience of job satisfaction is negatively related to physical symptoms of stress, while role conflict shows a positive relation.

Controlling for value commitment reduced the size of the coefficients between intrinsic and extrinsic

Table 13
 Zero-order Correlations and First-Order Partial Correlations between All Antecedents and
 Physical Symptoms of Stress, Controlling for Value Commitment
 and Continuance Commitment

Antecedents	N	Zero-Order Correlations	Controlling For VC	Controlling For CC
1 <u>Intrinsic Satisfact.</u> (1)	252	-.14**	-.02	-.07
2 <u>Extrinsic Satisfact.</u>	252	-.19**	-.10*	-.14**
3 Leader Reward Behav.	246	-.09	-.01	-.04
4 Leader Punitive Beh.	246	-.09	.10*	.11*
5 <u>Role Conflict</u>	248	.25**	.23**	.23**
6 Role Ambiguity	248	.23**	.19**	.22**
7 Supervisory Responsib.	247	.09	.11*	.12*
8 <u>Span of Control</u>	247	.01	.01	.03
9 <u>Size of Organization</u>	231	.05	.07	.05
10 Work Group Integrat.	250	.07	.07	.07
11 Age	243	-.19**	-.17**	-.17**
12 Marital Status	243	-.06	-.07	-.04
13 Number of Dependents	243	-.10	-.09	-.09
14 <u>Length of Employment</u>	243	.03	-.05	-.03
15 Tuition Support	249	.00	.02	.01
16 <u>Inability to Leave</u>	249	.04	.09	.06
17 <u>Protestant Work Ethic</u>	249	-.02	.03	-.01
18 <u>Materialistic Ethic</u>	252	-.09	-.13*	-.12*
19 <u>Self-Growth Ethic</u>	252	.00	.03	-.01

* p<.05

** p<.01

(1) The antecedents which are underlined have been found significantly correlated with either commitment type.

satisfaction and physical symptoms to -0.02 and -0.10 respectively. Somewhat smaller reductions occurred with the control of continuance commitment. The correlations changed to -0.07 and -0.14 respectively. No changes were found in the relationship between role conflict and physical symptoms with the effects of the commitment types controlled for. The positive relationship of role conflict with physical symptoms of stress remained practically unchanged.

Thus, value commitment, more strongly than continuance commitment, influences the relationship between intrinsic and extrinsic satisfaction and physical symptoms of stress. The reductions in coefficient size produced by the partialling of value commitment were slightly greater than the reductions incurred by the partialling of the effects of continuance commitment. However, the coefficients and the amount of their reductions are only of small magnitude. And because of the small size of the coefficients, value commitment cannot be established as clearly superior over continuance commitment in mediating these effects.

Role conflict appears to have a direct relation to the experience of physical symptoms. The partialling of commitment of either type produces negligible changes in coefficient size.

As indicated in Table 13, from among the remaining variable categories, which include organizational characteristics, constraint factors, and personality characteristics, none of the antecedents established as either predictors of value or continuance commitment were

also related to physical symptoms of stress.

In general, these findings indicate that the antecedents of the commitment types, with the exception of role conflict, have very weak associations with physical symptoms of stress. Role conflict tends to have a small but direct relationship with it.

Psychological Symptoms of Stress

Table 14 presents the relationships between all the antecedents and psychological symptoms of stress.

As shown in Table 14, from among the work experience measures, the job satisfaction indicators and role conflict are significantly correlated with psychological symptoms.

Intrinsic satisfaction and extrinsic satisfaction showed negative and moderately sized correlations with psychological symptoms (-0.35 and -0.38 respectively). Controlling for value commitment resulted in sizeable reductions for both coefficients (-0.09, and -0.18, respectively). In fact, the relationship between intrinsic satisfaction and psychological symptoms was no longer significant after the removal of the effects of value commitment.

Similarly, with the effects of continuance commitment removed, the coefficients were reduced in size but not as extensively, to -0.23 for intrinsic satisfaction and -0.29 for extrinsic satisfaction.

These findings indicate that organizational commitment of either type, better accounts for the variance in

Table 14
Zero-order Correlations and First-Order Partial Correlations between All Antecedents and Psychological Symptoms of Stress, Controlling for Value Commitment and Continuance Commitment

Antecedents	N	Zero-Order Correlations	Controlling For VC	Controlling For CC
1 <u>Intrinsic Satisfact.</u>	252	-.35**	-.09	-.23**
2 <u>Extrinsic Satisfact.</u>	252	-.38**	-.18**	-.29**
3 Leader Reward Behav.	246	-.26**	-.09	-.17**
4 Leader Punitive Beh.	246	.09	.14*	.12*
5 <u>Role Conflict</u>	248	.28**	.22**	.26**
6 Role Ambiguity	248	.34**	.26**	.31**
7 Supervisory Responsib.	247	-.04	.02	.02
8 <u>Span of Control</u>	247	-.03	-.03	.01
9 <u>Size of Organization</u>	231	.03	.09	.03
10 Work Group Integrat.	250	-.05	-.05	-.04
11 Age	243	-.15**	-.12*	-.11*
12 Marital Status	243	-.11*	-.07	-.07
13 Number of Dependents	243	-.13*	-.11*	-.09
14 <u>Length of Employment</u>	243	.01	.04	.08
15 Tuition Support	249	-.03	.02	-.01
16 <u>Inability to Leave</u>	249	-.08	.01	-.04
17 <u>Protestant Work Ethic</u>	249	-.10*	-.02	-.11*
18 <u>Materialistic Ethic</u>	252	-.02	-.09	-.06
19 <u>Self-Growth Ethic</u>	252	-.08	-.01	-.09

* p<.05

** p<.01

(1) The antecedents which are underlined have been found significantly correlated with either commitment type.

psychological symptoms of stress than the satisfaction indices.

However, neither value commitment nor continuance commitment are able to reduce the relationship between role conflict and psychological symptoms. Role conflict was found to be significantly and positively related to psychological symptoms $r=.28$ ($p<.01$). With the effects of value commitment controlled for, the changes in coefficient size are too small to be meaningful.

None of the organizational characteristics and personality characteristics showed significant relationships with psychological symptoms of stress. And from among the constraint factors, length of service was not found to be significantly correlated with psychological symptoms of stress.

In general, these findings indicate that the effects of intrinsic and extrinsic satisfaction on psychological symptoms of stress can be largely explained by value commitment and to some extent by continuance commitment. Only the association between role conflict and psychological symptoms of stress is largely unaffected by the partialling of the commitment types.

Personal Alienation

Table 15 shows the relationships between the antecedents and personal alienation.

As indicated in Table 15, intrinsic and extrinsic satisfaction as well as role conflict were found to be significantly related to personal alienation.

Table 15
 Zero-order Correlations and First-Order Partial Correlations between All Antecedents and
 Personal Alienation, Controlling for Value Commitment
 and Continuance Commitment

Antecedents	N	Zero-Order Correlations	Controlling For VC	Controlling For CC
1 <u>Intrinsic Satisfact.</u> (1)	252	-.52**	-.30**	-.44**
2 <u>Extrinsic Satisfact.</u>	252	-.46**	-.26**	-.39**
3 Leader Reward Behav.	246	-.37**	-.22**	-.31**
4 Leader Punitive Beh.	246	-.04	-.01	-.02
5 <u>Role Conflict</u>	248	.28**	.22**	.26**
6 Role Ambiguity	248	.33**	.25**	.31**
7 Supervisory Responsib.	247	-.12*	-.07	-.07
8 <u>Span of Control</u>	247	-.13*	-.14*	-.09
9 <u>Size of Organization</u>	231	.09	.17**	.09
10 Work Group Integrat.	250	-.11*	-.12*	-.10*
11 Age	243	-.15**	-.11*	-.11*
12 Marital Status	243	-.08	-.03	-.04
13 Number of Dependents	243	-.07	-.05	-.04
14 <u>Length of Employment</u>	243	-.04	-.01	.02
15 Tuition Support	249	-.02	.02	-.01
16 <u>Inability to Leave</u>	249	-.04	.06	-.01
17 <u>Protestant Work Ethic</u>	249	-.15**	-.07	-.16**
18 <u>Materialistic Ethic</u>	252	.10*	.03	.07
19 <u>Self-Growth Ethic</u>	252	-.15**	-.08	-.17**

* p<.05

** p<.01

(1) The antecedents which are underlined have been found significantly correlated with either commitment type.

