This is to certify that the

dissertation entitled

Organizational Goal Congruence in Schools:
An Exploratory Multi-Level Analysis

presented by

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has been accepted towards fulfillment
of the requirements for

Ph.D. degree in Psychology

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Major professor

Date 9/22/89

ORGANIZATIONAL GOAL CONGRUENCE IN SCHOOLS: AN EXPLORATORY MULTI-LEVEL ANALYSIS

by

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A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Psychology

1989

ABSTRACT

ORGANIZATIONAL GOAL CONGRUENCE IN SCHOOLS:
AN EXPLORATORY MULTI-LEVEL ANALYSIS

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Jeffrey B. Vancouver

This study defined four types of goal congruence based on type of comparison (between-constituency vs. within-constituency) and level of analysis (individual vs. organizational). The constituencies examined were within schools; specifically, the principal and the teacher constituency. The goal congruence terms were hypothesized to relate to job attitudes including job satisfaction, organizational commitment, intention to quit, participative decision making climate, stress and adjustment. Individual-level goal congruence terms included agreement between the supervisor and subordinate and agreement between an organizational member and his or her peers. At the organizational level between-constituency goal congruence was defined as the agreement between all subordinates and the supervisor, and within-constituency goal congruence was defined as the overall agreement on organizational goals among all the teachers in a school.

Goal importance ratings and attitude scale scores were collected from 14,721 teachers and 364 principals in a number of states using mailed questionnaires. Goal congruence was measured by computing the difference between profiles of the goal importance ratings of constituency members.

Results indicated that both type of comparison and level of conceptualization are useful distinctions in that they provided a great deal of information about whose agreement on goals was important. Moderate (.10 to .30) correlations were found between three of the goal congruence terms (supervisor-subordinate, member-constituency, and within-constituency) and job satisfaction, organizational commitment, and intention to quit.

Analyses on the interrelationship among the goal congruence terms revealed that the peer agreement goal congruence terms tended to maintain their relationships with the attitude variables even when the effects of the other goal congruence terms were statistically removed using partial correlation analyses. Most notably, peer agreement overshadowed supervisor-subordinate agreement in terms of explaining variance in the attitude scales.

The results of this study demonstrated to some extent that failure to agree can have negative consequences for the organization and its membership. Agreement is particularly important among one's peers in an organization. Discussion focusses on the relative importance of each goal congruence term in understanding associations with job attitudes. Suggestions for future research concentrate on refining the understanding of goal specificity and peer group boundaries.

ACKNOWLEDGMENTS

Challenging seems an appropriate word to describe the process of writing a dissertation. The challenge was ultimately mine, but a number of people suffered the consequences of this particular challenge. I would like to acknowledge some of these people formally.

First, I would like to thank my wife, Laurie. Her understanding, warmth, and support provided the base from which I could meet my challenge. May the challenges of our life together meet with the same success as this challenge.

I thank the National Association of Secondary School Principals for providing the data necessary to do this study. Also, I offer a special thanks to Mary Doherty, fellow graduate student, for her extensive work on the data collection process and for being a friend throughout.

Thanks to my exceptional committee for reading early drafts of my proposal even though they did not have to, and for meeting Summer Term even though they did not have to. Specifically, thanks to Daniel R. Ilgen and J. Kevin Ford for going through this process with me twice, once for the master's thesis and again for the dissertation, and to Mary Ann Reinhart for providing me sage advise throughout much of my graduate career.

Finally, I thank Dr. Neal Schmitt, professor extraordinaire, for turning an improbable challenge into merely a formidable one. Together we tested ideas, refined concepts, coalesced data, interpreted results, and ... met the challenge.

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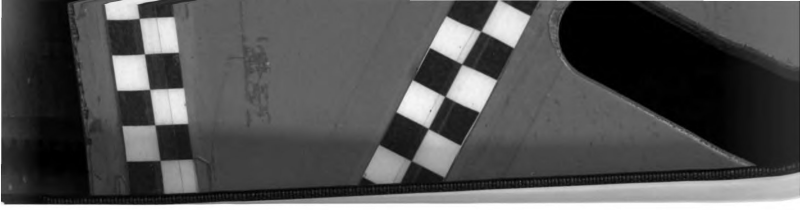


INTRODUCTION

> To achieve success in an educational institution, an organization must build a team, a true team in which individual efforts are welded into a common effort, where each member contributes something toward a common goal. Each position and each individual effort must be directed toward the objectives of the total enterprise (I. I. Dow, 1981, p. 375).

Dow's call for the involvement of all organizational members in the goals of the organization is not unique to educational institutions. Organizational goals reflect the values and commitments of the founders and leaders of organizations (Schien, 1985), and to some extent, the people who make up the organization (Schneider, 1975). The degree to which these people agree on the priorities of organizational goals may have profound effects on outcomes considered important to the organization and the people (e.g. Kochan, Cumming, & Huber, 1976). This study integrates the content areas of organizational development, organizational theory, group processes, and leadership to test hypotheses concerning the effects of goal congruence on outcomes relevant to schools and the teachers who work in them.

Background

Any textbook on strategic management emphasizes the importance of a well articulated statement of mission and organizational objectives (e.g., Donnelly, Gibson, & Ivancevich, 1987; Koontz, & Weihrich, 1988). These writers suggest through case study and anecdotal evidence that the best organizations know where they are going, if not how to get there. With a mission, organizational members can pull together and focus their efforts on similar goals. Thus, organizational objectives assume a central role in the normative models of strategic planners.

Advocates of strategic planning project both a sophisticated model of the organization and an untested assumption. The sophistication lies in the acknowledgement that organizational members or groups of members must be considered because these people may hold different goals for the organization. Specifically, these strategists advise the organization to consider imbuing the members with the organization's goals. At the same time, the strategists are assuming that congruence on those goals will lead to positive organizational outcomes. There are reasons to believe that congruence does related to positive outcomes, but the actual empirical evidence is scarce.

The supposed relationship between agreement on organizational goals and outcomes may be most compelling when outcomes are the attitudes, beliefs and intentions of organizational members. Job attitudes about satisfaction and organizational commitment; beliefs about participation in decision making, stress from work, and abilities to adjust to the work environment; and intentions to quit are all outcomes that have received substantial attention in the organizational

behavior literature. Nevertheless, the associations of agreement on organizational goals with these attitudes, beliefs and intentions (hereafter collectively referred to as attitudes) have received only scant attention[1]. This study was designed to provide evidence regarding these possible relationships. Because of the exploratory nature of this study, simple associations, rather than direction of causality were assessed.

Several issues arose when attempting to make these associations. For instance, which comparisons need to be made? At what level of conceptualization should these comparisons and associations be made? How are agreement and attitudes assessed? Most of these issues are discussed via an overview of the role of goals in organizational theory and research on forms of goal congruence and other similar concepts. The various possible ways of conceptualizing agreement as to organizational goals are discussed in the next section.

Types of Goal Congruence

There are numerous actors and factions within an organization whose goal priorities may or may not coincide (Mintzberg, 1983). The degree to which they coincide, I am calling goal congruence. Goal congruence has only recently come under the scrutiny of organizational researchers. Table 1 describes eleven studies on organizational goal congruence. These studies have occurred at two levels -- the individual and the organizational. At the individual level, supervisor and subordinate goal priorities are compared, and their level of agreement correlated

[1] Role conflict and role ambiguity are similar conceptualizations only at a much more micro (job) level.

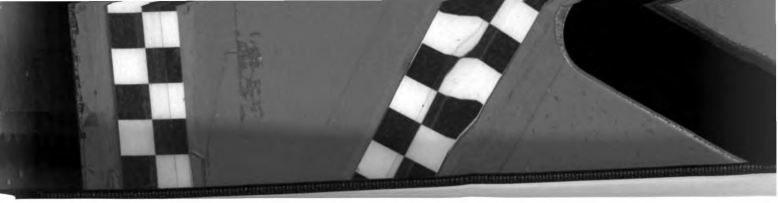


TABLE 1: Research on Organizational Goal Congruence

Study	Level	Type	Correlates
Avi-Itzhak (1985)	Organizational	Between	None
Barkhaus (1974)	Organizational	Between	None
Bourgeous (1985)	Organizational	Between	Organizational Performance
Jauch, Osborn, & Terpening (1980)	Individual	Within	Commitment
Kochan, Huber, & Cummings (1975)	Organizational	Between	Conflict, Dispersion of Power
Kochan, Cummings, & Huber (1976)	Organizational	Between	Conflict, Position
Leana (1986)	Individual	Between	Performance
Reichers (1986)	Individual	Between	Commitment, Role Conflict, Job Sat.
Schmink (1985)	Organizational	Between	None
Vroom (1960)	Individual	Between	Commitment, Participation

with various subordinate outcomes. At the organizational level, the goal congruence research has tended merely to describe the existence of differences between top management and employees.

Four types of goal congruence, based on the level of conceptualization and the type of comparison, are considered in this paper. The two levels are organizational and individual. The two types of comparison are between-unit and within-unit. Between-unit goal congruence consists of congruence in goals held by members of different hierarchical positions in the organization's structure. These hierarchical positions are referred to as constituencies, which are groups of people with a similar vested interest in the organization (e.g., customers, line workers, or management). Within-unit congruence is the agreement among individuals within a single constituency regarding the importance of various goals.

The selection of these four types of goal congruence is a function of both the theoretical consideration of organizational models and the practical considerations of the study sample. The study takes advantage of an archival data set collected from principals and teachers from a large number of schools. The principal and teachers within a school form two important constituencies. To assess the between-unit goal congruence, goal ratings are compared between these two constituencies at both the individual level (i.e., principal/teacher dyads), and the organizational level (i.e., aggregation of principal/teacher dyads by school).

Within-unit goal congruence refers to the level of agreement within a single constituency -- teachers. Because only a single principal exists within each

school, it is not possible to examine the differences in goal priorities among this constituency. At the individual level, within-unit goal congruence involves a comparison of a teacher's goal priorities with the goal priorities of all the other teachers in the school. At the organizational level, within-unit goal congruence is the average of all of the teachers' goal congruences within a school. The goal congruence terms are summarized in the 2 X 2 table presented below (Figure 1). The table defines four cells with level of conceptualization on the vertical axis and type of comparison on the horizontal axis.

LEVEL	TYPE OF COMPARISON: BETWEEN-UNIT	TYPE OF COMPARISON: WITHIN-UNIT
ORGANIZATIONAL	Between-Constituency Goal Congruence (BCGC)	Within-Constituency Goal Congruence (WCGC)
INDIVIDUAL	Supervisor/Subordinate Goal Congruence (SSGC)	Member-Constituency Goal Congruence (MCGC)

FIGURE 1: Types of Goal Congruence

To assess congruence, I used two sets of goal ratings. One set was from the principal of the school. The second set was from the individual teachers. From these two sets, the four comparisons of goal priorities were made. Each comparison is a type of goal congruence (see Figure 1). These types of goal congruence are described in more detail below.

SSGC

The individual representation of between-unit goal congruence is supervisor-subordinate goal congruence (SSGC). Within the setting of schools, the supervisor is the principal and the individual or subordinate is the teacher. The importance ratings of 14 school goals by both the teacher and his or her principal are compared to index SSGC. The method of this comparison is a form of profile analysis called the D statistic to be described much later in the chapter on methods.

The degree to which teachers' goals are congruent with their supervisors' is an issue of the supervisor/subordinate relationship. Therefore, the leadership literature is reviewed as a source of theory and research on this relationship. Specifically, the theory of Leader-Member Exchange (LMX) deals with the dyadic relationship between each individual and his or her supervisor. LMX theory and research is used as a source of hypotheses regarding correlates of SSGC such as participation in decision making climate, turnover intentions, stress, adjustment, organizational commitment, and job satisfaction.

MCGC

Individual teachers can also vary in their congruence with fellow teachers in their school. Each teacher's goal ratings profile is compared with the profiles of all the other teachers in their school. The average agreement with the other teachers' ratings is the measure of MCGC. Research has not examined this type of congruence. MCGC is very similar to the group cohesiveness construct, hence I have generated hypotheses regarding MCGC based on group cohesiveness research. Also, the comparison of individuals with their peers is a further

exploration of the climate discrepancy notions of Joyce and Slocum (1982). Climate discrepancy is the difference between an individual's perception of the organization's environment and the perceptions of others within that environment. Results of the review suggest job satisfaction as well as the other outcomes mentioned above may be correlated with MCGC.

BCGC

The third comparison is between the principal and all of his or her teachers on goal rating profiles. This is goal congruence at the organizational level which is hypothesized to relate to attitudes of the teachers within the school. Participation in decision making climate, intentions to quit, job satisfaction, and organizational commitment are thought to relate to BCGC. It is argued that aggregations of the principal/teacher dyads' congruence (SSGC discussed above) within a school can be examined for its effect on outcomes relevant to the total organization. Team-building research is evoked as a possible, although confounded, source of evidence linking BCGC to organizational correlates. Team-building is confounded in the sense that the ideal team has both between- and within-constituency goal congruence. Because of this, it is not known whether between, within, or both types of congruence are responsible for the types of relationships described in the team-building literature.

WCGC

I hypothesized that the degree of agreement within a constituency on the goals of the organization relates to job satisfaction, participation in decision making climate, organizational commitment, and intentions to quit. Here, the notion is that teachers form an important constituency within schools. The

aggregation of the degree of profile match between all possible teacher pairs within a school is the measure of WCGC (average MCGC for each school). The degree to which these teachers agree with each other may affect and be affected by variables at the organization level. Theories and research in group processes may be an important source for generating hypotheses. Specifically, the concept of group cohesion is examined, and variables that are related to group cohesion are hypothesized to be related to goal congruence within the teacher constituency. Team-building research is also evoked in this section.

Summary

The benefits of organizational goal congruence on outcomes relevant to the organization's members has been an assumed one. Recent descriptions of the organization have noted that organizations specify and pursue multiple goals which may conflict because of the differing advocations of constituencies and individuals within the organization. Based on this work, a study is described which explicitly specified and compared the multiple goals of two constituencies and their members within a number of organizations. It is important to note that although goals may be advocated by different constituencies or individuals, they are goals for the total organization; not for a constituency or an individual. Thus, direct comparisons between constituencies and between individuals were possible.

Overview

In the first part of the Introduction, I present an overview of organizational goals, the place they have had in organizational theories, and the problems associated with the organizational goal concept. I present the notion that organizations have multiple goals and multiple actors who may believe those

goals have different priorities. Furthermore, the intent or striving for a goal is seen to be uniquely human (i.e., individual), even if it is a goal for the organization. Thus, individual analysis is warranted. At the same time, groups of individuals within the organization may be comprised of individuals who hold similar goal priorities due to the similarity of their function and hierarchical level. I argue that one can combine the individual goal congruence indices based on this similarity, allowing organizational-level analyses.

Following the section on organizational goals, I present the rationale, research and hypothesis related to individual-level goal congruence terms. Past research on goal congruence, team-building, and Leader-Member Exchange (LMX) is used extensively in the Supervisor/Subordinate Goal Congruence section. In the MCGC section, group cohesion research and climate discrepancy are used to derive hypotheses. These concepts are similar to goal congruence, but they are under-utilized as sources of understanding organizational and individual attitudes.

A brief discussion of the potential link between SSGC and MCGC is discussed based on the concepts of multiple commitments (Reichers, 1985). According to Reichers, commitment to one group in the organization may be sufficient for commitment to the organization as a whole.

The similarity in constructs and linkages across levels of analysis suggests that composition modeling techniques would be appropriate (Kozlowski & Ostroff, 1987; Roberts, Hulin, & Rousseau, 1978). The concepts of composition modeling are briefly reviewed to give the reader an overview of this technique prior to discussing the predicted organizational level relationships. Two

composition models are built, one for between-unit goal congruence and one for within-unit goal congruence. The rationale for the linkages in the models is presented during discussions of the models.

Between-Constituency Goal Congruence (BCGC) is discussed in terms of past findings regarding this construct. Primarily, this research has been merely descriptive. Nonetheless, research on team-building and organizational-level models is used to predict relationships with BCGC.

Finally, Within-Constituency Goal Congruence (WCGC) is examined. Like MCGC before it, the agreement on goals within a group is mostly the province of social psychologists examining group cohesion. Hypotheses relating to WCGC are derived from much the same literature used for MCGC.

Following the presentation of all the hypotheses, a method for testing the hypotheses is presented, and the data analysis procedures are detailed. This Methods section describes the exact operationalization of the four goal congruence terms. Levels of analysis issues related to the study are discussed in this section as well. In addition, the subjects, measures, and procedures used in data collection are presented. A section describing the results follows. Finally, the results are discussed in terms of the concepts presented in the Introduction with possible directions for future research.

Organizational Goals

The role of goals in organizational theory has been a controversial one (Boland, 1984). This review begins with the rational-analytic model of organizations. In its simplest form, this model is the classic economic model of the organization as a single actor pursuing a single goal (Mintzberg, 1983). The

rational-analytic view holds that organizations pursue the goal articulated by top management (Boland, 1984). Using this perspective, one is able to assess the effectiveness of the organization by the degree to which it achieves its goal (cf., Keeley, 1984). Decisions within the organization are the product of rational appraisals of the environment, and utilitarian evaluations of alternative courses of action in terms of that goal (March & Simon, 1958).

The classic economic model has been slowly debunked such that now it is merely a straw model (Mintzberg, 1983). One-by-one the assumptions have been questioned. The questions raised have important implications for the analysis of goal congruence. The specific problems with the rational-analysts' model are threefold: (a) the assumption of a single goal (Hall, 1980; Papendreau, 1952), (b) the assumption of a single actor (Cyert & March, 1963), and (c) the reification of organizational goals (Silverman, 1970). The three problems are interrelated. When one moves away from the assumption of a single actor pursuing a single goal, the question of agreement between multiple actors arises. Similarly, a single actor can possess volition and intent. With the advent of multiple actors, the problem of reifying the collective is raised. Each of the three problems listed above are addressed separately, and their importance to the concept of goal congruence specified.

Number of Goals

The first problem associated with the rational-analytic approach is that organizations may articulate and work toward a number of goals rather than a single goal (Hall, 1980; Papandreau, 1952). As a result of the multiplicity of goals, conflicts may result. Cyert and March (1963) claimed that organizations

pursue multiple goals, and that those goals are highly ambiguous and non-operational. Each goal is used to justify the utilization of limited organizational resources. A classic example is the university which must balance teaching and research concerns. The administration must choose how to allocate its limited resources in terms of the different goals. The emphasis placed by tenure committees on publications versus feedback from students is one way the university influences the time resource of its faculty.

Attempting to support numerous goals greatly complicates the mission of organizations. Tradeoffs and compromises permeate the structure and policies of the organization. Conflict on the priorities of those goals may also arise. Factions within the organization may differ on their beliefs about the tradeoffs and compromises. This type of conflict (i.e., between factions) leads to the second assumption of the classic model.

Number of Actors

When one moves away from the assumption of a single goal, then assumptions of unanimity with respect to goal priorities must be questioned. Cyert and March (1963) were the first to point out that there may be multiple actors within an organization who hold different goal priorities. The thesis of this proposal is that these differences may be large or small within organizations.

Kochan, Cummings, and Huber (1976) claimed that rational theorists assume consensus on the goals of the organization among their members. For example, Etzioni (1964) defined organizational effectiveness as "the degree to which [an organization] realizes its goals" (p. 8). However, Hall (1980) and others (e.g., Gross, 1965; Pennings & Goodman, 1977) have noted the possibility

of goal multiplicity and incongruence. Schein (1980), for instance, defined organizations as "the idea of coordination of effort in the service of mutual help" (p. 13, emphasis in original text). Coordination is only helpful, according to Schein, if there is some agreement within the organizational membership on goals. Yet, agreement, particularly across levels of the organization, is not necessarily common. Therefore, analysts who attempt to measure the success of an organization by its own goals may have difficulty identifying which goals to use (Zammuto, 1984).

In Mintzberg's (1983) examination of power within organizations, he identified important players as those who have an influence on the selection and pursuit of organizational goals. Among these players are the CEO and the operators (the staff, the workers, the employees, etc). The CEO is the single most important player in the goal game, because of access to a number of power systems (Mintzberg, 1983). Operators can be either professional or non-professional. Professional operators are especially powerful within organizations due to their special knowledges (Mintzberg, 1983). For instance, within a school, the CEO is analogous to the principal and professional operators to teachers.

Another term for players is constituency. The notion of constituencies is important. Etzioni (1961) referred to constituencies as consensus-spheres. According to Etzioni, these consensus-spheres can agree on a number of dimensions, like organizational goals. That different constituencies exist within the organization reflects a position separate from that of organizations existing as single entities (Schein, 1980). The single entity concept ignores possible conflict

among members. Likewise, the constituency approach suggests that all the members need not be considered separately. Such an assumption would weight the goal priorities of an individual operator as equal to that of a CEO -- not a likely situation. Instead, the constituency concept suggests that there are units in the organization with properties relevant to organizational-level outcomes and that these properties need to be explicitly and directly measured and compared.

Reification

Silverman (1970) contended that any talk of organizational goals is reifying or anthropomorphizing organizations (Donaldson, 1985). The argument is that only humans can have goals, volition and purposeful action; applying such concepts to organizations is a fallacy. Silverman is raising more than just an anti-reductionist argument by rejecting organizational goals. He is rejecting the existence of goals for entities larger than the individual, even those organizational goals held by the individual.

