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Organizational commitment: A construct validation of two measures and an examination of antecedents and consequences

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ORGANIZATIONAL COMMITMENT: A CONSTRUCT VALIDATION OF TWO MEASURES AND AN EXAMINATION OF ANTECEDENTS AND CONSEQUENCES

by

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Abstract

ORGANIZATIONAL COMMITMENT: A CONSTRUCT VALIDATION OF TWO MEASURES AND AN EXAMINATION OF ANTECEDENTS AND CONSEQUENCES

by

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This research examined existing theory and research that would advance understanding of Organizational Commitment (OC). The theories of A. Etzioni and R. Kanter, and object relations and organizational theory were used in combination with empirical research to develop an attitudinally-based, three dimensional construct of Organizational Commitment. The dimensions paralleled and expanded upon Etzioni's Moral, Calculative and Alienative involvement types.

In order to test the OC construct, a validation study was conducted using the Penley and Gould (1989) OC scale and the Meyer and Allen (1984) OC scale. A confirmatory factor analysis was conducted using LISREL (Joreskog & Sorbom,

1988). The findings indicated that Moral and Affective Commitment formed one dimension, as hypothesized. The remaining two hypothesized dimensions found only partial support. The Meyer and Allen Continuance Commitment dimension did not form two subdimensions based on high Personal Sacrifice (PS) and Low Availability of Alternatives (LA). Therefore the PS and LA Continuance Commitment subdimensions did not respectively load with the Penley and Gould Calculative and Alienative Commitment dimensions, as hypothesized. Instead, four commitment dimensions were found: Moral/Affective OC, Calculative OC, Continuance OC and Alienative OC.

The second stage of this research examined the relationship between the five power bases proposed by French and Raven (1959), the four dimensions of OC and intention to remain with the organization. The results from the structural equation model indicated that all hypotheses except those involving Calculative Commitment were confirmed. Expert and Referent Power were positively related to Moral/Affective Commitment and intention to remain with the organization. Coercive Power was positively related to Alienative Commitment and negatively related to intention to remain with the organization. Legitimate and Reward power were positively related to Continuance Commitment and intention to remain with the organization. Calculative Commitment was not related to Legitimate and

Reward Power or intention to remain with the organization, as was hypothesized.

The results indicated that Organizational Commitment is a multidimensional construct with differential relationships between the dimensions and the five power bases. Future research should be directed at clarifying the nature of the Calculative and Continuance Commitment dimensions.

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CHAPTER I

INTRODUCTION

There has been a great deal of attention in the literature to the concept of Organizational Commitment (OC). This is in large part due to its connection to withdrawal behaviors such as absenteeism and turnover. OC has been viewed as a useful job attitude for organizations to understand because committed employees are presumed to be more motivated and productive and less likely to leave the organization. Thus organizations which foster commitment are likely to have a more efficient and happy workforce, thereby enhancing organizational performance and the quality of worklife for employees.

Despite this large amount of attention, numerous researchers have suggested that our efforts to understand OC have not been very successful (Bateman & Strasser, 1984; DeCotiis & Summers, 1987; Meyer & Allen, 1984; Morrow, 1983; Somers, 1987). Research and practice in the area of OC has been plagued by a number of problems. Perhaps the most obvious is the use of multiple definitions and operationalizations across research studies (Luthans, Baack & Taylor, 1987; Morrow, 1983; Reichers, 1986). In addition to the use of multiple definitions and measures, OC has been questioned for having conceptual redundancy with other work-related concepts (Morrow, 1983) and the number of dimensions

or factors which comprise OC itself is far from clear (Angle & Perry, 1981; Gould, 1979; McGee & Ford, 1987; O'Reilly & Chatman, 1986; Scholl, 1981).

Finally, to compound this situation, research efforts have typically consisted of atheoretical, empirical laundry lists that attempt to discern the antecedents and consequences of OC (O'Reilly & Chatman, 1987; Reichers, 1985) using correlational analyses which lack any contextual framework or model. Given this set of circumstances it is not surprising to find existing research results lacking in consensus and our progress in terms of understanding OC to be limited.

This study is concerned with integrating existing theory and research on OC in order to clarify the meaning of the OC construct and to identify relevant antecedents and consequences within the context of a structural equation model. First, theoretical propositions and empirical evidence are integrated to support a conceptualization of OC that reflects a single conceptual domain which is attitudinal and multidimensional in nature. Three dimensions or factors are proposed which encompass and subsume previous unidimensional and multidimensional conceptions of OC that have been presented in the literature. Then, two measurement instruments are hypothesized to independently tap the proposed three factor OC structure and specific interrelationships among the three

factors are hypothesized.

The second stage of this research examines the impact of supervisory influence strategies on the development of specific dimensions or factors of subordinate OC, as OC is proposed above. Supervisory influence strategies are considered to be instrumental in the development of OC and differential predictions about particular dimensions of subordinate OC are proposed based on the use of particular supervisory influence strategies. In addition, behavioral intentions to remain in the organization are examined as consequences of OC.

This research includes both an examination of the construct validity of OC using multiple measures and an examination of hypotheses regarding antecedents and consequences of OC within a causal model. It is intended to further the theoretical and empirical usefulness of research efforts in the field.

DEFINITION AND MEASUREMENT PROBLEMS

Inconsistency in definitions and measures of OC is not surprising in view of the fact that OC has been defined as both an attitude and a behavior; as a single unidimensional concept and as a multidimensional concept; as an emotional, moral, normative, economic and value-based construct; as a sociological (structural) as well as a psychological (functional) concept; and finally, as both an antecedent and

a consequence of behavior.

Behavior verses Attitude

OC has been defined by a large group of researchers as an attitude and by fewer others as a behavior. In general, those who subscribe to the attitudinal approach do not acknowledge the proponents of the behavioral approach and vice versa. Although proponents of each approach assume behaviors and attitudes are mutually exclusive, this is not necessarily the case. One behavioral view is proposed by Salancik (1977) who defines commitment as "a binding of the individual to behavioral actions and then through these actions the individual becomes bound to beliefs that sustain activities and involvement" (p. 4). The individuals' behaviors mold self-perceptions and expectations such that future actions are constrained by those previously exhibited. To the extent that the individuals perceive their acts to be publicly visible, volitional and irrevocable they are more or less committed by their own behavioral acts.

Becker (1960) in his "side-bet" theory of commitment provides a similar definition. Commitment involves engaging in "consistent lines of activity" as a result of accumulating "side-bets". "Side-bets" are organizationally-based investments the individual values and has acquired as a result of past actions. Types of "side-bets" are broadly defined and range from such things as time, money, and

pension plans to organizational position and status. "Consistent lines of activity" are those activities that maintain organizational membership and the retention rather than loss of valued "side-bets".

While Salancik (1977) elaborates a partial theory of OC, there is no empirical research and therefore no measurement instrument associated with his writings on behavioral commitment. Several studies however have investigated Becker's "side-bet" theory. This research typically uses the Ritzer and Trice (1969) (RT) scale and the Hrebiniak and Alutto (1972) (HA) scale, which is a modification of the RT scale. Research findings have been supportive indicating that "side-bets" such as age, years with the organization and years in one's current position were strong predictors of behavioral commitment (Hrebiniak, 1974; Hrebiniak & Alutto, 1972; Stevens, Beyer & Trice, 1978). Research findings have also been unsupportive and contradictory, indicating that personal investments that accrue as a function of organizational membership and time (e.g., age, salary and tenure) do not relate to behavioral commitment or relate more strongly to affective forms of commitment (Aranya & Jacobson, 1975; Ritzer & Trice, 1969). Meyer and Allen (1984) provide a convincing, methodologically-based explanation for these mixed findings and demonstrate in two separate studies that the supposedly behavioral RT and HA scales do not tap behavioral commitment

but instead measure an affective (emotional) form of commitment. Specifically, personal investments presumed to measure behavioral commitment, such as age, salary, tenure, and organization-specific learned skills were highly confounded with affective measures of attachment to the organization. (e.g., comfort with coworkers and supervisors, value-based attachments, etc.) As such, these scales may represent attitudinal measures of commitment inappropriate to the investigation of a strictly behavioral model of OC (Meyer & Allen, 1984; McGee & Ford, 1987).

Behavioral views of OC are exclusively behavioral in nature. To the extent that attitudes are acknowledged, little more is said than behaviors, as the fundamental substance of commitment, precede and shape the formation of committed attitudes (c.f. Salancik, 1977). While it is inarguable that behavior may play a role in attitude formation, and thus OC, it is less likely that organizationally committed behaviors occur devoid of any accompanying attitudes. To the extent that behavioral proponents have not elaborated on the existence and nature of such an attitudinal component they are limited. The findings of McGee and Ford (1987) underscore this point because the RT and HA measures of purported behavioral commitment appear to be heavily confounded with affective, attitudinal measures and conceptualizations of OC. At a minimum this indicates the presence of both attitudes and

behaviors. Additionally, Salancik's (1977) explanation of the development of commitment, as a behavior, relies heavily on explicating attitudes such as "felt responsibility toward coworkers and supervisors" as a source of commitment. A striking example of this involves his discussion of nationalism which he offers as an example of commitment. Salancik (1977) states, "most nations foster nationalism . . . [because] to wait for a holocaust before shaping attachments may be too late" (p. 44). Certainly "nationalism" and "attachment" are more akin to attitudes than behaviors. There appears to be considerable confusion between the behavior/attitude dichotomy in Salancik's own discussion of this issue.

Given these conceptual and measurement problems, and the numerous definitions of OC, and the lack of clarity surrounding it's actual nature and meaning it is best at this point to allow for the possibility of both a behavioral and attitudinal component.

Unidimensional verses Multidimensional Attitudes and Behaviors

There are a number of authors who have approached OC from an attitudinal perspective. Unlike behavioral theorists who focus narrowly on binding and consistent actions, attitudinal theorists vary broadly in what they mean by OC. Some provide unidimensional definitions while

others assume multidimensional conceptions of OC.

Wiener's (1982) unidimensional definition states OC is "the totality of internalized normative pressures to act in a way that meets organizational interests" (p. 418). (Upon a complete reading of Wiener's writings it could be suggested that his approach also contains behavioral implications.) Others define OC exclusively in terms of identification with the employing organization (c.f. Hall, Schneider & Nygren, 1970; Kidron, 1978; Lee, 1971; Patchen, 1970; Rotundi, 1975; Sheldon, 1971). For example, Sheldon (1971, in Mowday, Porter & Steers, 1982) defines OC as an orientation toward the organization which links or attaches the identity of the person to the organization. Lee (1971) states, it is "the degree of the individual's broad personal identification with the organization" (p. 215). Kidron, (1978) defines OC in terms of a normative identification with the organization and a separate calculative dimension. "Organizational commitment involves the individual's incorporation of organization values and goals into his own identity. [Another aspect of commitment] is the willingness of the individual to remain with a particular system given an alternative job that provides slightly better outcomes" (Kidron, 1978 p. 241). Patchen (1970) and Rotundi (1975), suggest OC is an identification with the organization that is exclusively emotionally or affectively-based. "Organizational identification reflects Patchen's view [and

is a] composite of similarity, membership, and loyalty components, with loyalty being determined by support of organizational policies and a desire to remain with the employing organization" (Rotundi, 1975 p.893).

Unfortunately most unidimensional attitudinal views of OC lack any real theoretical backing and are rarely associated with any measurement instruments. In isolation, this makes their evaluation difficult. Moreover, when compared to multidimensional concepts they appear to fall short in two major respects. First, they are more vague and generally defined and are therefore less useful in discerning what OC actually is. This is apparent if one compares Lee's (1971) definition of OC to any of the multidimensional views presented on the following pages. Lee simply cites an identification between the person and the organization, while all of the multidimensional approaches cite identification with specific things such as organizational goals, values, coworkers, etc. Even at a surface level the latter approach is more informative. Second, unidimensional approaches fall short because they define commitment exclusively as something that is either normative, affective, or instrumental. (This criticism applies to the behavioral approach as well.) The presumption not to consider OC as possibly being some combination of these dimensions is premature because little evidence exists to conclude that only one type or kind of OC

exists. As a general rule, research using both unidimensional and multidimensional conceptions of OC has not addressed this issue.

OC has traditionally been viewed as a multidimensional construct. This is exemplified by the work of Porter, Steers, Mowday & Boulian (1974) and Mowday, Porter and Steers (1982) whose research has been very influential in the OC literature. These authors define OC as an attitudinal variable reflecting "the relative strength of an individual's identification with and involvement in the organization" (p. 27). Included in this definition are the following factors: "a strong desire to remain in the organization, a willingness to exert considerable effort on behalf of the organization and a strong belief in and acceptance of the organization's goals and values" (p. 27).

Buchanon (1974) provides a similar definition of OC stating it is " a partisan, affective attachment to the goals and values of the organization, to one's role in relation to goals and values, and to the organization for its own sake, apart from its purely instrumental worth" (p. 533). Buchanon explicitly states that his definition is affective (emotional) in nature. It is also normative in nature because attachment to the goals and values of an organization is a form of normative control (Wiener, 1982). This concept of OC as both affective and normative is multidimensional and is broader than saying OC is either one

or the other. The inclusion of a normative element does not negate the existence of an affective element as these types or dimensions are not mutually exclusive. In fact, they are intuitively quite compatible. Mowday et al. (1982) also imply that their conception of OC is both affective and normative in nature.

Buchanon and Mowday et al. have both developed measurement instruments for their conceptualizations of OC. Buchanon's (1974) measurement of OC is elaborate but flawed. He combined the Hall, Schneider, and Nygren (1970) organizational identification scale, the Lodahl and Kejner (1965) job involvement scale, and then constructed a unique index of organizational loyalty. All three indices together were intended as a measure of OC. Job involvement has repeatedly been found to be a separate construct from OC (Morrow, 1983; Morrow & McElroy, 1987; Mowday et. al., 1982; Reichers, 1985) which makes Buchanon's efforts at measurement contaminated, not to mention highly limited in comparability.

Unfortunately, what has traditionally been the most commonly used measure, the Organizational Commitment Questionnaire (OCQ) (Mowday, Porter & Steers, 1982) has been criticized for construct dimensionality issues (Tetrick & Farkas, 1988) and potential response bias issues (Schmitt & Stults, 1985). It has also been suggested that the OCQ is confounded with the very behaviors that are purportedly its

consequences (i.e., intent to leave the organization) (DeCotiis & Summers, 1987; McGee & Ford, 1987; Mobley et al., 1979; Reichers, 1985).

Two other authors have proposed multidimensional, attitudinal conceptualizations of OC which are organized more succinctly than previous definitions into typologies. Kanter (1968) provides one such attitudinal typology and defines OC as "the willingness of social actors to give their energy and loyalty to social systems, [and] the attachment of personality systems to social relations that are seen as self-expressive" (p.499). Kanter is careful to point out that OC is a process "through which individual interests become attached to the carrying out of socially organized patterns of behavior (individuals become committed not only to norms but also to other aspects of a social system) which are seen as fulfilling those interests, as expressing the nature and needs of the person" (p. 500). She describes three types of OC: 1) Continuance Commitment, in which the individual wishes to remain in the organizational system because of an instrumental, cognitive evaluation of associated costs and benefits; 2) Cohesion Commitment, wherein the individual possesses a positive affective reaction to the organization accompanied by attachment based on enduring social relationships; and 3) Control Commitment, in which the individual identifies with and internalizes organizational system norms and thus

possesses a moral imperative of sorts. These three types or forms of OC may exist simultaneously together in varying or similar amounts and they may or may not be mutually determined depending upon the situation.

Kanter does not provide a measure to accompany her typology. However, her conceptualization is more valuable than many because it is theoretically grounded in systems theory. That is, unlike most psychological investigators of OC, she does not presume that individuals exist in a vacuum, unaffected by surrounding social structures. Kanter treats OC as a process and considers both the motivational nature of individuals and the motivational nature of social structures and how these two interact. Individual, psychological, organizational, and sociological inputs, through-puts and outputs are considered as an interacting system. System maintenance, whether at the individual level or at the organizational level is the major goal. Katz and Kahn (1966) point out that whenever one attempts to deal with the organization of the people within a social system the level of analysis is automatically a social-psychological one. Kanter integrates system characteristics and organizational maintenance with qualitatively different forms of individual attachments to the organization. In doing this she provides a conceptualization of OC at a social-psychological level of analysis. This is quite appropriate and provides the potential for much needed

answers regarding the meaning of OC because OC, by all of its definitions, ultimately involves the individual's interaction with the organization.

At a more general level, the earlier work of organizational theorists such as Barnard (1938) and March and Simon (1958) are consistent with Kanter's conceptualization. Barnard indicated that organizational functioning was based on the organization providing inducements in exchange for member contributions, which suggests Continuance Commitment and an instrumental cost-benefit exchange. March and Simon (1958) corroborate and elaborate on this rational exchange relationship in their discussion of motivational constraints and the organization member's decision to participate (cf. p. 93).

In addition to Kanter, Etzioni (1975) presents a three dimensional typology of different attitudinal commitment types which is grounded in macro-organizational theory. Etzioni proposed that organizations possessed predominant compliance systems which were associated with particular patterns of member involvement. He believed compliance to be a central element existing in all social structures and defined compliance in terms of a power or influence relationship between two entities. When one actor exercises power over another subordinate actor, "the orientation of the subordinated actor is either positive commitment or negative alienation and this orientation [reflects]

involvement in the organization" (p. 4). He differentiates three types of power which in turn are linked to three kinds of involvement and constitute compliance relationships between the organization and its members. Organizations typically possess all three types of compliance relationships in varying degrees. First, Moral Involvement is based on a symbolic compliance system and the internalization of organizational goals and values. It is accompanied by identification with the presiding organizational authority. Moral Involvement is comparable to Kanter's notion of Control Commitment and possesses a similar positive, normative element. Etzioni states that Moral Involvement is also affective in nature, while Kanter does not directly address this issue. Drawing on the work of Parsons (1951, in Etzioni 1975) Etzioni delineates two types of normative influence. One is social and derives from social acceptance and positive responses between people. The other is "purely normative" and stems from the manipulation of structurally linked elements such as organizational rituals and symbols. Second, Etzioni proposed a Calculative Involvement type which is based on the rational, instrumental exchange of rewards and benefits. The compliance system is one of exchange. Calculative Involvement is equivalent to Kanter's Continuance Commitment and similarly possesses an evaluative and cognitive exchange component. Finally, Etzioni proposed a third type:

Alienative Involvement. It is a negative affective response based on an exploitive or coercive organizational compliance system. Alienatively committed individuals feel affectively negative because their organizational membership is based on exploitation and control and they do not feel they can alter their situation. This is in contrast to behavioral commitment types such as Becker's "side-bet" commitment cr the exchange-based calculative commitment type in that behaviorally and calculatively committed individuals feel they have control over their situation. For example, they may decide their situation is inequitable and choose to leave the organization or alter their levels of effort or reward. Although Kanter does not describe a parallel commitment type, her notion of Cohesion Commitment which is based on a positive, affective identification and involvement in social relationships, may be one end of a continuum which has Alienative Involvement, perhaps stemming from negative or coercive social relationships, at its other pole. Wiener (1982, in Penley & Gould, 1988) raised the question of whether Alienative and Moral Involvement (or Cohesion Commitment) were independent concepts or simply opposite ends of one continuum. This question has yet to be answered.

Although it is not intuitively appealing to consider a positive construct such as commitment to be negative in nature (i.e. Alienative Involvement), given the overall

definitional confusion that exists in the field, it is worthwhile to retain for further consideration at this point. This is especially true because its inclusion does not rule out Kanter's Cohesion Commitment, and empirical and practical support for its inclusion exists. Empirically, Penley and Gould (1988) have provided convincing construct validity evidence for Etzioni's three distinct Involvement types (Moral, Alienative, and Calculative). McGee and Ford (1987), using a two dimensional commitment scale developed by Meyer and Allen (1984), found factor analytic, construct validity evidence supporting the existence of three distinct OC dimensions: 1) a Continuance dimension based on an instrumental exchange of costs and benefits with commitment associated with personal sacrifice from lost benefits if one were to leave the organization, 2) an affective commitment dimension based on belonging and organizational identification, and 3) a second, unsuspected Continuance dimension based on a lack of existing employment alternatives. McGee and Ford's empirically derived Continuance dimension, reflecting a lack of existing employment alternatives, directly echoes Penley and Gould's (1988) account of Etzioni's Alienative Commitment as, "an employee's attachment to an organization as a consequence of 1) a lack of control over the internal organizational environment and 2) the perceived absence of alternatives for organizational commitment (in the internal and external

environment). The employee's perceived sense of randomness and loss of control result in a negative affective attachment to the organization" (p. 47).

A Synthesis

There is a seeming convergence between the theoretical conceptualizations provided by Kanter and Etzioni, and the empirical work of Penley and Gould, and McGee and Ford. This again suggests a multidimensional approach to the concept of OC wherein at least three components exist: 1) a Calculative/Continuance commitment based on an instrumental exchange of costs and benefits, 2) an affectively based Moral/Control Commitment reflecting the identification and internalization of organizational goals and values, and, 3) an Alienative/Cohesion commitment representing either a positive or negative affective attachment to the organization based on either social identification and involvement or a lack of perceived social and employment alternatives.

Behavioral approaches, although with less specification, bear close resemblance to the instrumental exchange relationship described by Etzioni and Kanter in their Calculative/Continuance commitment types. Becker's (1960) "Side-Bet" theory provides a good example of this and places unidimensional behavioral approaches squarely within the Calculative/Continuance dimension of the merged

Etzioni/Kanter typology. For Becker, commitment is based on an instrumental exchange of work for benefits, rather than an affective attachment.

None of the attitudinal and behavioral approaches listed above are inconsistent with the Etzioni and Kanter models, rather they are subsumed by them and usually represent one piece of either of these typologies. This is because they are typically unidimensional, and are explicated with less clarity and detail, and because they often lack theoretical backing. The most commonly used measures which operationalize OC are also consistent with the Kanter and Etzioni models. The Hrebiniak and Alutto, and Ritzer and Trice measures of calculative or behavioral commitment have been criticized for being "saturated with affective commitment" (Meyer & Allen, 1984). This measurement problem is similar to that of the attitudinal OCQ measure, cited earlier as being confounded with behavioral commitment. Coincidentally, or perhaps not so coincidentally, the definition purportedly tapped by Mowday et al.'s (1982) OCQ, although more generally defined, is also consistent with the Kanter and Etzioni typologies.