The greater the job satisfaction of either an intrinsic or extrinsic nature, the less likely the individual feels personally alienated. And, the stronger the experience of role conflict the greater the experience of personal alienation.

Substantial reductions in coefficients can be noted upon removal of the effects of value commitment from the satisfaction-personal alienation relationships. For intrinsic satisfaction, the coefficient changed from -0.52 to -0.30, and for extrinsic satisfaction from -0.46 to -0.26 after controlling the effects of value commitment.

Similarly, controlling for the effects of continuance commitment incurred a reduction in the size of these coefficients. They changed from -0.52 to -0.44 for the intrinsic satisfaction-personal alienation relationship, and from -0.46 to -0.39 for the extrinsic satisfaction-personal alienation relationship. These changes were considerably smaller than those for value commitment.

Role conflict was found to be positively correlated with personal alienation at 0.28. The greater the experience of role conflict, the greater the experience of personal alienation. Neither value commitment nor continuance commitment notably changed the size of the coefficients when used as control variables.

As indicated in Table 15, span of control has a low negative correlation with personal alienation, $r=-0.13$. With the effects of value commitment controlled for, the coefficient remained practically unchanged ($r=-.14$). With

continuance commitment controlled for, this coefficient was reduced to -0.09 . Although the coefficient was reduced to a nonsignificant level, its size and the amount of the change are too small to have practical significance.

The personality characteristics also showed significant but small correlations with personal alienation. The Protestant work ethic and the self-growth ethic were found to be negatively correlated with personal alienation (-0.15 and -0.15 , respectively), while the materialistic ethic showed a borderline significant, positive relationship with personal alienation. With the effects of value commitment removed, the partial coefficients became nonsignificant. Yet, the total changes in the size of the coefficients are negligible because of their generally small magnitude.

In general these findings support value commitment and to a lesser extent continuance commitment as an explanatory variable.

Social Alienation

Table 16 presents the relationships between all antecedents and social alienation.

As indicated in Table 16, from among the antecedents which are significantly related to either commitment type, only intrinsic and extrinsic satisfaction and role conflict were also related to social alienation. The size of the coefficient is small for all three antecedents, -0.11 , -0.24 , and 0.19 respectively.

Table 16
Zero-order Correlations and First-Order Partial Correlations between All Antecedents and
Social Alienation, Controlling for Value Commitment
and Continuance Commitment

Antecedents	N	Zero-Order Correlations	Controlling For VC	Controlling For CC
1 <u>Intrinsic Satisfact.</u> (1)	252	-.11*	-.05	-.06
2 <u>Extrinsic Satisfact.</u>	252	-.24**	-.22**	-.22**
3 Leader Reward Behav.	246	-.18**	-.16**	-.16**
4 Leader Punitive Beh.	246	.01	.02	.02
5 <u>Role Conflict</u>	248	.19**	.17**	.18**
6 Role Ambiguity	248	.16**	.14**	.15**
7 Supervisory Responsib.	247	-.01	.00	.01
8 <u>Span of Control</u>	247	-.06	-.06	-.05
9 <u>Size of Organization</u>	231	-.04	-.03	-.04
10 Work Group Integrat.	250	-.15**	-.15**	-.15**
11 Age	243	-.03	-.02	-.02
12 Marital Status	243	.01	.02	.02
13 Number of Dependents	243	.03	.03	.03
14 <u>Length of Employment</u>	243	-.02	-.02	-.01
15 Tuition Support	249	.04	.05	.05
16 <u>Inability to Leave</u>	249	-.07	-.05	-.06
17 <u>Protestant Work Ethic</u>	249	.04	.06	.04
18 <u>Materialistic Ethic</u>	252	.08	.06	.07
19 <u>Self-Growth Ethic</u>	252	.00	.02	-.01

* p<.05

** p<.01

(1) The antecedents which are underlined have been found significantly correlated with either commitment type.

Controlling for the effects of either value commitment or continuance commitment had practically no impact on the size of the coefficients. Although the coefficient between intrinsic satisfaction and social alienation was reduced to -0.05, this change is negligible since the correlation was only borderline significant to begin with.

In general, these findings indicate a lack of explanatory power, on part of the commitment types, over and above the antecedents of commitment.

Intention to Stay

Table 17 shows the relationships between all antecedents and intention to stay with the organization.

As indicated in Table 17, intrinsic satisfaction and extrinsic satisfaction were found to have moderately high correlations with intention to stay, 0.50 and 0.46, respectively. Controlling for value commitment incurred greater changes in coefficient sizes than controlling for continuance commitment. With the effects of value commitment removed, satisfaction and intention to stay was reduced from 0.50 to 0.15, and that between extrinsic satisfaction and intention to stay from 0.46 to 0.17.

When controlling for continuance commitment, the coefficient of 0.50 for intrinsic satisfaction and intention to stay changed to 0.31, and the coefficient for extrinsic satisfaction to 0.32. While job satisfaction makes a direct contribution to the prediction of intention to stay, a considerable portion of it can be accounted for by value commitment and to some lesser extent by continuance

Table 17
Zero-order Correlations and First-Order Partial Correlations between All Antecedents and
Intention to Stay, Controlling for Value Commitment
and Continuance Commitment

Antecedents	N	Zero-Order Correlations	Controlling For VC	Controlling For CC
1 <u>Intrinsic Satisfact.</u> (1)	252	.50**	.15**	.31**
2 <u>Extrinsic Satisfact.</u>	252	.46**	.17**	.32**
3 Leader Reward Behav.	246	.29**	.04	.16**
4 Leader Punitive Beh.	246	-.03	-.09	-.07
5 <u>Role Conflict</u>	248	-.14**	-.02	-.09
6 Role Ambiguity	248	-.13*	.05	-.07
7 Supervisory Responsib.	247	.06	-.03	-.04
8 <u>Span of Control</u>	247	.12*	.15**	.07
9 <u>Size of Organization</u>	231	.01	-.09	.02
10 Work Group Integrat.	250	.10	.11*	.10
11 Age	243	.24**	.22**	.18**
12 Marital Status	243	.20**	.16**	.14**
13 Number of Dependents	243	.14**	.13*	.09
14 <u>Length of Employment</u>	243	.28**	.32**	.23**
15 Tuition Support	249	.04	-.02	.01
16 <u>Inability to Leave</u>	249	.18**	.08	.14**
17 <u>Protestant Work Ethic</u>	249	.09	-.04	.11*
18 <u>Materialistic Ethic</u>	252	-.15**	-.07	-.12*
19 <u>Self-Growth Ethic</u>	252	.05	-.07	.09

* p<.05

** p<.01

(1) The antecedents which are underlined have been found significantly correlated with either commitment type.

commitment.

The relationship between role conflict and intention to stay was found to be negative, $r = -.14$ ($p < .01$). Controlling for value and continuance commitment reduced this correlation to zero in both instances, with value commitment having a slightly greater effect than continuance commitment. However, since the relationship was weak to begin with, these changes lack practical significance.