Donaldson (1985) argued that the philosophical question of reification centered on the fallacy of expecting unwarranted properties for variables, and then rejecting those variables because the properties were not found. He used as an example the atom. Atoms, an abstraction by physicists, should not be expected to assume the properties of touch and substance that are generally used to prove existence. Rejecting the atom because it does not possess touch and substance is to lose the usefulness of the atom in understanding and predicting the environment. That usefulness is found in the consistency of empirical relationships found using the atom concept.

Donaldson (1985) maintained that the application of intent and purposeful action to organizations is not warranted. To reject the concept of the organization goal as a result of the lack of these properties is the fallacy. Donaldson (1985) makes the point that the organization coordinates individual actions, and as such, the properties of organizations may be useful concepts. He contended that it is more than the sum of its parts, but less than entities possessing intent. Therefore, it may be legitimate and useful to consider not only individual properties, but also organizational properties derived from aggregation. These two solutions to the problem of intent, individual and aggregation analysis, are discussed below.

Individual Analysis

The first approach to the problem of intent is to refer to an organizational goal as an individuals' goal for the group. The fact that the goals are for the organization does not mean that the unit of conceptualization and analysis is necessarily the organization. Cartwright and Zander (1968) pointed out that organizational goals can be held by the individual -- the individual's goal for the organization -- and collectively -- the organizational goal. The focus of this study is in the agreement or congruence among individuals on their goals for the organization, and the agreement on organizational goals within a group and between groups.

Aggregation

Mohr (1973) noted that if we wish to include intent in our concept of organizational goals, then the goals must be an aggregation of the organizational members, because only individuals can have intentions. The exact method of

aggregation (e.g., averaging, unanimity, or majority rule) is arbitrary, but Mohr (1973) and Etzioni (1964) suggested that when operationalizing organizational goals, participants should be asked what the goals seem to be.

Mohr (1973) went on to note that more than one set of goal priorities may exist within the organization. Borrowing from Perrow (1961), Mohr suggested that the goals of the chief executives may hold a great deal of sway, separate from the goals held by the general organizational membership. Thus, separate consideration of both groups may be warranted.

Summary

The discussion of the problems associated with goals in organizational models raises several important points. First, organizations can possess a number of goals. Second, constituencies and individuals within organizations can have different ideas as to the relative importance of those goals. Third, measurement of organizational goals requires separate individual analysis or the aggregation of individual responses if the problem of intent is considered.

The first point was addressed in this study by examining the ratings of importance for 14 school-level goals. The second point was addressed by identifying two types of comparisons -- between- and within-unit. The third point was addressed by recognizing two levels of conceptualization -- the individual and the organizational. Crossing type of comparison with level of conceptualization produced four types of goal congruence. At this point each type of goal congruence is examined separately for its potential correlates. The individual-level goal congruence terms are examined first because readers tend to be most familiar with this level when individual attitudes are considered. After predicted

relationships are discussed at the individual level, I discuss issues about levels of analysis and the use of composition modeling to aid in cross-level hypotheses generation. At that point the predicted correlates of the organizational-level goal congruence terms are discussed.

Individual-Level Goal Congruence

Supervisor/Subordinate Goal Congruence

The congruence between the teacher/principal dyad on the goals for the school may have significant consequences in terms of a teacher's attitudes and perceptions. An examination of the leadership literature, particularly Leader-Member Exchange, is used to derive the correlates of Supervisor-subordinate goal congruence (SSGC). Like SSGC, LMX focuses on the unique relationship between the leader and each of his or her subordinates. An overview of LMX is presented before launching into the specific examinations of the potential correlates of SSGC. Research on organizational goal congruence at the individual level is also available and examined.

Leader-Member Exchange

In a recent review of LMX, Dienesch and Liden (1986) examined the theoretical base, the implications for organizational members, and the methological problems with the theory. The following description borrows heavily from that review. The primary contribution of LMX to the leadership domain is the notion of the dyad relationship between the leader and each of his or her subordinates. These relationships are defined by the roles the subordinates have developed or negotiated with their leader. This process of development and negotiation is carried on informally through a series of role-episodes where the

supervisor imparts his or her role expectations for the subordinate onto that subordinate. These role expectations define the duties and expectations of the supervisor for the subordinate, thus clarifying the subordinates' role within the organization.

However, the degree of role clarification varies between each supervisor-subordinate dyad. This differentiation in the leader-member exchanges is exacerbated by the time constraints on leaders. Only a few key subordinates are likely to have a close relationship with their leader. For the other subordinates, leaders rely on the formalized role-setting structures of the organization. These differences in the exchange are termed the degree of negotiating latitude. The consequences of this differentiation are numerous. Studies have shown that members differ in their levels of turnover (e.g., Graen, Liden, & Hoel, 1982; Vecchio & Gobdel, 1984), satisfaction with supervision, and performance (e.g., Vecchio & Gobdel, 1984).

Despite these promising results in terms of understanding the phenomenon of leadership, LMX is not without methodological problems (Dienesch & Liden, 1986; Miner, 1980). A primary problem is the operationalization of the leader-member exchange or negotiating latitude, specifically the multidimensionality of the construct (Dienesch & Liden, 1986). LMX seems to be composed of a number of indices of togetherness. Dienesch and Liden (1986) identified three dimensions of the construct:

> (a) Perceived contribution to the exchange -- perception of the amount, direction, and quality of work-oriented activity each member puts forth toward the mutual goals (explicit or implicit) of the dyad; (b) Loyalty --

> the expression of public support for the goals and the personal character of the other members of the LMX dyad ...; (c) Affect -- the mutual affection members of the dyad have for each other based primarily on interpersonal attraction rather than work or professional values (pp. 624-5).

The concept of mutual goals and support for those goals enters into two of the three dimensions. It is assumed that one of the principle role expectations the leader wishes to convey to the subordinate is the goals of the organization, at least as the leader perceives them. Thus, perceptions of motivation toward the goals is found in the first dimension, and expression of support for those goals in the second dimension.

Factors Associated with SSGC

The interest in LMX is in the potential for understanding the possible antecedents and consequences of SSGC. The argument is that because goal congruence is such an inherent, if unexpressed, component of LMX, the findings related to the concepts are relevant sources for hypotheses regarding goal congruence.

Additional evidence linking SSGC to individual attitude variables can be found in research on individual-level, between-consistency goal congruence. These studies are cited in Table 1 above. Together with LMX, these studies are used to predict associations between SSGC and perceptions of participation in decision making, job satisfaction, organizational commitment, and intention to quit.

Participation. The conceptual base of the LMX model is the negotiating latitude of the subordinate with his or his supervisor (Dienesch & Liden, 1986).

The notion is that subordinates differ in the latitude their supervisor allows in the negotiation of their role. Preferred subordinates are allowed to negotiate more and thus participate more in the definitions of what they do for the organization. This leads to greater feelings of decision-making power, support and consideration in their dealings with their superior (Graen & Cashman, 1975). The research support for these hypotheses has been mixed. A study by Scandura, Graen, and Novak (1986) reported a correlation of .45 between a measure of LMX and decision influence. On the other hand, a study of Junior Achievement (JA) companies found no relationship between LMX and perceived influence (Duchon, Green, & Taber, 1986).

Other research and theory is relevant as well. This review will show that some researchers claim that goal congruence causes participation, and others the reverse.

Vroom and Yetton (1973) proposed in their model of leadership decision-making that managers use delegation only when they feel their subordinates share their organizational goals. Participation may be a consequence of goal congruence. Steiner and Dobbins (1986) found that when the work values of subordinates and supervisors were similar, subordinates were treated with more negotiating latitude.

On the other hand, in March and Simon's (1958) discussion of evoked alternatives, responses are to some extent a function of supervisor activities. They hypothesized that when subordinates feel participation in decisions is high, the evoked alternatives are more likely to be in line with the alternatives the organization wishes to promote (i.e., goal-directed behavior).

Goal-setting researchers advocate participation in order to facilitate goal acceptance as well. Recently, Ulrich, Brockbank, and Yeung (1988) extrapolated the goal-setting research to organizational goals. They hypothesized that participation in key organizational activities would lead to an increase in commitment to and acceptance of those activities. They further hypothesized that participation would increase overall job satisfaction both directly and through the acceptance of organizational goals. Participation was assessed by self-reported perceptions of degree of participation in decision-making. Goal acceptance was operationalized as a single question asking the respondent to indicate the degree to which the goal is appropriate considering challenges facing the company. Participation did not directly relate to satisfaction but did relate to goal acceptance, and goal acceptance related to satisfaction. Like the present study, the goals were organizational whereas participation, acceptance of those goals, and satisfaction were analyzed at the individual level.

In a study in which causation was not assumed, Vroom (1960) correlated employee's goals with those of top management. He then correlated those coefficients with the degree of participation and autonomy supervisors allowed their subordinates in decision making. The correlations were positive and significant.

Satisfaction. Satisfaction was found to be related to goal acceptance in the Ulrich et al. (1988) study. Other evidence of the possible relationship between goal congruence and satisfaction is through LMX. Numerous studies of LMX have demonstrated a relationship between these two variables. For example, Vecchio and Gobdel (1984) found that in-group members, those with a great deal

of negotiating latitude, had greater satisfaction with their supervisors. Likewise, out-group members, those with low negotiating latitude, had lower overall satisfaction than the middle-range group. In the study of JA companies mentioned earlier, Duchon et al., (1986) found a significant relationship between LMX and satisfaction with the company president four weeks into the program, but not 6 months later. Finally, Vecchio (1982) found that within-group variation in leadership behavior continued to affect positively satisfaction with the supervisor even when between-group variation was taken into account.

Organizational commitment. In the context of SSGC, organizational commitment has not received a great deal of attention in either LMX or goal congruence research. There are a few exceptions.

In the study of JA companies, Duchon et al., (1986) found a significant relationship between LMX and company commitment at both four weeks and 6 months into the program. Vroom (1960) looked at goal congruence as the correlation between an employee's goals for the organization and the aggregation of top managements' goals. He found that goal congruence predicted a positive attitude toward the company.

Intention to quit. LMX researchers have also demonstrated a relationship between negotiating latitude and turnover -- a frequent consequence of intention to quit (Graen, Liden, & Hoel, 1982; Vecchio & Gobdel, 1984). However, not all the tests of the relationship between turnover and LMX have been significant (Vecchio, 1985). In a recent study, Sherman (1986) operationalized what he called goal congruence as a single question asking employees' their commitment to the goals of the work unit. He found that goal congruence with one's work

unit influenced turnover decisions for engineers, but not for technical support personnel. Unfortunately, it is not clear whether the goals of the work unit are that of the supervisor, the organization, the peers in the unit, or some combination of these people.

Summary

The research on LMX and goal congruence seems to indicate a number of potential relationships with SSGC. The connection of a subordinate with her or his supervisor seems to affect subordinate attitudes as well as supervisor behavior toward the subordinate. What is not clear is whether goal congruence, the alignment of supervisor and subordinates on organizational goals, is the type of connection which is related to employee attitudes. One of the goals of this study is to examine the relationship between goal congruence at the supervisor-subordinate level and employee attitudes. Specific hypotheses for SSGC are presented after the section on member-constituency goal congruence due to the hypothesized relation between SSGC and MCGC. Both MCGC and its relations to SSGC are discussed next.

Member-Constituency Goal Congruence

Individuals' goals may or may not correspond with the goal priorities of their peers. Although teachers are within the same hierarchical constituency, any one of them may or may not identify strongly with that group. The consequences and antecedents of this identification have received only tangential attention in group processes and social psychological research. These researchers have mostly been interested in the influences the group uses to keep members in line (see for example, Hackman, 1976), or the effect of the agreement on initial joining and

group formation (Shaw, 1981). Group cohesiveness and team-building research are two exceptions, but their correspondence with within-unit goal congruence as defined here are not direct. The correspondence and research on cohesiveness and team-building are presented below. I also borrow from the climate discrepancy concept of Joyce and Slocum (1982). Climate discrepancy is the difference between the individual's perception of the organizational setting (psychological climate), and the aggregation of the perceptions of all the individuals in the organization (organizational climate). Each section is presented separately.

Cohesion

Research and writing on group cohesiveness indicates that it is a multidimensional construct, but the nature of the components of group cohesiveness is not clear. Research into the mechanisms regarding the effectiveness and outcomes of cohesive teams has emphasized the importance of agreement among individual members on the goals of the group. Group cohesiveness has been defined as agreement with group norms (Sutermeister, 1969), the attraction of members to the group (Goodman, Ravlin, & Schminke, 1987), intentions to stay (Zander, 1985), and commitment to the goals of the group or organization (Goodman et al., 1987). These definitions can be grouped into two types: (1) those related to the development and maintenance of harmonious interpersonal relationships, and (2) those related to successful task accomplishment (Carron, 1982; Yukelson, Weinberg & Jackson, 1984).

According to Carron (1982), for cohesion to exist, interpersonal attraction is necessary but not sufficient. What is required is the desire to pursue common

goals. Likewise, Wheeless, Wheeless, and Dickson-Markman (1982) felt that separating the social and the task roles of group members was "undesirable and unwarranted" (p. 374). A number of researchers and theorists have supported this claim.

For instance, in an attempt to develop a measure of group cohesiveness to be used by sports teams, Yukelson et al., (1984) found that their measure consisted of four factors. Unity of purpose was one of those factors. The internal consistency reliability of the overall measure was .93 based on 22 items. The intercorrelations between factors were not reported. Nevertheless, it seems reasonable to conclude that the factors that make up group cohesion are highly related and that one of these factors is congruence among group members on goals.

At the individual level, MCGC is the agreement of one member of the group with all the other members of his or her group. Cohesion as a group level variable is discussed in the section on WCGC. Most members of a cohesive group will tend to be congruent with each other, but some individuals may not be. MCGC is sensitive to these aberrant individuals. Likewise, individuals in noncohesive groups or members of splinter groups whose members do not share the majority's goals are not going to be congruent with the majority of other members in their organization. The hypothesis developed in this section is that individuals with incongruent goals, whether 1) members of a noncohesive group, 2) members of a splinter group, or 3) aberrant members from a cohesive one, are likely to feel disassociated from work and the organization.

Team-Building

The team-building research within the domain of Organizational Development (OD) has focused on the agreement of various parties on organizational goals. Within the organization, OD specialists focus on team building, conflict resolution, and the use of groups for organization-wide change (Strauss, Miles, Snow, & Tannebaum, 1974). In McGregor's (1967) classic example of OD at Union Carbide, one of the explicit tasks was to help build an "effective management team." One of the factors involved in building that team was "understanding, mutual agreement, and identification regarding the goals of the group" (Bennis, 1969). The OD perspective has centered its attention on team-building as an affective process and as a catalyst toward organizational change (Patten & Dorey, 1977). In a review of OD interventions, Porras and Berg (1978) reported that task-focused team-building techniques are the most widely used of the OD methods. One of the purposes of these team-building efforts is to increase member participation in the setting of organizational goals and the building of commitment to them (Hughes, Rosenbach, & Clover, 1983). The outcomes of team-building include increased team productivity (Patten & Dorey, 1977), positive work climate (Hughes et al., 1983), and satisfaction (Eden, 1985).

The team-building literature is replete with intervention type studies (quasi-experimental) of dubious empirical quality (Woodman & Sherwood, 1980). Nonetheless, team-building research provides a perspective on the types of antecedents and outcomes one may expect to be related to groups and group members with congruent goals. The team-building process includes the

participation of both leader and members. Because multiple hierarchical levels are represented within the teams, changes in goal congruence due to team-building efforts are likely to be both within and between hierarchical levels. It is not possible to separate constituency alliances in the building process. This is probably desirable in terms of the effects of the team-building, but complicates one's understanding of goal congruence. The present study proposes to separate cross-hierarchy goal congruence from within hierarchy goal congruence. However, the findings of team-building research are used to help generate hypotheses for both between- and within-constituency goal congruence. As with cohesion, team-building research and conceptualizations are evoked at the organizational-level sections as well as the individual-level section.

Climate Discrepancy

A great deal of methodological controversy has surrounded the concepts of psychological and organizational climate (for the most recent debate see James, Joyce, & Slocum, 1988; and Glick, 1988). Psychological climate is defined as the individual's perceptions of the practices and procedures of the organization. Organizational climate is the collective description of this environment, usually assessed through the average perception of the members (Joyce & Slocum, 1982). The methological question centers around the meaning of organizational climate when it is the aggregation of psychological climate. At least all agree that the individual responses must demonstrate some level of agreement before aggregation is to make sense. If agreement does exist, then shared perceptions can be assumed and aggregation reflects an organizational-level construct (see James, 1982; James, Joyce, & Slocum, 1988, for supporting arguments).

Joyce and Slocum (1982) added a new twist when they suggested that the difference between any one respondent's psychological climate and the organizational climate may be relevant to climate research outcomes. They called this difference climate discrepancy. The argument was that climate discrepancy reflects the degree of "fit" between the individual in an organization and others in the organization in terms of their perceptions of the organization. Large discrepancies might predict low performance and low job satisfaction relative to small discrepancies.

It should be noted what climate discrepancy is not. It is not the difference between what an individual prefers or expects the climate to be and what others believe it to be (cf, Schneider, 1972; 1975). Such a conceptualization would require individuals to answer questions about preferences, expectations, or perceptions prior to organizational entry, and for those answers to be compared to incumbents' perceptions of the organization as it is. Climate discrepancy asks only incumbents' perceptions of the organization as it is and compares each incumbent with all other incumbents to derive a discrepancy score for each incumbent. This latter definition is consistent with the way in which MCGC is operationalized.

Very little research on the climate discrepancy concept has been reported. Joyce and Slocum cite one clinical example of a very unhappy student whose perception of the school climate was very discrepant from her peers, even though her needs were very similar (Stern, 1978, cited in Joyce & Slocum, 1982). Joyce and Slocum (1982) found that climate discrepancy explained a significant amount

of variance (27%) in job satisfaction in the study of three heavy-duty truck manufacturing plants.

As intimated, the importance of the climate discrepancy notion in terms of goal congruence is found in the similarity of the operationalization of the terms. Climate discrepancy is derived from the difference between how one individual describes the organization as compared to his or her peers. The context of the description is the organization, but the respondents are an individual and the other members of the individual's group. MCGC is defined as the difference between an individual and his or her peers as well. The only difference is the content of the items to which the individual and group respond. For the climate discrepancy, the content is the individuals' view of the situation within the organization (Rousseau, 1988). For MCGC, the content is the individuals' view of the organization's goals.

Other Research

One of the consequences of discrepancy with the group norms is the source of discomfort this brings to the discrepant individual (Festinger, 1954). According to Festinger's (1954) theory on social comparison, individuals dislike being out of congruence with the group. They seek congruence by comparing themselves with others and using that information to guide behavior, beliefs and attitudes. Thus, being incongruent may result in low satisfaction, high stress and poor adjustment to the demands of work.

Factors Associated with MCGC

Cohesion, team-building, climate discrepancy, and, to a lesser extent, social comparison theory are evoked when predicting relationships with MCGC.

Size. Despite the cliché "the more the merrier," the opposite seems to be true (Seashore, 1969). Smaller groups promote more cohesiveness through the greater ability of the members to interact with one another, share interests, feel a significance in their contribution to the goals, et cetera (Napier & Gershenfeld, 1981; Tsouderos, 1955; Wicker, 1969).

Participation. As with SSGC and participation in the previous section, the direction of the relationship between goal congruence within a group and participation in decision making is unclear. The OD specialists use participation to increase the cohesiveness of the group (Leavitt, 1965). Yet, similarity in attitudes and goals is frequently cited as a determinant of cohesive groups (Shaw, 1981). At the same time, cohesive groups are more likely to interact and participate in group discussion (Shaw, 1981). For instance, Back (1951) manipulated group cohesiveness in a creativity task. Subjects in the cohesive groups tended to interact more. Of particular interest was the finding that when cohesiveness was manipulated by evoking interpersonal attraction, the interaction was pleasant and friendly. On the other hand, when the cohesiveness was evoked by congruence in task interest, interaction was more task oriented (Back, 1951). In a study of the contributions of individuals to group goals, it was found that the atmosphere within cooperative groups provided for a greater felt freedom to contribute (Rabbie, Benoist, Oosterbaan, & Visser, 1974). Cooperative groups can be defined as those groups in which there exists a homogeneity of the group goals held by members (Shaw, 1981).

Satisfaction. One of the definitions of cohesiveness is that members are attracted to the goals of the group and derive satisfaction from the group and

those goals. Conversely, without a purpose, the group is not likely to be satisfying to its members (Zander, 1985). The more sophisticated concepts of cohesiveness separated attraction and satisfaction. Nonetheless, both types of satisfaction are plausible and the data are consistent with these hypotheses (Shaw, 1981).

For example, Wheeless et al., (1982) found a high correlation between perceptions of group cohesion and self-reports of satisfaction with the group ($r = .63$). Marquis, Guetzkow, and Heyns (1951) reported a correlation between cohesiveness and member satisfaction with the group process. Exline (1957) found that members in groups that were told they were well matched and congenial reported greater satisfaction with group progress.