Some recent work in the area of OC measurement may help to clarify existing attitudinal and behavioral confounds. Meyer and Allen (1984), in a developmental effort to address the affective contamination of the behavioral commitment measures of Hrebiniak and Alutto (1972) and Ritzer and Trice

(1969), proposed a new two dimensional scale consisting of an instrumental commitment component (labeled Continuance, in keeping with Kanter's Continuance dimension, Etzioni's Calculative dimension and the behavioral definitions) (CC) and an affective attitudinal commitment component (consistent with the Mowday et al. [1982] definition and the Moral, Control and Cohesion dimensions of Etzioni and Kanter) (AC). Their analysis of a number of commitment measures indicated that both the affective, attitudinal OCQ measure and the behavioral measures of Hrebiniak and Alutto (HA) and Ritzer and Trice (RT) were confounded with each other. In contrast, the Meyer and Allen AC and CC scales displayed convergent and discriminant validity relative to the OCQ and the RT and HA measures, and relative to experimental manipulations designed to tap behavioral exchange commitment verses affective attitudinal commitment. This represents a developmental step in defining and operationalizing OC but it is qualified by the later work of McGee and Ford (1987) who as cited earlier, found evidence that the Meyer and Allen CC scale was in and of itself two dimensional (e.g. lack of perceived alternatives (PA) verses personal sacrifices from leaving the organization (PS).

In addition to finding two dimensions in the Meyer and Allen CC scale, McGee and Ford found different interrelationships between the two Continuance dimensions (PA & PS) and the affective attitudinal AC scale.

Continuance Commitment based on personal sacrifices was significantly positively correlated with affective attitudinal commitment, while continuance commitment based on a lack of perceived alternatives was significantly negatively correlated with positively-oriented affective, attitudinal commitment. Bateman and Strasser (1984) and Stumpf and Hartman (1984) lend additional support to the McGee and Ford findings. Bateman and Strasser found a strong negative relationship between a positive affective measure of OC and perceived environmental alternatives to a job. Stumpf and Hartman also corroborate the McGee and Ford findings reporting a negative relationship between environmental exploration and job search activities, and positive affective OC. Taken in total, these empirical findings point to the possibility of a three dimensional conceptualization of OC which is consistent with the theoretical typologies of Kanter and Etzioni. That is, the Meyer and Allen CC scale associated with a lack of perceived alternatives (PA) may parallel Etzioni's Alienative commitment dimension. The Meyer and Allen CC scale associated with personal sacrifice (PS) may be comparable to Etzioni and Kanter's dimensions of Calculative and Continuance commitment, respectively, as well as to behavioral conceptions of OC. Finally, the Meyer and Allen AC scale may be comparable to the Moral and Control commitment dimensions, and to Kanter's Cohesion commitment

dimension. An examination of the items comprising these scales and the Etzioni scale appear to support this proposition (See Appendices A and B). These scales clearly assume an attitudinal conception of OC across all dimensions and suggest, as Etzioni has, that both the Moral/Control dimension and the Alienative (negatively-oriented)/Cohesion (positively-oriented) dimension(s) may be affective or emotional in nature.

In an extension of the original Meyer and Allen (1984) findings, Meyer, Paunonen, Gellatly, Goffin and Jackson (1989), using the Meyer and Allen CC and AC scales, found affective commitment was significantly related to three measures of job performance. Continuance Commitment (CC), both personal sacrifice CC and lack of perceived alternatives CC were unrelated to any of the performance measures. Again, differential interrelationships between different commitment dimensions and outcomes were revealed confirming the multidimensional approach to the OC construct.

O'Reilly and Chatman (1986) provide additional theoretical and empirical support for the multidimensional and differential nature of OC. They proposed that the multiplicity of definitions and operationalizations in the field, had as a common underlying theme, psychological attachment to the organization. On the basis of this notion of psychological attachment, and drawing from clinical

research, they operationalized OC as "the degree to which the individual internalizes or adopts characteristics or perspectives of the organization," (p. 493). Drawing upon the attitude change work of Kelman (1958, in O'Reilly & Chatman, 1986) they indicated that individuals can be influenced toward commitment in three different ways: 1) through compliance or instrumental involvement for the exchange of extrinsic rewards (This is comparable to Kanter and Etzioni's Continuance and Calculative dimensions.); 2) through identification or involvement based on a desire for affiliation (This is comparable to Kanter's Cohesion dimension and Etzioni's socially-based Moral dimension.); and 3) through internalization or involvement based on individual-organizational value congruence (This is comparable to Kanter's Control dimension and to Etzioni's pure normative Moral dimension).

O'Reilly and Chatman (1986) first contribute to our understanding of the meaning of OC through their attempt to incorporate relevant theory. Relying on the concept of psychological attachment and Kelman's conceptualization of attitude change they arrive at a three dimensional definition of OC which parallels Kanter's sociologically derived dimensions almost exactly. Their dimensions are also very similar to Etzioni's macro-organizationally theory-driven work, with the exception of Alienative Commitment. In addition, all three researchers end up

focusing on the notions of compliance systems and influence which is particularly appropriate if OC is considered as a job attitude that can be developed and changed.

Finally O'Reilly and Chatman (1986) present empirical findings which support and augment those of McGee and Ford (1987) and Meyer et al. (1989). Different dimensions of OC are differentially related to particular outcome variables. In particular, internalized/value-congruent commitment and identification/affiliation commitment, both of which are positive affective forms of commitment, are positively related to extra-role behavior (behaviors which extend beyond formally prescribed job duties, e.g. helping a coworker or coming in early without being asked) and intent to remain in the organization and negatively related to turnover. In contrast, compliance commitment, which is similar to Meyer and Allen's (1984) Continuance Commitment (CC) and the behavioral "side-bet" exchange approach, is unrelated to intra-role and extra-role behavior or turnover and negatively related to the intent to remain with the organization. The findings of Meyer et al. (1989) and O'Reilly and Chatman (1986) both suggest that affective forms of OC are significantly associated with positive behaviors on the part of the organizational member, while instrumentally-based exchange (or behavioral) forms of OC are not.

Unfortunately, O'Reilly and Chatman chose to develop

their own measures which compromises comparability. But despite these instrument differences similar findings emerged. There is some question as to whether the two forms of positive affective commitment they pose (identification/affiliation and internalization/value-congruence) are really separate dimensions. Theoretically, Kanter implies they are while Etzioni states they are not. Empirically, both shared almost the same relationships with criterion variables in the O'Reilly and Chatman study and two of the eight items comprising the two dimensions loaded on both dimensions.

The clinical literature (cf. Blanck & Blanck, 1974; Bowlby, 1982; Horner, 1984) would also suggest that although they are separate processes, identification and internalization are contiguous mutual processes both necessary for normal personality development. O'Reilly and Chatman (1986) wisely rely on the concept of attachment to define OC. In doing so they refer to numerous clinical theorists and indicate that one mechanism for attachment is identification. This is true, but their discussion of attachment is incomplete and therefore misleading because they conclude that identification and internalization are conceptually distinct processes. In fact, this is not true according to the psychoanalytic theorists who write on this subject. Instead theorists who subscribe to this psychoanalytic object relations approach view identification

and internalization (usually to an infant's primary caretaker) as processes stemming from attachment, which mutually contribute to normal personality development. (Blanck & Blanck, 1974; Horner, 1984). Broadly, object relations theory refers to specific intrapsychic structures which constitute personality organization. Such structures develop and become increasingly differentiated in stages which reflect the confluence of the infant's biological maturation and attachment experiences with significant external objects, beginning with the primary caretaker (usually mother). The major stages, which if successfully maneuvered lead to normal personality development, are: autism, symbiosis and separation-individuation. Both identification and internalization take place in the final separation-individuation phase of personality development. Margaret Mahler (1968, in Blanck & Blanck, 1974) provides a useful example of this point by writing that the child's ability to engage in imitation is the precursor to identification with the primary caretaker and marks the beginning of the long process of internalization. As the internalization process proceeds the child achieves increasing independence from the primary caretaker (especially with the increase in locomotion capabilities experienced from maturation) and achieves his or her own sense of self as separate from others. It is implicit in this description that both identification and

internalization contribute jointly to personality development and are a function of the social attachment relationship between the mother and child. Internalization does not occur without identification and identification without ensuing internalization processes represents a severe disruption in normal attachment accompanied by extreme pathology in the associated emergent adult personality (e.g. schizoid, narcissistic or borderline personality types). In view of the clinical literature, it is this author's opinion that the identification and internalization dimensions contribute to one affectively positive OC dimension (comparable to Etzioni's concept of Moral Commitment and both Kanter's Control and Cohesion concepts) and that it is more useful at this point in the development of the construct to consider Etzioni's Alienative Commitment type as a second, affectively negative dimension of OC, rather than to incorrectly split hairs over identification and internalization.

Conclusion

Given the array of definitions and measures available in the literature the question arises as to which is the right one? Certainly it would not be instructive to create still more definitions and measures before some attempt at integration is made. Previous attempts to understand OC have clearly underestimated its complexity (Randall, 1988;

Somers, 1987) and as Reichers (1985) points out, a developmental reconceptualization of the OC construct is in order. Rather than assuming an undifferentiated global conceptualization as has been done in the past, or arguing about which is the right definition of OC, Reichers (1985) suggests approaching OC as a global as well as a multidimensional job attitude. This is in line with the evolution in thinking that has occurred in both the job satisfaction and climate areas and it has fostered their empirical and conceptual development (Reichers, 1985). For example, rather than thinking of OC as a generalized attitude stemming from general experiences, structures or personal predispositions, it would be better to systematically break this abstraction down into facets or dimensions which the actual employee may perceive as meaningful such as commitment to coworkers, supervisors, salary, organizational values, etc. This opens an avenue for understanding how commitment may be generated, from the perspective of the committed, and allows for the possibility that different dimensions of commitment, whether toward particular aspects of the organization or the organization overall, may exist. Additionally, it does not exclude the possibility of a global attitude of commitment as represented by some composite or summary of the facets or dimensions. This approach may help to tease out the conflicting research findings which exist when broad-based

global measures such as the OCQ are used in isolation.

This approach also implies that OC is a job attitude that should be separated from the behaviors and behavioral intentions it purports to predict (DeCotiis & Summers, 1987; McGee & Ford, 1987; Mobley et al., 1979; Reichers, 1985) and that there may be specific forms or dimensions of OC that have particular antecedents and consequences associated with them.

In accordance with this advice, efforts at integration should be comprehensive and include multidimensional measures of commitment that capitalize on the use of existing measures and definitions. Etzioni, Kanter, and O'Reilly and Chatman present comprehensive, theoretically based definitions which are consistent with and supportive of each other. Etzioni's definition is the most comprehensive through its inclusion of Alienative Commitment and it is well operationalized by Penley and Gould's (1988) three dimensional measure. It is also instructive to consider Meyer and Allen's (1984) CC and AC scales because they overlap with the Etzioni, Kanter, and O'Reilly and Chatman conceptualizations and because there is recent evidence that their CC scale may be two dimensional. The first CC dimension, associated with personal sacrifices from leaving the organization may be equivalent to Etzioni's Calculative Commitment type and Kanter's Continuance commitment concept. Both appear to have the same

definitions and both have compliance systems based on instrumental exchange underlying them. The second CC dimension associated with a lack of perceived alternative jobs or commitment objects may be synonymous with Etzioni's Alienative Commitment type. Both are rooted in a lack of control over available alternatives and reflect a forced or coercive compliance system. Finally, one would expect the Meyer and Allen AC scale to be synonymous with Etzioni's Moral Commitment type and Kanter's Control commitment dimension, as both reflect value-congruence and symbolic compliance. In addition, items in the Meyer and Allen AC scale appear to tap Kanter's Cohesion commitment dimension. Both the Penley and Gould (1989) and the Meyer and Allen scales will be used in this study because they comprehensively and succinctly subsume all of the theoretical definitions of OC under review. (See Appendix C).

A CAUSAL MODEL OF ANTECEDENTS TO OC

Given an acceptable definition and operationalization for the OC construct, the researcher is next confronted with determining an appropriate context within which to investigate OC. This is a difficult determination to make because OC has been treated as both an independent and a dependent variable and a broad array of other antecedent and consequent variables have been hypothesized as being related

to it (Somers, 1987). Mowday, Porter and Steers (1982) have identified four broad categories of antecedent variables that have been investigated relative to OC: 1) personal, demographic or personality characteristics of the organizational member, 2) role-related characteristics, 3) work experiences; and 4) structural properties of the organization. Operationalizations of OC have typically been the RT and HA scales or the Mowday et al. (1982) OCQ. Otherwise unique measures such as Buchanon's (1974) have infrequently been used. There is little evidence that any systematic effort to establish a reliable and valid multidimensional measure of OC has been undertaken until the work of Meyer and Allen (1984) and McGee and Ford (1987).

Because they are potentially more open to managerial change efforts, role-related characteristics and work experiences have been investigated the most frequently. However, the distinction between these two categories is quite blurred (Meyer & Allen, 1988). Variables falling into these two categories that have been commonly linked to OC are; role ambiguity (-), role clarity (+), role stress (-), role overload (-), and role conflict (-); job design characteristics such as job scope, task identity, responsibility, autonomy, feedback and participation in decision making; job attitudes such as job satisfaction and job involvement; group norms, met expectations and realistic job previews, social involvement, supervisor relations such

as initiating structure and providing consideration, feelings of personal importance, self-image reinforcement, person-job fit, organizational dependability, and organizational instrumentality.

These research efforts have typically been correlational and ungrounded theoretically. Therefore, little evidence for causal relationships exists. The vast number of different variables does not lend itself to an increased understanding of the OC construct and instead, creates confusion. It would be useful to find a "silk thread" that ties these many antecedents together, capturing their relationships with a multidimensional conception of OC and at the same time consolidating the long list of variables currently in existence. The fact that OC relates to such a long list of variables may also be a function of inadequate, global operationalizations of the construct such as the OCQ measure and the RT and HA scales.

Structural characteristics that have consistently related to OC are organizational formalization, decentralization and functional interdependence. This work in general does not appear to lead in any particular direction. Other structural variables such as organizational size and span of control have been investigated and are unrelated to OC. The broad focus of structural characteristics may have a watered-down or minimizing impact on more micro-level job attitudes such as

OC. Individuals may be less aware of and affected by overall organizational features (Indik, 1968; Schneider, 1983). Climate research suggests that the organizational member is more affected by processes in their immediate environment (e.g. office or department verses overall organization) than by those at the organizational level. It is important to notice too, that the organizational variables that do relate to OC (formalization, decentralization, and interdependence) are probably transmitted to lower organizational levels that impact on the organization member's immediate work environment. Formalization, decentralization and interdependence inherently have an impact on the role-related characteristics and work experiences mentioned earlier. It is likely that organizations characterized by formalization have less role-ambiguity and more role-clarity and would therefore be expected to relate to organizational commitment. Similarly, organizations characterized by decentralization and interdependence probably allow for more feedback and participation in decision making, and have more informal supervisor-subordinate and peer interaction patterns. Finally, structural characteristics may be too static in the short-term, to consider relative to OC. The formation and maintenance of OC, as a job attitude, is better understood when considered relative to more dynamic process variables. Mowday, Porter and Steers (1982)

originally postulated a dynamic and reciprocal influence process between committed attitudes and committed behaviors. Meyer and Allen (1988) have recently provided preliminary support for this postulate. This underscores the importance of using more dynamic process variables in future research on OC and is consistent with Kanter's social-psychological level of analysis.

Personal variables that have typically been related to OC are age (+), organizational tenure (+), education (-), need for achievement (+), and protestant work ethic (+). These relationships emerge with the RT and HA scales as well as with the Mowday et al. OCQ measure. It is the general consensus in the field that situational variables, particularly those capturing work experiences and role-related characteristics, account for significantly more variance in OC than personal variables (Blau, 1987; Bateman and Strasser, 1984; Colarelli, Dean & Kostanz, 1987; Davis-Blake & Pfeffer, 1989; DeCotiis & Summers, 1987; Morrow, 1983). Recent research efforts investigating the impact of perhaps more pertinent personal variables such as negative affectivity have corroborated this position (c.f. Fullagar & Clive, 1989; Organ & Konovsky, 1989; Witt & Boerkrem, 1989). Although it is important to recognize that personal characteristics inevitably interact with situational characteristics in the formation and maintenance of attitudes and behavior, given the existing confusion in the

OC literature it is advisable to acquire a better understanding of the more primary situational influences before proceeding into the personality domain.

SUMMARY OF ANTECEDENTS

It is useful to conduct research on the causal antecedents of OC within the context of a model. Antecedents in the model should be taken from the work characteristics and role-related experience categories because they overlap conceptually and provide the most promising research direction to date. Antecedent variables should capture the dynamic organizational processes through which OC, as a job attitude, is established and maintained. Antecedent variables should also be chosen such that they consolidate and improve upon the extensive list of existing antecedents. This can be accomplished by selecting a variable which reflects an appropriate level of analysis meaningful to understanding OC (i.e. a social-psychological level) and which subsumes, at least in part, existing variables.

LEADERSHIP AND THE SUPERVISOR-SUBORDINATE DYAD UNIT OF ANALYSIS

Leadership theory and research provides a productive tool or "silk thread" for synthesizing the literature on antecedents to OC. It is a dynamic organizational process operating at a social-psychological level of analysis. It is also a salient work experience in which both leaders and

followers assume definite roles and role-related behaviors. Unfortunately, and to a fault, there has been little integration between OC research and leadership research with the exception of some minor attention to the "initiating structure" and "providing consideration" concepts (Bateman & Strasser, 1984).

This is surprising given the theoretical and empirical justification for integration. Support for tapping the leadership domain to facilitate our understanding of OC comes from a diverse number of areas. First, leadership by definition overlaps with the theoretical sources of OC posited by Etzioni. Etzioni suggested that organizations are characterized by different types of compliance systems (symbolic, coercive, and exchange) that influence individuals to develop certain involvement types (moral, alienative, and calculative). Similarly, leadership, despite its many definitions, has as its most consistent element a process of influence between a leader and his or her followers (Hollander, 1985). An important conceptual connection exists between the different styles a leader or supervisor exerts to gain compliance from or influence over subordinates and the attitudes of organizational involvement subsequently exhibited by these subordinates. Yukl (1981, p. 45) corroborates this connection by indicating that the five power bases identified by French and Raven (1959) represent different sources of leader influence and in

different combinations lead to three types of outcomes; commitment, resistance or compliance. These outcomes parallel Etzioni's involvement types exactly.

Leadership should be investigated as an antecedent to OC because of its nature as an influence process. This overlaps with Etzioni and Kanter's theoretical writings regarding how different types of OC occur (e.g. in response to different types of organizational compliance and influence systems). Leaders are extensions, and often direct bearers of organizational practices and policies aimed at gaining member cooperation. The social exchange theory of leadership (Hollander, 1980) provides an example and framework for understanding the processes underlying the development of influence between leaders and their subordinates. In so doing, the theory offers both theoretical and empirical support for the proposed connection between leader influence strategies and subordinate attitudes of commitment.

From a theoretical standpoint social exchange considers leadership as a mutual influence process which occurs between leaders and subordinates as a consequence of leader and subordinate perceptions, expectations and goals, within the context of an organizational or group system. Leadership is explicitly distinguished as a process built over time, in which leaders rely on followers for perceived esteem, status and heightened influence, while followers

rely on leaders to fulfill their expectations for equity (regarding psychological and material rewards and treatment) and for competence in achieving group goals (Hollander, 1985; Hollander, 1980; Hollander & Julian, 1969).

The relative amount of esteem, status and influence a leader possesses contributes to an important feature of the leader's role-- his or her legitimacy in the eyes of followers. Legitimacy is also, of course, achieved through competence and success in meeting follower expectations and fulfilling group goals. Leader legitimacy is initially acquired through the leader's contributions and loyalty to group goals and norms. Later in the process, legitimacy can be acquired through "idiosyncracy credits" (Hollander, 1958). That is, leaders who have "an accumulation of positively disposed impressions residing in the perceptions of relevant others [followers] . . .may deviate from the common expectancies [and norms] of the group" (Hollander, 1958, p. 120). The accumulation of idiosyncracy credits allows the leader more "latitude for innovation" and even greater potential for influencing followers beyond that potential initially acquired through competence and conformity with regard to group goals and norms.

This latitude implies that the leader's source of influence (whether through perceived competence, conformity or expectations for innovation) is a relevant element in the leadership process and affects follower perceptions,

expectations and attitudes (Hollander, 1980; Hollander & Julian, 1969). It also implies, to the extent that followers expect innovation or the system requires change to progress, that the leader must provide a new, shared set of values, goals, and horizons with which the group can identify. Hollander and Julian (1969) have underscored the importance of followers' identification with their leaders by indicating that leaders can provide a shared "social reality or outlook", and they have called for closer scrutiny of this process.

Hollander (1980, 1978, 1958) has indirectly addressed the issue of group identification through his emphasis on the importance of perceived leader motivation. He states that the leader's motivation to provide followers with a reality that meets their underlying values and needs is critical to the retention of leader status. More specifically, and separate from leader competence, the leader's perceived motivation toward the group, in terms of interest in group tasks and interest in group members is very important. In essence,the leader too must identify with the group. Additionally, the perceived equity or fairness of the leader is also important to the retention of status. Research by Julian and Hollander (1966, in Hollander & Julian, 1969) supports these contentions. In general, all the essential elements of social exchange theory, including competence, conformity, idiosyncratic

influence, equity, esteem, status and leader legitimacy have all been supported by empirical research (Hollander, 1985; Hollander, 1980; Hollander & Julian, 1969) and the theory is a very useful one for understanding influence processes in organizational contexts.

Social exchange theory supports the relevance of examining leadership as a dynamic influence process related to OC. It explains the impetus for the development of influence between both leaders and subordinates as stemming from an open system's needs to accomplish individual and system goals and incorporates the need for innovation, or responsiveness to change, where necessary. This system concept is consistent with Kanter and Etzioni's postulates regarding system functioning as well as their assertions regarding the formation of particular types of commitment attitudes on the part of organizational members. In addition, similar to Etzioni and Kanter, the social exchange model assumes a social-psychological level of analysis and focuses on the supervisor-subordinate or leader-follower dyad. Finally, social exchange theory explains the actual development of mutual influence between leader and follower through the complex formation of roles, perceptions and expectations and implicates the importance of concepts such as identification with organizational and individual goals and values. These concepts are explicitly linked to attitudes of commitment by virtue of the multitude of

commitment definitions relying on them. Social exchange theory also includes, either explicitly or implicitly, normative, instrumental and affective components. These parallel the components which constitute the Etzioni and Kanter commitment typologies and subsume numerous unidimensional definitions of OC as well. In total, the social exchange model implicates the supervisor-subordinate dyad as a primary causal factor in the formation of subordinate perceptions, expectations and attitudes such as OC.