A significant correlation was also found between length of employment and intention to stay. When controlling for value commitment and continuance commitment in these relationships, only minor changes occurred in the size of the coefficients. Length of employment appears to have a direct relationship with intention to stay.

In summary, it can be stated that this post hoc analysis offers considerable support for value commitment and, to a lesser extent for continuance commitment as an explanatory variable in the antecedent-consequence relationships. To the extent to which direct relationships were noted, they expressed themselves in correlations of rather small magnitude and therewith ruling out the influences of notably strong confounding effects. The only antecedent most often unaffected by the partialling of the commitment types was role conflict. Thus, role conflict tends to have a low but direct relationship with the commitment consequences.

CHAPTER 6

Discussion

In spite of the number of studies that have investigated organizational commitment, only a few have made an effort to clarify the differences that exist with respect to its conceptualization and corresponding measures and attempt to examine their implications for research and theory. The present study addresses these issues. It investigates two prevalent conceptions of commitment in relation to their proposed antecedents and consequences.

Specifically, three propositions were the basis of this research. First, it was argued that in studying organizational commitment a distinction needs to be made between two prevalent types of commitment: (1) an affective attachment to the organization called value commitment, and (2) a cognitive attachment referred to as continuance commitment or commitment to stay with the organization.

Second, it was proposed that organizational commitment is a function of four different groups of antecedents with differential importance for the two commitment types. These variable groups include: (1) organizational experiences, (2) organizational characteristics, (3) personal/structural characteristics or constraint factors, and (4) personality characteristics.

Third, it was proposed that organizational commitment is related to outcomes which support its role as an organizational maintenance function. These outcomes include: greater service on behalf of the organization,

fewer psychosomatic complaints, lower levels of alienation, and stronger intentions to stay with the organization. Also, it was proposed that these outcomes are differently affected by the two commitment types.

These propositions are related in that support for the first proposition would be attained by finding support for the other two. To the extent to which the predicted differences in correlational patterns can be substantiated, a distinction between these proposed commitment types is warranted.

As will be evident in the discussion below, the results of this study yielded support for the first proposition. Briefly, several of the antecedents and consequences were found to be related to value commitment and continuance commitment with different strengths. However, the significant differences were not always in the predicted direction. With respect to the antecedents of commitment, five of the ten hypothesized differences were substantiated. In relation to the consequences, only two of the six predicted differential effects were found to be significant.

The fact that these empirical differences do exist argues for the recognition of two different types of organizational attachments. The implications are that the corresponding measures are not interchangeable and that their treatment as such is likely to lead to invalid interpretations and generalizations of the findings. The two commitment types can give rise to different

correlational patterns, and inconsistencies in findings across samples can be the result of different commitment types studied rather than differences in samples or methodological weaknesses of the research.

The Antecedents of Value Commitment and Continuance Commitment.

The results support the second proposition in that commitment was found to be a function of four different kinds of variable groups. Using partial correlations and controlling for potentially confounding effects of other correlated antecedents, eight of the antecedent variables from among the 19 variables tested in this study, were found to be related to value commitment, and four were found to be associated with continuance commitment at a statistically significant level. More importantly though, for both value commitment and continuance commitment the significant predictors emerged from all four proposed variable categories.

The antecedents which were found to be associated with value commitment for the present sample include: intrinsic satisfaction, extrinsic satisfaction, role conflict, organization size, inability to leave, the Protestant work ethic, the materialistic ethic, and the self-growth ethic. Continuance commitment, or an individual's commitment to stay with his or her organization, was predicted by intrinsic satisfaction, span of control, length of employment, and the self-growth ethic.

A competitive analysis of the effects of the

antecedents on each commitment type, using stepwise multiple regression analyses, identified intrinsic satisfaction as the strongest predictor of both value commitment and continuance commitment. Extrinsic satisfaction proved itself to be the second strongest predictor of value commitment, however, explaining a considerably smaller portion of the variance.

This finding supports Angle and Perry's (1983) contention who argued that for professionals, intrinsic satisfaction tends to play a more important role in commitment formation than extrinsic satisfaction. For the present sample, which comprises a group of young professional/technical and managerial employees, this argument holds true.

However, the importance of intrinsic satisfaction in the prediction of continuance commitment had not been anticipated. Variables from among the personal/demographic characteristics had been expected to make the most significant contribution. It appears that for young managers and professionals, satisfaction with the challenges of the job itself promotes an affective attachment to the organization as well as contributes to the individual's assessment of the organization as a desirable place to stay. On the other hand, satisfaction with the extrinsic rewards of the job was found to be related to value commitment and not to continuance commitment. It would appear that satisfaction with the contextual rewards of the job tends to

promote an affective attachment to the organization but has no bearing on the decision to accept or reject a slightly better job offer if it came along.

Neither perceived leader reward behavior nor perceived leader punitive behavior were found to be related to either commitment type. The positive relationships between leader reward behavior and value and continuance commitment, as indicated by the zero-order coefficients, were reduced to near zero once the effects of both intrinsic and extrinsic job satisfaction were controlled for. It appears that the perceived positive reinforcing or rewarding behaviors of a supervisor tend to affect either commitment type through the job satisfaction they create.

The perception of the supervisor as punitive, measured with the "leader punitive behavior" scale, was not found, as predicted, to have an inhibitory effect on commitment formation. Whether this kind of supervisory behavior is perceived as punitive or corrective may account for the absence of a negative impact on commitment. It is possible that among managerial and professional employees, punitive supervisory behavior upon substandard performance, is perceived as feedback on performance rather than punishment. If perceived as feedback, this behavior would not constitute an aversive condition and fail to have the predicted impact. Furthermore, this scale assesses perceived leader punitive behavior and as such may not have actually been experienced by the respondent but rather observed in relation to others. If so, this behavior may communicate to the employee the

supervisor's desire to enforce standards rather than create an unpleasant climate to work in. Again, predicted negative effects would not materialize.

Role conflict was found to influence value commitment but not continuance commitment. It appears that adverse experiences at work as manifested in role conflict tend to inhibit the development of a positive affective involvement with the organization. However, the experience of role conflict does not factor as a cost into one's assessment of the organization as a desirable place to work. These results may help explain previous inconsistencies in findings concerning the importance of role conflict in influencing organizational commitment. Role conflict would appear to have a stronger effect on one's affective orientation to the organization than one's cognitive attachment to the same.

Role ambiguity, contrary to predictions, was not found to be associated with either value commitment or continuance commitment. Zero-order correlations had indicated negative relations with both value commitment and continuance commitment. Yet, these correlations were reduced to near zero once the effects of the other commitment type and extrinsic satisfaction were controlled for. It appears that the negative association between role ambiguity and value and continuance commitment can be better explained with extrinsic satisfaction or rather, the lack of it.

No differential predictions had been made for either

organization size or span of control with respect to commitment formation. Yet, small but statistically significant differences in their relation with value commitment and continuance commitment were found.

Value commitment was found to vary with organization size but not continuance commitment. In larger organizations, more often than in smaller organizations, employees tend to develop a positive affective attachment to the same. However, the size of the organization is not considered in one's commitment to stay with it. The positive association between organization size and value commitment may be best explained within a framework of social exchange processes and the nature of the study sample.

As indicated above, satisfaction with a challenging job as well as material rewards are the most important determinants of value commitment. It is likely that larger organizations, because of their potentially greater resources, are better able to challenge and reward young managers and professionals who are working toward an advanced degree. Furthermore, these greater opportunities may be perceived as a stepping stone for greater future advancement rather than something to settle for.