Research on team-building has produced mixed results. Eden (1985) found that only peer relations increased as a result of a team-building effort within the Israeli Defence Forces. Other outcomes measured included component satisfaction, communication patterns, leadership, and general management, including an item on goal clarity. More to the point, Gross (1954) reported that cohesiveness in Air Force groups positively related to satisfaction with the Air Force and its goals. Other positive team-building-to-satisfaction research is provided in the BCGC section on satisfaction.

Finally, the work cited earlier on climate discrepancy and social comparison support a relationship between satisfaction and MCGC.

Intention to quit. Like satisfaction, intentions to remain with the group (conversely, intentions to quit) is an aspect of group cohesiveness (see for example, Cartwright & Zander, 1968). As such, turnover intentions by definition are related to cohesiveness. It is highly probable that the goal congruence aspect

of group cohesiveness is related to the intention to remain aspect. However, no empirical research regarding this relationship was found.

Stress and adjustment. Stress and adjustment have been linked with group cohesion (Lazarus & Folkman, 1985). Cohesion improves coping alternatives and adjustment. Conversely, stress and poor adjustment are likely to lead to low levels of acceptance of group and organizational goals (Tannenbaum, 1966). Seashore (1969) hypothesized that cohesive groups reduce stress and facilitate adjustment among their membership. Lastly, Festinger's (1954) theory on social comparison supports a prediction of a relationship between MCGC with stress and adjustment.

Teachers as a Group

The discussion of group cohesiveness and team-building as useful concepts depends, in part, on the link between the types of groups studied and teacher constituencies. Do they consider themselves members of a group? More to the point, are some schools filled with teachers who feel they belong to a cohesive group of peers, while others do not? The answer to that question seems to be yes (Blackman, Crowell, Bollmann, & Mester, 1988). High levels of camaraderie within the teaching core may be indicative of high cohesiveness. Researchers within the field of education have found that teaching staffs vary in the level of cohesiveness they express (Blackman et al., 1988).

Nevertheless, the size of teacher constituencies and the size of groups on which most research on cohesion is based is generally different. Most of the work is done by social psychologists on groups of 4 to 12 members. Other research done on sports teams uses groups of varying size depending on the type

of sport. Although basketball teams are generally small, hockey, football, and baseball teams can get quite large. Still other research is done in a military setting on groups as large as 100 (see, for example, Griffith, 1989). All of these types of researchers and settings have been evoked in this review.

Summary

The review of the cohesiveness, team-building and climate discrepancy research has demonstrated or suggested a number of possible correlates of MCGC. However, group cohesiveness has generally been measured with a questionnaire on attraction to the group and its goals (Goodman et al., 1987). This measure is then correlated with other questionnaire measures. Research of this type is highly susceptible to method bias. MCGC, on the other hand, is derived more objectively. The ratings on importance of goals by constituency members are compared with each other. Respondents are not asked for their perceptions of cohesiveness. Therefore, other perceptual correlates should be methodologically independent of MCGC.

Team-building research is generally of the quasi-experimental type in which team-building interventions are employed. When interventions are used, manipulation checks are sometimes used to verify the process. These checks are subject to the same bias as the cohesion questionnaires. For these reasons, MCGC is unique in its degree of methodological independence from its hypothesized correlates. Also, it is more focused on one aspect of same-constituency relations -- that is, goal agreement. Thus, MCGC is a unique contribution to the organizational behavior literature.

The Relationship Between SSGC and MCGC

At the individual level, organizational goal congruence is very similar to the concept of organizational commitment (Reichers, 1985). Organizational commitment is frequently defined as composed of three components: (1) a strong belief in and acceptance of the organization's goals, (2) a willingness to exert considerable effort on behalf of the organization, and (3) a definite desire to maintain organizational membership (Porter, Steers, Mowday, & Boulian, 1974). The first component is the focus of this proposal. The third component is incorporated in the intention to quit concept. The second component has not received much support (Angle & Perry, 1981), and may be less critical in a school setting because teachers are frequently motivated to educate students regardless of their commitment to the school.

Reichers (1985) made a number of points regarding commitment and organizational goals which are relevant to this proposal. Her first point is the separation of desire to maintain organizational membership from the Porter et al. (1974) conceptualization of organizational commitment. The argument was that the desire-to-remain items in the Organizational Commitment Questionnaire (OCQ) used to measure organizational commitment (Porter et al., 1974) are very close to intention-to-quit items. Intention to quit is an antecedent to turnover (Mobley, Griffeth, Hand, & Meglimo, 1979). Therefore, it is not surprising that organizational commitment correlates with turnover. The problem is the redundancy of commitment and intention to quit (Morrow, 1983). This leaves items on belief and acceptance of organizational goals, and willingness to work toward them as the remaining components of organizational commitment.

Recently, Reichers (1986) examined the relationships among conflict, goal congruence and organizational commitment. In her study, conflict was conceptualized as the perceived conflict between the individual's goals and those of top management. Individuals were asked to endorse goals as they would and as they felt management would. A conflict score was derived by summing the absolute differences between the two types of endorsements on 18 goal tradeoffs. The tradeoffs were between management, professional funding agencies, and client/public constituencies of a community mental health agency. For example, "Planning and implementing changes based more on top management's cost/benefit considerations, than on input from professional staff" was an item within the management/professional goal conflicts cell. Each constituency was crossed with each other constituency forming six cells. Each cell had three items in it. Internal consistency reliability for the conflict measure was .23. Nonetheless, 24% of the variance in organizational commitment was explained by this measure. Conflict correlated significantly, $r = -.51$, $p < .001$, with job satisfaction. Reichers also found that those endorsing top management goals exhibited more organizational commitment than those endorsing other constituencies' goals. She concluded that organizational commitment is, in part, a function of the individual's commitment to managerial goals and values.

The second point that Reichers made concerned the recognition of multiple constituencies within the organization. Much like the arguments presented in the section on organizational goals, Reichers noted that the goals for the organization might arise from different constituencies within and outside the organization. Organization members' goal priorities for the organization may be

more in line with one constituency than another. Congruence with the goals of one of the internal constituencies may be enough to produce organizational commitment and positive attitudes toward work (Reichers, 1985).

Jauch, Osborn, and Terpening (1980) examined the relationship between employee orientations and goal congruence. The employee orientation measure consisted of three factors: 1) professional identification, 2) organizational loyalty, and 3) peer loyalty. In this study, sixteen hospital administrators in 16 different hospitals were asked to rate 14 goal statements on a 5-point Likert-type scale anchored from unimportant to very important. Two hundred fifty seven professional/technical employees working for these hospital administrators, representing a 73 percent response rate, completed a similar questionnaire. No interpretable factor structure was found among the goals so they were considered separately and also summed into a global index. The global index had an adjusted Spearman-Brown reliability of .85. Goal congruence was assessed by calculating the absolute difference between the administrator's score on the individual goals and the global index, and an individual employee's score. The employee orientations interacted with each other in two-way interactions suggesting that the orientations can substitute for each other in the prediction of goal congruence.

In the Reichers' (1986) study, goal congruence correlated with job satisfaction and organizational commitment. With regard to organizational commitment, her goal congruence measure seemed most like SSGC because it was those who supported top management who displayed the highest organizational commitment. However, the evidence from the Jauch et al. (1980)

study and Reichers' own theorizing suggest that commitment to constituencies other than top management may still produce loyalty to the organization. Thus, SSGC and MCGC may substitute for each other in predicting organizational commitment and other correlates. Substitution is a non-linear relationship methodologically operationalized as an interaction. This interaction and the main effects of SSGC and MCGC are the individual-level goal congruence terms of interest in Hypothesis One presented below.

Individual-Level Hypothesis

Due to the expected interaction between SSGC and MCGC, and the fact that SSGC and MCGC have similar hypothesized correlates, the following single hypothesis is presented.

H1: SSGC and MCGC are positively related to perceptions of participation in decision making climate, job satisfaction, perceived adjustment to work, and organizational commitment of the teaching staff, and negatively related to intention to quit and perceived levels of stress. The interaction of SSGC and MCGC is related to perceptions of participation in decision making climate, job satisfaction, perceived adjustment to work, organizational commitment, intention to quit, and perceived levels of stress of the teaching staff.

The predictions in this hypothesis are based on theoretical and empirical work done in many domains of research. Some of these domains, particularly organizational theory, group cohesiveness and team-building, cross levels of conceptualization. In fact, it is not always clear at what level a concept is useful.

It is not clear whether group cohesiveness is a group-level phenomenon or the sum of its individual-level parts. Up until now the latter has been assumed within this introduction. At this point the organizational level needs to be more fully explicated. The process used to do this is called composition modeling. Composition modeling is discussed below to introduce the reader to some of the relevant concepts of the process. Following that presentation the organizational-level goal congruence terms are reviewed in terms of current research and theory. However, much of the work on relationships with organizational goal congruence has already been discussed at the individual level. To avoid redundancy the reader is directed to these areas when appropriate.

Composition Models

Composition models are the explicit definitions of relationships of functionally similar variables at multiple levels (Roberts et al., 1978). For example, rather than assuming technology means the same thing at the organizational, work unit, or individual job levels, a composition model defines technology at each level and specifies the relationships between these definitions. Furthermore, relationships between the various definitions and other variables of interest are identified. Thus, similarity must also include homology (Von Bertalanffy, 1975). Homology is the case of corresponding relative position linkages to correlates at the corresponding levels. For example, because it is known that job technology affects individual attitudes, organizational technology may affect organizational attitudes. Nonetheless, specific rationale relating organizational technology to organizational attitudes must be forthcoming. Without this explication, the relationship between organizational technology and

organizational attitudes cannot be specified. Similarity of constructs and homology are the two criteria for the development of composition models (Roberts et al., 1978).

Two Composition Models

Two composition models are developed in this study. In the first model, individual-level between-unit goal congruence, SSGC, is hypothesized to relate to individual attitudes. Furthermore, organizational-level between-unit goal congruence, BCGC, is hypothesized to affect individual-level attitudes. It is hypothesized that organizational-level disagreement, or general level of congruence, between top management and subordinates will have an effect above and beyond the mere addition of the individual supervisor/subordinate parts. In the second model, individual-level within-unit goal congruence, MCGC, is hypothesized to relate to individual attitudes and organizational-level within-unit goal congruence, WCGC, is hypothesized to relate to individual attitudes. Again, the degree to which the teachers exhibit "togetherness" on the school goals is believed to be more than the sum of each teacher's agreement with the other teachers in the school. The models are drawn below (Figure 2). The rationale for the individual-level links have already been presented. The rationale for organizational-level goal congruence hypotheses are presented in the next section.

Alternative models in which the goal congruence term at one level of analysis may mediate the relationships of the other goal congruence term with the attitude variables may be more appropriate. Mediation implies an effect, but an indirect one. Partialling the mediating goal congruence term from these relationships gives an indication of the direct versus indirect effects. Mediation is

indicated if an established association between a goal congruence measure and an attitude scale disappears when the other goal congruence term is controlled. Thus, the second goal congruence term mediates the relationship between the first goal congruence term and the attitude. These alternative models are depicted by a dashed line in Figure 2 below. Additional analyses were conducted to evaluate these models.

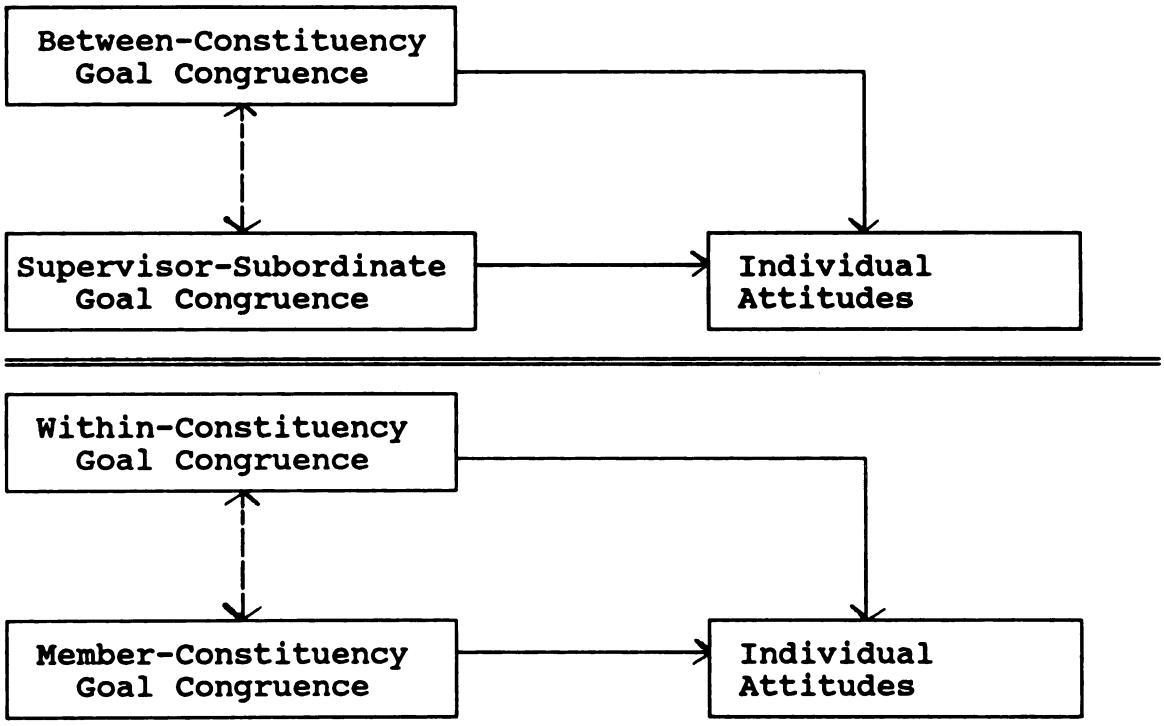


FIGURE 2: Composition Models

Organizational-Level Goal Congruence

Between-Constituency Goal Congruence

There are two dominant constituencies within a school -- the principal and the teachers. The fact that the constituencies are separated by hierarchical level

is important. Researchers reported differences in the climate perceptions of organizational members at different hierarchical positions (Johnston, 1976; Payne & Mansfield, 1973). More to the point, Mintzberg (1983) noted the potential for differences in the ratings of the importance of various organizational goals by the CEO and employee (operator) constituencies. Thus, differences between the constituencies are very possible.

The consequences of these differences in constituency perspective are also important. Perrow (1986) suggested that top management is in a position to win most of the battles over goals and define the priorities of those goals. However, McKelvey and Kilmann (1975) and others (Taylor & Cangemi, 1983) noted that designs developed at the top, without the input or cooperation of lower-status members, are often rejected and undermined, implying a lack of agreement with the goals. The longevity of the goals is also potentially related to congruence. In addition to goals being expressed by top management, "what makes the goals organizational is the process of their authorization and institutionalization. This latter process ensures that goals, once understood and shared, ... can survive the death of most of the architects" (Donaldson, 1985, p. 22). Because of the potential for conflict between the constituencies, their goal ratings should be considered separately so that their level of agreement can be measured.

Research Demonstrating BCGC

Although research on organizational goal congruence has been sparse and poorly executed, it has tended to find differences in goal priorities among constituencies in different hierarchical positions. Within a model of intraorganizational conflict, Kochan, Cummings, and Huber (1976) investigated

goal congruence in a sample from a city government. Goal congruence was defined as the differences among constituent's goals within the organizations. Much like the argument made in this proposal, the authors were disturbed by the assumption of goal congruence in some models of organizations (e.g. Schein, 1965; Tannenbaum, 1968), while other models assumed goal incongruence (e.g., Cyert & March, 1963, Weick, 1979).

Kochan et al. (1976) hypothesized that goal congruence is related to differences in the positions held by employees, operationalized as different job titles, and again that this congruence relates to perceptions of conflict. Goal congruence was measured by having city officials rate 14 goals on a Likert-type scale. The goals concerned protection of the power of particular constituencies. For example, one of the goals stated "The decision-making authority of agency heads is protected." Individual ratings were normalized to eliminate the bias of response tendencies across raters. The standard deviation of the normalized ratings of each goal across all city officials was summed to form the congruence score. The reported alpha for the combination of the standard deviations was an unimpressive .36. One-way analyses of variance were used to test the proposition that different position holders differed on goal ratings. The F ratio was significant ($p < .05$) for twelve of the 14 goals, indicating the presence of interconstituency differences in goal importance ratings.

A study by Avi-Itzhak (1985) in Israel attempted to assess the existence of differing goal orientations among the main status groups of a large university. The researchers asked students, faculty members, and administrators to rate importance on 30 goals using a five-point Likert-type scale. A factor analysis

reduced these 30 goals to five factors: 1) Freedom/Democratic Governance, 2) Extracurricular Activities, 3) Student Training, 4) Research, and 5) Accountability to State/Community. Alphas for these factors ranged from .51 to .71. Two additional factors, with eigenvalues of less than 1.00 and accounting for only 12.7% of the variance, were eliminated from the analyses. Analysis of the results consisted of comparing group means between the status groups on the factors. For three of the factors (Extracurricular Activities, Student Training, and Research) significant F ratios were found indicating differences between constituencies.

Although the study revealed mean differences between constituencies within the university, it did not examine the differences in the profile levels the constituencies gave to these goals. Should faculty, for instance, rate all the goals of equal and high importance, and the students rate all goals of equal but medium importance, the congruence in relative acceptance of the goals is lost in the mean difference analysis.

A second study done within the context of educational institutions examined the congruence between various constituencies within a school system (Schmink, 1985). Spearman-Brown Rank Order correlations were used to assess congruence. The goals of interest were content areas for the students. Little disagreement between constituencies was found. Nearly everyone agreed that basic skills and higher learning were top priorities. The other goals were ranked in the following order overall: Health and physical fitness, career, civic, moral/ethical, interpersonal relations, change/adaptation, creativity, economic

efficiency, family living and leisure. The rank order correlations ranged in the .80's and .90's across constituencies on these goals.

Contrary to the Avi-Itzhak study, relative differences in ranking were detectable in the Schmink study. However, ranking forces an ordinal scale and does not allow for mean differences. Thus, students may not care too much about any of the goals of the school, but they may rank them in a similar order to the faculty. A Spearman-Brown Rank Order correlation would not detect this mean difference.

Summary. With the exception of the last study, this research reinforces the proposition that constituencies separated by hierarchical level are likely to differ in their ratings of goal importance. This study will use profile analysis to incorporate both mean differences and relative differences when comparing constituencies. Theory and research on the potential correlates of BCGC is presented next.

Factors Associated With BCGC

Factors associated with goal congruence at the level of constituency agreement are numerous. Most of the existing work has been done on the relationship between congruence and participation in organizational decision making. Usually, this research is conducted under the assumption that participation leads to and increases congruence. However, it is not clear that direction of causality has been established. Other variables associated with congruence and conflict include satisfaction, organizational commitment, and turnover. Discussion and evidence regarding these relationships are presented below.

Participation. McKelvey and Kilmann (1975) argued that organizations must establish a climate of participation in which all organizational members have a chance to specify objectives for the organization. Among the advantages of this participation in decision making climate is that employees are more likely to be satisfied with and implement changes they helped make (Leavitt, 1965; Kilmann, 1974). In a description of the Scanlon Plan, Taylor and Cangemi (1983) articulated the same reasoning. They argued that only a climate for participative decision making will lead to consensus on and cooperation in working toward organizational goals. March and Simon (1958) noted that when the values of the top hierarchy and the rest of the organizational participants are similar, then participation is the best method to preserve that congruence and to enlist the support of the participants.

One of the explicit mechanisms of team-building efforts is the mutual participation of leaders and members in the definition and management of their own goals (Buller & Bell, 1986). Presumably this participation leads to the commonality of the team's goals. Friedlander (1967), Nadler and Pecorella (1975), and Woodman and Sherwood (1980) found team-building efforts increased participation in decision making perceptions within organizations. Of those studies, goal consensus was measured only by Woodman and Sherwood (1980). Unfortunately, they found only a slight increase in perceptions of decision making. Likewise, Brown, Aram, and Bachner (1974) found no change in goal consensus after a team-building effort.

Kochan, Huber, and Cummings (1975) hypothesized that the greater the incongruence in the goals of city officials, the more internal conflict would be

observed. Goal congruence was measured using the same normalized standard deviation in goal ratings across all city officials in a city government as in the Kochan et al. (1976) study. Congruence correlated with measures of dispersion of power and control, such that the greater the dispersion, the lower the congruence. This finding is counter to the participation studies cited earlier. However, due to the very political nature of the goals (i.e., maintaining constituency power), dispersion of control may have placed those goals in more direct conflict.

When the conflict is between upper and lower echelons within the organization, it may lead to lower satisfaction, organizational commitment and/or higher turnover among the lower echelon. Research on these variables is presented below.

Satisfaction. The relationship between BCGC and subordinate job satisfaction has not received a great deal of attention. Only team-building research is available and it has shown mixed results. Eden (1985) did not find a relationship between job satisfaction following a team-building effort. However, Gross (1954) did report that cohesiveness in Air Force groups correlated with satisfaction with the Air Force and its goals. Several other researchers have reported a relationship between team-building and satisfaction (Hand, Estafen, & Sims, 1975; Nadler & Pecorella, 1975; Schmuck, Murray, Smith, Schwartz, & Runkel, 1975; Schmuck, Runkel, and Langmeyer, 1969; 1971).