Additional evidence for the link between leadership processes and the development of subordinate attitudes is provided by the Vertical Dyad Linkage (VDL) theory of leadership, also known as Leader-Member Exchange (LMX) (Graen, 1983; Graen & Cashman, 1975). This model is based in role theory and postulates that leader-subordinate relations emerge from a dyadic series of reciprocal interactions termed the "role-making process" (Graen, 1983; Graen, Orris & Johnson, 1973). The role-making process involves a sequence of phases in which the supervisor first assesses the abilities and disposition (e.g. competence, dependability, compatibility) of the subordinate and then both supervisor and subordinate negotiate and reach consensus regarding the nature of their relationship. Issues such as subordinate influence in decision-making, the level of mutual sharing of information, the nature of work

assignments, the degree of subordinate authority and independence, and the degree of support, concern and trust are negotiated during this process and eventually evolve into set patterns of interaction (Graen & Scandura, 1987) or norms for behavior. "Negotiating latitude", or the constellation of mutual influence strategies that ultimately characterize the nature and quality of the supervisor-subordinate relationship will vary for different dyads. Graen (1983) summarizes "negotiating latitude" as the subordinate's perception of his supervisor's flexibility in allowing the subordinate to make changes in his or her job, and the supervisor's inclination to use formal authority to help solve problems in the subordinate's job. The outcomes of different leader-subordinate interactions indicate that dyadic relationships characterized by high "negotiating latitude", denoted as "in-group membership" for subordinates, are characterized by mutual trust, respect and liking, increased subordinate discretion and decision participation, extra-contractual behavior exchange, and a sense of a common or shared fate (Graen & Schiemann, 1978). "In-group" relationships possess mutual influence between supervisors and subordinates with the use of persuasion and negotiation leading to commitment. On the other hand, "out-group relationships" are characterized by unidirectional, downward influence from the supervisor, relationships defined strictly by formal organizational role

prescriptions, contractual behavior exchange, and a loosely coupled fate between the supervisor and subordinate. (Dansereau, Graen & Haga, 1975; Duchon, Green & Taber, 1986; Graen & Cashman, 1975; Graen & Schiemann, 1987; Liden & Graen, 1980). Here "out-group" members exhibit compliance rather than commitment in response to low levels of mutual influence and supervisory influence strategies that are more formal and directive. Yukl (1981) indicates that the primary source of influence in "out-group" relationships stems from (Yukl uses the French and Raven [1959] definitions.) legitimate power with some coercive and reward power.

VDL theory first provides justification for linking leadership and OC because of the importance that role theory has in the formation of both concepts. VDL theory explicates the role-making process while OC, perhaps because of its overall lack of theory, does not. Empirically however, OC is very strongly associated with role related variables such as role clarity, role conflict, role stress and role ambiguity (Jamal,1984; Morris & Koch, 1979; Morris & Sherman, 1981). It makes sense that a job attitude like OC with the organization as a conceptual focal point for the attitude would be embodied in the organization member's role.

There is also separate empirical support in the VDL, leadership and OC domains for linking these constructs.

Graen and Cashman (1975) found that "in-group" members high in "negotiating latitude" (HNL) had higher levels of productivity in terms of both the quality and quantity of work produced in comparison to a low "negotiating latitude" (LNL) "out-group". The HNL group also had significantly more positive attitudes toward their work in areas such as the motivating potential of the job, their preferred work load, the level of role conflict and role ambiguity, and the overall career relevance of their jobs. Finally, both supervisors and subordinates in the HNL group reported higher degrees of loyalty and support. Graen and Wakabayashi (1986) in a seven year longitudinal study found that HNL status individuals had significantly faster rates of promotion as well as significantly larger bonuses in comparison to LNL individuals. Vecchio and Gobdel (1984) report that HNL "in-group" members have higher performance ratings, a lower propensity to quit their jobs, and higher satisfaction with their supervision than "out-group" members. In general, research shows that HNL status results in more positive attitudes and affect toward one's work situation and more positive work situations and relationships in general (Dansereau, Graen & Haga, 1975; Graen, Novack & Sommerkamp, 1982). Graen, Cashman, Ginsberg and Schiemann (1977) corroborate many of Dansereau et al.'s findings reporting that in comparison to LNL members, HNL members are more involved in administrative decision making,

behave more in accordance with their supervisors expectations, receive more information, influence, latitude for action, supervisory support and acceptance, and are more satisfied with the technical competence of their supervisors. Liden and Graen (1980) report "in-group" members assumed greater job responsibility, contributed more to the job, and were evaluated as better performers in comparison to "out-group" members. Finally, Graen and Schiemann (1978) provide additional evidence that in HNL relationships there is greater supervisor-subordinate agreement regarding job problems, the nature of the supervisor-subordinate relationship itself and common perceptions of relational sensitivity, information sharing, attention and support. Taken together, the VDL research indicates that the nature of supervisor-subordinate relationships has a clear and definite impact on subordinate attitudes, perceptions and behavior. Many of the common findings regarding heightened performance, positive affective attitudes and evaluations, and shared perceptions and outlooks between supervisors and subordinates are outcomes one might expect to be manifested by an organizational member possessing some form of affective, moral, control or cohesion commitment.

In a similar vein, Smith, Organ and Near (1983) found leader supportiveness predicted job satisfaction. Motivation and job satisfaction, although distinct and

separate from OC (Brooke, Russell & Price, 1988; Colarelli, Dean & Kostanz, 1987; Mowday et al, 1982) are related in systematic ways to OC and one would expect to see similar positive relationships between in-group membership and leadership supportiveness with OC.

Bateman and Strasser (1984) found a strong relationship between leader reward behavior and OC. Lee (1971) reported that positive supervisor-subordinate interactions led to increased subordinate commitment. Stumpf and Hartman (1984) found a positive relationship between level of work unit influence possessed by the individual and the individual's OC. Buchanon (1974) and Lodahl (1964) reported a relationship between increased social involvement in the work place and increasing levels of OC. Leiter and Maslach (1988) reported a relationship between subordinate OC and both the quality and quantity of pleasant and unpleasant supervisor contacts. In addition subordinates' levels of personal accomplishment were predictive of OC. Kottke and Sharafinski (1988) reported that subordinates rely more on their direct supervisors for information and support than the organization as a whole. Reichers (1986) found congruence between subordinate and managerial goal orientations was predictive of OC. Similarly, Meglino, Ravlin and Adkins (1989) found that supervisor-subordinate value congruence was significantly related to OC. These empirical findings indicate that supervisors can have a

direct impact on subordinates' OC.

Less direct research support comes from the OC research. Although this work does not usually examine supervisor-subordinate relations directly, the variables that are consistently associated with OC appear to be ones which a supervisor would have control over and/or deliver directly to the subordinate. For example, the role-related variables mentioned earlier are probably in large degree controlled or at least executed by the supervisor. Another example is decision-participation. It is consistently related to OC (Rhodes & Steer, 1981) and it is quite likely that subordinates participate in making decisions with or through their superiors. In general, OC is consistently related to enriched job characteristics such as job scope and challenge (Blau, 1987; Buchanon, 1974; Meyer & Allen, 1988; Steers, 1977) which are in all likelihood delivered and or created by supervisory behaviors and expectations. Finally, there is a growing body of research indicating that distributive justice (the degree of perceived fairness with which organizational rewards are related to performance inputs by organizational members) (Brooke et al., 1986), reward structure saliency (Scholl, 1981), and perceived instrumentality (Fullagar & Barling, 1989) are positively related to OC. Scholl (1981) and VDL theory both indicate that the supervisor is the medium through which rewards, punishments and other psychological and material benefits

are exchanged. Gould (1979) provided evidence that the supervisor can strengthen or weaken the link between job performance and expected rewards or outcomes.

Finally, indirect support for treating the supervisor-subordinate influence dyad as a causal antecedent to OC is provided by work in the organizational climate and socialization areas. The supervisor is a primary agent of pre-entry and early socialization to the organization (Gordon et al., 1980; Wanous, 1982; Schein, 1985). The development of OC has been empirically linked to important socialization stages such as the confirmation of pre-entry job expectations (Arnold & Feldman, 1982; Buchanon, 1974; Dean, Ferris & Kostanz, 1988; Steers, 1977) early socialization experiences and later career stages (Meyer & Allen, 1988; Morrow & McElroy, 1987; Pierce & Dunham, 1987). Mowday et al. (1982) proposed a conceptual model for the development of OC which consisted of three stages: 1) the pre-entry stage, 2) the early employment work experience stage, and 3) the middle/late career stage. Pierce and Dunham (1987) found support for all the major linkages in this model. Thus, while supervisors have been implicated directly in the socialization process and socialization has been empirically and theoretically linked to OC, little attention has been paid to the link between supervisory processes such as socialization and OC. Examining the supervisor-subordinate influence dyad would

capture relevant socialization processes implicated in the development of OC.

The organizational climate literature (Litwin & Stringer, 1968; Schneider, 1983) suggests that individual-organizational value matches facilitate employee retention and organizational functioning. Schneider (1983) said that individuals are attracted to and selected by organizations because of shared values and goals. This similarity is what underlies person-organization matching and prevents attrition from the organization. OC has in part been defined as a value-congruence between individual and organizational goals and values and is therefore similar to Schneider's "Attraction-Selection-Attrition" model in the organizational climate area. In addition, the consequences of OC or a lack of OC have typically been measured in terms of retention in the organization or turnover. OC is a very strong predictor of turnover, tenure and intention to remain in the organization and therefore fits well with Schneider's interactional climate conception of "Attraction-Selection-Attrition".

Litwin and Stringer (1968) conceptualized climate as a perceptually based understanding of organizational events, features and processes, which mediates the effects of the organizational system on individual motivation and behavior. Given these conceptual similarities, evidence that leadership may have a strong impact on the development of

climate (Kozlowski & Doherty, 1989), and the idea that climate is a probable source of much informal socialization, the organizational climate literature provides additional indirect support for examining OC relative to the leadership influence process.

SUMMARY

The literature on OC, leadership, role theory, influence processes, socialization and climate, considered together, suggest that the supervisor-subordinate influence dyad, with the supervisor as an extension of organizational policies, practices, goals and values is a very viable causal antecedent in the development of OC. The supervisor-subordinate dyad provides an appropriate level of analysis for understanding OC because it is not too global or removed from the immediate experiences of organization members yet it still captures important organizational processes that are implicated in the development of OC. Supervisor influence on subordinates will be operationalized with the Hinkin and Schriesheim scales (1989) in Appendix D.

CONSEQUENCES OF OC AND A PROPOSED MODEL

In order to examine the proposed multidimensional OC

construct within the context of a causal model it is useful to consider the consequences of OC. It is likely that the three different dimensions of OC that have been posed may have differential consequences. There is evidence that positive affective forms of commitment are predictive of better work performance (Meyer et al, 1989; DeCotiis & Summers, 1987), extra-role pro-social behavior and intent to remain with the organization (O'Reilly & Chatman, 1986). Extra-role pro-social behaviors are those which go beyond the required job duties and description. For example, helping a coworker with their work when it is not required.

Calculative exchange-based commitment does not appear to be related to extra-role behavior or within-role job performance (O'Reilly & Chatman, 1986) and has also been found to be negatively related to job performance (Meyer et al., 1989) and intent to remain in the organization (O'Reilly & Chatman, 1986). The negative relationship between job performance and calculative exchange-based commitment was found using the Meyer and Allen (1984) Continuance Commitment (CC) scale and did not distinguish between the lack of available job alternative CC items and the personal sacrifice from lost "side-bets" CC items. The source for this negative relationship is thus unclear. It seems logical to suggest that the negative relationship may stem more from the lack of available alternatives CC items which parallel Etzioni's Alienative Commitment type.

There is also indirect support for differential behavioral consequences being associated with different commitment dimensions. Brief and Motowidlo (1986) indicate that positive affective definitions of OC are suggestive of pro-social behaviors. Job satisfaction, a related but distinct job attitude, has been significantly associated with extra-role pro-social behaviors (Smith et al., 1983; Bateman & Organ, 1983; Motowidlo, 1984). Puffer (1987) found satisfaction with material rewards predictive of pro-social behavior. More importantly, she found reciprocity or the notion of fairness as defined by equity theory to predict pro-social behaviors while a lack of confidence in management was related to non-compliant behaviors. Although the relationship between job satisfacton and performance behaviors, whether intra-role or extra-role is usually tentative, Organ (1977) has argued that certain boundary conditions based in equity theory strengthen the potential relationship between job satisfaction and behavior. Two relevant boundary conditions state that; 1) the person receiving interpersonal rewards must not feel their behavioral freedoms are unreasonably constrained or manipulated, and 2) the benefactor (or supervisor) must be considered a voluntary provider of rewards rather than an involuntary provider compelled by external factors. These boundary conditions directly implicate the supervisor in his or her influence role of providing equitable rewards.

These conditions coupled with the above research findings indicate that job attitudes may be more linked to behaviors when conditions of equity are perceived to be present. OC has been strongly linked to distributive justice and positive forms of affective OC are most related to pro-social behavior, probably because, given their identification and value-congruence elements, they presume the existence of equity.

Thus it is reasonable to conclude that the consequences of positive forms of OC are likely to be pro-social, extra-role behaviors and the intention to remain in the organization. It is also hypothesized that calculative exchange based forms of OC, when coupled with conditions or perceived equity are followed by the intention to retain organizational membership. Finally, Alienative Commitment is hypothesized to be associated with the behavioral intention of leaving the organization.

CHAPTER II

PROBLEM STATEMENT AND HYPOTHESES

A model of antecedents and consequences of OC has been proposed such that particular types of antecedent influence strategies are predictive of particular dimensions of OC. Particular dimensions of OC are then hypothesized to result in differential types of behavioral intentions to either remain in or leave the organization. Specifically, it is hypothesized that:

1) Supervisor-subordinate dyads characterized primarily by supervisor use of expert and referent influence strategies (reflecting a symbolic compliance system) will result in Moral OC and Affective OC (affectively positive commitment) and the intention to maintain organizational membership.

2) Supervisor-subordinate dyads characterized primarily by supervisor use of coercive influence strategies (reflecting a coercive or forced compliance system) will result in Alienative OC and Continuance OC based on a lack of perceived alternatives (affectively negative commitment) and the intention to leave the organization.

3) Supervisor-subordinate dyads characterized primarily by supervisor use of legitimate and reward influence strategies (reflecting a calculative exchange-based commitment) will result in Calculative OC. See Appendix E containing the model explicating these hypotheses.

This research represents a two-pronged effort. The first stage examines the construct validity of the Penley and Gould (1988) commitment scale and the Meyer and Allen (1984) commitment scales. First, the hypothesized three factor structure of each of these two measures is examined separately. Then, the overall correspondence between factors across the two measures is examined. Based on theoretical and empirical evidence differential relationships between latent factors are proposed.

Within the Penley and Gould Organizational Commitment Scale (OCS) the moral commitment dimension is predicted to be positively related to the calculative dimension and negatively related to the alienative dimension. Similarly, the Meyer and Allen (1984) affective commitment scale (AC) is expected to be positively related to continuance commitment based on personal sacrifice and negatively related to continuance commitment based on a lack of perceived alternatives. Across scales, moral commitment is expected to relate positively to the AC scale; calculative commitment is expected to relate positively to the CC scale based on personal sacrifice; and alienative commitment is expected to relate positively to the CC scale based on a lack of perceived alternatives. Interrelationships within and between the two commitment scales and their dimensions will yield convergent and discriminant construct validity evidence.

The second stage of the research examines the impact of various supervisory influence strategies on the development of different dimensions of subordinate OC as hypothesized above. Both the Penley and Gould and Meyer and Allen Scales are examined relative to supervisory influence. These a priori hypotheses will be examined within the context of a causal model.

CHAPTER III

METHOD

Sample

Data were collected from 656 full-time employees from a diverse number of organizations, occupations and occupational levels. Of the 656 surveys collected, 21 were removed because they were incomplete, resulting in a final sample of 635 subjects.

Surveys were collected from evening session graduate and undergraduate students enrolled in universities in the New York Metropolitan area. The statistical analyses used required a large sample size and as a result, surveys were also collected from a non-student convenience sample of individuals working full time. These subjects were contacted by the researcher and were employed primarily in computer, legal, social service, insurance, sales and secondary education organizations. Four hundred eighty one subjects were obtained from the evening student subsample and 154 surveys were returned via mail in response to a blanket distribution of 300. The response rate for the non-student subsample was 51.3 percent.

Sample Demographics

Demographics for the total sample of full-time workers indicated that 42 % (n=264) were male and 58 % (n=370) were

female. Twenty-two percent (n=140) were Black, 56 % (n=354) were White, 11 % (n=70) were Hispanic, 7 % (n=40) were Asian or Pacific Islander and 4 % (n=23) responded as other. Four percent (n=27) of the sample were high school graduates, 30 % (n=188) had some college, 24 % (n=152) had an Associate's degree, 13 % (n=83) had a Bachelor's degree, and 28 % (n=183) had some graduate school or a graduate degree. The mean income of the total sample was $33,400 and the average family size was 2.5 people. The average age of respondents was 30 years.

Table 1 contains relevant demographic information on organizational, occupational and supervisor-related characteristics for the total sample as well as for the student and non-student sumbsamples. Although there were moderate differences between the student and non-student samples with regard to organizational and job tenure, age, occupational group and income, these demographic variables did not impact upon differences in mean scale scores on the supervisory influence scale or the commitment scales, with the exceptions of the Penley and Gould calculative commitment dimension and the coercive influence strategy. Table 2 contains the two subsample means, standard deviations and t-tests on each of the subdimensions of the supervisory influence scale and the commitment scales. The absence of any meaningful differences between the two subsamples suggests the combined sample used for LISREL

Table 1

Demographic Data Segmented by Subsample

	Total Sample (n=635)	Student Subsample (n=481)	Non-Student Subsample (n=154)	t Value
Average Years with the Organization	4.3 (n=634)	3.8 (n=480)	5.7 (n=154)	3.4*
Average Years in the Job Title	3.0 (n=632)	2.5 (n=478)	4.4 (n=154)	4.3*
Average Years with Current Supervisor/Boss	2.2 (n=632)	2.1 (n=478)	2.7 (n=154)	2.5*
Average Age	29.6 (n=630)	28.1 (n=476)	34.2 (n=154)	8.0*
Average Income	$33,420 (n=631)	$30,920 (n=477)	$41,180 (n=154)	6.5*

*p<.01

Table 2

Subsample Means, Standard Deviations and t Values

	Student Sub-Sample Mean (sd) (n=481)	Non-Student Subsample Mean (sd) (n=154)	t Value
Supervisory Influence Strategies			
Reward	3.59 (0.99)	3.45 (1.05)	1.45
Legitimate	3.89 (0.77)	3.98 (0.64)	1.59
Expert	3.73 (1.01)	3.84 (0.92)	1.15
Referent	4.01 (0.85)	4.11 (0.74	1.29
Coercive	3.50 (0.99)	3.79 (0.96)	3.11*
Penley and Gould Commitment Dimensions			
Moral	4.74 (1.25)	4.66 (1.27)	0.65
Calculative	4.82 (1.28)	4.29 (1.25)	4.49*
Alienative	3.54 (1.39)	3.32 (1.25)	1.72
Meyer and Allen Commitment Dimensions			
Affective	4.03 (1.41)	4.14 (1.47)	0.84
Continuance	4.40 (1.33)	4.25 (1.44)	1.25

*p<.01

analyses was not confounded by subsample differences in demographics, particularly as these relate to the exogenous variables in the structural model.

Table 3 presents the percentage of respondents who reported being in each of the nine occupational categories for the total sample. The sample represents each of the nine occupational categories with the largest proportion of respondents being from the clerical-secretarial (20.2 %) and administrative (23%) groups. Table 4 presents the intercorrelations for sample demographic variables with each of the supervisory and OC dimensions under investigation.

Procedure

Faculty members from four public and private universities in the New York metropolitan area were contacted directly by the researcher. Individual instructors were solicited for permission to visit their evening classes during regular class hours in order to administer surveys. A standardized, non-leading description of the research was presented to solicit student participation and all subjects in the student subsample signed an informed consent form prior to completing the surveys. (See Appendix F for the introductory script and informed consent form.) Participation was voluntary and anonymous and all students were invited to participate regardless of whether they were employed full-time, part-

Table 3

Occupational Groupings of Samples

Occupational Group	Percentage of Total Sample	N
Operator-Laborer	2.5%	16
Craftsman	1.3%	8
Clerical-Secretarial	20.2%	128
Supervisor-Foreman	12.3%	78
Technical/Semi-professional	4.3%	27
Administrator	23.0%	146
Manager	11.5%	73
Professional	13.1%	83
Other	11.8%	75

Table 4

Correlation Matrix of Study Variables

	1	2	3	4	5	6	7
1. Reward Pow	1.00	___	___	___	___	___	___
2. Legitimate Pow	.29*	1.00	___	___	___	___	___
3. Expert Pow	.24*	.44*	1.00	___	___	___	___
4. Referent Pow	.29*	.55*	.49*	1.00	___	___	___
5. Coercive Pow	.06	.13*	-.10*	-.02	1.00	___	___
6. Moral OC	.22*	.22*	.25*	.28*	-.12*	1.00	___
7. Calculative OC	.20*	.14*	.03	.09**	.08**	.12*	1.00
8. Alienative OC	.16*	.13*	-.27*	-.22*	.33*	-.38*	.02
9. Affective OC	.21*	.21*	.28*	.31*	-.21*	.68*	.02
10. Continuance OC	-.03	.05	-.06	.08	.17*	-.05	.18*
11. Org. Tenure	-.10*	.01	-.07	.03	.02	.10*	-.17*
12. Job Tenure	-.15*	.03	-.12*	.04	.06	.04	-.18*
13. Boss Tenure	.03	-.01	-.06	.06	-.02	.05	-.13*
14. Age	-.01	.02	-.02	.05	.05	.13*	-.22*
15. Income	.03	.07	.01	.04	.05	.15*	-.05

Note: N = 635
* p<.01
**p<.05

Table 4 (Continued)

Correlation Matrix of Study Variables

	8	9	10	11	12	13	14	15
8. Alienative OC	1.00	___	___	___	___	___	___	___
9. Affective OC	-.53*	1.00	___	___	___	___	___	___
10. Continuance OC	.26*	-.12*	1.00	___	___	___	___	___
11. Org. Tenure	.09**	.13*	.13*	1.00	___	___	___	___
12. Job Tenure	.08**	.02	.13*	.55*	1.00	___	___	___
13. Boss Tenure	.04	.10*	.06	.52*	.42*	1.00	___	___
14. Age	-.02	.10*	.04	.61*	.51*	.37*	1.00	___
15. Occupation	-.16*	.18*	-.06	.12*	.00	.08**	.12*	___
16. Income	-.13*	.17*	-.06	.38*	.23*	.24*	.43*	1.00

time or were currently unemployed. Only those respondents indicating they currently worked on a full-time basis were included in this research.