Span of control was found to be positively associated with continuance commitment but unrelated to value commitment. There is no ready explanation for these results. The possibly greater individual freedom and autonomy accorded to a worker under a wider span of control

was expected to positively influence an individual's identification with and commitment to stay with the organization. The fact, however, that span of control did not contribute significantly to the prediction of continuance commitment in a multi-variate analysis indicates that the small amount of variance shared by span of control and continuance commitment can be better explained by other antecedents.

From among the personal/demographic characteristics, only length of employment was found to be related to continuance commitment. None of these variables correlated significantly with value commitment. While these personal/demographic characteristics had been expected to influence continuance commitment more strongly than value commitment, the general lack of association between variables such as age, marital status, number of dependents, and tuition support calls into question the relevance of a constraint model in explaining commitment formation for the present sample. However, the positive relationship between length of employment and continuance commitment and the absence of any significant relationships between the personal structural characteristics and value commitment does suggest the greater importance of personal/demographic characteristics for continuance commitment than value commitment.

The general lack of association between the personal/structural characteristics and continuance

commitment could be explained on the basis of the nature of the study sample. The average age of the MBA students, their average length of employment, as well as the average number of their dependents are somewhat low. For example, among the study participants, only 43 percent claimed to have dependents, but only 11 percent had two or more individuals depend on them for a major part of their financial support. Thus, number of dependents, similar to age and length of employment, appears to have had a restricted range and as a result could have lacked in psychological as well as economic significance for the participants. The youthfulness of the present sample may have masked these proposed relationships.

Also, contrary to predictions, work group integration as an indicator of psychological constraints was not found to be associated with either commitment type. These findings contradict those of others (e.g., Sheldon, 1971; Buchanan, 1974; Rotondi, 1975b). These authors suggested that increased social interaction increases the development of social ties, and subsequently strengthens the linkages between the individual and the employer. The failure to replicate these findings with the present sample could have been a function of the particular measure used to assess work group integration. This measure, by asking for the number of "close friends" at the work place, may have given rise to varying interpretations of the meaning of closeness in interpersonal relationships and possibly failed to reliably establish the level of integration for the

participants. This could account for the absence of the anticipated correlations. Future attempts at measuring psychological ties with members at work would need to employ instruments which define and quantify more clearly the concept of "close friends" to attain a more accurate and reliable assessment.

The inability to leave scale, as another index of the constraint factors, correlated positively with value commitment but was found to be unrelated to continuance commitment. This finding is contrary to predictions. It had been argued that investments such as pension plans, insurance, stock options and other perquisites, represent constraints which make it costly for the individual to leave the organization and thus influence continuance commitment.

A positive and significant correlation of the inability to leave scale with value commitment raises questions about the role of side-bets in commitment formation. According to the side-bet theory, pension plans, stock options, bonuses, insurance, status, etc., that is, investments which are not easily transferable from one organization to another tend to tie the individual to the organization over time because of the perceived costs of leaving the organization. Accordingly, in a study by Hrebiniak and Alutto (1972) it was argued that organizational investments are unlikely to play a role in the initial formation of commitment because they are not entering into the assessment of a reward-cost balance. Yet, the present results show a relation between

these perceived investments and value commitment and not continuance commitment. A possible explanation for this finding may be found within the characteristics of the study sample.

In recognizing the youthfulness of the study sample, the participants' average age, tenure, and income level, it is argued that side bets, at the early career stages may influence value commitment similarly to extrinsic rewards, although deferred. Initially, the opportunities for side-bets would tend to make it desirable for the individual to become involved with the organization, to identify with its goals and values and to want to put forth effort on its behalf. Only over time would these opportunities of investments turn into the kind of side-bets that affect the individual's perceived inter organizational mobility.

Personality also plays a role in commitment formation. The values which an individual holds regarding work, such as the importance of self-growth and the importance of work in and of itself as implied in the Protestant work ethic, tend to influence the development of value commitment. Confirming the observations by Kidron (1978), the Protestant work ethic was found to be positively related to value commitment and unrelated to continuance commitment. However, the anticipated absence of an association between the self-growth ethic and continuance commitment was not established on the basis of the data. Rather, a small but negative relationship was found between these two variables. It would appear that individuals who attribute lesser

importance to self-growth are also more likely to stay with their present job if only a slightly better job offer came along.

Contrary to predictions, a belief in the importance of money, as expressed in the materialistic ethic, tends to influence value commitment negatively. It appears that individuals who place a high value on money are less likely to become personally involved with the organization and develop an affective attachment to the same. However, as predicted, the belief in the materialistic ethic is unrelated to continuance commitment.

The Consequences of Value Commitment and Continuance Commitment

The results of this study involving the consequences of commitment provide some support for the proposition that value commitment is more likely than continuance commitment to inhibit negative emotional experiences in organizations. After controlling for possibly confounding effects of other correlated consequences and the other commitment type, value commitment was found to be associated, as predicted, with four of the six proposed consequences including: organization serving behavior, psychological symptoms of stress, personal alienation and intention to stay. Continuance commitment, on the other hand, was found to be associated with three outcomes: organization serving behavior, psychological symptoms of stress, and intention to stay with the organization.

However, only two of the predicted differences in strength of association between the two commitment types and the proposed outcomes were substantiated. Individuals who were value committed, as opposed to being merely committed to stay with the organization, were also reported by their co-workers to experience fewer psycho-somatic complaints such as psychological symptoms of stress and were also less likely to experience personal alienation. However, the type of commitment was not found to differentiate between the frequency with which an individual engages in organization serving behavior, experiences physical symptoms of stress or intends to stay with the organization. And, contrary to predictions, value commitment was found to be positively correlated with social alienation, although this association was found to be very weak and only borderline significant.

There appears to be no ready explanation for this unexpected positive relationship between value commitment and social alienation. Implied in the state of value commitment is an involvement with the organization, an identification with its goals and a willingness to put forth effort on its behalf. Social alienation, on the other hand, describes a psychological state in which the individual feels alone and separated from others. It is possible for an involvement with an organization to lead to a neglect of one's social relationships and subsequently to an estrangement from meaningful social relationships. However, the positive relationship between value commitment and

social alienation is too weak to be of practical significance.

The finding that value commitment and continuance commitment are related to organization serving behavior with equal strength was not predicted. Organization serving behavior was expected to be more strongly exhibited by individuals who have the kind of affective involvement with their organization as it is implied in value commitment, than by individuals who have a cognitive attachment to the same, as implied in continuance commitment. Yet, it appears that an individual who has a cognitive attachment to the organization is equally likely to engage in organization serving behavior as an individual with an affectively positive attachment to the same.

Also, no difference in correlations was found between the two commitment types and intention to stay with the organization. This finding was not anticipated. Continuance commitment had been expected to be more strongly related to intention to stay than value commitment, mostly because intention to stay is implied in the continuance commitment construct. Yet it appears that intention to stay is equally likely expressed as a result of one's voluntary involvement with the organization as one's realization that leaving the organization could be costly.

As indicated by these results, differences in consequences for value commitment and continuance commitment can be anticipated, however, these differences are limited

to outcomes which have primarily an affective, emotional base, such as psychological symptoms of stress and personal alienation. Intention to stay with the organization and the likelihood to engage in organization serving behaviors, tend to be equally likely an outcome of a cognitive attachment to the organization.

Summary and Implications of Findings

In general, these results provide justification for distinguishing between value and continuance commitment as two different types of attachments to the organization. Differences were found in their respective antecedents as well as consequences. Some support was found for the anticipated greater relevance of constraint factors, as indexed by length of employment, to the prediction of continuance commitment. Also, as expected, the mechanisms of reciprocation, cost-benefit analyses, as well as value congruence, tend to have greater significance for the prediction of value commitment than continuance commitment. A greater portion of the variance in value commitment than continuance commitment was explained by the variables indexing these mechanisms.