Intention to quit and organizational commitment. The research reviewed earlier demonstrated a possible connection between goal congruence and turnover. Numerous models of turnover exist at both the individual (e.g., March & Simon, 1958; Mobley et al, 1979) and organizational levels (e.g., Price, 1977).

The only research available on turnover and organizational-level goal congruence is in the team-building field, and that is sparse. Beckhard and Lake (1971) reported turnover decreased in a management team that went through a team-building exercise.

Organizational commitment has, like turnover, received much more attention at the individual level. The current discussion centers on the idea that goal congruence is a part of organizational commitment. At least, agreement on organizational goals is usually an item in commitment measures. At the organizational level, organizational commitment has been shown to relate to turnover rate (Angle & Perry, 1981). Because the best predictor of turnover is intention to quit (Bluedorn, 1982), intention to quit may serve as a proxy for turnover. Likewise, organizational commitment may reasonably be expected to relate to organizational-level variables, providing some degree of agreement or shared perceptions exists (Mossholder & Bedeian, 1983).

Between-Constituency Hypothesis

Despite the centrality of goals within organizations and the logic of the importance of goal congruence between the upper and lower echelons of an organization, little research has been done in this area. A number of studies have documented the varying levels of goal congruence between constituencies of different hierarchical levels (Avi-Itzhak, 1985; Barkhaus, 1974; Bourgeous, 1985, Kochan, Huber & Cummings, 1975; Kochan, Cummings, & Huber, 1976; and Schmink, 1985). However, a pressing question centers around the distinction between organizational-level and individual-level between-unit goal congruence. Is BCGC merely the sum of SSGC? The prediction within this study is that

conceptually BCGC is more than just the sum of SSGC, even if the correlates are similar. Theoretical speculation and some research has suggested that concepts similar to BCGC are related to organizational members' attitudes. Specifically:

H2: BCGC is positively related to the climate for participative decision making, job satisfaction and organization commitment of the teachers, and negatively related to intentions of teachers to quit.

Next, theory and research related to the second method of operationalizing organizational-level goal congruence, WCGC, is examined.

Within-Constituency Goal Congruence

The group processes and team-building literatures were used to support the notion that, at the individual level, congruence on the goals within an operator constituency will lead to positive outcomes. However, the research may be relevant at the organizational level as well. Much of the theoretical work done on group cohesiveness and team-building is at the group level. Because this study considers all teachers in a school as a group, group and organization level are equivalent in the following discussions.

Conceptually, moving from the individual to the group with cohesiveness and team-building is not a difficult transition to make. Cohesiveness at the individual level is how much an individual wishes to be a member and pursue the goals of the group. At the group level, cohesion is a reflection of how much everyone wants to be in the group and pursue mutual goals. Cohesion at the group level is more than just the sum of its parts. For example, group members may find themselves between two factions within a group. The individual may generally agree with everyone, but must deal with the lack of agreement among

the other members. On the other hand, a cohesive group is like "one big happy family." It is not just that one member gets along with everyone else; it is that everyone gets along with everyone. It is a feeling of unity, of cooperation.

The team-building concept is similar to cohesion in its gestalt. A sense of team enhances the experience for everyone. Whether rallying against an external force, responding to a team-building effort like sensitivity training, or simply responding to one another, a cohesive team may have profound effects on member attitudes.

One is tempted to characterize the difference between individual and organizational-level, within-unit goal congruence as reflected in the amount of discrepant stimuli impinging on individuals versus the stimuli impinging on all members. This conceptualization ignores the work of Hackman (1976) regarding the messages sent to aberrant group members designed to bring these individuals in line with group goals. Groups where most of the members are in high agreement on goals may be more consistent in terms of the messages sent to aberrant members. Therefore, congruent groups (high WCGC) may increase their congruence through the use of discretionary stimuli on some group members.

In March and Simon's (1958) model of the organization, group cohesiveness is affected by and affects the degree of uniformity of group opinion. Also, regardless of the degree of identification of members with the group, uniformity of group opinion decreases the possibility of receiving mixed messages from the group. Thus, the set of evoked alternatives and the consequences of

those alternatives are less ambiguous when a group has a high level of goal congruence.

The effects of organizational goal congruence within a constituency at the organizational level have been reported in a single study. Bourgeous (1985) looked at the goal congruence of top managers in 20 public corporations. He operationalized goal congruence as the standard deviation of managers' ratings of numerous non-operational goals. Although he hypothesized that goal consensus among the top management team would lead to high economic performance, the opposite relationship was found. A post hoc explanation that goal consensus implies the perils of groupthink (Janis, 1972) was offered. He argued that due to differing perspectives of top executives, goal diversity would be the normal and preferred condition. Would a similar finding occur if goal congruence was operationalized at the subordinate level?

Group Goals and Cohesion

Group processes literature provides a great deal of empirical evidence on the relationship between group goals and cohesiveness. Researchers of group processes discuss group goals as a focal point for the group members and use the term cohesiveness to connote the "togetherness" of the group on, among other factors, group goals (Goodman, et al., 1987). Therefore, an understanding of the processes surrounding group-level goals is important to the understanding of congruence on organizational goals within the group. Theoretical and empirical information is available on the congruence of group goals and is used to further understand organizational goal congruence. First, group goals as a focal point for members are discussed.

Group goals. All groups must have a purpose (Zander, 1985). Whether it be the self-aggrandizement of its members or the accomplishment of some difficult or altruistic task, groups cannot become established without a purpose. Without informed, comprehended, and accepted group goals, group members are more interested in personal rewards than group accomplishments (Zander, 1985). This may not be a problem when groups are formed for the realizations of individual goals. However, when groups are formed to accomplish the goals of the group or organization, a lack of congruence within the membership on those goals is likely to lead to ineffective group processes.

During the history of group goals research, theorists have had to grapple with the validity of a group-level goal construct (Napier & Gershenfeld, 1981), much like organizational theorists grapple with the problem of reification of organizational-level goals. Allport (1924) rejected the idea of a group-level goal, while Lewin (1939) supported it. The controversy raged bitterly for many years before the acceptance of group goals as a construct emerged intact (Napier & Gershenfeld, 1981). Cartwright and Zander (1953) assumed that the formal properties of group goals do not differ from those of individual goals. Substantial empirical evidence backed this notion (Shaw, 1981). Nonetheless, linking individual goals to group goals was still a problem (Shaw, 1981). Like Mohr on organization-level goals, Cartwright and Zander (1953) suggested assessing individual members' beliefs regarding the group goal. Degree of consensus was taken as a reflection of the degree to which a group had a unitary goal. But again, as with the organizational-level goals, more than one goal is common among groups, and this has to be taken into account (Shaw, 1981).

Concurrently, Shaw (1981) discussed the term "goal clarity" as the degree to which a group's task or tasks are clearly defined. He hypothesized that the less clearly defined the group goals the more likely the resulting confusion will lead to ineffective group action. A study of the effects of goal clarity was conducted in the laboratory (Raven & Rietsema, 1957). The researchers found that by increasing the clarity of the goal, members could be more attracted to the task, show less nontask-directed tension, show more involvement in the group, and conform more to group expectations.

Goal clarity, therefore, is the degree of consensus which is shown to be related to individual attitudes of group members. Simultaneously, a construct called group cohesiveness began to take on the role of consensus on goals. However, cohesiveness included other concepts as well.

Cohesion. As with the individual level, cohesion at the organizational level is highly interrelated with goal congruence. By definition cohesive groups agree on goals. Dynamically, cohesive groups send messages to their membership which solidify goal congruence (Rosen, 1989). An example of the power of cohesiveness on group members was provided by Sheikh and Koch (1977). They found that interrupted group tasks are remembered better than completed ones, if the group is cohesive. Their study is an extension of the Zeigarnik Effect (Zeigarnik, 1927) -- that individuals tend to remember interrupted tasks better than completed ones. Lewin's (1951) theory of motivation has been used to explain the effect as a result of unresolved tension set up by the uncompleted task (Sheikh & Koch, 1977). Horwitz (1954) extended the generalizability of Zeigarnik's finding from the individual level to the group level. Horwitz found

that when the group members believed that the group voted to complete a task, they set up a tension for completing that task. This tension was reflected in the better memory of the uncompleted group task. Sheikh and Koch's (1977) finding confirmed Horwitz's, but added cohesion as a moderator. Apparently, the tension is only felt for interrupted tasks when it is believed that the group wishes to complete the task, and that the group is highly cohesive.

The findings of the group-level construct of cohesion provides support for the placement of an organizational-level variable within a composition model of within-unit goal congruence. Like MCGC at the individual level, WCGC should be related to the concept of cohesion and cohesion's correlates. Below, are presented the factors specifically examined in this study.

Factors Associated with WCGC

Size. Size of the group was postulated to affect group cohesiveness (Seashore, 1969). The larger the group, the more difficulty each member has connecting with all the other members and the group as a whole. Therefore, the larger the group, the more likely WCGC is low for the entire group. Like in MCGC, size needs to be controlled in any test of relationships involving WCGC.

Participation in decision making. Perceptions of participation in decision making may be associated with WCGC for a number of reasons. Most have already been mentioned. For example, participation may be higher in groups where all members feel the others agree on group or organizational goals. Participation in decision making may make the organization goals more salient such that cohesive groups are motivated to bring aberrant members in line on these important dimensions.

Job Satisfaction and organizational commitment. As pointed out in the MCGC discussion, cohesiveness is the degree to which the members are attracted to, committed to, and satisfied with each other and the group goals. At the organizational level, members attitudes may be affected by the sense of unity within the group; unity reflected in congruence among all the members on all the goals; unity measured by WCGC. Thus, WCGC should correlate with their job satisfaction and group commitment where group is defined as the organization.

Intent to quit. A similar argument can be made for intentions to quit. Only members with a weak affiliation to the group may wish to leave that group. The remaining members reflect a lower level of intention to quit. Thus, WCGC should correlate with intention to quit.

Stress and adjustment. Griffith (1989) studied cohesiveness in army units. In Griffith's study cohesiveness was increased by using unit replacement rather than individual replacement. Two facets of satisfaction, perceived satisfaction with social support and helpfulness of the support, were positively related to cohesiveness, regardless of replacement procedure.

Within-Constituency Hypotheses

The constituency of interest is teachers. Based on the literature discussing cohesiveness and team-building a third hypothesis is specified.

H3: WCGC is positively related to climate for participative decision making, feelings of adjustment among the teachers, job satisfaction, and organizational commitment; WCGC is negatively related to intentions to quit and teacher stress.

Summary

The notion of organizational goals as an important component of organizational processes is intuitively appealing, but conceptually and operationally complex. Closer examination of organizational goals and models reveals the multiplicity of entities and intentions within organizations with regard to their goals. Because of this multiplicity, the concept of congruence between these entities represents a potentially important factor reflecting the harmony and integration of the organization and its members. Defining the entities and comparisons leads to a consideration of hierarchical level and constituency groupings. Further exploration of the units involved required the incorporation of both individual and organizational-level comparisons and conceptualizations. From this analysis, I argued that four types of goal congruence terms are useful in understanding the role of organizational goals in relation to properties of organizations and its members.

Between-unit goal congruence has received some attention in the past. This study adds the within-unit goal congruence measures to that research. Furthermore, both absolute and relative differences between and among organizational members are assessed.

Many of the same correlates are hypothesized for the different goal congruence measures, yet the research used to generate these hypotheses frequently confounded these types of congruence. Thus, one advantage of separating type of goal congruence is the recognition of numerous potentials for goal incongruence. Explicit measurement of this congruence (or incongruence) may further our understanding of where goals diverge within the organization and

when that divergence is important. The method to test these hypotheses is presented in the next chapter.

METHOD

Background

The data for this study were collected as part of a larger project on school effectiveness carried out for the National Association of Secondary School Principals (NASSP). The larger project was designed to study a model of school environments (cf. Keefe, Kelley, & Miller, 1985). Information was collected from students, teachers and principals in 364 schools located throughout the United States and Canada. The instrumentation was piloted in a series of studies over a four year period of time (Kelly, Glover, Keefe, Halderson, Sorenson, & Speth, 1986; Schmitt & Loher, 1984; Schmitt & Ostroff, 1987). The results of the larger study are reported in Schmitt and Doherty (1988).

Subjects and Units of Analyses

Two levels of analysis were needed to test the hypotheses in this study. At the organizational level, schools were the units of analysis. Information about the schools was collected from the principal and the teachers. At the individual level, teachers were the units of analysis. Information was collected from teachers and principals for this level of analysis. Any information collected from the principals was school level, and, therefore, assigned to all the teachers in that school. A description of the schools, principals, and teachers is presented below, followed by

a description of the measures completed by each of these groups in the Measures Section.

Schools

A sample of 364 schools from 36 states and Canada agreed to participate in this study. Three hundred fifty four schools returned usable information from the principals and teachers. Ten schools were missing information from at least one group, but provided some data. These missing data account for the number of schools ranging from 354 to 364 in the results.

Schools were selected based on a randomized cluster sampling. Ten metropolitan areas were selected as cluster points. Concentric circles defined by postal zipcodes were drawn around the metropolitan midpoints. A specific number of schools were randomly selected within each concentrically defined area. When a school refused to participate, another with similar size and location characteristics was selected. This sampling procedure produced 261 of the schools. The remainder were schools participating in an "effective" schools study conducted by NASSP. The procedures assured a wide range in school and community size.

The states with the highest percentage of schools in the sample were Michigan (21.2%), Iowa (13.5%), and Tennessee (9.1%). Three hundred thirty of the schools (90.7%) claimed to be public, and 24 private (6.6%). Seventy-five schools (20.6%) were junior high level, 252 (69.2%) were senior high level, and 36 (9.9%) included all elementary students.

Principals

All the principals from the 364 schools were asked to fill out a questionnaire on goals and an open-ended questionnaire about their schools. The questionnaire is provided in Appendix A. Of the 364 schools, 356 principals responded to the goal questionnaire items and 355 responded to other relevant measures, providing a total of 352 complete principal responses. Demographic information on the principals is provided in Table 2. Principals responded to questions about school goals, and school size, as well as numerous items not included in this study.

Teachers

Information from 14,721 teachers in 362 schools was obtained for this study. The number of teachers responding per school ranged from 8 to 86 with a mean of 40.67. Entire teaching staffs completed questionnaires for schools with less than 75 teachers. In larger schools, principals were instructed to obtain at least 75 randomly selected teacher questionnaires by selecting every *n*th teacher in an alphabetic listing, where *n* depended on the number of teachers in the school. The teachers answered questions about school goals, school commitment, participation in decision making climate, intention to quit, overall and component satisfaction, stress, and adjustment. The teachers' questionnaire is provided in Appendix B. No demographic information is available for the teachers.

Measures

The exact measures as presented in the questionnaires are reproduced in Appendices A and B. Appendix C breaks down the questions into the specific

TABLE 2: Demographic Characteristics of Principals[1]

Characteristic	Frequency
Gender	
Male	89.0%
Female	8.5%
Ethnic Status	
Asian American	0.8%
Black	3.7%
Hispanic	0.3%
White	92.9%
Other	0.3%
Tenure	
Less than 1 year	10.7%
More than 1 year, but less than 2	11.8%
More than 2 years, but less than 3	11.8%
More than 3 years, but less than 4	7.1%
More than 4 years, but less than 5	6.6%
More than 5 years, but less than 8	15.9%
8 or more years	33.8%

[1]The total percent for each characteristic does not equal 100% due to missing data.

constructs discussed below. This discussion describes the constructs and calculations used to form indexes.

Goal Congruence

Four goal congruence terms were discussed in the introduction of this proposal. A description of the goals, the rating scales, and exact procedures for computing the goal congruence terms follows below.

Goal Ratings

Both the principals and the teachers rated the importance of the same 14 goals for the school. A seven-point Likert-type rating scale ranging from "Of no importance" (0) to "Of primary importance" (6) was used. The goals and the rating scale are provided in the beginning of Appendices A, B and C.

One potential issue is the exact wording of the goal rating items. The directions indicated to the respondent that they should rate the goals' importance without specifying whose perspective to take. Therefore, respondents may have rated the goals as to the importance they felt should be given the goals; or, they may have rated them as to importance the organization gives the goals. This distinction can be summarized as the difference between rating how important a goal "should be" versus how important it "is." One study asked respondents to rate the importance specific school goals should have versus the importance they felt goals were presently being given (Barkhaus, 1974). The rank order correlations between these two types of items was .70 for faculty, .84 for administration. Thus, although the items as worded in this study may have been ambiguous, evidence exists which seems to indicate that the ambiguity may not have produced markedly different responses.

Goals were initially selected based on a review of the education literature. The set of goals were then reviewed and edited by the six members of the NASSP School Climate Task Force which included educational researchers and consultants. All but one of these persons had worked as teachers or principals in elementary or secondary schools in various parts of the U.S.

From the ratings of the importance of these goals by the principals and teachers the goal congruence terms were created. The exact procedure is described for each term.

SSGC

Supervisor-subordinate goal congruence is an individual-level variable. It was the comparison of the teacher with his or her principal on their ratings of the importance of the 14 goals for the school. In order to calculate a congruence score, the principals' ratings were assigned to all the teachers in their school. The D statistic (described below) was used to index congruence. In this analysis, the number of subjects should equal 14,721.

The comparison was calculated using the D statistic (Cronbach & Gleser, 1953). D is defined as follows:

$$D = \sqrt{\sum_{j=1}^{N}(x_{aj}-x_{bj})^2}$$

where a and b represent the constituencies being compared, j the goal being compared, and N the number of goals compared.

As an index of comparison, the D statistic reflects both absolute differences and relative differences. The alternatives were the Pearson-r between the goal profiles in question, or the sum of mean differences, each of which reflect only one type of difference. Pearson-r only accounts for relative

differences, such that a rating on 3 goals of 1-2-3 when correlated with ratings of 4-5-6 would yield 1.0. Thus, the difference in value between the 1 and the 4, the 2 and the 5, the 3 and the 6 would not be reflected in the perfect correlation. On the other hand, the sum of the mean differences would be 9. The same mean difference would be calculated if the ratings were 1-2-3 and 6-5-4 respectively. However, the relative similarity of 1-2-3 to 4-5-6 would be lost with the sum of the mean differences. The D value range depends on the number of comparisons (in this case 14, one for each goal), and the range of the scale (in this case 6, zero minus six). These parameters allowed D to range from 0 to 22.45, where a low score meant high congruence. Correlations with the D statistic were reversed so that high scores on the attitude scales would correlate positively with high scores on congruence.

MCGC

Member-constituency goal congruence is the comparison of a teacher with all other teachers in a school. Therefore a D statistic was calculated for each teacher with every other teacher in the same school. Averaging these D's for each teacher produced an index of the difference of that teacher's goal priorities with all others in their school. Figure 3 represents the method for calculating MCGC in matrix form. The number of subjects again equalled 14,721.

BCGC

The between-constituency goal congruence term is a comparison of the ratings of the principal constituency with the teacher constituency. Principal constituency ratings were simply the ratings of the principal for the school on the 14 goals. The principal's rating was compared to the rating of each teacher in

Between-Unit Goal Congruence

	T_1	T_2	T_3	.	.	.	T_n		
$Principal_a$	D_1	D_2	D_3	.	.	.	D_n	}	$BCGC_a = \frac{(\sum_{k=1}^{n} D_k)}{n}$

Where: a represents one school, n the number of teachers completing the survey in the school, and k the teacher being compared. SSGC is the D_k (D_1 .. D_n) for each teacher/principal pair.

Within-Unit Goal Congruence

	T_1	T_2	T_3	.	.	.	T_n		
T_1	--	D_{12}	D_{13}	.	.	.	D_{1n}	}	$MCGC_1 = \frac{(\sum_{i=1}^{n} D_{1i})}{n}$
T_2	D_{21}	--	D_{23}	.	.	.	D_{2n}		$MCGC_2$
T_3	D_{31}	D_{32}	--	.	.	.	D_{3n}		$MCGC_3$
.	.	.	.	.	.	.	.		.
.	.	.	.	.	.	.	.		.
.	.	.	.	.	.	.	.		.
T_n	D_{n1}	D_{n2}	D_{n3}	.	.	.	--		$MCGC_n$

$$WCGC_a = \frac{(\sum_{i=1}^{n} MCGC_i)}{n}$$

Where a represents one school, n the number of teachers completing the survey in the school, and i the teacher who is compared with all the other teachers completing the survey.

FIGURE 3: Calculation of Goal Congruence Terms in Matrix Form

the principal's school (SSGC). These comparisons were then averaged by school. The average was used as the measure of BCGC. Figure 3 shows this calculation in matrix form. The number of subjects equalled 356, the number of schools with usable goal ratings from principals and with the goal ratings of at least some (8) teachers.