The non-student convenience sample was solicited for participation either in person or via telephone by the researcher and provided with an anonymous, postage-paid mailer package. Three hundred packages were distributed to individuals who were employed on a full-time basis and were not students. Each package contained an introductory cover letter describing the research (Appendix G).

All subjects were administered five survey questionnaires regarding supervisory influence strategies (one survey), organizational commitment (two surveys), and intent to remain in the organization (two surveys), as well as a background information section. These materials were administered in a fixed sequential order as one package. The surveys were ordered sequentially to avoid or reduce response bias. For example, OC surveys preceded the supervisory survey because it was probable that responses to the supervisory survey would lead individuals to respond in particular ways to the OC surveys. Since supervisory influence was hypothesized to have an independent effect on OC, and OC was not hypothesized to effect supervisory influence, the supervisory surveys were presented after rather than before the OC surveys. The surveys and their order are presented in Appendix H.

Measures

Organizational Commitment. The Penley and Gould (1988) and Meyer and Allen (1984) scales were used to assess OC. The Penley and Gould OCS is a 15 item, 7 point Likert response format scale with five items comprising each of the three moral, calculative and alienative dimensions. Penley and Gould (1988) provide evidence of factor structure congruence concerning their three dimensions across five samples. Most within dimension items possess item-intercorrelations of .90 or above. Internal consistency reliability for each of the three commitment dimensions, as measured by Cronbach's alpha was generally above .80 for each of the five samples. Coefficient alphas for the combined sample were .86 for alienative commitment, .86 for moral commitment and .78 for continuance commitment.

The Meyer and Allen (1984) AC and CC scales are eight items each and are presented in sequential order together when administered. The response format is a 7 point Likert format identical to the Penley and Gould scale (ranging from strongly agree to strongly disagree). Meyer and Allen report internal consistency reliabilities (Cronbach's alpha) of .87, .88 and .84 for the AC scale in three separate samples. Convergent validity with the OCQ (r=.78) was also demonstrated with the AC scale. The CC scale has exhibited reliability coefficients of .77, .73 and .74. It has also demonstrated discriminant validity with two affective

measures of OC, the OCQ (r=-.06) and their own AC scale (r=.01). In the present study internal consistency reliability coefficients (Cronbach's alpha) for the AC and CC scales were .83 and .72, respectively.

A cautionary note is in order regarding the two OC surveys. The items which comprise both the Meyer and Allen, and Penley and Gould scales represent imperfect measurement devices. They do not directly tap the pure construct of OC, and instead represent measures of the expression of OC. For example, dedication to one's organization is a manifestation or outgrowth of organizational commitment rather than organization commitment itself. Because the scales represent an indirect form of measurement, they are open to potential sources of contamination or error such as individual motivations for social desirability or other need states and environmental circumstances that might influence the individual's response. The scales are not however any less sound than other attitude measures in the field and they reflect research findings and knowledge in the field of OC to date.

Supervisory Influence Strategy Scale. The 20 item, 5 point Likert response format (strongly agree to strongly disagree), scale developed by Hinkin and Schriesheim (1989) was used to assess supervisory influence strategies. The scale measures the five bases of social power or influence

proposed by French and Raven (1959) relying on 4 items to tap each of the five influence strategies. Hinkin and Schriesheim provide reliability evidence for their five influence strategies across three samples. Reward power reliability coefficients using Cronbach's alpha were .80, .77 and .77. For coercive power, reliability coefficients ranged from .80 to .86. Reliability coefficients for the remaining three influence strategies (legitimate, expert and referent) were .83 or greater across all of the three samples. In addition, Hinkin and Schriesheim provide discriminant validity evidence for their scale using measures of both job satisfaction and organizational commitment (OCQ). In the present sample reliability coefficients using Cronbach's alpha were .76 for reward power, .84 for coercive power, .79 for legitimate power, .78 for expert power and .81 for referent power.

Intent to Remain. Intent to stay or leave the organization was assessed using Bluedorn's (1982) Staying or Leaving Index (SLI). This is an eight item scale with a seven point likert response format ranging from excellent to terrible (See Appendix I). Bluedorn (1982) reports significant relationships between leaving intentions and actual leaving behavior across twenty-three studies. In nineteen of these 23 studies, the SLI was the most accurate predictor of actual staying or leaving behavior when

compared to numerous other potential predictors. Reliability coefficients for the SLI (Cronbach's alpha) across five samples range from .87 to .95. In addition, factor analyses across these five samples indicate the SLI has a clear unidimensional structure with all eight items loading highly on the same single factor.

The SLI was modified slightly to improve upon the item wording. Instead of asking "How do your rate your chances of still working for your organization", the item was revised to read, "Assuming that it is entirely up to you, how likely is it that you will still be working for your present organization". The second question stem was revised to read as follows, "Assuming that it is entirely up to you, how likely is it that you will quit your organization". The original wording asked, "How would you rate your chances of quitting your organization". The revisions were intended to clarify that staying or leaving is a volitional intention on the part of the organizational member and that the respondent is not being asked to comment about organization separations that are out of his or her awareness or control, such as being laid off or fired. Cronbach's alpha for the SLI in this study was .94.

The Hrebiniak and Alutto scale (1972) was also used to measure intentions to stay or leave the organization. This four item scale has a three point response format ranging from "Yes definitely" to "No definitely not". (See Appendix

J). The authors report a Spearman-Brown reliability coefficient of .79 and a significant association with years in one's current job. Hrebiniak (1974) also reported the HR scale correlated with job tenure (.31), job level (.42) and role tension (-.36). The HR scale was included in this study as an alternative measure of intention to remain in the organization which might relate more strongly to calculative and alienative dimensions of OC. The scale asks the respondent whether they would go to another organization for the same job given only slight changes in pay, status, coworkers or professional creativity. The scale was originally developed as a measure of calculative commitment, but as cited earlier, has numerous problems when used as a measure of OC. The HR scale might prove to be a more sensitive measure of intention to remain with the organization for individuals high in alienative and/or calculative OC. Cronbach's alpha for the HR scale was .85 in this sample.

Analyses

Item-level responses to the Penley and Gould and Meyer and Allen commitment scales were analyzed using confirmatory factor analysis. Based on the hypothesized factor structure proposed in Appendix C, which combines six factors from two scales into a single three factor scale, a series of models representing this structure were developed and tested

relative to the sample data. In addition to evaluating the fit of the hypothesized three factor model, the fit of alternative one, two, four, five and six factor models were evaluated for comparative fit. The alternative models represented combinations of the six commitment factors previously found in the Meyer and Allen and Penley and Gould scales. The LISREL VI and VII structural equation programs (Joreskog & Sorbom, 1986; 1988) were used to test the fit of the sample data to the original three factor model and to modified factor models suggested by theory and iterative LISREL analyses.

A confirmatory factor analytic model was also used to assess the goodness of fit of the sample data to the proposed five factor structure delineated by Hinkin and Schriesheim in their power scale. This effort served as a replication of the factor structure proposed by the original authors and provided additional construct validity evidence for the scale.

A full LISREL structural equation model was used to test the hypotheses between supervisory influence strategies, the various dimensions of organizational commitment, and intent to remain with the organization. Appendix E illustrates these hypotheses. As with the confirmatory factor analyses, item-level data were analyzed in the form of covariance matrices.

The structural equation models available in LISREL VI

and VII consider the measurement relationship between observed variables and their latent underlying factors as well as the hypothesized relationships between latent underlying independent (exogenous) factors or constructs and their associated latent dependent (endogenous) factors or constructs. In examining the relationships between latent variables rather than observed variables, the structural model has the advantage of looking at relationships that are presumably free of measurement error and are therefore more valid or free of bias.

Confirmatory Factor Analysis. Confirmatory factor analysis in LISREL VI and VII uses the maximum likelihood approach to test a priori hypotheses stating that specific subsets of variables (in this instance scale items are the observed variables) legitimately define a prespecified factor or set of factors (latent variables). Covariances among observed sample items are used to estimate factor loadings and uniquenesses that best reproduce the population covariance matrix, based upon the maximization of a likelihood function (Gorsuch, 1983). The general factor model is depicted by the following parameters:

$$\Sigma = \Lambda_x \phi \Lambda_x ' + \Theta_\delta$$

where Σ is the covariance matrix of all item level variables, Λ_x is the variable (p) by factor (m) factor pattern matrix, ϕ is the m x m factor correlation matrix and

θ_δ is a p x p matrix of uniquenesses (including both reliable unique variance and measurement error).

Structural Equation Model Analysis. Structural equation modeling in LISREL VI and VII also relies on a maximum likelihood approach to data analysis. The LISREL model used in this research examined the directional effect that latent supervisory influence variables had upon latent commitment variables. In addition, directional relationships between the latent dependent variables of commitment and intent to remain in the organization were examined. The general structural model is represented by a system of linear structural relationships and is similar to regression analysis. It is depicted by the following matrix parameters:

$$\eta = \mathbf{B}\ \eta + \Gamma\ \xi + \zeta$$

where η represents the latent dependent factors, $\mathbf{B}$ represents the directional paths between the endogenous latent factors, Γ represents the directional relationships between the latent exogenous and endogenous factors, ξ represents the latent exogenous factors, and ζ represents the residual error terms associated with the prediction of η from ξ. Exogenous variables are comparable to independent variables in that they effect changes in the dependent or endogenous variables. Exogenous variables are presumed to have a directional and explanatory affect on endogenous

variables in any given model.

Hypothesis Testing in LISREL

The nature of the hypotheses and design of this research require that causal inferences be based on the statistical evaluation of a series of models. Causal relationships in LISREL cannot be proven, "they can only be established as more or less reasonable relative to alternative specifications" (Joreskog and Sorbom, 1988 p. 1).

Therefore, the confirmatory factor analysis examined a series of separate and nested models to determine whether a three, four, five or six factor model best described the OC item-level data. To determine the number of factors that best fit the data separate models were examined (i.e., a set number of factors was specified for each model). To further evaluate each of these factor models, nested models were compared with each other. All LISREL models can be contrasted in terms of the degree to which they are restricted vs. unconstrained. Restrictedness refers to the number of parameters in a model that are predetermined to act in a certain way (i.e., to assume an assigned value, or to be equal to another parameter). An unconstrained model is one with few or no restrictions wherein parameters are permitted to be freely estimated with minimal specification. Models with the same basic specifications but with a greater

number of constraints are generally considered to be nested within more general models with fewer constraints. For example, Model A is nested within model B if A can be derived from B by imposing constraints on B. Model A can thus be considered a special case of B. The relative increase in lack of fit can thus be evaluated when nested models with increasing constraints are compared.

All factor models were evaluated as unconstrained models, where a set number of factors were specified and all items were permitted to load on one or more of each of the factors. All factor models were also evaluated with a more restricted congeneric factor model, where a set number of factors were specified and each item was permitted to load on only one predesignated (in accordance with the hypothesis) factor. In addition, all factor models were evaluated relative to a highly constrained null model (Bentler & Bonett, 1980) in which the model specified that there were no common factors or no common variance among any of the items.

The hypothesized structural equation model was evaluated in the same manner. A series of hypothesized general models were evaluated relative to a series of more restricted nested models, and relative to a null model which specified that there were no relationships (no common variance) between any of the latent exogenous or endogenous variables.

Fit Indices in LISREL

"The most important issue associated with the analysis of any LISREL model is the assessment of fit between the hypothesized model and the sample data. If the goodness of fit is inadequate, the next logical step is to detect the source of misfit in the model" (Byrne, 1989 p.54). LISREL provides fit indices at two levels of analysis-- fit indices for individual model parameters and fit indices for the overall model. Both should be used in the interpretation of results with the precaution that none of the indices are absolute. Instead, fit indices should be viewed as rules of thumb, which when taken together, provide the most accurate picture of the research findings.

Individual Model Parameter Fit Indices

Feasibility of Parameter Estimates

This involves examining communality, factor loading and regression weight estimates for sufficient magnitude. In addition, covariance matrices such as phi that are not positive definite are an indication that the model may be misspecified and parameter estimates are either not meaningful or cannot be computed.

T-Values

LISREL provides t-values for each of it's parameter estimates. Parameters with significant t-values should be

interpreted as important to the model. t-values of 2.00 or greater are generally considered to be statistically significant (Byrne, 1989). It is important to note that the interpretation of t-values is predicated on the assumption that the overall model fits adequately.

Modification Indices

For each of the parameters that are fixed to a specific value, LISREL provides a modification index. This index represents the relative improvement in fit that would result if the parameter were permitted to be freely estimated rather than constrained to a particular value, holding all other aspects of the model constant. The size of a modification index indicates how much the overall chi-square would drop if the fixed parameter in question were freed. Modification indices are interpreted as a chi-square statistic with one degree of freedom and they are affected by sample size in the same way as the overall chi-square (Hayduk, 1987).

Standardized Residuals

LISREL provides residual information that indicates the discrepancy between hypothesized and sample covariance matrices. This information directly indicates how well the model reproduces the observed data. In general, standardized residuals of 2.00 or less are indicative of

good fit.

Overall Model Fit Indices

Chi-Square

Historically, the most frequently used fit index used to evaluate LISREL models has been the chi-square statistic. As chi-square increases in magnitude so does the discrepancy between the hypothesized model and the sample data. Thus, chi-square is an indication of a lack of fit. It should be interpreted relative to the degrees of freedom in the model. In general, the smaller the chi-square statistic and the closer in value it is to the degrees of freedom, the better the fit of the model. It is widely recognized that the chi-square statistic is sensitive to sample size and to violations of normality assumptions such that larger sample sizes and deviations from normality tend to artificially increase chi-square over and above what would be expected based on model misspecification (Byrne, 1989; Joreskog & Sorbom, 1986).

When nested models are examined a chi-square difference statistic can be computed:

$$\chi^2_{diff} = \chi^2_{constrained} - \chi^2_{less\ constrained}$$

The chi-square difference statistic has degrees of freedom equal to the difference in degrees of freedom for the two models. The chi-square difference statistic indicates whether the placement of additional constraints on a model

significantly reduces the model's fit to the data.

NFI

The Normed Fit Index (NFI) (Bentler & Bonett, 1980) was developed in response to the sample size problems associated with chi-square. The NFI ranges from 0 to 1.00 and is derived from a comparison of a constrained model with a null model:

$$NFI = (\chi^2_o - \chi^2_i) / \chi^2_o$$

where i and o refer to the constrained model and the null model respectively. In confirmatory factor analysis, the null model is usually chosen to be a highly constrained model that assumes no common factors. The NFI in this case indicates the improvement in fit produced by less constrained models that allow common factors. The NFI is less sensitive to sample size than the individual chi-square statistic and values which approximate .90 or better are generally considered to indicate good fit (Byrne, 1989).

LISREL'S GFI

LISREL'S Goodness of Fit Index (GFI) indicates the relative amount of variance and covariance jointly explained by a specified model (Byrne, 1989). Unlike the chi-square statistic, it is less dependent on sample size and reasonably robust against deviations from normality (Joreskog & Sorbom, 1988). The GFI ranges from 0 to 1.00

and values which approximate .90 or better are considered to be indicative of good fit.

LISREL'S Adjusted Goodness of Fit Index (AGFI) differs from the GFI only in that it adjusts for the number of degrees of freedom in the model. It is bounded by 0 and 1.00 and values indicative of good fit are the same as those for the GFI. Given two models that fit equally well, the AGFI will be lower for the one with fewer parameters. The AGFI therefore penalizes more complex models.

RMSR

The Root Mean Square Residual (RMSR) is another index produced by LISREL. It is an indication of the average discrepancy between the observed sample covariance matrix elements and the reproduced covariance matrix hypothesized by a specified model. Higher RMSR's indicate greater discrepancy and poorer fit. Interpretation of the RMSR requires a comparison of the RMSR with the average size of the elements in the input covariance matrix. When the size of the RMSR would have little impact on the elements in the input covariance matrix the fit of the model is considered to be good. This implies that the smaller the size of the RMSR relative to the average size of all the covariances in the input matrix, the better the fit. For example, a RMSR value of .02 would indicate good fit if all the elements in the input covariance matrix were equal to 2.0. This is

because there is very little difference between a value of 2.0 and a value of 1.98. Appendix K contains the sample covariance matrix for the final structural equation model.

CHAPTER IV

RESULTS

Preliminary Construct Validity Analyses

Confirmatory Factor Analysis of the Hinkin and Shriesheim Power Scale

LISREL VI was used to assess the fit of the five factor model proposed by Hinkin and Shriesheim. A more constrained null model which proposed no common factors was also evaluated and used as a baseline for the Normed Fit Index. All models were analyzed using the sample covariance matrix and the sample size, using listwise deletion, was always 635 subjects. All models were evaluated using the fit indices described above as well. Prior to examining the fit of the five factor model, one item was assigned as being fixed to each factor at a factor loading value of 1.00. All other factor loadings for this item were fixed to zero. This "marker" for each factor was chosen by identifying the item with the highest factor loading as assessed in preliminary exploratory factor analysis using SAS. This procedure is commonly used to uniquely identify a factor structure. The following marker items were used for the expert, referent, coercive, reward and legitimate power bases, respectively: 1) "My supervisor can provide me with needed technical

knowledge", 2) "My supervisor can make me feel like he/she approves of me", 3) "My supervisor can make things unpleasant at work", 4) "My supervisor can influence my getting a pay raise", and 5) "My supervisor can give me the feeling I have responsibilities to fulfill".

Table 5 presents the fit indices for each of the five models evaluated. The null model, hypothesizing that there were no common factors among the items, had a very poor fit [χ^2 (190)=5956.21, p<.001; GFI=.39; AGFI=.32; RMSR=.36]. The second unconstrained model allowed all items except marker items to load on any or all of the five hypothesized factors (Marker items do not constrain the model, they serve to identify it). Given the complete unrestrictedness of this model it was expected that the fit to the data would be good {χ^2(100)=333.83; NFI=.94; GFI=.95; AGFI=.89; RMSR=.03]. The second model is a very general one however and does not include added restrictions requiring that each item load on one and only one predesignated factor. The unrestrictedness of this model does not give a strong sense of the structure of the factors. Simple structure requires that each item load on one and only one factor. It is a basic principle in factor analysis which facilitates the interpretation of factors. This simple factor structure is also in keeping with the hypothesized constructs that are purportedly uniquely represented by different subsets of items. An examination of the t-values in the factor pattern matrix of

Table 5

Supervisory Measurement Model Fit Indices

MODEL		FIT INDEX CHI^2 (df)	NFI	GFI	AGFI	RMSR
1.	Null	5956.21 (190)	___	.39	.32	.36
2.	Five Factor Unconstrained	333.83 (100)	.94	.95	.89	.03
3.	Five Factor Congeneric	649.11 (160)	.89	.90	.87	.09
4.	Five Factor Congeneric Dropping Item 3 and Item 16	444.75 (125)	.92	.93	.90	.07
5.	Five Factor Semi-Congeneric with Item 17 Loading on Reward and Legitimate Factors	410.46 (124)	.93	.93	.91	.06

Note: CHI^2 = CHI-Square Value; NFI = Normed Fit Index; GFI = Goodness of Fit Index; AGFI = Adjusted Goodness of Fit Index; RMSR = Root Mean Square Residual.

Model Two indicated that the factor loadings of those items hypothesized to represent each of the five factors were all significant ($t>2.00$). T-values for multiple loadings across additional factors were all non-significant ($t<2.00$).

Model three evaluated a five factor congeneric model placing the additional constraints of forcing each item to load on only one factor. All fit indices indicated a fairly good fit of the data to this hypothesized five factor model [$\chi^2(160) = 649.11$, $p<.001$; NFI=.89; GFI=.90; AGFI=.87; RMSR=.09]. An examination of the individual parameter estimates in Model three suggested respecifications that would significantly improve the fit of the data to the model without departing from the hypothesized factor structure. First, item three ("My supervisor can provide me with special benefits") and item sixteen ("My supervisor can give me undesirable job assignments") were dropped from the reward and coercive factors in the model because of low communality estimates and factor loadings (item 3: communality=.20, loading=.58; item 16: communality=.21, loading=.58). These items had the lowest loadings in the model and this finding is consistent with Hinkin and Shriesheim's (1989) findings across three separate samples. The substantive meaning of item three may have been adversely affected by the use of the term "special benefits", perhaps implying something different than the usual organizational rewards a subordinate might expect to

receive from a supervisor. It is less clear why item sixteen did not contribute to the coercive power base. Perhaps undesirable job assignments for this sample were considered an inherent, although small, part of their jobs and was not associated with supervisory behaviors reflecting coercion. Model four drops items three and sixteen and indicates there is a very good fit of the data to this model [χ^2 (125)=447.75, p<.001; NFI=.92; GFI=.93; AGFI=.90; RMSR=.06].

The final respecification allowed item seventeen ("My supervisor can influence my getting a promotion") to load on the hypothesized reward power factor as well as on the legitimate power factor. This was predicated on a high modification index for item seventeen on the legitimate power factor. Conceptually it also made sense that there would be overlap present in this item because the ability to administer a reward such as promotion presumes a legitimate power base or a requisite amount of position power within the organization. Model five includes this final respecification and indicates there is a good fit of the model to the data [χ^2 (124)=410.46, p<.001; NFI=.93; GFI=.93; AGFI=.91; RMSR=.059].