With respect to the consequences, value commitment would tend to play a significantly greater role than continuance commitment in inhibiting adverse emotional experiences such as psychological symptoms of stress and personal alienation, thus making a potentially greater contribution to the maintenance of individual, emotional well-being at work.

In general, it should be noted that the picture of commitment formation identified in this research can be meaningfully interpreted in the context of the characteristics of the study sample. It has been suggested that future research on organizational commitment may want to take into consideration the variable of career stage as a possible moderators of the antecedent-commitment relationships.

On the applied side, these findings suggest those factors with which the value commitment and continuance commitment of educated, upwardly mobile, young managers and professionals can be influenced. What tends to be important are job satisfaction of an intrinsic and extrinsic nature, the absence of role conflict, the opportunity to plan for the future in terms of benefits, investments, and career opportunities. In large sized companies such provisions would tend to be facilitated. And further, the selection of individuals for their basic work value systems can also facilitate their involvement with the organization.

The findings also suggest that it may be difficult to retain young managers and professionals if they are offered slightly better employment terms elsewhere. What tends to sustain their organizational membership if a slightly better job offer came along, are their satisfaction with a challenging job, tenure with the organization, and the extent to which they have a lack of belief in a self-growth ethic.

Limitations of this study

Because the research reported here was correlational, and employed mostly self-report measures, the results and implications must be interpreted carefully. With correlational studies, no inferences about causality between antecedents and commitment and commitment and outcomes can be made. For example, correlations observed in this study could have been the result of some unidentified extraneous factor. Further, some of the identified relationships could have operated in the opposite direction from that predicted. Obviously individuals who are committed to an organization may be prone to report higher levels of satisfaction. Also, an individual who is personally alienated may be less inclined to develop any type of commitment to his or her organization. In addition, the individual who is devoting much of his or her time to working in the service of the organization may experience as a result higher levels of role conflict and role ambiguity in organizations.

However, for those relationships for which independent observational data existed, evidence of correspondence between the findings can increase our confidence in the results.

Another limitation exists in the number and type of variables included. The antecedents studied in this research hardly exhaust the possible factors at work that may influence commitment formation. Also, there are many more aspects to a individual's personality than his or her particular set of work values. Furthermore, the types of

emotional reactions studied are not exhaustive of all possible reactions that an individual may have at work.

The fact that the sample consisted of MBA students limits the generalizability of the results and also introduced possible confounding effects into the analysis. For example the psycho-somatic complaints experienced at work may have resulted from working full-time while trying to earn a degree at night. Also, by limiting the sample to MBA students, a self-selection factor was given the chance to operate. This self-selection factor resulted in a restriction of range for some of the independent variables, as for example age, length of employment, and number of dependents.

Another limitation imposed by the sample is the lack of generalizability of the findings to other occupational groups and to more advanced career stages. For example, medical professionals, lawyers, and social workers, as well as more seasoned managers and professionals were underrepresented in this sample. In addition, the sample was drawn from only one New York City business school. The experiences of MBA students at other schools within the metropolitan area or outside of it may be different from those student participants in the present study.

On the other hand, the study design offered several advantages. A primary consideration at the outset was to obtain a sample of managerial and professional employees from a range of different types and different size

organizations. The fact that they were given the time to fill out a lengthy questionnaire in class elicited a high degrees of cooperation. Most likely, this procedure made it possible for those individuals to participate in the study who under other circumstances would not find the time or have the inclination to complete a research questionnaire. Further, social desirability effects seem less likely to have occurred with questionnaires submitted anonymously and away from the actual place of work and employer.

In summary, this study provides meaningful knowledge concerning two prevalent conceptions of organizational commitment, their antecedents and their consequences. It offered some clarifications on the nature of the two corresponding organizational commitment measures, their implications as well as limitations. Replications of this study with other samples, as well as studies using different research methods, are needed to further document the differential effects of these commitment types on work behavior and work attitudes.

APPENDIX

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Management Department

October 11, 1984

WORK EXPERIENCE AND WORK ATTITUDE SURVEY

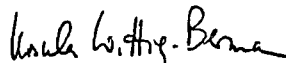
This questionnaire investigates the interrelationships between work experiences, work values and work attitudes. I would greatly appreciate your help in this research. It will serve in part as the basis of my doctoral dissertation.

The questionnaire should take about 30-40 minutes to complete. Please do not skip any questions otherwise valuable information will be lost.

The attached envelope contains a second, very brief questionnaire which I would like you to give to one of your co-workers to complete and return to me through the mail. Please ask a co-worker, who knows you well, to participate in this study.

The information you provide will be used for research purposes only and the data will not be identified with any individual. Your questionnaire is anonymous and your replies are strictly confidential. Only the number which appears on the first page of your questionnaire will be used to match your data with those of your co-worker.

Thank you very much for your help.


Ursula Wittig-Berman

Ph.D. Candidate,
City University of New York

Instructor,
Department of Management

BACKGROUND INFORMATION

DIFFERENCES IN BACKGROUND AND PERSONAL CHARACTERISTICS OFTEN AFFECT THE WAY PEOPLE SEE THE WORK SITUATION AND HOW THEY FEEL ABOUT IT. THE FOLLOWING QUESTIONS ARE ASKED SO THAT THESE DIFFERENCES CAN BE STUDIED.

PLEASE INDICATE: (fill-in or circle one)

1. NAME OF COLLEGE ATTENDING

2. THE NAME OF YOUR PROGRAM:
1. MBA
2. MPA
3. MA/MS
4. UNDERGRADUATE
5. NON-CREDIT CONTINUING
OR ADULT EDUCATION
6. OTHER _____
3. MAJOR/AREA OF CONCENTRATION:

4. THE HIGHEST DEGREE EARNED:
1. HS Diploma
2. AA
3. BA, BS, or BBA
4. MA, MS, or MBA
5. Ph.D
6. OTHER _____
5. YOUR SEX:
1. Male
2. Female
6. YOUR AGE: _____
7. YOUR ETHNIC GROUP:
1. White
2. Black
3. Hispanic
4. Oriental
5. American Indian
6. Other _____
8. YOUR MARITAL STATUS:
1. Single-never married
2. Married
3. Divorced or Separated
4. Widowed
9. YOUR EMPLOYMENT STATUS:
1. Full-time
2. Part-time
10. How many individuals are dependent on you for a major part of their financial support:

Please indicate your total work experience in years:
11. Full-time _____
12. Part-time _____
13. What is your formal job title?

14. What is your annual salary ?

15. How long have you been employed by your present organization?

16. How long have you occupied your current job?

17. Please indicate the number of organizations (including your present one) you have worked for during the past ten years:

18. What kind of organization do you work for now?
1. Manufacturing/Wholesale or Retail Business
2. Financial Institution
3. Other For-Profit Business
Please specify: _____
4. Educational Institution
5. Hospital
6. Government (Federal, State, Local)
7. Other Non-Profit Organization
Please specify: _____
8. Self-employed
Please specify: _____
9. Other, please specify: _____
19. Is your company paying part or the full amount of your tuition?
1. Yes
2. No
20. Does your job involve supervising the work of others ?
1. Yes
2. No
21. If yes, how many employees report directly to you?