WCGC

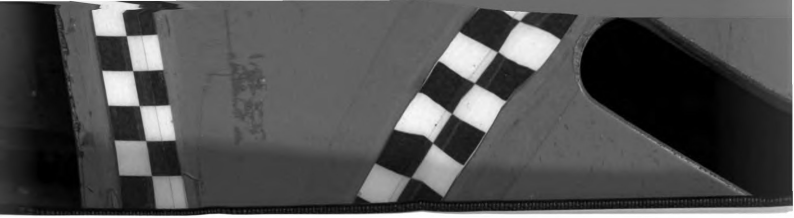
Within-constituency goal congruence is an index of the variability of the ratings of the importance of school goals by the teachers. This variability is the difference between all the constituency members with each other. Because MCGC is an index of each individual teacher's differences with the other teacher, the average MCGC across teachers in the school was the best index of WCGC (see Figure 3). The number of subjects (schools in this case) equalled 352.

Correlates

Hypotheses about the correlates of the various congruence terms were outlined above in the Introduction. The correlates, including participation in decision making climate, satisfaction, commitment, intention to quit, adjustment, and stress, were derived from questionnaire items asked of the teachers (Appendix B). Appendix C groups the items by scale. Size, a covariate, was determined by an open-ended question to the principal asking for the number of full-time equivalent teaching personnel currently paid by the school.

Participation in Decision Making

Four items asking respondents to estimate the frequency with which they participated in different types of decisions were used to measure participation in decision making climate. This participation scale was developed by Hage and



Aiken (1967). The five-point Likert-type scale ranged from never (0) to always (4). A coefficient alpha of .76 and test-retest reliability of .65 was reported on this scale for a sample similar to the respondents in this study (Schmitt & Ostroff, 1987).

Job Satisfaction

Nine items concerning feelings of satisfaction about various aspects of the schools constituted the satisfaction scale. A Likert-type scale was used ranging from 1, "I am very dissatisfied with this aspect of the school," to 5, " I am very satisfied with this aspect of the school." These items were obtained from a larger measure of facet satisfaction (cf. Schmitt & Ostroff, 1987). A single item from each subscale was used in this scale based on the item's intercorrelation with the other items in the scale. The subscales all had reasonable reliabilities (> .77), and interscale correlations ranging from .14 to .58.

Organizational Commitment

Organizational commitment was measured by the rating of 9 items on a five-point Likert-type scale ranging from strongly disagree (0) to strongly agree (4). Seven of the items were taken from the Porter and Smith (1970) Organizational Commitment Questionnaire, and 2 from Franklin's (1975) Commitment to the Formal Organization Scale. The sampling of items from the different questionnaires insured the scale assessed three aspects of organizational commitment (Ostroff, 1987). The aspects are attitudinal commitment, commitment to the school's values and calculated involvement. The internal consistency reliability of this scale was reported as .82 by Schmitt and Ostroff (1987).

Intention to Quit

Three items from the Michigan Organizational Assessment Questionnaire (Cammann, Fichman, Jenkins, & Klesh, 1979) were adapted to assess teachers' desire to remain with the school. The items were rated on a five-point Likert-type scale ranging from strongly agree (0) to strongly disagree (4). A coefficient alpha of .83 was reported in the original publication. Ostroff (1987) reported an alpha of .85.

Adjustment

Teachers' perceptions of adjustment to work were measured by a six item scale. The items were adapted from Fisher (1982) for the earlier study (Schmitt & Ostroff, 1987). Ratings on a five-point Likert-type scale ranging from strongly agree (0) to strongly disagree (4) were used. Earlier research reported a coefficient alpha of .75 (Ostroff, 1987).

Stress

Teachers' perceptions of stress were measured by four items soliciting perceptions of psychological symptoms of stress adapted from the Job-Related Tension Scale (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964). A fifth item asked about a general feeling of stress. All items required ratings using a scale ranging from never (0) to quite often (4). An alpha of .82 was reported using this measure (Ostroff, 1987).

Covariate

The covariate in this study is a situational constraint beyond the control of the school which may affect the relationships hypothesized in the introduction. Size is hypothesized to affect relationships with WCGC and MCGC. Size was

operationalized as the number of employed teachers within the school. Principals were asked to report how many full-time equivalent (FTE) teachers were employed at the school. Note, size is not necessarily equivalent to the number of teachers responding from each school (n) in the study. FTE is a better measure of the size of the teacher constituency.

Measurement Issues

With many of the organizational-level correlates, measurement issues arise concerning aggregation. SSGC, MCGC, participation in decision making climate, job satisfaction, organizational commitment, intention to quit, adjustment and stress are all individual perception variables that were aggregated to the organizational level for testing some of the hypotheses. As individual perception variables, the individual represents the "unit of theory" (Roberts et al., 1978). When individuals share meaning about organizational phenomenon, and associations with organizational-level variables are being tested, then composition theory suggests that individual-level variables can be aggregated to avoid violating the assumption of independent observations. Discussion of the measurement of shared meaning is presented below in the Degree of Agreement section.

A second approach is to assign the organizational-level terms (BCGC and WCGC) to the individual. Although this procedure violates the assumption of independent observations underlying the computation of correlations, it has certain advantages. One advantage is the ability to compare the relative effects of both individual and organizational variables simultaneously. Another advantage is that because the attitude scales are individual, some suggest they should not be aggregated (see, for example, Glick, 1988). Assigning

organizational-level variables to individuals obviated aggregation of individual-level variables.

Procedure

The data collection procedures described below were described by Schmitt and Doherty (1988) in their technical report to NASSP.

Permission from the schools to administer the surveys was solicited by Dr. James Keefe, Director of Research, NASSP. The surveys were mailed by NASSP to school principals who then distributed the appropriate materials to their teachers and students. Principals were asked to obtain a maximum of 75 teacher participants. All principals were asked to participate. A letter explaining the project and how to collect the data requested accompanied each packet of measures. All responses were anonymous and confidential. Once teachers and students completed the measures, they were collected by the school principal who mailed them to the researchers. The researchers reviewed each set of data for problems (torn answer sheets, missing data, etc.), and coded open-ended answers, prior to machine scoring of the data.

Data Analyses

Descriptive Data

Descriptive data includes the means and standard deviations on all the variables. Scale internal consistency reliabilities and intercorrelations were also computed. Mean goal importance scores were broken down by principal and teacher groups.

Degree of Agreement

Before one can aggregate the perceptions of individuals, they must be shown to possess shared meaning (James, Joyce, & Slocum, 1988). Generally, shared meaning is assessed by intraclass correlation or ICC(1) (James, 1982). ICC(1) is calculated by a simple one-way ANOVA, where the between-organization sum of squares is compared with the total sum of squares. It is the proportion of variance in individual responses associated with variation among environments (eta^2). In general, eta^2s have ranged from .00 to .50, with a median of approximately .12 (James, 1982). In the sample of schools, 362 different conditions exist.

A second method for obtaining eta^2 is the ratio of organizational-level standard deviation over individual-level standard deviation for the particular variable in question (James, Demaree, & Hater, 1980). A slight difference in the values of eta^2 using the two methods can be traced to unequal sample sizes in cells (i.e., unequal numbers of teachers reporting in each school).

As a check of the contention that teachers form a like-minded constituency, the goal ratings by the teachers and all perceptual variables to be aggregated were tested for intraclass agreement. For the perceptual variables, reasonable levels of agreement defined by James (1982) were reached before aggregating. Also, because WCGC was an aggregation of all the MCGC's within a school, the degree of agreement for MCGC needed to be calculated to confirm the reasonableness of organizational-level within-constituency goal congruence. Likewise, the degree of agreement between SSGC within schools needed to be assessed before aggregating to form the BCGC measure.

Finally, because WCGC is an index of the degree of agreement on organizational goals within the teacher constituency it was applied to improve the relationships of BCGC with its correlates. If WCGC was so low that the teacher constituency does not provided a consistent stance with which the principal can be compared, then BCGC would not be a reliable measure. To test if this effect was indeed present in the data, BCGC was correlated with its hypothesized correlates using the total sample and using only those schools where WCGC was above average. Finding equal effect sizes would imply no reliability problems in low WCGC schools.

Tests of Hypotheses

To test the relationships hypothesized for the individual-level goal congruence terms, tests of the significance of hypothesized correlations were computed. The size of the school was assigned to all teachers in the school in order to partial size from MCGC relationships. Organizational-level hypotheses were also tested using tests of the significance of the simple correlations of the organizational-level goal congruence terms with each other or perceptual variables. With the WCGC relationship tests, the effect of size was partialled out.

Particularly for the individual-level hypothesis, sample size and power were so great that the major emphasis was on the size of the correlation. In this regard, any correlation below .10 was not considered useful. This value was chosen because Cohen (1977) suggested that correlations below .10 are indicative of negligible effect size in social science research.

Composition Models

The hypotheses reflect the composition models developed in the Introduction. These models and the subsequent hypotheses only included direct effects. Recall the models were constructed for each type (between- and within-unit), with two goal congruence terms at two levels of analysis. The results of partialling one goal congruence measure from relationships between another goal congruence measure and the attitude scales revealed the direct and indirect effects between goal congruence terms and the attitude variables. All tests of the alternative models occurred at the individual level. Because of the sample size, the practical meaningfulness of the partial coefficients rather than significance was the critical factor used to interpret the results.

RESULTS

Results of this study are reported in four sections. The first section provides descriptive information on the scales and goal ratings. Internal consistency reliabilities for the attitude scales are also presented in this section. The second section describes the results of the tests on the individual-level hypotheses. The third section presents the eta^{2}s relevant to organizational aggregation followed by results of the tests of the organizational-level hypotheses. For these tests, BCGC and WCGC were correlated with both aggregated and non-aggregated attitude scores. Finally, in the last section the partial correlations of goal congruence with attitudes in which the "other-level" goal congruence term is the covariate are presented to indicate the relative contributions of the congruence terms on the attitude scales.

Descriptive Statistics

Goals

The means and standard deviations of the 14 organizational goals for all the principals and all the teachers are presented in Table 3. Eta^{2}s for the fourteen goals are also presented in Table 3. These values range from .06 to .16 with a mean of .08. These values indicate a range of agreement among teachers within a school versus between schools. Although these values tend to be low, the goals themselves are never aggregated by schools; rather, the profile similarity

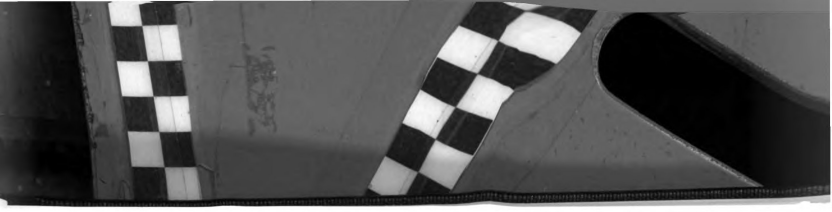


TABLE 3: Means on Goals*

GOAL	PRINCIPAL MEAN (SD)	TEACHER MEAN (SD)	ETA^2
1. Basic Skills	5.35 (1.12)	5.30 (1.08)	.06
2. Breadth of Courses	3.47 (1.33)	3.45 (1.41)	.07
3. Athletic Programs	2.75 (1.11)	3.03 (1.59)	.07
4. Cocurricular Activities	3.15 (1.10)	2.89 (1.32)	.06
5. Staff Development	4.64 (1.14)	3.78 (1.42)	.08
6. Cost Effectiveness	3.70 (1.35)	3.70 (1.42)	.06
7. Physical Resources	3.83 (1.33)	3.67 (1.46)	.09
8. Racial Integration	2.30 (2.00)	2.47 (1.87)	.16
9. Instructional Time	4.49 (1.33)	3.89 (1.50)	.06
10. Special Education	4.06 (1.32)	3.74 (1.43)	.07
11. Discipline	3.76 (1.28)	3.96 (1.44)	.08
12. Parent/Community Involvement	4.42 (1.11)	3.96 (1.33)	.07
13. Academic Programs	4.28 (1.30)	4.09 (1.35)	.10
14. Vocational Education	3.48 (1.48)	3.40 (1.63)	.14

*Scales ranged from 0 to 6 where 0 means the goal is of no importance and 6 means the goal is of primary importance.

indices are aggregated. Intercorrelations among the goal ratings are given in Appendix D. These intercorrelations tend to be low, indicating an independence in goal ratings among goals, and between principals and teachers on goal ratings.

Attitude Scales

Ranges, means and standard deviations across all teachers on the attitude scales are presented in Table 4. Internal consistency reliabilities for these scales are also presented in Table 4. The reliabilities were good, ranging from .74 to .85.

Goal Congruence

Descriptive statistics on the four goal congruence terms are also given in Table 4. The indices potentially range in value from 0 to about 22 as a function of the number of items in the profile that are matched (in this case, fourteen), and the range of the scale (in this case, six). The observed range was much more restricted, particularly among the organizational terms (BCGC and WCGC). The values in this table reflect the euclidean distance (D) between profiles. As such, a higher score indicates a greater distance and, therefore, a greater incongruence. Because the variables are labelled goal congruence, higher values should indicate higher congruence. Therefore, for purposes of clarity, the sign was reversed for any correlational analyses with these terms.

Although the principal and teacher means appear quite similar, the specific interest of this research is the differences in profile matches. Two profile comparisons are presented in Figures 3 and 4 which show the diversity of pattern similarity between principal and teacher in the highest and lowest SSGC found, respectively. Similar pattern comparisons in the other goal congruence

TABLE 4: Scale Statistics

SCALE(# items)	RANGE	MEANS	SDs	RELIABILITIES	ETA^2
Individual (13405 ≤ N ≤ 14718)					
Participation(4)	0-4	.82	.65	.74	.12
Satisfaction(9)	1-5	3.22	.63	.74	.21
Commitment(12)	0-4	2.96	.65	.83	.17
Intent to Quit(3)	0-4	.96	1.03	.85	.08
Adjustment(6)	0-4	3.29	.52	.75	.06
Stress(5)	0-4	1.97	.79	.78	.08
SSGC(14)	0-22	6.83	1.89	.--	.25
MCGC(14)	0-22	5.98	1.11	.--	.23
Organizational (328 ≤ N ≤ 354)					
Size (# of teachers)	11-193	54.31	31.27		
BCGC	0-22	6.84	.95		
WCGC	0-22	5.92	.56		
SD-SSGC[a]	-2-2	.46	.21		

[a]Log of the standard deviation of SSGC by school.

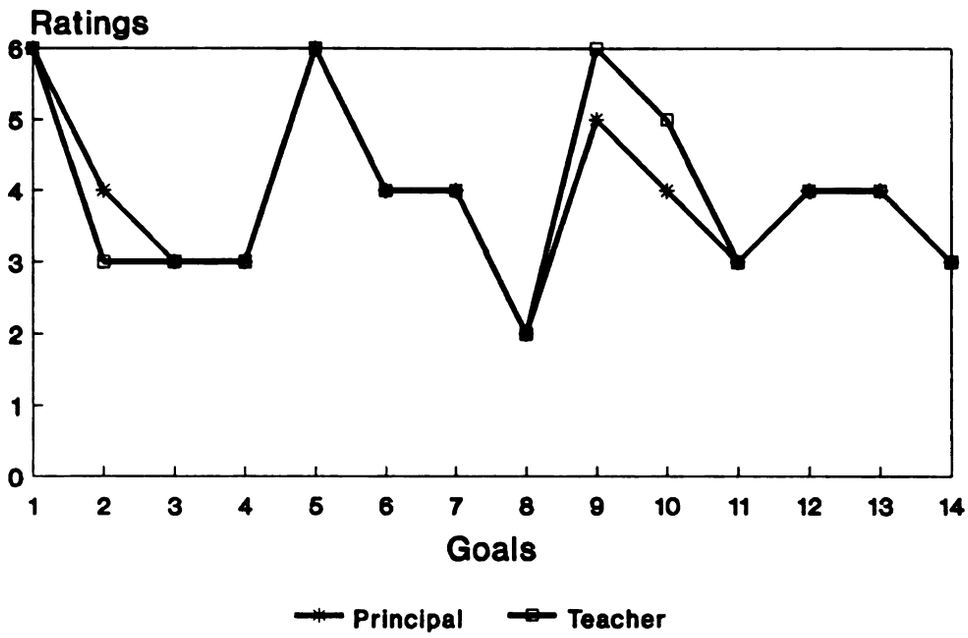


FIGURE 4: Highest Supervisor-Subordinate Goal Congruence

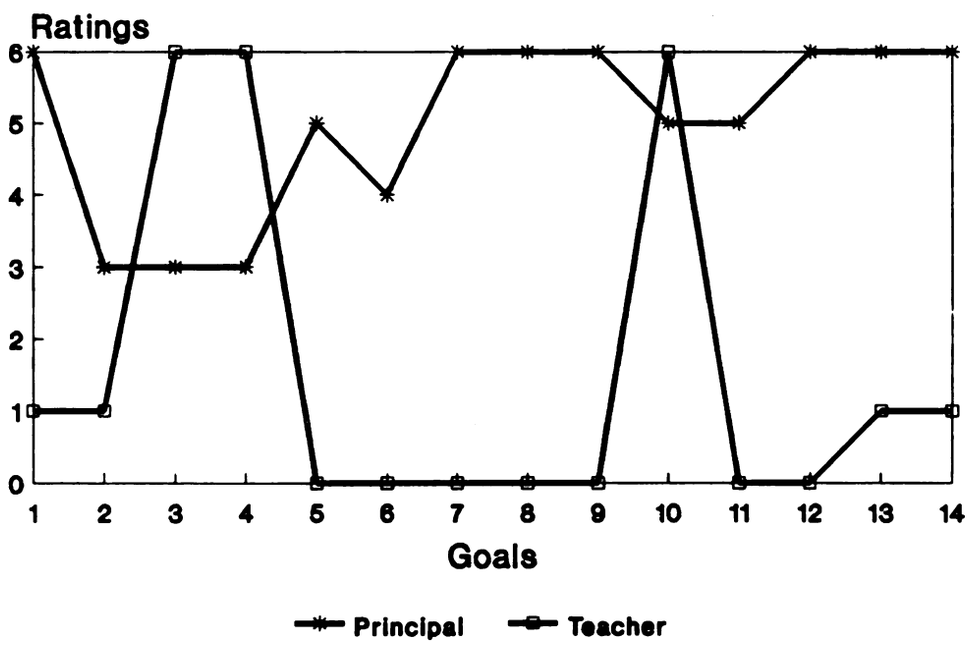


FIGURE 5: Lowest Supervisor-Subordinate Goal Congruence

terms cannot be illustrated because of the large number of comparisons made for each case.

Size

The only other index used in this study was size of the school (i.e., number of full-time equivalent teaching positions). Descriptive statistics on size are also presented in Table 4.

Individual-Level Hypothesis

Hypothesis One

Hypothesis One was a prediction that all the individual-level attitude scales would correlate with either SSGC, MCGC or the interaction of those two terms. Table 5 contains correlations relevant to the hypothesized main effects in the upper triangle. For the individual-level correlations, a stringent α of .001 was used to establish significance. Nonetheless, a correlation of .03 (-.03) or greater (less) was all that was required for significance. As indicated earlier, a correlation of .10 was considered practically significant. Participation in decision making climate, job satisfaction, organizational commitment, and intention to quit all correlated significantly and in the predicted direction with both SSGC and MCGC. Perceived adjustment at work did not correlate significantly with either individual-level goal congruence term. Perceptions of stress correlated significantly with SSGC and MCGC, but at .05 and .07 respectively; therefore, the practical meaningfulness of the relationship is questionable.

One note of caution, the intercorrelations among the attitude scales are likely to be inflated due to common method bias. In terms of the relationships with goal congruence, the goal congruence terms were derived through the D

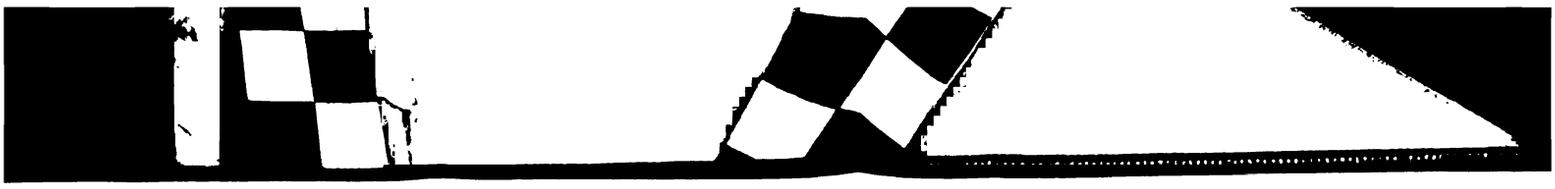


TABLE 5: Scale Intercorrelation Matrix

(Individual Level Variables in Upper Triangle[a])

(Organizational Level Variable in Lower Triangle[b])

Scale	1	2	3	4	5	6	SSGC[c]	MCGC[c]	9
1. Participation	.--	.26	.27	-.16	.15	-.05	.10	.13	-.09
2. Satisfaction	.38	.--	.57	-.41	.22	-.32	.19	.28	.01
3. Commitment	.29	.74	.--	-.53	.36	-.21	.21	.25	.02
4. Intent to Quit	-.22	-.53	-.57	.--	-.28	.30	-.12	-.17	-.04
5. Adjustment	.17	.35	.46	-.50	.--	-.23	.02	.01	.07
6. Stress	-.13	-.29	-.26	.42	-.34	.--	-.05	-.07	.04
7. BCGC[c]	.08	.17	.17	-.09	.02	-.06	.--	.62	.02
8. WCGC[c]	.30	.41	.39	-.21	.05	-.12	.44	.--	.04
9. Size	-.23	.00	.05	-.15	.29	.14	.06	.14	.--
10. WCGC|Size[d]	.22			-.27	.09	-.13			

[a]For individual level correlations $|r| > .03$ is significant at $p < .001$

[b]For organizational level correlations $|r| > .12$ is significant at $p < .01$, $|r| \geq .09$ is significant at $p < .05$.