Table 6 presents the final factor loading pattern for Model 5. All factor loadings were significant (t>2). Table 7 shows the factor correlation matrix for Model 5. Intercorrelations between factors are in the expected

Table 6

Factor Loadings for Final Supervisor Model
(Maximum Likelihood Estimates)

Items	Factors					
	Expert	Referent	Reward	Coercive	Legitimate	Communalities
Give me Good Technical Suggestions	1.065					.75
Share Considerable Experience	.810					.52
Provide Sound Job Related Advice	.782					.51
Provide Needed Technical Knowledge	1.000*					.71
Make Me Feel Valued		1.007				.34
Make Me Feel He/She Approves Of Me		1.000*				.40
Make Me Feel Personally Accepted		1.598				.63
Make me Feel Important		1.680				.71
Make My Work Difficult For Me			.765			.51
Make Things Unpleasant At Work			1.000*			.93
Make Being At Work Distasteful			.969			.77
Can Increase My Pay Level				.812		.45
Influence My Getting Pay Raise				1.000*		.83
Influence My Getting A Promotion				.588	.340	.42
Feel I Have Commitments To Meet					.731	.39
Should Satisfy My Job Requirements					.753	.35
Feeling of Responsibilities To Fill					1.000*	.70
Recognize I Have Tasks to Accomplish					.942	.59

Note: Asterisks indicate items that were fixed for identification.
All factor loadings are significant (t>2).

Table 7

Factor Correlation Matrix for Final Supervisor Model

	Expert Factor 1	Referent Factor 2	Coercive Factor 3	Reward Factor 4	Legitimate Factor 5
1.	1.00	___	___	___	___
2.	.53*	1.00	___	___	___
3.	-.13*	-.08	1.00	___	___
4.	.12*	.16*	.07	1.00	___
5.	.52*	.68*	.07	.21*	1.00

Note: * = 635
* = t>2

direction and are not too high. These results provide strong additional construct validity evidence for the Hinkin and Schriesheim power scale and suggest stable item loadings with the exception of the two dropped items. This final factor structure was used in the structural equation model which follows.

Confirmatory Factor Analysis of the Meyer and Allen and Penley and Gould OC Scales

LISREL VI and VII were used to assess the fit of the hypothesized three factor commitment model illustrated in Appendix C. This model proposed that the six separate factors included in the Meyer and Allen and Penley and Gould commitment scales represented three latent factors. Affective and Moral Commitment were hypothesized to represent one underlying construct involving value-congruence, identification and positive emotional attachment between the individual and the organization. Continuance Commitment based on a lack of perceived alternative options was hypothesized to be synonymous with Alienative Commitment because both are based on a negative affective attachment resulting from a lack of control over one's situation. Finally, Continuance Commitment based on high personal sacrifice was hypothesized to represent the same construct as Calculative Commitment because both reflect an attachment based on an instrumental, cost-benefit exchange between the

individual and the organization.

In order to evaluate these hypotheses within the context of a confirmatory factor analytic model it is necessary to evaluate constrained and unconstrained models representing three, four, five and six factors. The three factor model is the one hypothesized in this research and is described above. The four factor model examined whether Continuance Commitment would load as one single Continuance factor rather than two. The four factor model with one single Continuance Commitment factor would not be expected to load with Calculative or Alienative Commitment as originally hypothesized, resulting in a four factor model comprised of Moral/Affective OC, Continuance OC, Calculative OC and Alienative OC. The five factor model examined whether Continuance Commitment would separate into Continuance based on personal sacrifice and Continuance based on a lack of perceived alternatives, resulting in a model with Moral/Affective OC, Continuance OC based on personal sacrifice, Continuance OC based on a lack of perceived alternatives, Calculative OC, and Alienative OC. This model suggests that the personal sacrifice and lack of perceived alternative subdimensions of Continuance OC do not load with Calculative and Alienative OC as hypothesized and instead represent distinct dimensions of commitment. Finally, the six factor model examined whether any of the Meyer and Allen (1984) or Penley and Gould (1988) commitment

factors shared a common factor and presumed Continuance Commitment would break down into Continuance based on personal sacrifice and Continuance based on a lack of perceived alternatives. The six factor model was comprised of Moral OC, Affective OC, Continuance OC based on personal sacrifice, Continuance OC based on a lack of perceived alternatives, Calculative OC and Alienative OC.

As in the supervisory factor analysis the sample covariance matrix was used in the analysis of all models and listwise deletion was used with a sample size that was always 635. Preliminary exploratory factor analyses were also run in SAS in order to identify the various LISREL models and to delete items that didn't contribute significant variance to any particular factors. These preliminary analyses indicated the following three negatively worded items should be eliminated: 1) "I think I could easily become as attached to another organization as I am to my present one" (Affective OC), 2) "It wouldn't be too costly for me to leave my organization in the near future" (Continuance OC based on personal sacrifice), and 3) "I am not afraid of what might happen if I quit my job without having another one lined up" (Continuance OC based on a lack of alternatives). These items had communalities below .09 and factor loadings of .20 or less. They may have had varying meanings to respondents because of the negative and generally vague wording. The first item does not

reference attachment to anything in particular. The second item introduces cost and a near future time frame without clarifying whether cost is emotional or financial. The third item introduces elements involving fear, quitting one's job and "what might happen" and is at best very vague.

Table 8 presents the fit indices for the three, four, five and six factor models and also includes the highly constrained null model hypothesizing that no common factors exist among any of the items. A comparison of the three factor unconstrained model [χ^2 (297)=1133.56, p<.001; NFI=.81; GFI=.87; AGFI=.82; RMSR=.18] with the four factor unconstrained model [χ^2 (272)=756.94, p<.001; NFI= .87; GFI=.92; AGFI=.87; RMSR=.13] indicates the four factor model has better fit. The factor pattern matrix for the three factor model indicates that there are many items with highly significant loadings (t>2) on more than one factor. These multiple cross-loadings make conceptual interpretation of the factors difficult and suggest that three factors are not sufficient to meaningfully explain item variance.

A comparison of the four factor unconstrained model with unconstrained five and six factor models was not possible because the LISREL program would not compute estimates for these two models. Attempts to run the five and six factor unconstrained models yielded that "PHI was not positive definite". This LISREL message often indicates that too many factors are included in the model.

Table 8

OC Measurement Model Fit Indices

MODEL	FIT INDEX CHI^2 (df)	NFI	GFI	AGFI	RMSR
1. Null	5837.47 (378)	___	.40	.36	.83
2. Three Factor Unconstrained	1133.56 (297)	.81	.87	.82	.18
3. Three Factor Congeneric	1854.34 (347)	.68	.80	.76	.34
4. Four Factor Unconstrained	756.94 (272)	.87	.92	.87	.13
5. Four Factor Congeneric	1101.66 (344)	.81	.88	.86	.23
6. Five Factor Congeneric[a]	1039.02 (340)	.82	.89	.88	.22
7. Six Factor Congeneric[a]	931.92 (335)	.84	.90	.88	.21
8. Final Four Factor Semi-Congeneric Drops 6 Items Frees 1 Item to Load on 2 Factors	561.32 (202)	.87	.92	.91	.21

[a]Five and six factor unconstrained models fit the data very poorly and LISREL estimates could not be computed.

Note: CHI^2 = CHI-Square Value; NFI = Normed Fit Index; GFI = Goodness of Fit Index; AGFI = Adjusted Goodness of Fit Index; RMSR = Root Mean Square Residual.

An analysis of the hypothesized three factor congeneric structure is not appropriate as the unconstrained three factor model had poor fit. The four factor congeneric model [χ^2 (344,$\underline{N}$=635)=1101.66; NFI=.81; GFI=.88; AGFI=.86; RMSR=.23] demonstrated a moderate degree of fit to the data. The five factor congeneric model, despite the inclusion of an additional factor did not fit the data any better than the four factor model [χ^2 (340,$\underline{N}$=635)=1039.01, p<.001; NFI=.82; GFI=.89; AGFI=.88; RMSR=.22]. The five factor congeneric model allowed the Meyer and Allen Continuance Commitment scale to split into OC based on either personal sacrifice or a lack of perceived alternatives. This two factor Continuance Commitment structure found previously by McGee and Ford (1987) was not evident in this data. The correlation between personal sacrifice CC and low alternative CC (r=.86) was substantially higher than that found by McGee and Ford (r=.34), and instead indicates a one factor structure for Continuance Commitment. In addition, personal sacrifice CC was not correlated with Affective Commitment (r=.02) which is again in contrast to the McGee and Ford findings (r=.34). Table 9 presents the factor correlation matrix for the five factor congeneric model. It suggests that the hypothesized one factor structure between Alienative Commitment and Continuance Commitment based on a lack of perceived alternatives and the hypothesized one factor structure between Calculative Commitment and

Table 9

Factor Correlations for 5 Factor Congeneric Model

	1	2	3	4	5
1. Affective/ Moral OC	1.00	___	___	___	___
2. Alienative OC	-.63*	1.00	___	___	___
3. Continuance OC Lack of Alternatives	.25*	.39*	1.00	___	___
4. Continuance OC Personal Sacrifice	.02	.24*	.81*	1.00	___
5. Calculative OC	.04	.02	.21*	.23*	1.00

Note: N = 635
* t>2

Continuance Commitment based on personal sacrifice do not hold. This is because Continuance Commitment does not split into personal sacrifice CC and low alternative CC, and as a single dimension it doesn't correlate highly with Calculative Commitment (r=.23).

A six factor congeneric model which forced the Penley and Gould Moral Commitment factor to separate from the Meyer and Allen Affective Commitment factor was also evaluated. This model tests the hypothesis that none of the factors identified by the Meyer and Allen and Penley and Gould scales are equivalent. The fit of this model [χ^2 (335)=931.92, p<.001; NFI= .84; GFI=.90; AGFI=.88; RMSR=.21] was somewhat better than the four factor model but the increment in the NFI index from .81 to .84 is modest in view of the addition of two more factors. An examination of the individual parameter fit indices for the six factor model indicated that 25 % of the Affective and Moral OC items shared high modification indices with each other that were greater than 25. This indicates the Moral and Affective items were loading on one single factor as predicted in the original hypotheses rather than on two separate factors as was forced in the six factor model. The correlation (r=.83) between the Moral and Affective OC factors, when forced into two separate factors also suggests a one factor structure is more appropriate.

The four factor congeneric model represented the best

compromise between adequacy of fit and interpretability of the conceptual model. This model partially confirms the proposed hypotheses. There was support that Moral and Affective Commitment are one factor representing an emotionally positive, value-congruent attachment, as predicted. The two remaining hypothesized factors (Alienative/Continuance based on a lack of alternatives and Calculative/Continuance based on personal sacrifice) did not appear as predicted because Continuance OC did not break down into Continuance based on personal sacrifice and Continuance based on a lack of perceived alternatives. The remaining three factors in the four factor model were Alienative OC, Calculative OC and Continuance OC. These three factors are not conceptually inconsistent with the hypothesized three factor model, however the empirical finding of a fourth Continuance OC factor that is separate from Alienative and Calculative OC suggests organizational commitment may be comprised of four rather than three dimensions.

The individual parameter fit indices in the four factor congeneric model were examined for respecification in areas where the fit of the data to the model was poorest. Item factor loadings, communality estimates, t-values and modification indices were examined for fit and items with the lowest, least fitting values for these parameters were eliminated on a step by step basis. Six items were deleted

as a result of this empirical post-hoc analysis. The first item deleted was a Meyer and Allen Continuance Commitment item ("Right now staying with my organization is a matter of necessity as much as desire"). The second and third items deleted were from the Penley and Gould Calculative Commitment dimension ("I am motivated by thoughts of getting greater personal rewards from my organization" and "I support my organization to the extent that it supports me"). The remaining three items dropped were reverse-scored (negatively worded) Meyer and Allen items from their Affective Commitment scale ("I do not feel a strong sense of belonging to my organization", "I do not feel emotionally attached to my organization" and "I do not feel like part of the family at my organization"). These items were dropped because they had the lowest communalities and factor loadings and the highest modification indices. All of the reverse-scored items in the Meyer and Allen scales were ultimately dropped from the final model because of poor individual fit. It would appear there may be a method variance effect regarding subjects' responses to negatively worded items. Method variance could not be evaluated with the Penley and Gould items as none were negatively worded.

The explanation for low estimates in the first three items dropped is less clear. The first item dropped could be considered to be "double-barreled" in that it contrasts necessity with desire. The second item dropped may have

introduced confusion through the use of the term "personal rewards". Personal rewards are by definition individualized and therefore may mean different things to different people. The third item dropped may not have been as strongly worded as the other four Calculative Commitment items.

The final model allowed one item from the Alienative Commitment factor ("I feel trapped at my organization") to load on the Continuance Commitment factor as well. This item had the highest combined modification indices and could clearly be inversely related to Continuance Commitment (i.e., If you want to stay with your organization, you're not likely to feel trapped there). This slightly less constrained model, which allowed one item to load on two factors in addition to dropping six items, significantly improved the fit of the model to the data [$\chi^2_{diff}(91)=18.18$, $p<.001$].

The final model, which dropped the six items previously described and allowed one item to load on two factors, fit the data reasonably well [χ^2 $(202)=561.32$, $p<.001$; NFI=.87; GFI=.92; AGFI=.91; RMSR=.21] and resulted in a four factor OC model consisting of Moral/Affective OC, Alienative OC, Calculative OC and Continuance OC. This final model was used in the structural equation model which follows.

The factor pattern matrix of the final model is presented in Table 10. Table 11 shows the factor correlation matrix for the final model. Intercorrelations

Table 10

Factor Loadings for Final OC Model
(Maximum Likelihood Estimates)

Item	Moral/ Affective Factors	Alienative Factor	Continuance Factor	Calculative Factor	Communalities
Great Deal Personal Meaning	1.000*				.53
Happy To Spend Rest of Career	.964				.42
Enjoy Discussing Org With Outsiders	.900				.48
Orgs Problems Are My Own	.870				.41
Am Dedicated To My Organization	.784				.47
It Is My Duty To Support My Org	.743				.44
In Public Think Of Self As An Employee	.688				.23
Personal Resp Help Org Achieve Success	.727				.33
Get Upset When People Say Bad Things	.759				.40
Want To Walk Out And Never Come Back		1.019			.42
Want To Get Even With My Org		.717			.26
Get Angry When I Think Of My Org		1.000*			.52
Feel Trapped At My Org		.910	.227		.44
No Matter What Org Remains Unchanged		.681			.22
Leaving Requires Personal Sacrifice			.639		.26
Too Few Options To Consider Leave			1.000*		.63
Scarcity Of Available Alternatives			.880		.51
Very Hard Even If I Wanted To Leave			.785		.37
Life Disrupted If I Leave			.660		.27
Best Effort For Right People				.663	.33
Most Involved When I Get Recognition				1.000*	.68
Put Effort To Extent I Get A Return				.574	.25

Note: Asterisks indicate items that were fixed for identification.
All factor loadings were significant (t>2).

Table 11

Factor Correlations Matrix for Final OC Model

	Moral/ Affective Factor	Alienative Factor	Continuance Factor	Calculative Factor
1.	1.000	___	___	___
2.	-.60*	1.00	___	___
3.	-.13*	.30*	1.000	___
4.	.03	.01	.23*	1.00

Note: N = 635
* t>2

between factors are for the most part in the expected direction and are not too high. The Moral/Affective factor is highly inversely related to the Alienative OC factor (r=.60), slightly inversely related to the Continuance OC factor (r=-.13), and unrelated to the Calculative OC factor (r=.03). These findings are similar to Penley and Gould (1988) and McGee and Ford (1987) given that the Continuance Commitment factor did not split into personal sacrifice CC and lack of perceived alternative CC. The Continuance Commitment factor was less related to the Calculative factor (r=.23) than predicted, but this is not surprising, again, because the Continuance factor did not break down. Continuance Commitment based on personal sacrifice was predicted to form a common factor with Calculative OC. The positive correlation between the Alienative factor and the Continuance OC factor (r=.30) is less clear and was even stronger prior to allowing one item to load on both of these factors. It suggests that the Continuance factor includes elements of negative affective attachment which is not consistent with the original construct definition provided by the authors. This finding is however consistent with the hypothesis that Continuance Commitment items reflecting a lack of perceived alternatives would form a common factor with Alienative OC. Again, the fact that Continuance Commitment did not break down into two subfactors reflecting personal sacrifice and a lack of perceived alternatives

confounds this question. It suggests the Continuance Commitment construct requires additional clarification.

Final Structural Equation Model Analyses

Structural Equation Model of Supervisor Influence on Organizational Commitment

The original hypotheses proposed that : 1) Expert and Referent power predict Moral/Affective OC, 2) Coercive power predicts Alienative OC, and 3) Reward and Legitimate power predict Calculative OC. A fourth hypothesis was included because of the preceding factor analysis results which stated that Reward and Legitimate power may also predict Continuance OC. Because the relationship between Calculative and Continuance OC is not totally clear, this hypothesis was a logical extention of the aforementioned findings. The final results of the supervisor and OC analyses were entered into a structural equation model. All structural equation models were analyzed using the sample covariance matrix, listwise deletion and a sample size of 635 subjects. The four hypotheses mentioned above were tested by constraining the gamma matrix in LISREL. Gamma is a matrix of regression coefficients relating the five latent supervisory power factors to the four latent commitment factors. Gamma was constrained such that Expert and Referent power were freed to predict Moral/Affective OC,

Coercive power was freed to predict Alienative OC, and Reward and Legitimate power were freed to predict Continuance and Calculative OC. All other elements in gamma were fixed to zero, allowing no other relationships between the exogenous and endogenous variables. Model One in Table 12 indicates the fit of this first basic model was fair [χ^2 (715)=1552.16, p<.001; NFI=.85; GFI=.89; AGFI=.87; RMSR=.18]. Table 12 also shows that the nine factor null model hypothesizing no relationships between any of the latent exogenous and endogenous variables had a very poor fit to the data [χ^2(780)=10,424.24, p<.001; GFI=.37; AGFI=.34; RMSR=.53].

An examination of the estimated gamma parameters or path coefficients indicated that all coefficients were significant (t>2) with the exception that Reward power did not significantly predict Continuance Commitment (t=1.12). The modification indices for gamma indicated that Alienative OC was strongly inversely related to Expert and Referent power as well as inversely related to Legitimate power. These findings were expected based on the interfactor correlations for each of the scales and are also indicated as less obvious hypotheses in the directional paths specified in the proposed causal model (Appendix E).

Because the structural equation model simultaneously estimates the factor loadings for both the supervisory and OC scales, the factor pattern matrices were examined to

Table 12

Fit Indices for Supervisor and OC Structural Equation Models

MODEL	FIT INDEX CHI^2 (df)	NFI	GFI	AGFI	RMSR
Nine Factor Null	10,424.24 (780)	___	.37	.34	.53
Model One Basic	1,552.16 (715)	.85	.89	.87	.18
Model Two	1,361.66 (701)	.87	.90	.89	.14
Model Three	1,350.86 (700)	.87	.90	.89	.14
Model Four	1,378.79 (704)	.87	.90	.89	.14
Model Five Final	1,169.90 (696)	.89	.92	.90	.14

Note: CHI^2 = CHI-Square Value; NFI = Normed Fit Index; GFI = Goodness of Fit Index; AGFI = Adjusted Goodness of Fit Index; RMSR = Root Mean Square Residual.

detect areas of misfit in the measurement model. The final factor structures previously found in the power and OC confirmatory factor analyses were used in the structural equation model. It is important to note that structural equation models in LISREL do not require the explicit computation of factor scores in order to derive regression coefficients. Therefore, actual items, rather than factor scores are manipulated in order to examine changes in the structural model. The modification indices for the supervisory scale indicated that four items were loading on more than one factor. Similarly, the OC scales indicated cross loadings for four additional items. Table 15 presents these items and their associated factors.

Model Two in Table 12 includes the two respecifications suggested by the individual parameter fit indices in Model One. First, the almost fully congeneric nature of the supervisory and OC measurement models was relaxed by allowing some items to load on more than one factor, as indicated in Table 13. Second, the constraints on gamma were relaxed by allowing Expert, Referent and Legitimate power to inversely predict Alienative OC. Model Two has significantly better fit than Model One and does not compromise the theoretical underpinnings of the hypotheses [$\chi^2(701)=1362.66$, $p<.001$; NFI=.87; GFI=.90; AGFI=.89; RMSR=.14].

Model Three allowed Coercive power to inversely predict

Table 13

Measurement Model Items Freed to Load On More Than One Factor

Item	Original Factor	Additional Factor
Organizational Commitment		
1. I really feel as if my organization's problems are my own.	Moral/ Affective	Alienative
2. One of the few negative consequences of leaving my organization would be the scarcity of available alternatives.	Continuance	Moral/Affective[b] Alienative[b]
3. It would be very hard for me to leave my organization now, even if I wanted to.	Continuance	Moral/Affective
4. I often feel like I want to "get even" with my organization.	Alienative	Calculative
5. I feel trapped at my organization.[a]	Alienative	Continuance

[a]From confirmatory factor analysis model.

[b]Refixed in Models 4 and 5 because T<2.

Table 13 (Continued)

Measurement Model Items Freed to Load On More Than One Factor

Item	Original Factor	Additional Factor
Supervisor Power		
1. My supervisor can provide me with sound job-related advice.	Expert	Referent[b]
2. My supervisor can provide me with needed technical knowledge.	Expert	Referent
3. My supervisor can make me feel valued.	Referent	Expert
4. My supervisor can make me feel that I have commitments to meet.	Legitimate	Referent
5. My supervisor can influence my getting a promotion.[a]	Reward	Legitimate

Moral/Affective OC. Although this did not improve the fit of the model relative to Model Two this respecification was retained as it is a logical inverse extention of the original hypotheses and was indicated as such in the proposed causal model. This path was retained for conceptual reasons because it was hypothesized in the original causal model.

Model Four introduces additional constraints to the measurement model in comparison to Models Two and Three. Items originally freed to load on more than one factor in Models Two and Three, because of high modification indices, were examined to see if their second factor loadings were significant. Items with cross-loadings in the supervisory and OC factor pattern matrices with insignificant ($t<2$) cross-loadings were zeroed out from their respective second factor. This effort aimed at creating more congeneric and "pure" factors by reducing cross-loadings. Model Four respecifications are detailed in Table 13 and did not reduce the fit of the data to the model [$\chi^2(704)=1378.79$, $p<.001$; NFI=.87; GFI=.90; AGFI=.87; RMSR=.14].