22. How many employees, including yourself, report directly to your supervisor?

23. To the best of your knowledge, about how many people work for your company (organization) altogether?

24. About how many people work at your particular geographical location?

II. LISTED BELOW ARE A NUMBER OF STATEMENTS WHICH DESCRIBE SUPERVISORY BEHAVIOR. PLEASE INDICATE TO WHAT EXTENT THESE STATEMENTS ARE TRUE OR FALSE CONCERNING YOUR OWN SUPERVISOR'S BEHAVIOR AT WORK. CIRCLE THAT NUMBER IN THE SCALE NEXT TO EACH STATEMENT THAT YOU CONSIDER MOST ACCURATE.

	1	2	3	4	5	6	7
	very false						very true
1. Your supervisor would personally pay you a compliment if you did outstanding work.	1	2	3	4	5	6	7
2. Your supervisor would lend a sympathetic ear if you had a complaint.	1	2	3	4	5	6	7
3. Your supervisor would see that you should be dismissed if you were absent for several days without notifying the organization or without a reasonable excuse.	1	2	3	4	5	6	7
4. Your supervisor would see that you will eventually go as far as you would like to go in this organization, if your work is consistently above average.	1	2	3	4	5	6	7
5. Your supervisor would get on you if your work was not as good as the work of others in your department.	1	2	3	4	5	6	7
6. Your supervisor would recommend that you be promoted if your work was better than others who were otherwise equally qualified.	1	2	3	4	5	6	7
7. Your supervisor would help you get a transfer if you asked for one.	1	2	3	4	5	6	7
8. Your supervisor would tell his/her boss if your work was outstanding.	1	2	3	4	5	6	7
9. Your supervisor would give you a reprimand (written or verbally) if your work was consistently below acceptable standards.	1	2	3	4	5	6	7
10. Your supervisor would recommend that you get no pay increase if your work was below standard.	1	2	3	4	5	6	7
11. Your supervisor would give you special recognition if your work performance was especially good.	1	2	3	4	5	6	7
12. Your supervisor would show a great deal of interest if you suggested a new and better way of doing things.	1	2	3	4	5	6	7
13. Your supervisor would do all he/she could to help you if you were having problems in your work.	1	2	3	4	5	6	7
14. Your supervisor would recommend that you not be promoted to a higher level job if your performance was only average.	1	2	3	4	5	6	7

III. PEOPLE LOOK FOR DIFFERENT THINGS IN THEIR JOBS. WE WOULD LIKE TO KNOW WHAT YOUR PREFERENCES ARE. USE THE SCALE BELOW TO INDICATE HOW MUCH OF THE FOLLOWING JOB CHARACTERISTICS YOU PREFER.

	4	5	6	7	8	9	10
Would like having this only a moderate amount (or less)			Would like having this very much				Would like having this extremely much
1. Stimulating and challenging work.....	4	5	6	7	8	9	10
2. Chances to exercise independent thought and action in my job.....	4	5	6	7	8	9	10
3. Opportunities to learn new things from my work.....	4	5	6	7	8	9	10
4. Opportunities to be creative and imaginative in my work.....	4	5	6	7	8	9	10
5. Opportunities for personal growth and development in my job.....	4	5	6	7	8	9	10
6. A sense of worthwhile accomplishment in my work.....	4	5	6	7	8	9	10

IV. IN THIS SECTION WE WOULD LIKE TO KNOW HOW SATISFIED OR DISSATISFIED YOU ARE WITH YOUR PRESENT JOB. LISTED BELOW ARE SEVERAL JOB ASPECTS. PLEASE USE THE FOLLOWING SCALE AND CIRCLE THAT SCALE VALUE NEXT TO EACH STATEMENT THAT BEST INDICATES YOUR LEVEL OF SATISFACTION OR DISSATISFACTION.

	1	2	3	4	5	6	7
	Extremely Dissatisfied	Dissatisfied	Slightly Dissatisfied	Neutral	Slightly Satisfied	Satisfied	Extremely Satisfied
1. The amount of job security I have.....	1	2	3	4	5	6	7
2. The amount of pay and fringe benefits I receive.....	1	2	3	4	5	6	7
3. The amount of personal growth and development I get in doing my job.....	1	2	3	4	5	6	7
4. The people I talk to and work with on my job.....	1	2	3	4	5	6	7
5. The degree of respect and fair treatment I receive from my boss.....	1	2	3	4	5	6	7
6. The feeling of worthwhile accomplishment I get from doing my job.....	1	2	3	4	5	6	7
7. The chance to get to know other people while on the job.	1	2	3	4	5	6	7
8. The amount of support and guidance I receive from my supervisor.....	1	2	3	4	5	6	7
9. The degree to which I am fairly paid for what I contribute to this organization.....	1	2	3	4	5	6	7
10. The amount of independent thought and action I can exercise in my job.....	1	2	3	4	5	6	7
11. How secure things look for me in the future in this organization.....	1	2	3	4	5	6	7
12. The chance to help other people while at work.....	1	2	3	4	5	6	7
13. The amount of challenge in my job.....	1	2	3	4	5	6	7
14. The overall quality of the supervision I receive in my work.....	1	2	3	4	5	6	7

V. IN THIS SECTION WE WOULD LIKE YOU TO ANSWER SOME QUESTIONS ABOUT YOUR RELATIONSHIPS WITH CO-WORKERS. (Please circle one response alternative)

1. In your work environment, how many close friends do you have?
0, 1, 2, 3, 4, 5 or more
2. While you are actually working, how often do you see your close friends in committees, conferences, work tasks, at lunch, during breaks, etc.
 1. More than twice a workday
 2. Once a workday
 3. Two or three times a week
 4. Once or twice a month
 5. Hardly ever
3. How often do you see your close work friends outside of working hours, such as dinner, sports, or other social events.
 1. More than twice a week
 2. Once a week
 3. Twice a month
 4. Once a month
 5. Hardly ever

VI. LISTED BELOW ARE SEVERAL STATEMENTS DESCRIBING DIFFERENT WORK EXPERIENCES. WE WOULD LIKE TO KNOW TO WHAT EXTENT THESE STATEMENTS ARE TRUE OR FALSE DESCRIPTIONS OF YOUR OWN EXPERIENCES AT YOUR JOB. (Please circle one number for each)

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

II. THE STATEMENTS LISTED BELOW DESCRIBE ATTITUDES WHICH DIFFERENT PEOPLE HAVE TOWARD WORK IN GENERAL. YOU ARE ASKED TO EXPRESS YOUR OPINIONS ABOUT EACH STATEMENT. PLEASE CIRCLE THE NUMBER WHICH MOST ACCURATELY INDICATES HOW MUCH YOU AGREE OR DISAGREE WITH EACH.

	1	2	3	4	5
	Strongly disagree	Moderately disagree	Neither agree nor disagree	Moderately agree	Strongly agree
1. A person should hold a second job to bring in extra money if the person can get it.....	1	2	3	4	5
2. A person should choose the job which pays the most.....	1	2	3	4	5
3. If I were paid by the hour, I would probably turn down most offers to make extra money by working overtime.....	1	2	3	4	5
4. A person should take the job which offers the most overtime if the regular pay on the jobs is about the same.....	1	2	3	4	5
5. A person should choose one job over another mostly because of the higher wages.....	1	2	3	4	5
6. The only good part of most jobs is the paycheck.....	1	2	3	4	5
7. A good job is a well-paying job.....	1	2	3	4	5
8. When someone is looking for a job, money should not be the most important consideration.....	1	2	3	4	5
9. A person should take a job that pays more than some other job even if that person cannot stand other workers on the job....	1	2	3	4	5

III. IN THIS SECTION WE WOULD LIKE TO KNOW SOME OF YOUR ATTITUDES TOWARD YOUR EMPLOYING ORGANIZATION. PLEASE CIRCLE THE NUMBER ON THE SCALE TO THE RIGHT OF THE STATEMENT WHICH BEST INDICATES YOUR AGREEMENT OR DISAGREEMENT WITH IT. (Circle only one number for each statement)