[c]Goal congruence terms. Signs are reversed.

[d]WCGC controlling for Size.

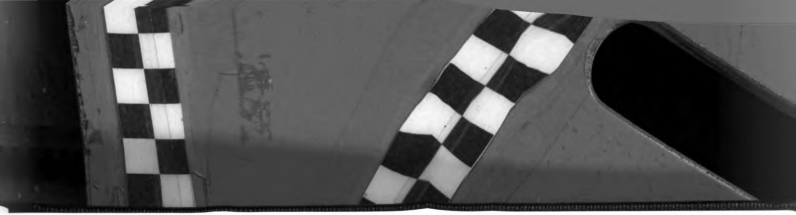
statistic; that is, respondents were not directly asked for their perceptions of congruence. Therefore, it is not likely that common method bias would be an issue. As noted earlier, signs on the goal congruence terms are reversed so that higher values on the congruence variable are associated with higher congruence. As a final note, size was not partialled from the tested relationships with MCGC because it was uncorrelated with MCGC and the attitude variables at the individual level.

The interaction of SSGC and MCGC was tested using moderated multiple regression. The interaction term was significantly related to organizational commitment only (change in $R^2 = .0028$, $p < .001$). Although significant, the magnitude of the effect did not warrant further consideration. The lack of finding a multiplicative model for SSGC and MCGC in terms of their relationship to the attitudes variables prompted consideration of the variables as additive. To test the additive nature of SSGC and MCGC partial correlations were used. These results are discussed in the section on partial correlations.

Organizational-Level Hypotheses

Two methods were used to test the organizational-level hypotheses. In one method the attitude scales were aggregated by school and correlated with the organizational goal congruence terms. For this method, the number of observations was between 328 and 354. Eta^{2}s were calculated for the attitude scales prior to aggregation (see Table 4). The eta^{2}s ranged from .06 for Adjustment to .21 for Satisfaction with a mean eta^2 of .12.

The second method used was to assign to each teacher the organizational-level goal congruence values (BCGC and WCGC) of the school in which they



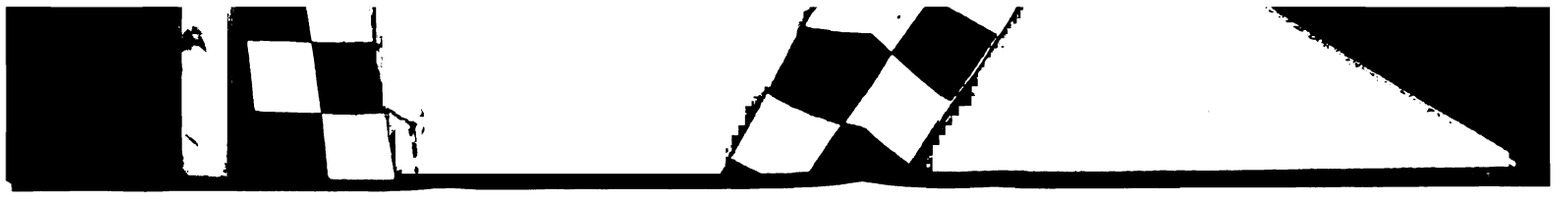
taught. The number of observations using this method was 13405. The results from the two methods are described below.

The organizational-level hypotheses involved the goal congruence terms of Between-Constituency Goal Congruence (BCGC) and Within-Constituency Goal Congruence (WCGC). For both methods used to test the organizational-level hypotheses described above, SSGC and MCGC were aggregated to form BCGC and WCGC, respectively. Eta^{2}s for SSGC and MCGC were .25 and .23 respectively.

It was suggested earlier that in schools where teachers are too incongruent with each other to sustain a concerted level of disagreement (or agreement) with the principal, the congruence of the teacher constituency with the principal is meaningless and should not be attempted. That is, because of the attenuating effects of low WCGC on BCGC, BCGC would not be related to the organizational-level attitude scales in those schools with low WCGC. To assess the possibility of this effect, coefficients of BCGC were recalculated after dropping schools with lower than average WCGC. The resulting coefficients did not improve, in fact they tended to drop. Therefore, it was not necessary to eliminate any schools from analyses at the organizational level. This was true regardless of method (i.e., organizational aggregation versus individual assignment).

Hypothesis Two

Hypothesis Two required a test of the significance of the correlation between BCGC -- the organization-level, between-constituency, goal-congruence term -- and aggregates of climate for participation in decision making, job



satisfaction, organizational commitment, and intentions to quit. The lower triangle in Table 5 contains the intercorrelations of the aggregated attitude scale. To test the organizational correlations, α-levels of .01 and .05 were used. In these cases the critical correlations were |.12| and |.09|, respectively. Thus, because of the lower sample size at the organizational level, power and the making of a Type II error were more germane.

The correlations of BCGC with satisfaction and commitment were significant at the .01 level. The correlation between BCGC and intention to quit was significant at .05. The correlation of -.08 for BCGC with climate for participation in decision making was not significant. All the correlations were in the predicted direction.

Correlations of BCGC using individual-level analysis are given in Table 6. Although the same correlates remain significant, effect sizes dropped precipitously. The relevant comparisons are the coefficients in the row labeled BCGC in Table 5 and the column labeled BCGC in Table 6. The drop in effect size was directly related to the eta of the attitude scales, such that multiplying the individual-level correlation by eta (not eta^2) gives the approximate value of the organizational-level correlation. The value is only approximate because of the unequal number of teachers surveyed in each school. In these calculations, eta represents the amount of noise BCGC encounters within schools relative to the amount of information encountered between schools. A similar drop was found when correlations of WCGC with aggregated attitude scales are compared to correlations of WCGC with non-aggregated attitude scales. Here the relevant

TABLE 6: Comparison of Correlations with Partial Correlations

Scale	SSGC	SSGC|BCGC	MCGC	MCGC|WCGC	BCGC	BCGC|SSGC	WCGC	WCGC|MCGC	SSGC|MCGC	MCGC|SSGC
Participation	.10	.09	.13	.09	.03	-.02	.10	.05	.03	.11
Satisfaction	.19	.17	.28	.21	.09	-.01	.22	.10	.03	.27
Commitment	.21	.19	.25	.19	.09	-.02	.19	.08	.08	.20
Intent to Quit	-.12	-.12	-.17	-.15	-.03	.03	-.08	.00	-.03	-.15
Adjustment	.02	.02	.00	.01	.00	.00	.02	.02	.03	-.01
Stress	-.04	-.04	-.06	-.05	-.01	-.01	-.04	-.01	.00	-.07

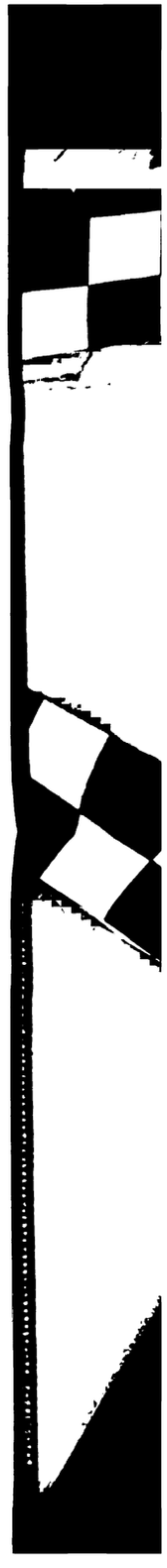
$|r| > .03$ is significant at $p < .001$

| = controlling for

N = 13808 for Within-Unit Goal Congruence correlations

N = 13388 for Between-Unit Goal Congruence correlations

*Signs are reversed.



comparisons are the coefficients in the row labeled WCGC in Table 5 and the column labeled WCGC in Table 6.

Hypothesis Three

The third hypothesis involved correlates of WCGC - Within-Constituency Goal Congruence. Table 5 gives the correlations of WCGC with aggregated attitude scales. WCGC was significantly ($p < .01$) correlated with all the scales except perceptions of adjustment. WCGC was also significantly correlated with size, and size was significantly correlated with participation in decision making, intention to quit, perceptions of adjustment, and perceptions of stress (see Table 5). Partialling size from WCGC correlations did change coefficients for the factors significantly related to size (see Table 5). Specifically, controlling for size decreased the correlation of WCGC with participation in decision making, while increasing the correlations of WCGC with intention to quit, and perceptions of adjustment and stress.

When WCGC was assigned to individual teachers, size was again ignored due to its low correlation with attitudes at the individual level. Correlations of WCGC at the individual level are presented in Table 6. Again, statistical significance is easily reached at $r > |.03|$. Even so, the correlation of WCGC with perceptions of adjustment was not significant. Correlations of WCGC with intention to quit and perceptions of stress did not reach practical significance (-.08 and -.04, respectively). Perceptions of participation in decision making just reached practical significance (.10). Correlations of WCGC with job satisfaction and organizational commitment remained practically significant but moderate (.22 and .19, respectively).

Partial Correlations

Table 6 gives all the simple correlations at the individual level. This table is redundant with Table 5 for SSGC and MCGC, but all other coefficients are unique. Also given are each goal type partialling out its other-level variable. SSGC correlated with BCGC at r = .50; MCGC with WCGC at r = .46. The partial correlations tended to show that correlations with individual-level goal congruence terms do not change when their organizational-level counterparts are partialled out. Correlations with BCGC dropped or changed sign when SSGC was partialled out. Partial correlations of WCGC with MCGC partialled out showed no consistent pattern relative to the zero-order correlations with WCGC.

Finally, for each individual-level goal congruence terms the other individual-level term was partialled out. This analysis assessed the degree to which MCGC and SSGC were additive in explaining attitude scale variance. The results, given in Table 6, showed that the SSGC correlations with the attitude variables dropped to zero when MCGC was partialled out. On the other hand, correlations with MCGC maintained their levels (dropping only 1 to 5 points) after partialling SSGC.

In the next section, I present a discussion of these results and their meaning in terms of the composition models developed in the introduction. Furthermore, the limitations of the current study are presented. Finally, a discussion of possible future directions in goal congruence research is presented.

DISCUSSION

The central proposition underlying this study is that the agreement among organizational members on the goals for that organization are related to the attitudes of its members. In the Introduction, I argued that subgroups within the organization must be considered when assessing agreement. From there I argued that agreement 1) within and 2) between those subgroups (constituencies) are two types of comparisons that could be examined for agreement. Finally, I argued that within these two types of comparisons were two levels of conceptualizing agreement -- individual and organizational. The results indicate that both type and level are useful distinctions in that they provided a great deal of information about whose agreement on goals was important.

Of the two types of comparison (within- and between-constituency) within-constituency congruence (i.e., peer agreement) had the greatest impact on job attitudes. Both individual and organizational-level goal congruence among peers were correlated as predicted with job attitudes. Most notably, both showed a meaningful, positive effect on job satisfaction and organizational commitment even when the effects of the other types of goal congruence were statistically controlled. Of the two within-constituency goal congruence terms, the individual-level one maintained these relationships better.

The comparison of goals between subgroups showed relationships similar to those of the within subgroup comparisons, but when other congruence effects were controlled the partial correlations were near zero. For instance, the average congruence between a supervisor and all of his or her subordinates was unrelated to job attitudes when supervisor-subordinate congruence was partialled from the relationships. Furthermore, individual supervisor-subordinate agreement was overshadowed by peer agreement, but an individual's congruence with his or her supervisor did relate to numerous attitudes.

Taken together these findings underscore the need to examine the degree to which colleagues agree on organizational priorities as a potential factor in job attitude research. Closer examination of the findings of this study are discussed below. Type of comparison and the level of conceptualization are examined first, then the individual goal congruence terms are examined. These sections are followed by discussions of levels of analysis issues, limitations with the study, and future directions of research in the area of organizational goal congruence.

Between-Unit Compared to Within-Unit Goal Congruence

In general, the within-constituency goal congruence terms related to the attitude scales better than the between-constituency terms. Although preliminary, the findings in the current study demonstrate a relationship between differences in goal priorities among peers and perception of participation in decision making, job satisfaction, organizational commitment, and intention to quit. Within the context of organizational theory, this result implies that researchers may need to focus on the interactions of individuals at the same hierarchical level within the organization. Intra-group conflict, particularly on goal orientation issues, has not

received a great deal of attention. If one assumes that goal congruence causes the attitudes, then teachers seem to care about the direction of the school and when disagreement about that direction occurs among the teachers, they react negatively. Goal-oriented conflict at the subordinate level gives credence to the Theory Y description of involved employees, because it implies an involvement in the outcome of the school, not just the size of a paycheck (McGregor, 1967).

Individual-Level Compared to Organizational-Level Goal Congruence

Because of the findings, modifications in the composition models developed in the Introduction are required. Recall, the correlations between BCGC and the attitudes scales dropped to zero when controlling for SSGC. Thus, SSGC seems to be a mediator in the BCGC to attitude relationships. Moreover, correlations between SSGC and the attitude scales dropped two points at most when controlling for BCGC (see Table 6). Thus, Figure 5 shows the more appropriate composition model for between-constituency goal congruence. As such, the usefulness of BCGC as a construct seems limited. That is, BCGC appears to be simply the sum of its parts.

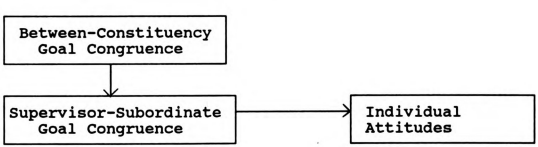


FIGURE 6: Between-Constituency Goal Congruence Model

With regards to the debate on the best level of analysis in the leadership domain (Dansereau, Alutto, & Yammarino, 1984), these results provide support for the dyad approach when the issue is organizational goals. Group-level theorists frequently discriminate between consideration and initiating structure behaviors of leaders (see, for example, Fleishman & Harris, 1962). The current study speaks only to the initiating structure component by focusing on goals.

For the within-constituency goal congruence model the evidence is not as clear. Although the correlations with WCGC dropped notably when MCGC was controlled, meaningful partial correlations remained for job satisfaction and organizational commitment. Likewise, the moderate correlations of MCGC with the attitude scales dropped two to seven points when WCGC was controlled. Thus WCGC and MCGC share common variance with the attitude scales, but both also seemed to directly and perhaps meaningfully affect individual attitudes. For that reason, the model presented in Figure 6 is less parsimonious but more interesting conceptually than the between-constituency model.

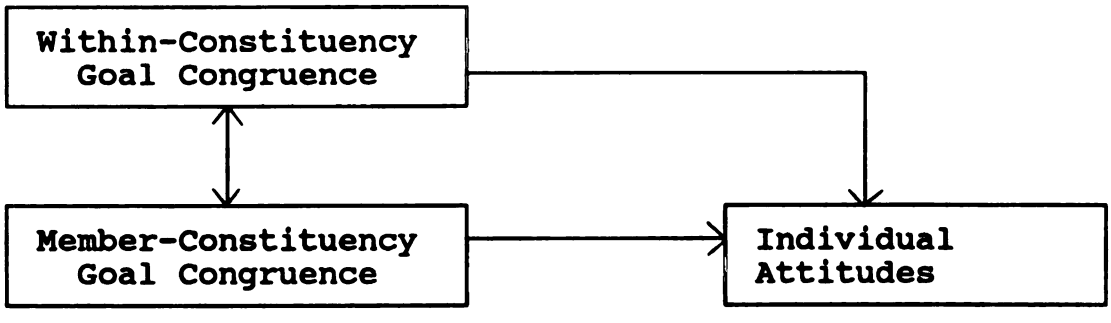


FIGURE 7: Within-Constituency Goal Congruence Model

The variance in the attitude measures common to both MCGC and WCGC can be given a post hoc conceptual explanation. WCGC may reflect a

sense of unity of purpose among the teachers. That sense of unity is likely to bring about two conditions. One condition is the shared camaraderie manifest in low levels of observed conflict among one's peers. This observed unity is manifested in WCGC only. The second condition is low conflict between oneself and peers. This low conflict is manifested in both WCGC and MCGC. The first condition still accounts for variance in teachers' attitudes but is not as strong when the second component is removed. The findings can be explained this way, but it is important to note that there were no measures of "camaraderie" or conflict, hence this speculation remains to be evaluated in future research.

Can a similar argument be made to explain the results when organizational variance is partialled from individual relationships? When defining MCGC in the Introduction, I described three types of low MCGC individuals. The first were members of an incongruent school (low WCGC). The second were members of a splinter group (low to high WCGC depending on the relative sizes of the majority and splinter groups and the congruence of the majority group). The last was the aberrant individual in a cohesive constituency (high WCGC). Had WCGC accounted for substantial MCGC-to-attitude variance, one could speculate that the first type of condition was prominent and the latter two not so. Because correlation coefficients dropped only slightly (2 to 7 points) for the MCGC-to-attitude relationships when controlling for WCGC (see Table 6), some speculations can be offered. First, it may be that many teachers are members of splinter groups or aberrant from the majority relative to members of incongruent schools. Second, that individuals whose goals are inconsistent with the other members of a highly cohesive group have markedly lower attitudes about their

job and organization than individuals in non-cohesive groups. That is, the individual who finds him or herself outside the in-group is more likely to have a lower perception of participation in decision making, lower job satisfaction, lower organizational commitment, and higher intentions to quit than the individual who is among a non-cohesive group (i.e., one of the crowd). Thus, I would argue that the psychological distress of disagreement with peers on the priority of organizational goals is most acute when those peers agree among themselves.

Individual-Level Findings

When considered separately, correlations with the two individual-level goal congruence terms were consistent with most of their hypothesized attitude variables. When considered together only MCGC maintained reasonable effect sizes. They are first discussed jointly.

The Relationship of SSGC and MCGC

The prediction that congruence with one's supervisor might substitute for peer congruence and vice versa did not receive support. For this reason partial correlations were computed in which SSGC was partialled from MCGC-to-attitude correlations and MCGC from SSGC-to-attitude correlations. The findings were somewhat surprising given the relative attention paid to supervisor-subordinate relations compared to peer relations. These partial correlations showed that MCGC could retain its demonstrated relationships to the attitude scales when SSGC was partialled out, but that SSGC could not when MCGC was partialled out. Conceptually, we can interpret these findings to mean that the agreement on organizational goals among peers is more important than the agreement with one's supervisor. Specifically, with regards to the substitution

notion, it seems that agreeing with one's peers on the goals for the organization can substitute for agreement with one's supervisor, but that agreement with one's supervisor does not substitute for agreement among one's peers.

SSGC

Despite the results of the partial correlations discussed above, the supervisor/subordinate relationship as measured by goal congruence was related to job satisfaction, organizational commitment and to a lesser extent participation in decision making climate and intention to quit. It was not meaningfully related to perceptions of work adjustment nor to stress. These findings deserve discussion in their own right. Even if MCGC is a stronger type of congruence, the data supported the hypothesis that SSGC related to subordinate attitudes.

Recall that the primary theoretical perspective for SSGC was LMX (Leader-Member Exchange). Discussion of the LMX concept usually includes the idea that leaders and member share goals (Dienesch & Liden, 1986). The results support the importance of goal congruence as a component of LMX. The relationships confirmed are most impressive given the method of measuring goal congruence. Method bias can be virtually eliminated as a source for spurious correlations.

With regards to specific attitudes, the findings help clarify discrepancies in the literature. For example, as reported in the Introduction, the relationship between LMX and decision influence (participation in decision making) varied. Scandura et al. (1986) reported a correlation of .45 between these two variables. Duchon et al. (1986) reported that they were not significantly related. Unlike the Scandura et al. study, but like the Duchon et al. study, this study used a method

other than self-report to assess LMX. Also, the relationship in this study was low (r = .10). Combining the findings from Duchon et al. (1986), Scandura et al. (1986), and the current study leads to the conclusion that 1) when measuring LMX, one should not use self-report measures because of method bias, and 2) participation in decision making is only modestly related to LMX.

This study confirms previous research that indicates LMX and job satisfaction are related. Moreover, the effect size found in this study, r = .19, was similar to the effect sizes of Vecchio and Gobdel (1984), r = .25, and Duchon et al. (1986), r = .25.

Organizational commitment had previously received only scant attention in LMX research. This study is consistent with the few past studies of a positive relationship (see Duchon et al., 1986; and Vroom, 1960) between organizational commitment and LMX.

Intention to quit findings tend to parallel the participation in decision making findings. As with participation in decision making, intention to quit demonstrated a low but meaningful relationship with goal congruence, although in a negative direction. In the case of intention to quit, one factor that has been used to explain mixed findings is the level of the employee within the organizational hierarchy (Vecchio, 1985). Vecchio (1985) suggested that only for relatively high-level employees would LMX show the negative relationship with intention to quit. The current findings are consistent with this interpretation if one accepts the contention made in the Introduction that teachers represent an operator constituency (i.e., professionals; Mintzberg, 1983).