Model Five respecifications were suggested by Model Four modification indices in the supervisory and OC unique factor matrices. It became apparent that within factor item pairs in the OC and supervisory measurement models were sharing unique variance in addition to what was explained by their common factor structure. Within factor item pairs

that share unique variance have common portions of variance that are not explained or represented by their common factor structure. In the OC Moral/Affective factor the following three items were sharing unique variance such that their modification indices were very large: "I am dedicated to my organization", "I feel it is my duty to support my organization", and "It is my personal responsibility to help my organization achieve success". These items are worded in such a way that they are capturing a dutiful obligation to the organization. They covary in the uniqueness matrix as a consequence of common method variance resulting from the way they are written rather than the underlying factor they share. That is, items with content reflecting dutiful obligation are sharing variance outside of the common factor structure variance accounting for Moral/Affective OC.

The following three items in the Continuance OC factor share unique covariation due to method variance as well: "One of the few negative consequences of leaving my organization would be the scarcity of available alternatives", "It would be very hard for me to leave my organization right now, even if I wanted to", and "Too much in my life would be disrupted if I decided to leave my organization now". These items focus on issues of hardship, disruption and negative consequences associated with leaving the organization that are not fully captured by the continuance factor itself.

In the supervisory scale the following item pairs in the referent power factor shared unique variance: "My supervisor can make me feel valued" and " My supervisor can make me feel he/she approves of me". These two items reflect the felt value or self-worth a supervisor can impose upon a subordinate. Also, in the referent power factor the following two items shared common method variance: "My supervisor can make me feel important" and "My supervisor can make me personally accepted". These two items seem to capture issues of social or interpersonal approval. Model Five allowed these within factor item pairs to share unique variance (to correlate with each other) beyond what was predicted by their common factors with the rationale of allowing some room for common method variance. This resulted in a satisfactory fit of the model to the data [$\chi^2(696)=1169.90$, $p<.001$; NFI=.89; GFI=.92; AGFI=.90; RMSR=.14; $\chi^2_{diff}(8)208.89, p<.001$] (See Table 8).

Structural Equation Model of Supervisor Influence, Organizational Commitment and Intent to Remain

In order to evaluate the full structural model hypothesized, Bluedorn's (1982) Staying or Leaving Inventory (SLI) was added into the model as a fifth and final dependent variable. The SLI is a one factor scale measuring intent to remain with the organization. It was originally hypothesized that Alienative OC would negatively predict

intent to remain and Moral/Affective OC would positively predict intent to remain. No relationship with Calculative or Continuance OC was predicted.

The Hrebiniak and Alutto Scale (HAS) (1972) was included as an alternative measure of intent to remain with the organization that might relate more highly to Alienative, Continuance and Calculative OC and potentially shed more light on the nature of these constructs. The zero-order correlations from the scale scores indicated that this scale did not relate more highly to any of the OC dimensions and instead demonstrated a substantially lower relationship. The Hrebiniak and Alluto scale correlated moderately with the SLI (r=.41), did not relate to Continuance or Calculative OC (r=.05 and r=.04, respectively) and was less related to Alienative OC than the SLI (r=-.40 verses r=-.56). The HRS demonstrated lower correlations with all the variables under investigation in this study and was therefore not included in the final structural model.

In order to test the hypotheses in the structural model, the beta matrix, which represents the directional paths between the endogenous variables, was constrained in accordance with the above hypotheses. The SLI was entered into the structural model as a latent variable having perfect reliability by constraining it's factor loading value to 1.00 and constraining it's unique variance to zero.

Model Seven in Table 14 corresponds to Model Four in Table 12 except for the inclusion of the SLI. This model reduces factor cross-loadings to a minimum and allows for all the directional paths depicted in the hypothesized structural equation model. The fit of the model [$\chi^2(742) = 1532.88$; NFI=.86; GFI=.89; AGFI=.88; RMSR=.15] was moderate. Model Six, which represents a ten factor null model hypothesizing no relationships between any of the latent variables in the structural model fit the data very poorly [$\chi^2(820)=10,880.34$, $p<.001$; GFI=.36; AGFI=.33; RMSR=.54].

Model Eight in Table 14 corresponds to Model Five in Table 12 except it includes the SLI. This model reduces constraints by allowing for common method variance between within-factor item pairs. The fit of this model to the data was significantly better than Model Seven [$\chi^2(734)=1325.65$, $p<.001$; NFI=.88; GFI=.91; AGFI=.89 RMSR=.14; $\chi^2_{diff}(8)=207.23$, $p<.001$].

An examination of the individual parameter fit indices in Model Eight suggested slight measurement model respecifications stemming from the inclusion of the intent to remain factor. Specifically, three multiple cross-loadings were allowed between the intent to remain factor and: 1) the Continuance item stating "Too much of my life would be disrupted if I decided to leave my organization now", 2) the Moral/Affective item stating "I would be very

Table 14

Fit Indices for Supervisor, OC and Intent to Remain Structural Equation Models

MODEL	FIT INDEX CHI^2	(df)	NFI	GFI	AGFI	RMSR
Model Six. Ten Factor Null Includes Intent to Remain (SLI)	10,880.34	(820)	___	.36	.33	.54
Model Seven. Same as Model 4 with SLI	1,532.88	(742)	.86	.89	.88	.15
Model Eight. Same as Model 5 with SLI	1,325.65	(734)	.88	.91	.89	.14
Model Nine. Frees 4 Cross Loadings in Dependent Variable Factor Pattern Matrix	1,213.73	(730)	.89	.92	.90	.13
Model Ten. Allows Continuance OC to Predict SLI	1,207.42	(729)	.89	.92	.90	.13

Note: CHI^2 = CHI-Square Value; NFI = Normed Fit Index; GFI = Goodness of Fit Index; AGFI = Adjusted Goodness of Fit Index; RMSR = Root Mean Square Residual.

happy to spend the rest of my career with my organization", and 3) the Moral/Affective item stating "I enjoy discussing my organization with people outside of it". In addition, the first Moral/Affective item was allowed to load inversely with Alienative OC. The elimination of these constraints was based on modification indices greater than 20 and was driven primarily by empirical post-hoc analyses which were considered to have minimal impact on the structural model hypothesized. These respecifications are represented in Model Nine, which in comparison to nested Model Eight possesses significantly better fit of the data to the model [$\chi^2(730)=1213.73$, $p<.001$; NFI=.89; GFI=.92; AGFI=.90; RMSR=.13; $\chi^2_{diff}(4)=11.92$, $p<.001$].

Model Ten allowed Continuance OC to predict Intent to Remain. Although this path was not hypothesized, this fifth and final respecification was predicated on a high modification index in the beta matrix of paths among endogenous factors. This final model significantly improved fit over the previous model [$\chi^2(729)=1207.42$, $p<.001$; NFI=.89; GFI=.92; AGFI=.90; RMSR=.13; $\chi^2_{diff}(1)=6.31$, $p<.02$] and overall indicates the fit of the data to the hypothesized model was quite good. Although it would have been possible to improve the fit of this model even further, additional respecifications would have been based exclusively on empirically driven reasons affecting the structural model rather than guided by theory. As a result,

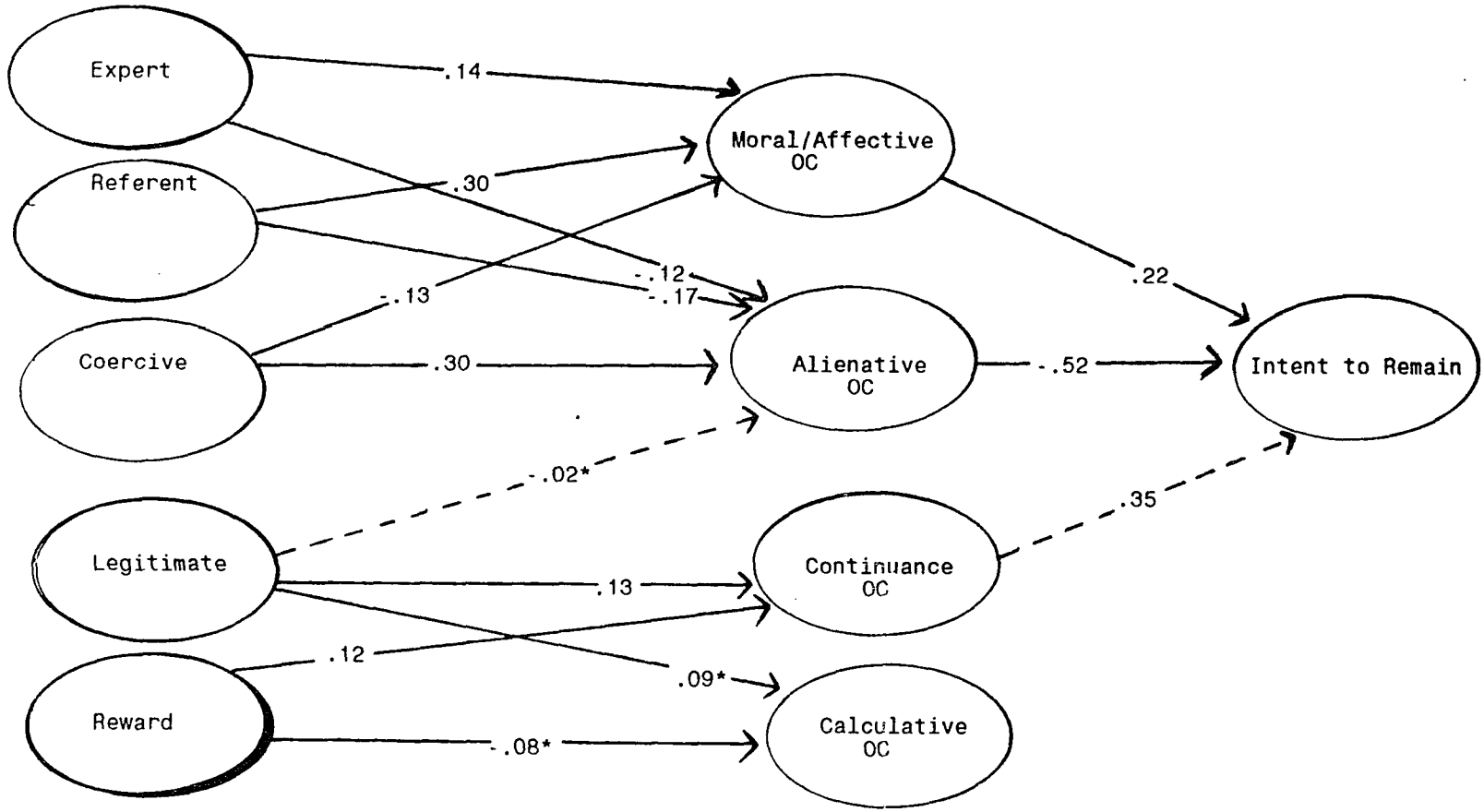
determination of the model was stopped here.

Figure 1 presents the path coefficients for the hypothesized model. All the predicted paths in the structural model were significant (t>2) except those involving Calculative OC. Coercive power was highly predictive of Alienative OC (Γ=.30,t=6.5) and Alienative OC was strongly inversely related to intention to remain with the organization (Γ=.52,t=9.0). Although Expert (Γ=.14,t=2.5) and Referent (Γ=.30,t=5.0) power both had significant path coefficients with Moral/Affective OC, Referent power was more highly related. Moral/Affective OC was also predictive of intention to remain with the organization (β=.22,t=4.5) as hypothesized.

The weakest paths in the model were those between Legitimate and Reward power and Calculative OC (Γ=.09 and Γ=-.08, respectively). The paths between Legitimate and Reward power and Continuance OC were slightly significant but small as well (Γ=.13,t=2.4 and Γ=.12,t=2.3, respectively). Similarly, the amount of variance accounted for in the latent endogenous variables was greatest for Moral/Affective OC (η=.19), Alienative OC (η=.18) and intent to remain (η=.46), and smallest for Continuance (η=.01) and Calculative (η=.04) OC. (Eta (η) should be interpreted in the same way as a squared multiple correlation.) These findings suggest, as noted earlier with the confirmatory factor analyses, that the Continuance and Calculative OC

Figure 1

Standardized Path Coefficients for Final Structural Model



NOTE: Asterisks indicate non-significant path coefficients; Dotted lines are unpredicted paths.

dimensions require further clarification. Unlike Moral/Affective and Alienative OC, they demonstrate no clear relationship with the supervisory influence strategies hypothesized in this study. Continuance OC did however have an unexpected relationship with intention to remain in the organization (β=.35,t=2.3) suggesting some form of attachment to the organization may have been operating.

Table 15 presents the correlations among the latent variables in the structural model. These findings parallel those found in the confirmatory factor analyses. As expected, Moral/Affective OC was highly inversely related to Alienative OC (r=-.60), and positively correlated with intent to remain with the organization (r=.48), Expert power (r=.33), Referent power (r=.40) and Legitimate power (.27). There was no relationship between Moral/Affective OC and Calculative OC (r=.04) and a slightly inverse relationship with Continuance OC (r=-.15). These latter two findings do not replicate the findings of McGee and Ford (1987) and Penley and Gould (1988) who found moderate positive correlations between Moral/Affective OC and Continuance and Calculative OC (r=.34 and r=.26, respectively). However, the positive relationship with Continuance OC was only with Continuance commitment based on personal sacrifice. McGee and Ford (1987) did find an inverse relationship between Moral/Affective OC and Continuance OC (r=-.21) based on a lack of perceived alternatives.

Table 15

Correlations Between Latent Variables in Final Structural Model

	1	2	3	4	5	6	7	8	9	10
1. Moral/Affective OC	1.00	___	___	___	___	___	___	___	___	___
2. Alienative OC	-0.60*	1.00	___	___	___	___	___	___	___	___
3. Continuance OC	-0.15*	0.25*	1.00	___	___	___	___	___	___	___
4. Calculative OC	0.04	-0.02	0.23*	1.00	___	___	___	___	___	___
5. Intent to Remain	0.48*	-0.56*	0.19*	0.10*	1.00	___	___	___	___	___
6. Expert Power	0.33*	-0.27*	0.04	0.08*	0.23*	1.00	___	___	___	___
7. Referent Power	0.40*	-0.28*	0.05	0.10*	0.25*	0.58*	1.00	___	___	___
8. Coercive Power	-0.17*	0.33*	0.00	0.02	-0.21*	-0.13*	-0.08*	1.00	___	___
9. Reward Power	0.07	-0.03	-0.06	0.14*	0.01	0.14*	0.18*	0.07	1.00	___
10. Legitimate Power	0.27*	-0.17*	0.08*	0.15*	0.18*	0.54*	0.66*	0.08*	0.20*	1.00

Note: N = 635
p<.05 (Significance levels were calculated using an ordinary bivariate correlation)

The relationships of Alienative OC with the other latent variables were in the expected direction and magnitude. Calculative OC was unrelated to Alienative OC (r=-.02). This finding replicates that of Penley and Gould (1988) who also found no relationship (r=.06). Alienative OC was moderately related to Continuance OC (r=.26). This relationship was not examined by either Penley and Gould (1988) or McGee and Ford (1987) in their research and suggests the Continuance factor found in this research contains features of alienation. Similarly, the relationship between Continuance OC and Calculative OC (r=.23), previously unexplored, suggests an instrumental cost-benefit component exists within the Continuance OC dimension as well.

Finally, the magnitude of the correlations between the exogenous power variables with the endogenous commitment variables was greater than the relationship between the power variables and intention to remain with the organization. This suggests the hypothesized paths between power and commitment and then between commitment and intent to remain with the organization are reflective of direct rather than indirect effects.

CHAPTER V

DISCUSSION

Organizational Commitment Dimensions

This research examined the factor structure of two OC scales in an attempt to clarify the dimensionality and nature of the organizational commitment construct. A hypothesized three factor structure for OC was partially confirmed. Clear evidence for a Moral/Affectice OC dimension was found. This dimension taps positive affective attachment grounded in the identification with and internalization of the organizations goals and values. It includes both social and structural normative influences and is based on a symbolic compliance system.

The remaining two hypothesized OC dimensions were only partially confirmed. The bidimensional nature of the Meyer and Allen (1984) Continuance Commitment scale was not confirmed and therefore it did not relate to Alienative and Calculative OC as predicted. Contrary to the original hypotheses, Continuance Commitment based on personal sacrifice did not form a factor with Calculative Commitment, and Continuance Commitment based on a lack of perceived alternatives did not form a factor with Alienative Commitment. Clear evidence for Alienative OC as a separate dimension based on a negatively affective attachment

stemming from a coercive or exploitive compliance system was found. There was also clear evidence for a Calculative OC dimension based on the rational, instrumental exchange of organizational benefits or rewards for individual costs or efforts.

The Meyer and Allen (1984) Continuance Commitment dimension formed its own fourth factor rather than splitting into personal sacrifice OC and a lack of perceived alternatives OC. As a single fourth factor Continuance Commitment related to both Calculative and Alienative OC. The reasons for this are unclear. A recent confirmatory factor analysis (Somers & Birnbaum, 1991) of the Continuance Commitment dimension with a sample of nurses also found no evidence for a bidimensional structure. Somers and Birnbaum (1991) speculated that their sample was not as subject to issues of high sunk costs (personal sacrifices) or a lack of employment alternatives in comparison to the sample of university faculty members used in the McGee and Ford (1987) study. The suggestion that the dimensionality and mechanisms underlying Continuance Commitment may be affected by labor market conditions is potentially applicable to the present research. Although the present sample was from a diverse number of occupations and organizations, the prevailing economic recession in the Northeastern United States at the time the data were collected had a definite impact on the labor market, making it very poor for almost

all occupations. High unemployment, organizational downsizing and layoffs in the public and private sector would have been expected to enhance perceptions of a lack of available employment opportunities and Continuance Commitment based on this lack of alternatives. One would therefore have expected a bidimensional Continuance Commitment construct in the face of very adverse economic considerations and this did not emerge. A more plausible explanation may be that the construct, whether unidimensional or bidimensional, is not adequately operationalized by the items used to measure it. The original authors did not intend to discriminate between Continuance Commitment based on personal sacrifice and Continuance Commitment based on a lack of perceived alternatives in their item development efforts. While the distinction is conceptually quite plausible when viewed in light of Etzioni's typology of organizational compliance systems, it was not intentionally or effectively operationalized. This is underscored by the unique method variance found in negatively worded items and the correlated item-pair uniquenesses found in this research.

A second explanation for the the Continuance Commitment findings may lie in its relationship to Becker's (1960) behavioral "side-bet theory" of commitment. This view states that the individual's connection to the organization is based on behavioral, extrinsic concerns (i.e., pension,

seniority, no where else to go) and suggests there may be little or no intrinsic affective component. The presence or absence of an affective or emotional element in the Continuance Commitment dimension is important if OC is defined, as it has been, in terms of an attachment to the organization. Organ and Near (1985) provide evidence and suggest that there may be different processes and behavioral consequences associated with purely cognitive evaluative attitudes vs. affective attitudes. That is to say an employee's feelings of happiness, commitment or satisfaction with the organization may be distinguished from their cognitive evaluation of their work situation. While cognition and affect are invariably interrelated, as evidenced by cognitive consistency research and theory, they may be more independent than previously considered and therefore have a more distinct and/or variable impact upon the formation of commitment than has been previously considered. As Zajonc indicates (1980, p. 154-157, in Organ & Near, 1985) "Affect and cognition are under the control of parallel, separate, and partly independent systems. Affect often persists after a complete invalidation of its original cognitive basis." This suggests that the cognitive cost-benefit appraisal used to define Continuance Commitment may not be sufficiently associated with affect to reflect attachment, or that it may be differentially associated with affect contingent upon perceptions of personal sacrifice or

a lack of perceived alternatives, or other as yet unexplored considerations. It would be unwarranted and premature, given the lack of any confirmatory data and the need for further construct definition, to conclude that Continuance Commitment is less affective in nature than the other commitment dimensions or that it may be less reflective of OC as an attachment to the organization. The potential distinction between cognition and affect does however suggest a fruitful line of inquiry into future research directed at clarifying the nature of Continuance and Calculative OC.

These issues warrant the attention of future research directed at the clarification of Continuance Commitment as a construct. They are also applicable to the Calculative OC dimension which, although defined in the same way as Continuance OC, emerged as a separate factor. There were differential relationships between the power bases and intent to remain with the organization relative to Calculative and Continuance Commitment. These differences were not expected given that both OC dimensions were defined in the same way and that both OC dimensions were assumed to be based on an exchange compliance system. Continuance OC was related to Reward and Legitimate power as well as to intent to remain with the organization. Calculative OC did not parallel these findings and shared no relationships. Again, this indicates the nature of these exchange-based

commitment dimensions are either different or poorly defined and operationalized. A close examination of the items comprising the Calculative OC dimension suggests that they may be based on an inequitable exchange system in which the individual seeks to derive gains or benefits from the organization without returning equal amounts of effort (e.g., "I will give my best effort when I know it will be seen by the 'right' people in my organization"). An examination of the Continuance OC items suggests that they are referenced to behaviors or behavioral consequences surrounding staying with or leaving the organization. They address the costs the individual would incur from leaving the organization but fail to explicitly account for an exchange relationship in which the individual's efforts (inputs) have been considered. This attention to the outcome end of the exchange relationship, at the expense of inputs or individual efforts may explain why Continuance Commitment based on personal sacrifice did not break out as a separate factor from Continuance Commitment based on a lack of perceived alternatives, and why the latter did not relate to Alienative Commitment. A lack of alternatives and an alienative attachment are based on an absence of control over one's own circumstances and therefore do not acknowledge the potential impact of individual efforts or inputs. Additionally, inattention to the input end of any exchange relationship between the individual and the

organization does not operationalize the Continuance or Calculative OC dimensions adequately.

Future research needs to clarify the nature of the Continuance and Calculative OC constructs. First, relevant theories such as Etzioni's and Katz and Kahn's organizational theories, equity theories, and social exchange and cognitive consistency theories should be analyzed to derive a comprehensive definition for the construct. Then the definition should be operationalized with a sufficient number of items to include plausible and relevant subdimensions such as personal sacrifice and a lack of available alternatives. Finally, the measure should be validated for convergent and divergent validity using quasi-experimental or experimental designs across a variety of independent samples reflecting differing occupations and organizations.

Supervisory Power Bases

The findings regarding the five factor structure proposed by Hinkin and Schriesheim (1989) were very supportive. It is clear that the reward, legitimate, expert, referent and coercive power bases are separate and identifiable constructs. Future research should address the nature of the interrelationships between expert, referent and legitimate power. These power bases were correlated very similarly and it would be informative to learn more

about the situations in which they occur, either in combination or in isolation.