	1	2	3	4	5	6	7
	Strongly Disagree	Moderately Disagree	Slightly Disagree	Neither Disagree Nor Agree	Slightly Agree	Moderately Agree	Strongly Agree
1. I am willing to put in a great deal of effort beyond that normally expected in order to help this organization to be successful.....	1						
2. I talk up this organization to my friends as a great organization to work for.....	1						
3. I feel very little loyalty to this organization.....	1						
4. I would accept almost any type of job assignment in order to keep working for this organization.....	1						
5. I find that my values and the organization's values are very similar.....	1						
6. I am proud to tell others that I am part of this organization.....	1						
7. I could just as well be working for a different organization as long as the type of work were similar.....	1						
8. This organization really inspires the very best in me in the way of job performance.....	1						
9. It would take very little change in my present circumstances to cause me to leave this organization.....	1						
10. I am extremely glad that I chose this organization to work for, over others I was considering at the time I joined...	1						
11. There is not too much to be gained by sticking with this organization indefinitely.....	1						
12. Often, I find it difficult to agree with this organization's policies on important matters relating to its employees...	1						
13. I really care about the fate of this organization.....	1						
14. For me this is the best of all possible organizations for which to work.....	1						
15. Deciding to work for this organization was a definite mistake on my part.....	1						

IX. LISTED BELOW ARE SOME COMMON PHYSICAL PROBLEMS WHICH OFTEN BOTHER PEOPLE AT WORK. HOW OFTEN DOES EACH OF THEM HAPPEN TO YOU? (Circle one frequency for each)

1. <u>Headaches</u>	2. <u>Upset Stomach</u>	3. <u>Trouble getting to sleep</u>
1. Several times a week	1. Several times a week	1. Several times a week
2. About once a week	2. About once a week	2. About once a week
3. Several times a month	3. Several times a month	3. Several times a month
4. About once a month	4. About once a month	4. About once a month
5. Once every few months	5. Once every few months	5. Once every few months
6. Almost never	6. Almost never	6. Almost never

1. Most people have days when they feel pretty "blue" or depressed during most of the workday. How often does this happen to you?
 1. Two or three times a week
 2. About once a week
 3. Once or twice a month
 4. Less often than once a month
2. Most people have workdays when they feel tired or worn out. How often does this happen to you?
 1. Two or three times a week
 2. About once a week
 3. Once or twice a month
 4. Less often than once a month
3. How often do you feel nervous, tense or edgy while on the job?
 1. More than 50 per cent of the time
 2. About 40 or 50 per cent of the time
 3. About 20 or 25 per cent of the time
 4. About 5 or 10 per cent of the time
 5. Vary rarely or never

X. LISTED BELOW ARE A NUMBER OF STATEMENTS WHICH EXPRESS VIEWS ABOUT PEOPLE AND WORK. WE WOULD LIKE TO KNOW TO WHAT EXTENT YOU AGREE OR DISAGREE WITH THESE STATEMENTS. PLEASE CIRCLE THAT SCALE VALUE, NEXT TO EACH, WHICH MOST ACCURATELY INDICATES YOUR LEVEL OF AGREEMENT OR DISAGREEMENT.

	1	2	3	4	5	6
	Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
1. Most people spend too much time in unprofitable amusements..	1	2	3	4	5	6
2. Our society would have fewer problems if people had less leisure time				1	2	3 4 5 6
3. Money acquired easily (e.g. through gambling or speculation) is usually spent unwisely				1	2	3 4 5 6
4. There are few satisfactions equal to the realization that one has done his best at a job				1	2	3 4 5 6
5. The most difficult college courses usually turn out to be the most rewarding				1	2	3 4 5 6
6. Most people who don't succeed in life are just plain lazy...	1	2	3	4	5	6
7. The self-made person is likely to be more ethical than the person born to wealth				1	2	3 4 5 6
8. I often feel I would be more successful if I sacrificed certain pleasures				1	2	3 4 5 6
9. People should have more leisure time to spend in relaxation..	1	2	3	4	5	6
10. Any person who is able and willing to work hard has a good chance of succeeding				1	2	3 4 5 6
11. People who fail at a job have usually not tried hard enough..	1	2	3	4	5	6
12. Life would have very little meaning if we never had to suffer	1	2	3	4	5	6
13. Hard work offers little guarantee of success.....	1	2	3	4	5	6
14. The credit card is a ticket to careless spending.....	1	2	3	4	5	6
15. Life would be more meaningful if we had more leisure time....	1	2	3	4	5	6
16. The person who can approach an unpleasant task with enthusiasm is the one who gets ahead				1	2	3 4 5 6
17. If one works hard enough, one is likely to make a good life for oneself				1	2	3 4 5 6
18. I feel uneasy when there is little work for me to do.....	1	2	3	4	5	6
19. A distaste for hard work usually reflects a weakness of character						1 2 3 4 5 6

XI. IN THIS SECTION WE WOULD LIKE TO KNOW HOW YOU THINK ABOUT YOUR EMPLOYING ORGANIZATION. (Circle one number for each)

Assume you were offered a position with another employing organization. Would you leave your present organization under any of the following conditions?

1. With a slight increase in pay?
 1. Yes definitely
 2. Uncertain
 3. No definitely not
2. With slightly more freedom to be professionally creative?
 1. Yes definitely
 2. Uncertain
 3. No definitely not
3. With slightly more status?
 1. Yes definitely
 2. Uncertain
 3. No definitely not
4. To work with people who are a little friendlier?
 1. Yes definitely
 2. Uncertain
 3. No definitely not

XII. DIFFERENT PEOPLE BEHAVE DIFFERENTLY AT WORK. LISTED BELOW ARE SOME ACTIVITIES THAT SOME PEOPLE DO AND OTHERS DO NOT DO. TO WHAT EXTENT DO YOU ENGAGE IN THESE BEHAVIORS? USE THE SCALE BELOW TO INDICATE THE FREQUENCY FOR EACH. (Circle one number next to each statement)

Do you:

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

- | | | | | | |
|--|---|---|---|---|---|
| 1. Take work home or stay late to finish up your work, even if not specifically asked to do so. | 1 | 2 | 3 | 4 | 5 |
| 2. Go out of your way to help a co-worker who is having difficulty in his or her job. | 1 | 2 | 3 | 4 | 5 |
| 3. Call in sick when you just want to stay home and relax..... | 1 | 2 | 3 | 4 | 5 |
| 4. Keep aware of everything that goes on around you at your place of work. | 1 | 2 | 3 | 4 | 5 |
| 5. Cancel an important social engagement because you feel needed in the office. | 1 | 2 | 3 | 4 | 5 |
| 6. Postpone your vacation or day off, in spite of personal inconvenience, to meet the needs of your organization. | 1 | 2 | 3 | 4 | 5 |
| 7. Use company time to take care of personal matters..... | 1 | 2 | 3 | 4 | 5 |
| 8. Talk about your work during lunch..... | 1 | 2 | 3 | 4 | 5 |
| 9. Recall with ease work related problems, incidents, and information. | 1 | 2 | 3 | 4 | 5 |
| 10. Do some extra work for your job which is not really required of you. | 1 | 2 | 3 | 4 | 5 |
| 11. Would you say you work harder, less hard, or about the same as other people doing your type of work in your organization? (Circle one) | | | | | |
| 1. Much less hard than most others | | | | | |
| 2. A little less hard than most others | | | | | |
| 3. About the same as most others | | | | | |
| 4. A little harder than most others | | | | | |
| 5. Much harder than most others | | | | | |

XIII. PEOPLE STAY WITH THEIR EMPLOYING ORGANIZATION FOR MANY DIFFERENT REASONS. LISTED BELOW ARE SOME OF THE FACTORS THAT CAN INFLUENCE A PERSON'S DECISION TO STAY WITH HIS OR HER ORGANIZATION. HOW IMPORTANT HAS EACH OF THESE FACTORS BEEN IN INFLUENCING YOUR CHOICE TO REMAIN WITH YOUR EMPLOYING ORGANIZATION? (Please indicate for each factor the level of importance by circling one number in the scales provided.)