Perceptions of stress and adjustment were not predicted to be related to SSGC and were not.

In general, the findings support the past evidence and further elucidate the types of contingencies researchers and practitioners have been seeing in LMX research. The consistency of the current findings with past LMX research seems to emphasize the importance of goal agreement as a central aspect of the supervisor/subordinate relationship. Recall that the LMX concept was composed of three components: 1) perceived contribution of the exchange, 2) loyalty, and 3) mutual affection. The first two incorporated notions of goal congruence. The current findings support inclusion of these notions in the measurement of the leader-member relationship. Furthermore, the current study measured this component without asking direct questions of the leader or member about the relationship between them. Therefore, susceptibility to method bias, a problem in other measures of LMX (Dienesch & Liden, 1986), is not a problem here. Implications of the dyad versus group level approach to leadership research are discussed in the individual- versus organizational-level comparisons below.

MCGC

The least precise theoretical work is available on the concept of MCGC, yet MCGC was related to the attitude variables more strongly than the other goal congruence terms. MCGC correlated substantially with participation in decision making climate, job satisfaction, organizational commitment, and intention to quit. These findings show that as a person's agreement with his or her peers on goals for the group or organization increases, the person's positive attitudes increase and negative attitudes decrease. If one is tempted to conclude from the

SSGC findings that team-building need only focus on the supervisor-subordinate dyad, the findings with regards to MCGC should temper the temptation. The strength of peer goal congruence was most notable for job satisfaction and organizational commitment, but participation in decision making and intention to quit were also meaningfully related to MCGC. Size of the group did not seem to be a factor. Size was used as a covariate but was not sufficiently related to MCGC or the non-aggregated attitude scales to explain correlations between MCGC and attitudes. Issues regarding size as a variable are discussed in the limitations section.

In the Introduction, I argued that MCGC represented the task orientation component of group cohesion. The advantage of this conceptualization is found in the ability to use group cohesion and related social psychological concepts on a more specific collectivity -- the organizational constituency. Constituency membership is more specific in that it is defined, at least in this study, by membership in a single hierarchical level in an organization. Parallel organizational constructs were identified for the social psychological constructs that have been found to be correlated with group cohesion. The parallelism included willingness to participate in group interaction which translated to participation in decision making climate, satisfaction with the group which translated to job satisfaction, commitment to the group which translated to organizational commitment, and attraction to the group which translated to intentions to remain. All these associations were confirmed by the results.

Finally, these findings tend to confirm the importance of climate discrepancy (Joyce & Slocum, 1982). Climate discrepancy focuses on the

difference between one individual's level on a particular variable and the levels of his or her peers, rather than just the level on the particular variable for that individual. Although in the current study it was goals rather than climate perceptions that were compared, I am arguing that goal inconsistency among peers creates psychological distress.

Organizational-Level Findings

BCGC

Most of the hypotheses regarding BCGC were unconfirmed. Even when BCGC was significantly related to an attitude, the attitude was predicted better by each of the other goal congruence terms, regardless of whether the attitude scale was aggregated or not. Furthermore, when partialling SSGC from relationships with BCGC and the attitudes, the original meager coefficients drop to zero.

Limitations regarding the quality of the BCGC term can be addressed readily. The intercorrelation matrices between the principals' and teachers' goal ratings, and teachers' goal ratings among themselves (Appendix D) show low associations on each goal among these individuals. High associations would have indicated little range for variance. Furthermore, BCGC had the highest eta^2 (.25) of the variables studied. These two points indicate that the psychometric quality of BCGC is <u>not</u> an issue.

Another factor that might have produced these disappointing results for BCGC was the exact weighting of constituencies used in the calculation of BCGC. In this study, I separated the supervisor (principal) from his/her subordinates (teachers). For the BCGC term this weighted the supervisor's goal rating as

equal to the sum of all the teachers' ratings. Thus, like a dictatorship, the opinion of a single leader equalled the opinion of the masses. Perhaps this over-emphasis (or under-emphasis) on the principal in the current calculation of BCGC did not properly reflect influence. Continuing the metaphor, WCGC represented a mutinous ship where only the crew's opinion remained salient. Toward the mutinous end of this power-distribution metaphor, is a pure democracy, where the principal's importance ratings are weighted the same as all the others. Still at other points on the continuum are the republic, the aristocracy, the oligarchy, and the monarchy, each representing increasingly disproportionate difference in the salience of the leaders' goal ratings relative to those of the subordinates. A more complex understanding of the influence or power of various persons or parties (i.e., weighting) may be necessary.

For instance, weighting may be contingent on the organization. Flat organizations may be more amenable to unit weighting the individual goal ratings. Unit centrality or resource control may also add complications. Those constituencies which are central to the organization or control scarce resources may require greater weighting than constituencies tangential to the organization, because incongruence is more salient with core constituencies. Incongruence in tangential units may be more easily tolerated.

Specific events or environmental factors may also affect the salience of a particular constituency's goals. Union votes, power struggles, and short- and long-term conflicts may galvanize certain groups and the goals they represent. Underlying these constructs is the issue of control of goal attainment. A union vote may temporarily give employees some control over some organizational goal.

These issues are developed more fully in the section on future directions for research.

WCGC

WCGC produced the most ambiguous findings. Correlations between WCGC and the aggregated attitude scales were the largest of the four congruence measures studied. Moreover, size of school did not greatly affect these associations when size was controlled. However, partialling MCGC from the WCGC-attitudes relationships yielded small partial correlations. The meaning of these findings was discussed earlier in the section on individual- vs organizational-level goal congruence.

The correlations with size were not always as expected (see Table 5). Teachers in larger schools did report lower levels of participation in decision making and higher stress perceptions, but they also reported less intention to quit and greater adjustment problems.

The effect of controlling size deserves attention as well. Though no specific predictions were made, it is interesting to note that partialling lowered the correlation of WCGC with perceptions of participation in decision making and raised the correlation of WCGC with intention to quit, adjustment and stress.

Levels of Analysis Issues

A primary concern facing organizational researchers is determining the proper level of analysis. Dansereau et al. (1984) developed the Variant Approach in an attempt to answer the question of proper level. Within the approach they developed a test and cutoff values to determine the appropriate level of analysis. The 30% test, their most liberal, requires an eta^2 of .33 or

higher if a researcher is to conclude that an organizational-level variable (whole, in their terms) is valid. Neither BCGC nor WCGC came close to this level.

On the other hand, James (1982) reported a median eta² of .12. The goal congruence terms easily surpassed this level. James' data imply that high eta²s are difficult to find and that meaningful information can be gleaned from aggregated variables whose eta² are relatively low (cf. Mossholder & Bedeian, 1983).

These opinions reveal the lack of consensus on what is an appropriate level for the eta² of an individual variable to be aggregated. One perspective is that eta² is like reliability (James, 1982) in that low values indicate a ceiling for validity (i.e., correlation). Therefore, obtaining correlations of some level of practical meaningfulness indicates that the eta² was sufficient. This was the case with WCGC. Since BCGC had a similar eta², its value does not adequately explain the low correlations found with BCGC. These arguments are purely statistical, not conceptual. That is, they speak to the measurement model (i.e., the association of instruments to the constructs they are designed to measure). There is agreement that conceptual rationale must exist before a variable collected from individual units can be aggregated. Moreover, a rationale must be established for the predicted association as well as the construct itself. BCGC may have failed because the conceptual model (i.e., the predicted association of constructs) was inadequate. This study was exploratory, perhaps the findings indicate that one should not expect that BCGC be related to individual attitudes.

Limitations

Many of the possible limitations associated with this study have been discussed in the sections on the specific goal congruence terms. However, some general limitations need to be addressed. Among these are selection issues, method bias in the attitude scales, and generalizability. Each are discussed in turn.

Selection

One limitation involves the selection of study subjects. Although schools were selected based on a procedure designed to insure representativeness, some declined and were replaced by other schools fitting the selection criteria. It may be that the schools (their principals to be specific) had reasons to refuse to participate that were related to the studied variables that skewed the results. Fortunately this number was quite small.

At the individual level the selection issue may be greater. Respondents (teachers) within schools were selected by the principal. Although sampling was requested only in schools with over 75 teachers, there is no guarantee that sampling within smaller schools did not occur. Nor is it guaranteed that when sampling did occur it was random, despite instructions to the principal to use random sampling. Selection bias may have occurred in the form of avoidance of disliked teachers. Such an occurrence would have restricted the range of the goal congruence measure (particularly the between-unit measures). More likely, convenience issues affected the randomness of selection, which would probably have no strong effect on the studied variables.

Relationships with regards to size -- indicated by the number of full time teachers -- were the most threatened by selection bias. Because sampling was most likely to occur in large schools, the composition of the respondents in those schools may not have reflected true composition. Perhaps, size would have had a more substantial effect in this study if sampling was within the control of the researchers.

Method Bias

Although method bias was not a likely problem with the goal congruence measures, the attitude variables were all assessed in a self-report manner. Because self-report was used, the high intercorrelations between the attitude scales (see Table 5) may be partially attributable to the data collection method. These high intercorrelations are also reflected in the similarity of patterns in the correlations in the goal congruence correlations. Different or more divergent patterns may have resulted had numerous methods been used. However, many of these variables have been shown to be highly related in previous research using various methods of data collection (see, for example, Steers & Mowday, 1981). Therefore, the high intercorrelations may simple reflect their conceptual similarity, and are not particularly surprising.

Generalizability

The generalizability of these findings beyond teachers needs further investigation. Teachers are a unique class of employees. They perform in a highly demanding atmosphere for relatively low wages. Confirmation across occupations will be necessary before one can address the generalizability of the findings.

Direction of Causality

Another issue is causal linkage. This study was cross-sectional and exploratory. A longitudinal or time lag study would be necessary to determine whether goal congruence causes job attitudes, whether the reverse is true, or whether some form of reciprocal causality occurs. For instance, the findings with regards to SSGC imply that, when a supervisor's and subordinate's goals are congruent, there is a high level of leader-member exchange. But what happens first? Does high goal congruence lead the supervisor to increase exchange (cf. Vroom & Yetton, 1973)? Or, do increases in the exchange relationship, presumably because of the supervisor's perceptions of subordinate competence, increase goal congruence and goal acceptance (cf. Ulrich et al., 1988)?

The same questions can be posed with regard to MCGC and participation in decision making. Advocates of OD suggest the use of participation in decision making to increase cohesion, goal acceptance and presumably congruence (e.g., Leavitt, 1965). Shaw (1981), on the other hand, suggested that cohesive groups are a consequence of members holding similar goals. Now that there is support for associations between these variables, confirmatory and experimental studies should be conducted.

Implications and Future Directions of Research

The goal congruence terms in this study were based on the consideration of multiple goals and multiple constituencies. Continued research in goal congruence needs to examine further the definitions of both organizational goals and constituencies.

Goal Specificity

In this study all goals and overall attitudes were considered. Fourteen goals were rated by all constituencies and members alike. Perhaps, disagreement on one or some goals is more critical than disagreement on others. For example, disagreement on customer relations within a unit which has control over customer relations may be more important than disagreement on building maintenance. It is also possible that some goals had no relevance for some of the schools in the sample (i.e., integration of the school's student body). Perhaps by focusing on a specific goal, using goal accomplishment and examining the congruence on just the one goal, outcomes would be more tractable. Such a procedure would make direct goal comparisons between units difficult. On the other hand, perhaps comparisons between constituencies should only be done on those functions (and their goals) for which there is overlap between the constituencies.

Goal salience can also be affected by control over goal accomplishment and the ability to monitor progress. Organizational-level control concepts have recently been introduced by Green and Welsh (1988). They discussed the constraints on establishing control systems at the organizational level. Along with these constraints, traditional goal-setting issues must be considered, like goal acceptance and an effector (ability to affect goal accomplishment). Goal acceptance takes on a whole new meaning at the organizational level. This study examined differences in the level of goal acceptance at the organizational level by focusing on who is doing the accepting and what are the consequences of differences in this acceptance. These issues must be considered by anyone trying to use control theory concepts at the organizational level.

Defining the Constituency

One general assumption of this study is that objective membership can be a meaningful categorization tool. Recall, constituencies were defined by job title (teacher, principal). However, constituency membership may have subjective as well as objective dimensions. For instance, it may be that social identification (cf., Ashforth & Mael, 1989) would differentially weight the importance of goal congruence for the individuals in an organization. However, categorizing based on complicated weighting schemes quickly becomes intractable. Even though the current study lacked data on subgroups and coalitions, easily interpretable results were obtained.

Further investigation into goal congruence needs to focus on the subgrouping structure with special attention to the outliers. Is the aberrant member under more psychological distress than the member of an inconguence organization? Clustering procedures may be able to identify the subgroups, but more information needs to be collected to understand the nature of the subgrouping (i.e., is it structural or belief based?). Perhaps the best approach is to focus on how the subgrouping comes about. Cognitive perspectives, discussed next, may help understand these processes.

Combining the issues related to goal specificity and constituency membership highlights an added dimension of goal congruence -- intensity of the goal strength. Goals for which constituency members have the greatest control, define the specific duties of the unit and provide meaning for the members are likely to be the most salient. Incongruence on these goals are likely to have the greatest impact on job attitudes.

The Thinking Organization

Weick and Bougon (1986) described organizations as objects of the minds that consider them. Physical or objective reality is not nearly as important as the organizational members' perceptions of reality. It is the mutual, "consensually validated" perceptions of the members that make a group of people an organization (Weick, 1979), in other words, congruence. But when does this "consensual validation" process begin? For most members it begins upon entering the organization. When is it complete? Probably never, but when some level of congruence is reached between a newcomer and incumbents, consensual validation may have reached an equilibrium.

The process of acquiring a perception of the organization is often referred to as organizational socialization. Interest in organizational socialization as an issue for psychological research is only just beginning. Schein (1965) has described socialization as the process of newcomers "learning the ropes" of the organization they enter. Others have described socialization as sense-making (Louis, 1980), and the process of role acquisition, development of work skills and adjustment to a work group's norms and values (Feldman, 1981; Nicholson, 1984). Fisher (1986) stated that organizational socialization "focuses on the learning of organization-specific modes of behaving and thinking" (p. 102). In Weickian terms, what is learned are the perceptions of the current members in the organization. Specifically, "the ropes" include organizational goals and the acceptance or level of importance associated with these goals by other organizational members.

It is important to note two features of socialization. One, is that it is a process and therefore happens over time (Katz, 1980). Two, is that if organizations are viewed as consensual entities, the congruence of perceptions between members is the critical feature of an organization.

The results of this study demonstrated to some extent that failure to consolidate can have negative consequences for the organization and its membership. What the study does not address is the process of acquiring (or not acquiring) that consolidation. What are the specific tactics, policies, circumstances that lead to congruence (MCGC) among teachers? For instance are smoking policies within the school affecting WCGC? While conducting this study, I was told of a school in which two factions existed. One faction was composed of smokers, the other non-smokers. Apparently the teachers' lounges were on the opposite ends of the school. In one lounge smoking was allowed, in the other it was not. Groups formed based on which lounge one typically used. Finally, an interesting line of research might focus on the moves by groups to achieve congruence (Zander, 1985, p. 6; Hackman, 1976).

Conclusion

When organizational strategists suggest organizations should articulate a clear mission and objectives, they may be on to something. This study confirms the idea that agreement on organizational goals is associated with positive attitudes, intentions and perceptions. Most importantly is the agreement among peers. Specifically the study found the following:

- Supervisor-subordinate goal congruence is positively related to attitudes regarding participation in decision making, job satisfaction,

organizational commitment, and negatively related to intention to quit.

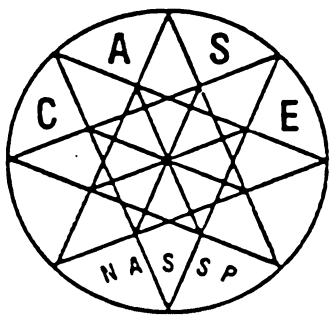
- Member-constituency goal congruence is positively related to attitudes regarding participation in decision making, job satisfaction, organizational commitment, and negatively related to intention to quit.
- Between-constituency goal congruence is positively related to job satisfaction and organizational commitment only when job satisfaction and organizational commitment are aggregated to the school level.
- Within-constituency goal congruence is positively related to participation in decision making, job satisfaction, organizational commitment, and negatively related to intention to quit and stress when stress is aggregated to the school.

With the exception of BCGC, the findings represent associations with congruence between and among different constituencies. The view of organizations as a collection of constituencies and members with multiple goals and multiple priorities produced research results that indicate the importance of peer goal congruence -- a construct that has been relatively neglected by organizational behavior researchers. Further investigation, centered at understanding specific findings within this study are required to move from the exploratory stage to the confirmatory stage. These investigations may help us to understand how to make organizations into teams, and the consequences of such team formation.

APPENDIX A

NATIONAL ASSOCIATION OF SECONDARY SCHOOL PRINCIPALS

COMPREHENSIVE ASSESSMENT OF SCHOOL ENVIRONMENTS



CASE
INFORMATION
MANAGEMENT
SYSTEM

NATIONAL NORMATIVE STUDY

NOVEMBER 9 - DECEMBER 4, 1987

PRINCIPAL FORM

Comprehensive Assessment of School Environments (CASE)
Principal Report

This survey asks questions about the school and/or the school district. **ANSWERS SHOULD BY PROVIDED BY THE PRINCIPAL OR SCHOOL HEADMASTER OR A KNOWLEDGEABLE REPRESENTATIVE.** Please mark your answers on the separate computer answer sheet furnished with your survey. Use only a No. 2 pencil and do **NOT** fold your answer sheet or make any stray marks on it. Mark your answer to question 1 on the answer sheet next to the No. 1, then No. 2, etc.

1. Which of the following population categories best describes the locale of the high school in which you are principal?

   0. City, more than 1,000,000
   1. City, 150,000 - 999,999
   2. Suburban, related to city of 150,000 or more
   3. City, 25,000 - 149,999, distinct from a metropolitan area
   4. City, 5,000 - 24,999, not suburban
   5. Town under 4,999 or rural

Using the scale below, indicate how important each of the following goals are for your school.

   6 - Of primary importance
   5 - Highly important, but not of most importance
   4 - Important, more important than many other goals
   3 - Average importance among all the other goals the school must meet
   2 - Somewhat important, must be considered, but other goals are more important
   1 - Little importance, can't be ignored, but most other goals are more important
   0 - Of no importance

2. Increasing basic skills of students (reading, writing, and math)

3. Increasing the breadth of courses offered

4. Enhancing school athletic programs

5. Enhancing other cocurricular activities such as clubs and intramural programs

6. Upgrading staff development and inservice programs

7. Increasing the cost effectiveness of the school's programs

8. Upgrading the physical resources of the school

9. Achieving full racial integration

10. Developing better policies and procedures to maximize instructional time

11. Upgrading programs for special education, gifted, and/or low-functioning students

12. Upgrading discipline plans and practices

13. Increasing parent/community involvement

14. Upgrading college preparation and other academic programs for students

15. Upgrading vocational education programs for students

16. How would you classify your school's governing structure?

    0. Public
    1. Private, church-related
    2. Private, nonchurch-related

17. How many years has your current superintendent (or the person in a similar leadership role if the school is not a public school) served as superintendent in your district?

    0. Less than one year
    1. More than one year, but less than two
    2. More than two years, but less than three
    3. More than three years, but less than four
    4. More than four years, but less than five
    5. More than five years, but less than eight
    6. Eight or more years

Use the scale below to answer the following questions about your role in the district.

    4 = Always
    3 = Often
    2 = Sometimes
    1 = Seldom
    0 = Never

18. How frequently do you participate in the decision to hire new staff?

19. How frequently do you participate in decisions on the promotion of any of the professional staff?

20. How frequently do you participate in decisions on the adoption of new policies?

21. How frequently do you participate in decisions on the adoption of new programs?

Use the scale below to respond to the following statements about practices in your district.

3 = Definitely true
2 = True
1 = False
0 = Definitely false

22. There can be little action taken here until a supervisor approves a decision.
23. A person who wants to make his/her own decisions would be quickly discouraged here.
24. Even small matters have to be referred to someone higher up for a final answer.
25. I have to ask my supervisor before I do almost anything.
26. Any decision I make has to have my superior's approval.

27. How old is your school building?

0. Less than 5 years
1. 5-9 years
2. 10-14 years
3. 15-19 years
4. 20-24 years
5. 25-29 years
6. 30-49 years
7. 50-74 years
8. 75-99 years
9. More than 100 years

28. How long has it been since some structural renovation took place at your school (other than scheduled maintenance)?

0. Less than 1 year
1. 1-3 years
2. 4-6 years
3. 7-9 years
4. 10-12 years
5. 13-15 years
6. 16-18 years
7. 19-21 years
8. 22-25 years
9. More than 25 years

29. How many security personnel are employed in your school?

0. None
1. one
2. two
3. three
4. four
5. five
6. six
7. seven
8. eight
9. nine or more

30. How many years has the current principal or headmaster served your school in this role?

0. Less than one year
1. More than one year, but less than two
2. More than two years, but less than three
3. More than three years, but less than four
4. More than four years, but less than five
5. More than five years, but less than eight
6. Eight or more years

31. How many principals or headmasters have served your school in the last decade?

0.	one	5.	six
1.	two	6.	seven
2.	three	7.	eight
3.	four	8.	nine or more
4.	five		

32. What is your sex (i.e., the school principal's sex)?

0.	Male	1.	Female

33. What is your ethnic status (i.e., the school principal's ethnic status)?

0.	American Indian/Eskimo	3.	Hispanic
1.	Asian American	4.	White
2.	Black	5.	Other

To what degree does the school district specify the regulation of the academic program? Use the following scale for the next three items.