Future research on power and influence should also consider the inclusion of other potential power bases or influence strategies. One omitted, but probably important power source is information. The possession of, access to and control over the distribution of information has been identified in the theoretical literature as an important source of influence and little empirical research exists to date (Yukl & Falbe, 1990). It is probable that information power relates in some systematic ways to the power bases examined in this study. In particular, it is likely to relate to the expert and legitimate power bases. Two additional types of influence to consider would be the use of rational appeals and persuasion and personal-social influences such as likeability and charisma. These types of influence may be related to French and Raven's conception of referent power. Although the French and Raven (1959) power typology used in this study was useful and informative, it should not limit further developments and distinctions in the area that consider different typologies and levels of analysis. Bass' (1960, in Yukl & Falbe, 1990) two factor taxonomy of personal vs. position power is an important one. Finally approaches to measuring power should distinguish between attributional measures of power which assume the agent's power has actually been used on the target, and

measures which assess whether an agent possesses the potential to use various power bases (Yukl & Falbe, 1990). The scales used in this study are limited to the extent that they confound the actual and potential use of power. All the scale items begin with the stem, "My supervisor can". The use of the word can connotes potential power but could also be interpreted as "My supervisor does" influence me in certain ways. The logic here is that I know he or she can influence me because he or she does. Additional research is needed to clarify this issue.

Supervisory Influence, Organizational Commitment and Intent to Remain with the Organization

The hypothesized relationship between expert and referent power, moral/affective commitment and intent to remain was supported. Similarly, the hypothesized relationship between coercive power, alienative commitment and intent to remain with the organization was supported. Legitimate and reward power were not related to calculative OC and minimally predicted continuance OC. As hypothesized, no direct paths were needed between the power bases and intent to remain.

This research provides clear evidence for a multidimensional definition of OC which includes negative and positive affective components based on values, social attachments and coercive control as well as instrumental,

exchange-based components. All are related to supervisory power bases reflective of different types of compliance inducing mechanisms. While the affective components of OC (Alienative and Moral/Affective) were relatively clear and demonstrated the predicted relationships with power, more research is needed on the instrumental type(s) of commitment. Continuance commitment was only marginally related to the power bases, but was rather strongly related to intention to remain with the organization. Future research needs to examine what instrumental commitment is as a construct and what antecedents, power bases as well as other organizational features, will systematically predict it. Future research is also needed on other organizational variables in addition to supervisory influence and intention to remain with the organization, that may be causally related to different dimensions of OC. Finally, there is a need to explore commitment dimension mixtures or combinations and how these relate to particular antecedents and consequences. Comparative research conducted across organizations with clear and different compliance systems, reward systems and the like would help to shed light on the formation of various commitment dimensions.

The finding that the SLI scale measuring intent to remain with the organization was more strongly related to all the commitment dimensions than the HAS scale sheds some additional light on the nature and consequences of

commitment. The HAS assesses an employee's willingness to change from one organization to another for slight increases in pay, professional freedom, status and the friendliness of coworkers. The SLI assesses the employee's intention to quit or leave their organization within three, six, twelve and twenty-four month time frames and does not reference intent to remain to any particular organizational features. This suggests that the SLI is a more global and direct measure of intent to remain and that intent to remain is a rather definite and differentially related consequence of three of the four dimensions of commitment studied in this research. The fact that the HAS did not relate to Continuance and Calculative Commitment more strongly than the SLI, in contrast to what was expected, suggests that Continuance and Calculative OC may not be responsive to "slight increases" in pay, professional freedom, status or the friendliness of coworkers. The formation of Continuance and Calculative OC may require the accrual of more substantial gains or benefits in one or more of these areas. Again, in order to clarify the nature of the Calculative and Continuance Commitment dimensions it would be useful to assess whether they are differentially related to each of the four areas identified in the HAS scale as well as to other relevant variables. Future research in this direction would help to define and clarify the nature of the Calculative and Continuance dimensions more thoroughly.

This research contains certain limitations. A large portion of the sample consisted of evening students. Although the demographics did not appear to differ markedly between the student and non-student subsamples, this is still a consideration. The average organizational tenure and age of the sample was lowered. Longer organizational tenure may result in different patterns or dimensions of commitment. In addition, students are presumably attending school to further themselves and their careers. They may not have the same kind of instrumental expectations or commitments from their employment situation if it is viewed as a more temporary situation pending advancement to something better. This research should be replicated with other samples for the above reasons.

While some of the modifications introduced to the original structural model in this research were expected for theoretical reasons (i.e., inverse paths between Moral/Affective OC and Alienative OC with their respective power bases), others were largely data driven. For example, the modifications that allowed uniquenesses between items to covary were a data driven and tentative type of respecification step. As noted earlier, theoretical explanations for such modifications could often be found post-hoc. However, this type of post-hoc modeling should be viewed with caution and efforts at replication are strongly warranted. It would be valuable to ascertain whether this

type of respecification cross-validates well in a different sample. Finally, replication across different samples would also provide more confidence in the sample-specific regression weights reported.

Conclusions

This research suggests that organizational commitment is a multidimensional construct consisting of at least four dimensions or factors of OC (Moral/Affective OC, Continuance OC, Alienative OC and Calculative OC). It is therefore reasonable to conclude that unidimensional definitions of OC are not enough to further our understanding of the OC construct. This research also suggests that each of the dimensions of OC are differentially related to various antecedents and consequences, such as those examined in this study involving supervisory influence strategies and intent to remain with the organization. Future research efforts need to clarify the nature and interrelationships between these existing dimensions with particular attention directed toward the meaning and operationalization of Calculative and Continuance Commitment. Finally, additional antecedents and consequences should be examined in order to further our understanding of the development and consequences of organizational commitment.

Appendix A

Three Factor Model of Organizational Commitment

Organizational Commitment Scale (OCS)

Moral Commitment Items

3. I am dedicated to this organization.
6. I feel it is my duty to support this organization.
9. Whenever I am in public, I think of myself as an employee of this organization.
12. It is my personal responsibility to help this organization achieve success.
15. I get upset when people say bad things about this organization.

Calculative Commitment Items

1. I will give my best effort when I know it will be seen by the "right" people in this organization.
4. I get most involved in my work when I know I'll receive recognition for it.
7. I am motivated by thoughts of getting greater personal rewards from this organization.
10. I put effort into this company to the extent I get something in return for it.
13. I support this organization to the extent that it supports me.

Alienative Commitment Items

2. Sometimes I would like to walk out of this organization and never come back.
5. I often feel like I want to "get even" with this company.
8. I get angry when I think about this organization.
11. I feel trapped here.
14. No matter what I do around here, this organization remains unchanged.

Responses: 1 Strongly Disagree; 2 Moderately Disagree; 3 Slightly Disagree; 4 Neither Disagree nor Agree; 5 Slightly Agree; 6 Moderately Agree; 7 Strongly Agree.

Penley, L. E. & Gould, S. (1988). Etzioni's model of organizational involvement: A perspective for understanding commitment to organization, Journal of Organizational Behavior, 9, 43-59.

Appendix B

Two Factor Model of Organizational Commitment

Affective Commitment Scale

1. I do not feel a stronge sense of belonging to my organization.
2. I do not feel "emotionally attached" to this organization.
3. This organization has a great deal of personal meaning for me.
4. I do not feel like "part of the family" at this organization.
5. I would be very happy to spend the rest of my career at this organization.
6. I enjoy discussing my organization with people outside it.
7. I really feel as if this organization's problems are my own.
8. I think I could easily become as attached to another organization as I am to this one.

Continuance Commitment Scale

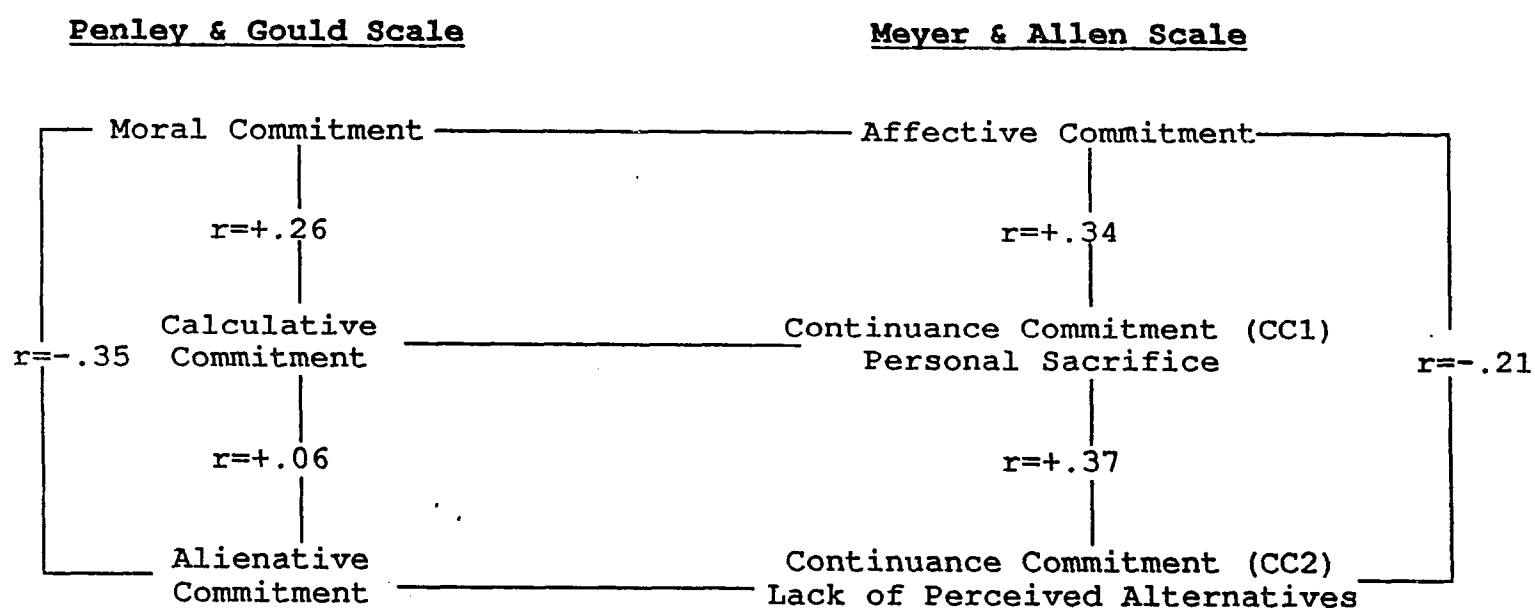
1. Right now, staying with my organization is a matter of necessity as much as desire.
2. One of the major reasons I continue to work for this organization is that leaving would require considerable personal sacrifice-- another organization may not match the overall benefits I have.
3. I feel I have too few options to consider leaving this organization.
4. One of the few negative consequences of leaving this organization would be the scarcity of available alternatives.
5. It would be very hard for me to leave my organization right now, even if I wanted to.
6. Too much in my life would be disrupted if I decided I wanted to leave my organization now.
7. It wouldn't be too costly for me to leave my organization in the near future.
8. I am not afraid of what might happen if I quit my job without having another one lined up.

Responses: 1 Strongly Disagree; 2 Moderately Disagree; 3 Slightly Disagree; 4 Neither Disagree nor Agree; 5 Slightly Agree; 6 Moderately Agree; 7 Strongly Agree.

Meyer, J. P. & Allen, N. J. (1984). Testing the "side-bet theory" of organizational commitment: Some methodological considerations, Journal of Applied Psychology , 69, 372-378.

Appendix C

A Comparison of Penley & Gould and Meyer & Allen Scales



Correlations are from separate research conducted by Penley & Gould (1988) and McGee & Ford (1987).

Appendix D

Power/Influence Scale

***Instructions*: Below is a list of statements which may be used in describing behaviors that supervisors in work organizations can direct toward their subordinates. First carefully read each descriptive statement, thinking in terms of your supervisor. Then decide to what extent you agree that your supervisor could do this to you. Mark the number which most closely represents how you feel. Use the following numbers for your answers:**
5 Strongly Agree; 4 Agree; 3 Neither Agree Nor Disagree; 2 Disagree; 1 Strongly Disagree.

My Supervisor can...

(Reward Power)
1. increase my pay level.
13. influence my getting a pay raise.
16. provide me with special benefits.
17. influence my getting a promotion.

(Legitimate Power)
5. make me feel I have commitments to meet.
14. make me feel like I should satisfy my job requirements.
18. give me the feeling I have responsibilities to fulfill.
20. make me recognize I have tasks to accomplish.

(Expert Power)
8. give me good technical suggestions.
10. share with me his/her considerable experience and/or training.
15. provide me with sound job-related advice.
19. provide me with needed technical knowledge.

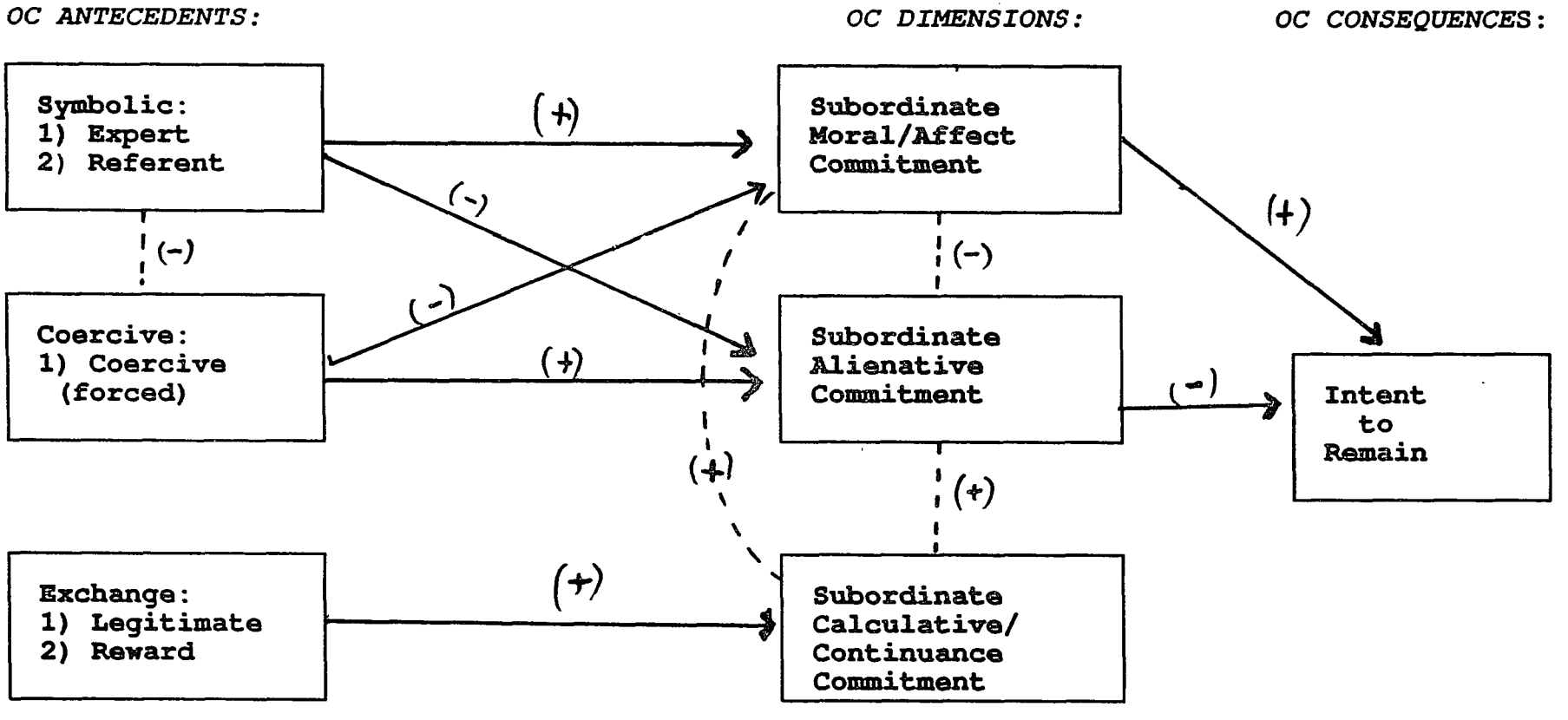
(Referent Power)
2. make me feel valued.
4. make me feel like he/she approves of me.
6. make me feel personally accepted.
7. make me feel important.

(Coercive Power)
3. give me undesirable job assignments.
9. make my work difficult for me.
11. make things unpleasant here.
12. make being at work distasteful.

Hinkin, T. R. & Schriesheim, C. (1989). Development and application of new scales to measure the French and Raven (1959) bases of social power, Journal of Applied Psychology, 74, 561-567.

Appendix E

A Proposed Causal Model



NOTE: Dotted lines indicate hypothesized correlations involving no directional paths.

Appendix F

Introductory Script

My name is Lori Poveromo and I am a Ph.D. student in Industrial and Organizational Psychology. I am conducting some research about work attitudes and am here to ask you to complete five surveys about the organization you presently work for. If you are not working right now you can complete the surveys referring to your most recent employment experience and I would ask you to indicate in the background information section that you are currently unemployed. Or, if you're currently not working, you can simply browse through the surveys without completing the questions. The surveys take about 20 minutes to complete and your participation is of course totally voluntary and anonymous. The cover page is a consent form explaining the research and your participation and I would ask that everyone read the form and sign it before beginning the surveys.

Debriefing Script

First, before I begin, does anyone have any questions? The first two surveys you completed are trying to assess the job attitude of organizational commitment. That is, how attached you feel to the organization you work for in terms of loyalty, or common goals, or values, or attachment based on needing your salary and the like. I asked you to complete two surveys because there is alot of confusion in the field of industrial and organizational psychology about what organizational commitment is and about what is the best way of measuring it. Basically what I will be doing is combining all of your responses with a few hundred more people's responses and using statistics to see how similar the two organizational commitment surveys really are. They are supposed to be measuring the same thing and therefore they should turn out to be similar. To the extent that they are similar to each other I'll be able to conclude that they are or are not decent measurement instruments for assessing organizational commitment.

The second thing I am investigating with this research is whether the way your supervisor or boss treats you affects the kind of organizational commitment you develop. For example, if your boss treats you terribly and never helps you out at work, I hypothesize (propose) that you will develop a negative kind of attitude toward your organization. Conversely, if your boss is considerate, sensitive to your needs and teaches you alot of valuable things, you'll probably develop positive, strong feelings of organizational commitment. So, this explains why the supervisor survey is in the package of surveys you just completed.

Finally, there were two surveys that asked you about your intentions of staying with or leaving your organization. Basically, I propose that if you have positive, strong feelings of organizational commitment, you'll end up wanting to stay with your organization more and for a longer period of time. Of course the opposite is expected to hold true as well. The less committed you are, the more you will want to leave your organization.

Are there any more questions? Thank you again for your time and help in doing this research. Remember, if you are interested in receiving the final results when they are completed, let me know and I will be very happy to forward them to you.

BARUCH COLLEGE

DEPARTMENT OF PSYCHOLOGY

FALL, 1990

The following research study is part of a doctoral dissertation being conducted at the Baruch College Department of Psychology by Lori Poveromo, M.S., M.Ph. under the supervision of Roger E. Millsap, Ph.D.

As a participant you will be asked to complete five survey questionnaires about work. The questions ask about your attitudes toward your current work organization and your supervisor or boss. There are also a few questions about your background such as whether you are employed full or part-time. The results of this study will add to our general fund of knowledge about how work attitudes are developed and may ultimately enhance the quality of work life for both individuals and organizations.

All of your answers are anonymous and none of the information you provide will be released to anyone. Your participation is completely voluntary and you may choose to stop your participation at any point in the process. The surveys take approximately 20 minutes to complete.

I am very appreciative of your help and will be very happy to answer any questions you may have. In addition, upon your request I will be happy to share the final research findings with you.

THANK YOU VERY MUCH FOR YOUR COOPERATION AND HELP.

I have read and understood the information provided above and agree to participate in this project.

Signed_____ Date_____

Appendix G

BARUCH COLLEGE

DEPARTMENT OF PSYCHOLOGY

FALL, 1990

Dear participant:

The following research study is part of a doctoral dissertation being conducted at the Baruch College Department of Psychology by Lori Poveromo, M.S., M.Ph. under the supervision of Roger E. Millsap, Ph.D.

As a participant you will be asked to complete five survey questionnaires about work. The questions ask about your attitudes toward your current work organization and your supervisor or boss. There are also a few questions about your background such as whether you are employed full or part-time. The results of this study will add to our general fund of knowledge about how work attitudes are developed and may ultimately enhance the quality of work life for both individuals and organizations.

All of your answers are anonymous and none of the information you provide will be released to anyone. Your participation is completely voluntary and you may choose to stop your participation at any point in the process. The surveys take approximately 20 minutes to complete.

I am very appreciative of your help and will be very happy to answer any questions you may have. In addition, upon your request I will be happy to share the final research findings with you. A self-addressed, stamped envelope is attached for your convenience.

THANK YOU VERY MUCH FOR YOUR COOPERATION AND HELP.