	No Im- portance	2	3	4	5	6	Utmost Importance
1. My pension benefits.....	1	2	3	4	5	6	7
2. My insurance coverage benefits....	1	2	3	4	5	6	7
3. My stock options.....	1	2	3	4	5	6	7
4. My annual bonus.....	1	2	3	4	5	6	7
5. My status in the organization.....	1	2	3	4	5	6	7
6. The likelihood of a promotion.....	1	2	3	4	5	6	7
7. Personal or social relationships with co-workers.....	1	2	3	4	5	6	7
8. Limited alternative job opportunities.....	1	2	3	4	5	6	7
9. Personal or family considerations.	1	2	3	4	5	6	7

1. What is the likelihood that you will be working for your present organization in 3 years? (Please circle one)

1. Very Unlikely
2. Somewhat Unlikely
3. 50-50, Can't tell
4. Somewhat Likely
5. Very Likely

2. How long do you plan to remain with your present organization? (Circle one)

1. Less than a year
2. About 1 or 2 years
3. About 3 or 4 years
4. About 5 or 6 years
5. About 7 or 8 years
6. About 9 or 10 years
7. More than 10 years

XIV. THE FOLLOWING ITEMS ARE STATEMENTS PEOPLE CAN MAKE ABOUT THEIR PHILOSOPHY OR VIEW OF LIFE. PLEASE CIRCLE THE NUMBER WHICH MOST ACCURATELY INDICATES HOW MUCH YOU AGREE OR DISAGREE WITH EACH STATEMENT. THERE ARE NO RIGHT OR WRONG ANSWERS.

1	2	3	4	5
Strongly Disagree	Slightly Disagree	Neutral	Slightly Agree	Strongly Agree

1. Sometimes I feel all alone in the world..... 1 2 3 4 5
2. Real friends are as easy as ever to find..... 1 2 3 4 5
3. In thinking of my life, I often wonder why I exist..... 1 2 3 4 5
4. There are few dependable ties between people anymore..... 1 2 3 4 5
5. I often wish I were doing something else..... 1 2 3 4 5
6. It is almost impossible for one person to really understand
the feelings of another..... 1 2 3 4 5

	1	2	3	4	5
	Strongly Disagree	Slightly Disagree	Neutral	Slightly Agree	Strongly Agree
7. I feel that my daily activities don't reflect my real interests and values.....	1	2	3	4	5
8. Too many people in our society are just out for themselves and don't really care for anyone else.....	1	2	3	4	5
9. Facing my daily tasks is a painful and boring experience.....	1	2	3	4	5
10. Many people in our society are lonely and unrelated to their fellow human beings.....	1	2	3	4	5
11. I have thought seriously of making major changes in my life..	1	2	3	4	5
12. Most people do not hesitate to go out of their way to help someone in trouble.....	1	2	3	4	5
13. I regard my life as meaningful in that it reflects my values.	1	2	3	4	5
14. I can be comfortable with nearly all kinds of people.....	1	2	3	4	5
15. I would give a good deal to live a different life than I do..	1	2	3	4	5
16. People are too self-centered.....	1	2	3	4	5
17. I have discovered clear cut goals and a satisfying life purpose.....	1	2	3	4	5
18. It's only a rare person who would risk his or her own life and limb to help someone else.....	1	2	3	4	5

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Management Department

October 11, 1984

Dear Participant:

One of your co-workers, _____, is presently participating in a study which is the basis of my Ph.D. Dissertation. S/he has indicated that you might be willing to complete a brief questionnaire on her/his behalf. It will only take a few minutes of your time, but the information you can give us will be important for the quality of our research.

We are interested in your impressions of your co-worker's behavior at work, so we can correlate these behaviors with other data your co-worker has given us. Please answer the questions independently and as completely as possible, and return the questionnaire directly to my office. A stamped, addressed envelope has been attached for this purpose.

We would like to assure you that the information you provide will be treated in a strictly confidential manner. It will be used for research purposes only, and be of no consequences for your co-worker or you. Only the number on your questionnaire and that on your co-worker's questionnaire will be used to match the two sets of data. To assure the anonymity of your co-worker, please detach this cover letter before returning the questionnaire.

Please feel free to call me at work (212-725-7129) if you have any questions.

Thank you for your cooperation.

Sincerely,

Ursula Wittig-Bergan
Instructor, Department of Management

Ph.D. Candidate,
City University of New York

CO-WORKER PERCEPTION QUESTIONNAIRE

The following questions ask about your co-worker's behavior at work. Please answer the questions below by using your own judgment and whatever information (even if limited) you might have. There are no right or wrong, favorable or unfavorable answers.

Work Activity Inventory

Different people behave differently at work. Listed below are some activities that some people do and others do not do. Based on your impressions, to what extent does your co-worker engage in these behaviors? (Please look at the scale below and circle that number to the right of each statement that most accurately indicates the frequency. Please do not skip any statements.)

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

Does your co-worker...

1. take work home or stay late to finish up a task, even if not specifically asked to do so. 1 2 3 4 5
2. go out of his/her way to help a co-worker who is having difficulty in his or her job. 1 2 3 4 5
3. call in sick when he or she just wants to stay home and relax. 1 2 3 4 5
4. keep aware of everything that goes on around him or her at the work place. 1 2 3 4 5
5. cancel an important social engagement because he or she feels needed in the office. 1 2 3 4 5
6. postpone his or her vacation or day off, in spite of personal inconvenience, to meet the needs of the organization. 1 2 3 4 5
7. use company time to take care of personal matters. 1 2 3 4 5
8. talk about his or her work during lunch. 1 2 3 4 5
9. Recall with ease work related problems, incidents, and information. 1 2 3 4 5
10. do some extra work for his or her job which is not really required. 1 2 3 4 5
11. Would you say that your co-worker works harder, less hard, or about the same as other people doing his or her type of work in the organization?
 1. Much less hard than most others
 2. A little less hard than most others
 3. About the same as most others
 4. A little harder than most others
 5. Much harder than most others

Please circle one answer for each question.

1. Most people have days when they feel pretty "blue" or depressed during most of the workday. Based on your impressions, how often does this happen to your co-worker?
 1. Two or three times a week
 2. About once a week
 3. Once or twice a month
 4. Less often than once a month
2. Most people have workdays when they feel tired or worn out. Based on your impressions, how often does this happen to your co-worker?
 1. Two or three times a week
 2. About once a week
 3. Once or twice a month
 4. Less often than once a month
3. In your opinion, how often does your co-worker feel nervous, tense or edgy while on the job?
 1. More than 50 per cent of the time
 2. About 40 or 50 per cent of the time
 3. About 20 or 25 per cent of the time
 4. About 5 or 10 per cent of the time
 5. Very rarely or never

Thank you very much for taking the time to complete this questionnaire. Would you please print your name and telephone number below so that we might contact a limited number of respondents. We do this as part of our standard research procedure to assure the scientific reliability of the information we collect. Your identity and the identity of the individual described herein will, of course, not be disclosed to anyone. This page will be detached from the data set immediately upon receipt of the envelope.

Thank you again.

Name

Area Code Telephone Number (Please indicate whether business or home)

(O P T I O N A L)

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