Sincerely,

Lori Poveromo

Lori Poveromo
281 Park Place
Brooklyn, NY 11238
(212) 587-5952

Appendix H

ORGANIZATION SURVEY ONE

Please circle the response which most closely represents the extent to which you agree or disagree with the following statements about the organization you presently work for. Please use the following response choices:

1	2	3	4	5	6	7
STRONGLY DISAGREE	MODERATELY DISAGREE	SLIGHTLY DISAGREE	NEITHER DISAGREE OR AGREE	SLIGHTLY AGREE	MODERATELY AGREE	STRONGLY AGREE

1. I will give my best effort when I know it will be seen by the "right" people in my organization.

   1 2 3 4 5 6 7

2. Sometimes I would like to walk out of my organization and never come back.

   1 2 3 4 5 6 7

3. I am dedicated to my organization.

   1 2 3 4 5 6 7

4. I get most involved in my work when I know I'll receive recognition for it.

   1 2 3 4 5 6 7

5. I often feel like I want to "get even" with my organization.

   1 2 3 4 5 6 7

6. I feel it is my duty to support my organization.

   1 2 3 4 5 6 7

7. I am motivated by thoughts of getting greater personal rewards from my organization.

   1 2 3 4 5 6 7

8. I get angry when I think about my organization.

   1 2 3 4 5 6 7

9. Whenever I am in public, I think of myself as an employee of my organization.

   1 2 3 4 5 6 7

1	2	3	4	5	6	7
STRONGLY DISAGREE	MODERATELY DISAGREE	SLIGHTLY DISAGREE	NEITHER DISAGREE OR AGREE	SLIGHTLY AGREE	MODERATELY AGREE	STRONGLY AGREE

10. I put effort into my company to the extent I get something in return for it.

1 2 3 4 5 6 7

11. I feel trapped at my organization.

1 2 3 4 5 6 7

12. It is my personal responsibility to help my organization achieve success.

1 2 3 4 5 6 7

13. I support my organization to the extent that it supports me.

1 2 3 4 5 6 7

14. No matter what I do around my organization, it remains unchanged.

1 2 3 4 5 6 7

15. I get upset when people say bad things about my organization.

1 2 3 4 5 6 7

ORGANIZATIONAL SURVEY TWO

Please circle the response which most closely represents the extent to which you agree or disagree with the following statements about the organization you presently work for. Please use the following response choices:

1	2	3	4	5	6	7
STRONGLY DISAGREE	MODERATELY DISAGREE	SLIGHTLY DISAGREE	NEITHER DISAGREE OR AGREE	SLIGHTLY AGREE	MODERATELY AGREE	STRONGLY AGREE

1. I do not feel a strong sense of belonging to my organization.

   1 2 3 4 5 6 7

2. I do not feel "emotionally attached" to my organization.

   1 2 3 4 5 6 7

3. My organization has a great deal of personal meaning to me.

   1 2 3 4 5 6 7

4. I do not feel like "part of the family" at my organization.

   1 2 3 4 5 6 7

5. I would be very happy to spend the rest of my career with my organization.

   1 2 3 4 5 6 7

6. I enjoy discussing my organization with people outside it.

   1 2 3 4 5 6 7

7. I really feel as if my organization's problems are my own.

   1 2 3 4 5 6 7

8. I think I could easily become as attached to another organization as I am to my present one.

   1 2 3 4 5 6 7

1	2	3	4	5	6	7
STRONGLY DISAGREE	MODERATELY DISAGREE	SLIGHTLY DISAGREE	NEITHER DISAGREE OR AGREE	SLIGHTLY AGREE	MODERATELY AGREE	STRONGLY AGREE

9. Right now, staying with my organization is a matter of necessity as much as desire.

1 2 3 4 5 6 7

10. One of the major reasons I continue to work for my organization is that leaving would require considerable personal sacrifice-- another organization may not match the overall benefits I have.

1 2 3 4 5 6 7

11. I feel I have too few options to consider leaving my organization.

1 2 3 4 5 6 7

12. One of the few negative consequences of leaving my organization would be the scarcity of available alternatives.

1 2 3 4 5 6 7

13. It would be very hard for me to leave my organization now, even if I wanted to.

1 2 3 4 5 6 7

14. Too much in my life would be disrupted if I decided I wanted to leave my organization now.

1 2 3 4 5 6 7

15. It wouldn't be too costly for me to leave my organization in the near future.

1 2 3 4 5 6 7

16. I am not afraid of what might happen if I quit my job without having another one lined up.

1 2 3 4 5 6 7

ORGANIZATION SURVEY THREE

The following responses should be used in answering the next four questions. Please circle the number that best represents what you think you would do.

7	6	5	4	3	2	1
EXCELLENT	**VERY GOOD**	**GOOD**	**SO-SO**	**NOT SO GOOD**	**BAD**	**TERRIBLE**

Assuming that it is entirely up to you, how likely is it that you will still be working for your present organization:

1. Three months from now:

   7 6 5 4 3 2 1

2. Six months from now:

   7 6 5 4 3 2 1

3. One year from now:

   7 6 5 4 3 2 1

4. Two years from now:

   7 6 5 4 3 2 1

SUPERVISOR SURVEY

Below is a list of statements which may be used in describing behaviors that supervisors in work organizations can direct toward their subordinates. First carefully read each descriptive statement, thinking in terms of your supervisor. Then decide to what extent you agree that your supervisor could do this to you. Circle the number which most closely represents how you feel. Use the following numbers for your answers:

1	2	3	4	5
STRONGLY DISAGREE	DISAGREE	NEITHER AGREE OR DISAGREE	AGREE	STRONGLY AGREE

1. My supervisor can increase my pay level.

   1 2 3 4 5

2. My supervisor can make me feel valued.

   1 2 3 4 5

3. My supervisor can give me undesirable job assignments.

   1 2 3 4 5

4. My supervisor can make me feel like he/she approves of me.

   1 2 3 4 5

5. My supervisor can make me feel that I have commitments to meet.

   1 2 3 4 5

6. My supervisor can make me feel personally accepted.

   1 2 3 4 5

7. My supervisor can make me feel important.

   1 2 3 4 5

8. My supervisor can give me good technical suggestions.

   1 2 3 4 5

9. My supervisor can make my work difficult for me.

   1 2 3 4 5

1	2	3	4	5
STRONGLY DISAGREE	DISAGREE	NEITHER AGREE OR DISAGREE	AGREE	STRONGLY AGREE

10. My supervisor can share with me his/her considerable experience and/or training.

    1 2 3 4 5

11. My supervisor can make things unpleasant at work.

    1 2 3 4 5

12. My supervisor can make being at work distasteful.

    1 2 3 4 5

13. My supervisor can influence my getting a pay raise.

    1 2 3 4 5

14. My supervisor can make me feel like I should satisfy my job requirements.

    1 2 3 4 5

15. My supervisor can provide me with sound job-related advice.

    1 2 3 4 5

16. My supervisor can provide me with special benefits.

    1 2 3 4 5

17. My supervisor can influence my getting a promotion.

    1 2 3 4 5

18. My supervisor can give me the feeling I have responsibilities to fulfill.

    1 2 3 4 5

19. My supervisor can provide me with needed technical knowledge.

    1 2 3 4 5

20. My supervisor can make me recognize that I have tasks to accomplish.

    1 2 3 4 5

BACKGROUND INFORMATION

For each of the following seven questions please check the ONE response which most applies to you:

1. Your gender:
   _____ Male
   _____ Female

2. Your ethnic group:
   _____ Black
   _____ White
   _____ Hispanic
   _____ Asian/Pacific Islander
   _____ Native American Indian
   _____ Other

3. Your highest level of education:
   _____ Elementary school
   _____ Some high school
   _____ High school graduate
   _____ Some college
   _____ Associate's degree
   _____ Bachelor's degree
   _____ Some graduate school
   _____ Graduate degree

4. Your present marital status:
   _____ Single (never married)
   _____ Married
   _____ Divorced or separated
   _____ Widowed

5. Your employment status:
   _____ Part-time (20 hrs. or less a week)
   _____ Full-time (35 hrs. or more a week)
   _____ Unemployed

6. Your annual income:

   _____ Less than $ 5,000.
   _____ $ 5,001. - $10,000.
   _____ $10,001. - $15,000.
   _____ $15,001. - $20,000.
   _____ $20,001. - $25,000.
   _____ $25,001. - $30,000.
   _____ $30,001. - $35,000.
   _____ $35,001. - $40,000.
   _____ $40,001. - $45,000.
   _____ $45,001. - $50,000.
   _____ $50,001. - $55,000.
   _____ $55,001. - $60,000.
   _____ $60,001. - $65,000.
   _____ $65,001. - $70,000.
   _____ $70,001. - $75,000.
   _____ $75,001. - $80,000.
   _____ $80,001. - $85,000.
   _____ More than $85,001.

7. Your current occupational job group:

_____ Administrator (Having primary but non-supervisory responsibility for a project or ongoing function of the organization)
_____ Clerical-Secretarial (Including bookeeper, receptionist, key punch operator, etc.)
_____ Craftsman (Manual work for which special training, apprenticeship, or other licensing is required)
_____ Manager (Supervising persons who, in turn, supervise others)
_____ Operator-Laborer (Manual work that requires only training specific to the job)
_____ Professional (Doctor, lawyer, engineer, scientist, C.P.A., architect, registered nurse, etc.)
_____ Supervisor or foreman
_____ Technical--semi-professional (White-collar work that requires some college and/or a technical degree)
_____ Other

For each of the following eight questions please fill in your most accurate response:

8. What is your current age? _____

9. How many dependents do you currently support financially, in whole or in part?

_____

10. Is your income the sole supporting income for your family?

_____ Yes _____ No

11. How many people are in your family?

_____

12. How many years have you worked for your present company or organization?

_____

13. What is your present job title?

_____

14. How many years have you worked in your present job title?

_____

15. How many years have you worked for your present supervisor or boss?

_____

ORGANIZATION SURVEY FOUR

The following responses should be used in answering the next four questions. Please circle the number that best represents what you think you would do.

1	2	3
YES DEFINITELY	UNCERTAIN	NO DEFINITELY NOT

Assume you were offered a position which is the same as your present job, but with another employing organization. Would you leave your present organization under any of the following conditions?

1. With a slight increase in pay:

   1 2 3

2. With slightly more freedom to be professionally creative:

   1 2 3

3. With slightly more status:

   1 2 3

4. To work with people who are a little friendlier:

   1 2 3

The following responses should be used in answering the next four questions. Please circle the number that best represents what you think you would do.

7	6	5	4	3	2	1
EXCELLENT	VERY GOOD	GOOD	SO-SO	NOT SO GOOD	BAD	TERRIBLE

Assuming that it is entirely up to you, how likely is it that you will:

5. Quit your organization sometime in the next three months:

   7 6 5 4 3 2 1

6. Quit your organization sometime in the next six months:

   7 6 5 4 3 2 1

7. Quit your organization sometime in the next year:

   7 6 5 4 3 2 1

8. Quit your organization sometime in the next two years:

   7 6 5 4 3 2 1

Appendix I

The Staying or Leaving Index (SLI)

How do you rate your chances of still working for (the name of the organization):

1. Three months from now (date).
2. Six months from now (date).
3. One year from now (date).
4. Two years from now (date).

(At another place in the questionnaire, not immediately following questions 1-4, the next set of four questions should be located.)

How would you rate your chances of:

5. Quitting the (name of the organization) in the next three months (by date).
6. Quitting this company sometime in the next six months (by date).
7. Quitting this company sometime in the next year (by date).
8. Quitting this company soemtime in the next two years (by date).

Responses: 1 Terrible; 2 Bad; 3 Not So Good; 4 So-So; 5 Good; 6 Very Good; 7 Excellent.

(The first four questions are reverse scored, and all eight questions are then summed to produce the total score. Thus, the higher the score, the greater the respondent's intention of leaving the organization.

Bluedorn, A. (1982). The theories of turnover: Causes, effects and meaning. In S. Bacharach (Ed.), Research in the sociology of organizations (pp. 75-138). Greenwich, CT: JAI Press.

Appendix J

Hrebiniak and Alutto Scale

1	2	3
YES DEFINITELY	**UNCERTAIN**	**NO DEFINITELY NOT**

Assume you were offered a position which is the same as your present job, but with another employing organization. Would you leave your present organization under any of the following conditions?

1. With a slight increase in pay:

   1 2 3

2. With slightly more freedom to be professionally creative:

   1 2 3

3. With slightly more status:

   1 2 3

4. To work with people who are a little friendlier:

   1 2 3

Appendix K

Structural Equation Model Covariance Matrix

	MA3	MA5	MA6	MA7	PG3	PG6
MA3	3.790					
MA5	2.079	4.412				
MA6	1.979	1.886	3.398			
MA7	1.765	1.688	1.672	3.735		
PG3	1.576	1.457	1.331	1.338	2.653	
PG6	1.341	1.192	1.174	1.161	1.409	2.512
PG9	1.379	1.260	1.329	1.214	1.028	1.031
PG12	1.272	1.239	0.987	1.485	1.130	1.479
PG15	1.498	1.420	1.290	1.444	1.121	1.293
PG2	-1.353	-1.693	-1.406	-0.965	-1.014	-0.885
PG5	-0.811	-1.098	-0.731	-0.342	-0.635	-0.512
PG8	-1.131	-1.391	-1.356	-0.703	-0.896	-0.791
PG11	-0.933	-1.199	-1.125	-0.384	-0.755	-0.692
PG14	-1.072	-0.891	-0.892	-0.780	-0.834	-0.608
MA10	-0.043	0.212	-0.090	-0.014	0.035	0.222
MA11	-0.584	-0.254	-0.568	-0.314	-0.416	-0.201
MA12	-0.690	-0.415	-0.571	-0.534	-0.518	-0.247
MA13	0.170	0.109	0.001	0.163	0.069	0.219
MA14	0.104	0.294	-0.069	-0.058	-0.073	0.039
PG1	0.239	0.160	0.177	0.164	0.134	0.315
PG4	-0.041	-0.226	0.000	0.293	-0.142	0.204
PG10	-0.360	-0.113	-0.208	0.097	-0.337	-0.050
BLTOT	1.241	2.002	1.264	0.817	1.075	0.918
BO8	0.362	0.438	0.400	0.422	0.341	0.285
BO10	0.460	0.446	0.459	0.429	0.419	0.294
BO15	0.524	0.495	0.420	0.474	0.292	0.334
BO19	0.378	0.443	0.381	0.477	0.295	0.272
BO2	0.344	0.414	0.317	0.271	0.219	0.318
BO4	0.288	0.248	0.212	0.216	0.201	0.249
BO6	0.503	0.517	0.472	0.457	0.344	0.359
BO7	0.553	0.480	0.447	0.490	0.380	0.342
BO9	-0.357	-0.346	-0.259	-0.183	-0.261	-0.130
BO11	-0.349	-0.316	-0.385	-0.292	-0.200	-0.155
BO12	-0.423	-0.392	-0.432	-0.397	-0.238	-0.143
BO1	0.348	0.273	0.359	0.445	0.216	0.191
BO13	0.124	0.138	0.060	0.245	0.100	0.233
BO17	0.282	0.414	0.286	0.263	0.183	0.332
BO5	0.217	0.298	0.230	0.294	0.199	0.148
BO14	0.173	0.263	0.097	0.248	0.092	0.201
BO18	0.259	0.283	0.256	0.331	0.228	0.256
BO20	0.209	0.314	0.239	0.335	0.143	0.226

	PG9	PG12	PG15	PG2	PG5	PG8
PG9	4.120					
PG12	1.221	3.237				
PG15	1.061	1.218	2.915			
PG2	-0.784	-0.766	-0.803	4.442		
PG5	-0.459	-0.475	-0.397	1.374	3.535	
PG8	-0.621	-0.734	-0.717	1.702	1.412	3.479
PG11	-0.299	-0.522	-0.514	1.925	1.213	1.874

	PG9	PG12	PG15	PG2	PG5	PG8
PG14	-0.355	-0.698	-0.703	1.124	0.748	1.201
MA10	0.060	-0.054	0.077	0.110	0.183	0.356
MA11	-0.357	-0.500	-0.138	0.494	0.542	0.651
MA12	-0.360	-0.445	-0.182	0.861	0.654	0.565
MA13	-0.090	0.071	0.311	0.547	0.330	0.424
MA14	-0.001	-0.008	0.052	0.019	-0.006	0.163
PG1	0.227	0.171	0.304	-0.098	0.103	-0.280
PG4	0.143	-0.027	0.200	-0.096	0.629	-0.046
PG10	0.229	0.089	-0.092	0.082	0.608	0.273
BLTOT	0.940	0.787	0.750	-1.535	-1.070	-1.361
BO8	0.190	0.276	0.342	-0.395	-0.210	-0.210
BO10	0.173	0.200	0.456	-0.404	-0.259	-0.361
BO15	0.345	0.294	0.443	-0.478	-0.343	-0.330
BO19	0.188	0.352	0.398	-0.495	-0.261	-0.215
BO2	0.169	0.259	0.259	-0.264	-0.235	-0.330
BO4	0.145	0.152	0.211	-0.100	-0.159	-0.179
BO6	0.393	0.273	0.363	-0.365	-0.224	-0.285
BO7	0.430	0.250	0.502	-0.352	-0.181	-0.344
BO9	-0.203	-0.155	-0.046	0.689	0.310	0.424
BO11	-0.298	-0.230	-0.058	0.837	0.447	0.449
BO12	-0.305	-0.266	-0.082	1.007	0.519	0.576
BO1	0.199	0.372	0.222	-0.184	0.105	-0.216
BO13	0.236	0.279	0.147	-0.009	-0.048	-0.214
BO17	0.292	0.391	0.338	-0.320	-0.124	-0.247
BO5	0.123	0.229	0.220	-0.065	-0.042	-0.103
BO14	0.180	0.194	0.151	-0.020	-0.074	-0.118
BO18	0.244	0.236	0.310	-0.163	-0.014	-0.206
BO20	0.176	0.221	0.250	-0.127	-0.130	-0.168

	PG11	PG14	MA10	MA11	MA12	MA13
PG11	4.307					
PG14	1.266	3.856				
MA10	0.685	0.201	4.057			
MA11	1.255	0.677	1.730	4.055		
MA12	1.115	0.696	1.151	2.404	3.903	
MA13	0.889	0.558	1.179	1.829	1.710	4.268
MA14	0.455	0.449	1.425	1.449	1.283	2.047
PG1	-0.226	-0.142	0.457	0.330	0.290	0.166
PG4	0.000	0.006	0.697	0.564	0.399	0.405
PG10	0.236	0.208	0.661	0.495	0.641	0.362
BLTOT	-1.257	-0.908	0.252	-0.034	-0.359	0.241
BO8	-0.389	-0.381	-0.140	-0.222	-0.188	0.021
BO10	-0.297	-0.482	-0.113	-0.187	-0.138	-0.001
BO15	-0.431	-0.465	-0.195	-0.215	-0.174	0.014
BO19	-0.423	-0.386	-0.138	-0.239	-0.176	-0.034
BO2	-0.240	-0.336	-0.045	0.007	0.014	0.063
BO4	-0.104	-0.264	0.015	0.089	0.093	0.186
BO6	-0.146	-0.414	0.032	0.078	-0.043	0.185
BO7	-0.133	-0.424	-0.028	0.150	0.046	0.200
BO9	0.525	0.210	0.172	0.240	0.424	0.171
BO11	0.613	0.368	0.193	0.275	0.475	0.265
BO12	0.651	0.448	0.183	0.297	0.566	0.254
BO1	-0.202	-0.321	-0.225	-0.368	-0.113	-0.144
BO13	-0.072	-0.221	-0.069	-0.127	0.060	-0.074
BO17	-0.240	-0.313	-0.009	0.045	0.090	0.013
BO5	-0.043	-0.285	-0.041	0.036	0.023	0.164
BO14	-0.050	-0.216	-0.097	-0.004	-0.019	-0.019
BO18	-0.140	-0.288	0.001	0.166	0.085	0.099
BO20	-0.197	-0.192	0.031	0.094	0.045	0.124

	MA14	PG1	PG4	PG10	BLTOT	BO8
MA14	4.090					
PG1	0.234	3.891				
PG4	0.368	1.952	4.289			
PG10	0.515	1.055	1.676	3.808		
BLTOT	0.543	0.049	-0.114	-0.333	2.923	
BO8	0.052	-0.093	-0.096	0.054	0.327	1.540
BO10	-0.005	0.015	-0.017	-0.027	0.301	0.855
BO15	0.099	-0.013	-0.135	-0.032	0.379	0.804
BO19	-0.021	0.046	-0.096	0.004	0.252	1.117
BO2	0.128	0.077	0.081	0.015	0.331	0.420
BO4	0.093	0.125	0.048	0.018	0.195	0.316
BO6	0.261	0.091	0.070	0.131	0.353	0.426
BO7	0.154	0.223	0.149	0.134	0.325	0.545
BO9	0.145	0.179	0.127	0.083	-0.328	-0.034
BO11	0.225	0.107	0.245	0.078	-0.292	-0.166
BO12	0.208	0.158	0.298	0.096	-0.386	-0.194
BO1	-0.117	0.093	0.153	0.356	0.022	0.129
BO13	-0.117	0.153	0.250	0.309	-0.104	0.069
BO17	0.037	0.181	0.224	0.330	0.210	0.340
BO5	0.094	0.105	0.107	0.069	0.220	0.311
BO14	0.125	0.203	0.182	0.123	0.061	0.300
BO18	0.152	0.271	0.155	0.052	0.237	0.401
BO20	0.229	0.258	0.149	0.135	0.288	0.392

	BO10	BO15	BO19	BO2	BO4	BO6
BO10	1.285					
BO15	0.692	1.225				
BO19	0.813	0.767	1.434			
BO2	0.393	0.384	0.295	0.959		
BO4	0.314	0.354	0.255	0.474	0.806	
BO6	0.383	0.443	0.274	0.447	0.504	1.296
BO7	0.424	0.467	0.422	0.512	0.491	0.900
BO9	-0.076	-0.171	-0.022	-0.002	0.022	-0.076
BO11	-0.106	-0.211	-0.120	-0.020	-0.003	-0.126
BO12	-0.138	-0.280	-0.177	-0.024	-0.025	-0.159
BO1	0.194	0.116	0.140	0.305	0.160	0.106
BO13	0.170	0.147	0.096	0.203	0.162	0.144
BO17	0.318	0.297	0.343	0.331	0.207	0.225
BO5	0.249	0.305	0.270	0.291	0.338	0.408
BO14	0.181	0.363	0.239	0.220	0.204	0.329
BO18	0.319	0.401	0.342	0.266	0.280	0.466
BO20	0.278	0.364	0.417	0.246	0.219	0.399

	BO7	BO9	BO11	BO12	BO1	BO13
BO7	1.486					
BO9	-0.027	1.768				
BO11	-0.088	1.169	1.637			
BO12	-0.137	1.124	1.479	1.857		
BO1	0.126	0.035	0.053	0.105	2.036	
BO13	0.121	0.084	0.104	0.140	1.138	1.685
BO17	0.313	0.111	0.026	0.045	0.718	0.888
BO5	0.425	0.138	0.120	0.069	0.186	0.178
BO14	0.386	0.147	0.151	0.153	0.138	0.248
BO18	0.542	0.047	0.014	0.000	0.143	0.178
BO20	0.398	0.131	0.076	0.041	0.123	0.126

	BO17	BO5	BO14	BO18	BO20
BO17	1.486				
BO5	0.229	0.821			
BO14	0.264	0.317	0.971		
BO18	0.290	0.419	0.447	0.859	
BO20	0.278	0.398	0.433	0.585	0.907

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