4 = Very extensive regulation
3 = Extensive regulation
2 = Moderate regulation
1 = Some regulation
0 = Little regulation

34. The Curriculum (Formal plan for teaching/learning activities; subject matter courses of study)

35. Instructional Procedures (Teaching methods, strategies, and classroom organization)

36. Evaluation Approaches (Curriculum design, program effectiveness, teacher performance, student grade reporting)

To what degree does the school (principal, administrative team) require adherence to the following? Use the following scale for the next three items.

4 = Very strict adherence
3 = Strict adherence
2 = Moderate adherence
1 = Some adherence
0 = Little adherence

37. The Established Curriculum (Formal plan for teaching/learning activities; subject matter courses of study)

38. Mandated Instructional Procedures (Teaching methods, strategies, and classroom organization)

39. Required Evaluation Approaches (Curriculum design, program effectiveness, teacher performance, student grade reporting)

5

Use the scale below to indicate the extent to which written statements or rules and regulations apply to the following.

3 = Written rules are strictly enforced
2 = Written rules are sometimes enforced
1 = Written rules exist, but are not enforced
0 = No written rules

40. Student attendance

41. Student dress

42. Student employment

43. Teacher/staff attendance

44. Teacher/staff dress

Indicate for each of the following activities whether budgeted resources are available. Mark 0 if no budgetary resources are available; 1 if a separate budget exists for the item.

45. Priority setting for the school (needs assessment)

0 = No
1 = Yes

46. Monitoring of student activities

0 = No
1 = Yes

47. Student discipline

0 = No
1 = Yes

48. Supervision of instruction

0 = No
1 = Yes

49. Teacher evaluation

0 = No
1 = Yes

50. Staff development

0 = No
1 = Yes

51. Program evaluation

0 = No
1 = Yes

52. Curriculum review and update

0 = No
1 = Yes

53. Review of instructional materials

0 = No
1 = Yes

54. Review of instructional methods

0 = No
1 = Yes

55. School improvement plans

0 = No
1 = Yes

56. Student recognition and reward

0 = No
1 = Yes

57. Teacher recognition and reward

0 = No
1 = Yes

58. Parental involvement

0 = No
1 = Yes

59. Use of volunteers in the school

0 = No
1 = Yes

60. Public information and community relations

0 = No
1 = Yes

Indicate in the next three questions whether teachers are provided curriculum guidance and supervision by each of the following? On the answer sheet, mark 0 if the answer is NO; 1 if the answer is YES.

61. District personnel

0. No
1. Yes

62. Principal or assistant principal

0. No
1. Yes

63. Department chairpersons

0. No
1. Yes

64. How many scheduled periods does your school have each day?

0. 5 or fewer
1. 6
2. 7
3. 8
4. 9
5. 10 or more

How many electives (total) are available to your students in <u>each</u> of the following subject areas? Use the scale below for items 65-73.

0. 0
1. 1
2. 2
3. 3
4. 4
5. 5
6. 6
7. 7
8. 8
9. 9 or more

65. English/language arts

66. Fine Arts (music, art, theatre)

67. Foreign languages

68. Mathematics

69. Physical and health education

70. Science

71. Social studies

72. Vocational and technical education

73. Interdisciplinary approaches

What percentage of your students are enrolled in the programs below? Use the following scale for your responses:

0 = Less than 10%	5 = 50-59%
1 = 10-19%	6 = 60-69%
2 = 20-29%	7 = 70-79%
3 = 30-39%	8 = 80-89%
4 = 40-49%	9 = 90% or more

74. Remedial programs

75. Vocational/technical

76. College preparatory

77. What percentage of households in your school attendance area have school-age children?

0. Less than 5%	5. 25-29%
1. 5-9%	6. 30-39%
2. 10-14%	7. 40-59%
3. 15-19%	8. 60-79%
4. 20-24%	9. 80% or more

The scale below is designed to assess important aspects of the performance of your school's administrative team (principal with other administrators as defined by school or district). Read the definition of the various performance dimensions and use the following scale for your evaluation.

5 = Exemplary
4 = Superior
3 = Good
2 = Satisfactory
1 = Needs improvement
0 = Unsatisfactory

78. Curriculum and Instructional Leadership - the team establishes procedures, sets expectations and goals, monitors the degree to which the school's academic objectives and individual progress goals are met.

79. Coordination of Student Activities - the team takes responsibility for approving, and in some instances, initiating, supervising, participating in, and evaluating student activities.

80. Direction of Support Services - the team assumes appropriate responsibility for direction and supervision of cafeteria, bus service, school maintenance, various support staff, etc.

81. Directing the Behavior of Students - the team sets guidelines for student behavior and enforces them objectively; maintains up-to-date procedural manuals, and monitors observance.

82. Staff Evaluation and Development - the team arranges for observations, conferences, feedback, goal setting, and appropriate development activities related to staff performance.

83. Community Relations - the team works to promote parental and community involvement in the school and to develop positive relationships between the school and parents/community.

84. Interpersonal Effectiveness and Communication - the team interacts effectively with other persons; is aware of the effect of its behavior and decisions on persons inside and outside of the school; attempts to address the needs, concerns, and problems of other parties.

85. Coordination with District and Other Schools - the team provides needed input and cooperative action toward a coordinated educational program in the district's schools and other educationally related agencies.

86. Fiscal or Monetary Management - the team manages monetary resources effectively and fairly.

87. Maintenance of School Plant - the team provides for needed maintenance and enlists help of faculty and students in maintaining an attractive facility.

88. Overall Performance Effectiveness of the administrative team in your school.

89. What percent of the total number of your students received disciplinary referrals last year? (Divide number of students who received one or more referrals by total number of students.)

0. Less than 1%
1. 1-2%
2. 3-4%
3. 5-6%
4. 7-8%
5. 9-10%
6. 11-12%
7. 13-14%
8. 15% or more

90. What percent of your students received suspensions last year? (Divide number of students who received one or more suspensions by total number of students.)

0. Less than 1%
1. 1-2%
2. 3-4%
3. 5-6%
4. 7-8%
5. 9-10%
6. 11-12%
7. 13-14%
8. 15% or more

91. What percent of students were involved in counseling referrals for disciplinary reasons? (Divide number of students who received one or more referrals by total number of students.)

0. Less than 1%
1. 1-2%
2. 3-4%
3. 5-6%
4. 7-8%
5. 9-10%
6. 11-12%
7. 13-14%
8. 15% or more

92. How many serious incidents of vandalism occurred at your school last year?

0.	None	5.	9-10
1.	1-2	6.	11-12
2.	3-4	7.	13-14
3.	5-6	8.	15 or more
4.	7-8		

Introducing change in school organizational structures or programs can be difficult. The statements below describe various attitudes or conditions that may be present in your school. Use the following scale to indicate the extent of your agreement or disagreement with items 93-107.

4 = Strongly agree
3 = Agree
2 = Undecided
1 = Disagree
0 = Strongly disagree

93. Our school staff tries to understand the needs of our students.

94. We try to find out how the people who will be affected feel about proposed new programs.

95. We carefully evaluate our programs.

96. Our school staff is effective in introducing changes.

97. Our administrators and faculty do not trust each other.

98. Our administrators and faculty often talk about changing things at the school.

99. Our administrators participate actively in school improvement efforts.

100. Our school staff is free to propose improvements even when funding is needed for the changes.

101. Our administrators and teachers are open to student or parent suggestions.

102. Some of our school procedures or programs need to be changed.

103. I favor implementing new programs that support our total program.

104. I favor new programs that realistically can be implemented in our school.

105. I am uneasy about programs that are really new.

106. I am most comfortable with what we are already doing.

107. What is your general reaction to making defensible program changes?

4 = Strongly supportive
3 = Supportive
2 = Undecided
1 = Cautious
0 = Very cautious

SCHOOL CODE: Your school code number for this CASE national validation study is printed at the upper left corner of your address label, just above your name. The number has nine digits. Please ignore other codes and numbers printed elsewhere on this label.

Before proceeding with the final pages of this report, go to numbers 116-123 on SIDE 2 of your computer answer sheet and blacken the correct circles for each of the nine digits of this code. Use #116 for the first number of the code, #117 for the second number, and so on until you have completed all nine digits (at #124).

THE REMAINDER OF THE ITEMS SHOULD BE ANSWERED DIRECTLY ON THIS AND THE FOLLOWING PAGES, IN THE SPACES PROVIDED, BY THE SCHOOL PRINCIPAL OR HEADMASTER OR A KNOWLEDGEABLE REPRESENTATIVE. PLEASE TYPE OR PRINT YOUR RESPONSES AND RETURN THESE THREE PAGES WITH THE COMPUTER ANSWER SHEET.

In what state is your school located?_____

How many square feet in your school building?_____

What was your total school budget minus capital expenditures for last year (1986-1987)? _____

What is the average per pupil expenditure in your school for the current school year (exclusive of capital outlay)?_____

What is the average teacher salary in your school this year?_____

What has been the average annual cost of vandalism at your school over the last three years? _____

How many people (professional staff plus aides, secretaries, janitors, cooks, and other support staff) are employed at your achool?_____

How many professional staff (teachers, counselors, administrators, etc.) are employed at your school? _____

How many teacher full-time equivalents (FTEs) are employed at your school?_____

How many students are enrolled in your school?_____

How many of your students are non-minority?_____

List the percentages of students in your school in each of these racial/ethnic groups.

_____American Indian/Eskimo

_____Asian American

_____Black

_____Hispanic

_____White

_____Other

How many of the students in your school speak English as their primary language?
_____

How many students in your school receive free or reduced-price lunches? _____

How many students transferred into your school last year (1986-1987)? _____

How many students transferred out of your school last year? _____

What was the average daily attendance in your school last year? Report as a percent. _____

How many students dropped out of your school last year; i.e., quit school without transferring to another school? _____

How many students did not drop out of your school last year; i.e., completed the school year or transferred to another school?_____

Of the students enrolled in all courses last year, what percentage passed them? _____

Of the students enrolled in college preparatory courses last year, what percentage passed them? _____

Of the students enrolled in vocational courses last year, what percentage completed them with a grade of B or better? _____

In the tables below, please report standardized achievement test scores for all grades in your school from 6 to 12. Give average percentiles or average normalized curve equivalent scores (NCES).

READING COMPREHENSION

Grade Level	Reading Comprehension Score	Type of Score Reported: NCES or percentile?	Test Used, Test Form and Publication Date
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

TOTAL MATH

Grade Level	Total Math Score	Type of Score Reported: NCES or percentile?	Test Used, Test Form and Publication Date
____	_____	_____	_____
____	_____	_____	_____
____	_____	_____	_____
____	_____	_____	_____
____	_____	_____	_____
____	_____	_____	_____
____	_____	_____	_____

TOTAL SCIENCE

Grade Level	Total Science Score	Type of Score Reported: NCES or percentile?	Test Used, Test Form and Publication Date
____	_____	_____	_____
____	_____	_____	_____
____	_____	_____	_____
____	_____	_____	_____
____	_____	_____	_____
____	_____	_____	_____
____	_____	_____	_____

APPENDIX B

nassp The National Association of Secondary School Principals
1904 Association Drive • Reston, Virginia 22091 • Tel: 703-860-0200

October 1987

Dear Teacher:

The National Association of Secondary School Principals (NASSP) is pilot testing measures for the Comprehensive Assessment of School Environments (CASE) in order to examine the determinants of school effectiveness. Data are being collected from principals, teachers, and students in selected schools throughout the country. We believe this project is extremely important and urge your serious participation.

This short survey asks questions about the characteristics of your school and your own feelings about the school. Please respond to the survey items by marking your answers on the separate answer sheet. Use only a No. 2 pencil on the answer sheet. Please do NOT fold the answer sheet. There is no need to write your name; your responses are confidential. Instructions for completing the items are printed in the survey.

When you have completed the survey, please return your answer sheet to your principal, who will mail it to us. Your help and cooperation is greatly appreciated.

James W. Keefe

James W. Keefe, Ed.D.
Director of Research

0864

NATIONAL ASSOCIATION OF SECONDARY SCHOOL PRINCIPALS

COMPREHENSIVE ASSESSMENT OF SCHOOL ENVIRONMENTS

CASE INFORMATION MANAGEMENT SYSTEM

NATIONAL NORMATIVE STUDY

NOVEMBER 9 - DECEMBER 4, 1987

TEACHER FORM

Comprehensive Assessment of School Environments (CASE)
Teacher Report

This survey asks questions about your perceptions of the school and your job. Please mark your answers on the separate computer answer sheet furnished with your survey. Use only a No. 2 pencil and do NOT fold your answer sheet or make any stray marks on it. Mark your answer to question 1 on the answer sheet next to the No. 1, then No. 2, etc.

Using the scale below, indicate how important each of the following goals (items 1-14) are for your school.

6 - Of primary importance
5 - Highly important, but not of most importance
4 - Important, more important than many other goals
3 - Average importance among all the other goals the district must meet
2 - Somewhat important, must be considered, but other goals are more important
1 - Little importance, can't be ignored, but most other goals are more important
0 - Of no importance

1. Increasing basic skills of students (reading, writing, and math)
2. Increasing the breadth of courses offered
3. Enhancing school athletic programs
4. Enhancing other cocurricular activities such as clubs and intramural programs
5. Upgrading staff development and inservice programs
6. Increasing the cost effectiveness of the school's programs
7. Upgrading the physical resources of the school
8. Achieving full racial integration
9. Developing better policies and procedures to maximize instructional time
10. Upgrading programs for special education, gifted, and/or low-functioning students
11. Upgrading discipline plans and practices
12. Increasing parent/community involvement
13. Upgrading college preparation and other academic programs for students
14. Upgrading vocational education programs for students

Use the scale below to respond to items 15-32.

4 - Strongly agree
3 - Agree
2 - Neither agree nor disagree
1 - Disagree
0 - Strongly disagree

15. I feel very little loyalty to this school.

16. I am proud to tell others that I am a teacher at this school.

17. For me, this is the best of all possible schools in which to work.

18. Deciding to work for this school was a definite mistake on my part.

19. I really care about the fate of this school.

20. Often, I find it difficult to agree with this school's policies on important matters relating to its employees, teachers, or students.

21. I find that my values and the school's values are very similar.

22. I am committed to achieving the goals this school sets.

23. I really feel that the school's problems are my problems.

24. I often think about quitting.

25. I will probably look for a new job in the next year.

26. I will actively look for a new job in the next year.

27. I feel I have the respect of the people with whom I work.

28. I feel sure of myself in this teaching position.

29. I feel I've adjusted well to working in this school.

30. I don't think my fellow teachers feel relaxed around me.

31. I think I work well with other teachers.

32. I feel that I have a good system for doing my job.

Use the scale below for items 33-37 to indicate how often you have experienced the following circumstances during this school year.

4 = Quite often
3 = Frequently
2 = Occasionally
1 = Rarely, just once or twice
0 = Never

33. Feeling that you have too heavy a workload, one you can't possibly finish in an ordinary work day.

34. Thinking that you'll not be able to satisfy the conflicting demands of various people for your time.

35. Feeling that you're not fully qualified to handle your job.

36. Feeling that your job tends to interfere with your family/personal life.

37. Generally feeling stress from your job.

Use the scale below to answer items 38-41 about your decision making role in the district/school.

4 = Always
3 = Often
2 = Sometimes
1 = Seldom
0 = Never

38. How frequently do you participate in the decision to hire new staff?

39. How freqently do you participate in decisions on the promotion of any of the professional staff?

40. How frequently do you participate in decisions on the adoption of new policies?

41. How frequently do you participate in the decisions on the adoption of new programs?

Use the scale below to respond to the following statements about practices in your district/school.

3 = Definitely true
2 = True
1 = False
0 = Definitely false

42. Little action can be taken here until a supervisor approves a decision.

43. A person who wants to make his/her own decisions would be quickly discouraged here.

44. Even small matters have to be referred to someone higher up for a final answer.

45. I have to ask my supervisor before I do almost anything.

46. Any decision I make has to have my superior's approval.

Introducing change in school organizational structures or programs can be difficult. The statements below describe various attitudes or conditions that may be present in your school. Use the following scale to indicate the extent of your agreement or disagreement with items 47-61.

4 - Strongly agree
3 - Agree
2 - Undecided
1 - Disagree
0 - Strongly disagree

47. Our school staff tries to understand the needs of our students.

48. We try to find out how the people who will be affected feel about proposed new programs.

49. We carefully evaluate our programs.

50. Our school staff is effective in introducing changes.

51. Our administrators and faculty do not trust each other.

52. Our administrators and faculty often talk about changing things at the school.

53. Our administrators participate actively in school improvement efforts.

54. Our school staff is free to propose improvements even when funding is needed for the changes.

55. Our administrators and teachers are open to student or parent suggestions.

56. Some of our school procedures or programs need to be changed.

57. I favor implementing new programs that support our total program.

58. I favor new programs that realistically can be implemented in our school.

59. I am uneasy about programs that are really new.

60. I am most comfortable with what we are already doing.

61. What is your general reaction to making defensible program changes?

4 - Strongly supportive
3 - Supportive
2 - Undecided
1 - Cautious
0 - Very cautious

Use the scale below to select the answer that best describes how you feel about the following aspects of your school.

1 - I am very dissatisfied with this aspect of the school.
2 - I am dissatisfied with this aspect of the school.
3 - I am neither satisfied nor dissatisfied with this aspect of the school.
4 - I am satisfied with this aspect of the school.
5 - I am very satisfied with this aspect of the school.
6 - I don't know how I feel about this aspect of the school, or I don't know whether this statement fits my school.

62. The administrators in your school.

63. Your pay, fringe benefits, and other compensation.

64. Your opportunities for career advancement in your school or district.

65. Student discipline and sense of responsibility.

66. The school curriculum and your job duties.

67. The competence, commitment, and level of cooperation of your fellow teachers.

68. Community and parent support for your school and its programs.

69. The availability and quality of school facilities, supplies, and maintenance.

70. The extent and quality of communication about school matters within the school and the district.

Choose the answer from the following scale that you think most people in your school and community would pick to describe your school. Use this scale for items 71-82.

1 - Most people would strongly disagree with this statement.
2 - Most people would disagree with this statement.
3 - Most people would neither agree nor disagree with this statement.
4 - Most people would agree with this statement.
5 - Most people would strongly agree with this statement.
6 - I don't know what most people think about this statement, or I don't know whether this statement fits the school.

71. Teachers are patient and make extra efforts to help students.

72. Teachers understand and meet the needs of each student.

73. Students and teachers are safe in the school building.

74. The school is kept neat and attractive.

75. The administrators listen to teachers and students when making decisions.

76. Students work hard on their studies.

1 - Most people would strongly disagree with this statement.
2 - Most people would disagree with this statement.
3 - Most people would neither agree nor disagree with this statement.
4 - Most people would agree with this statement.
5 - Most people would strongly agree with this statement.
6 - I don't know what most people think about this statement, or I don't know whether this statement fits the school.

77. Students are well-behaved.

78. Students can get help and advice from teachers or counselors.

79. Students care about and respect each other.

80. Parents and members of the community attend school meetings and activities.

81. Most classroom time is spent in learning activities.

82. Students are able to take part in school activities that interest them.

SCHOOL CODE: Now go to numbers 107-115 on your computer answer sheet and blacken the circles for the nine-digit school code which your principal has given you. Use #107 for the first number of the Code, #108 for the second number, and so on until you have completed all nine digits (at #115).

APPENDIX C

Goals (Principals and Teachers)

Instructions: Using the scale below, indicate how important each of the following goals (items 1-14) are for your school.

6 = Of primary importance
5 = Highly important, but not of most importance
4 = Important, more important than many other goals
3 = Average importance among all the other goals the district must meet
2 = Somewhat important, must be considered, but other goals are more important
1 = Little importance, can't be ignored, but most other goals are more important
0 = Of no importance

1. Increasing basic skills of students (reading, writing, and math)

2. Increasing the breadth of courses offered

3. Enhancing school athletic programs

4. Enhancing other cocurricular activities such as clubs and intramural programs

5. Upgrading staff development and inservice programs

6. Increasing the cost effectiveness of the school's programs

7. Upgrading the physical resources of the school

8. Achieving full racial integration

9. Developing better policies and procedures to maximize instructional time

10. Upgrading programs for special education, gifted, and/or low-functioning students

11. Upgrading discipline plans and practices

12. Increasing parent/community involvement

13. Upgrading college preparation and other academic programs for students

14. Upgrading vocational education programs for students

Participative Climate (Teachers)

Instructions: Use the scale below to answer items 38-41 about your decision making role in the district/school.

4 = Always
3 = Often
2 = Sometimes
1 = Seldom
0 = Never

38. How frequently do you participate in the decision to hire new staff?

39. How frequently do you participate in decisions on the promotion of any of the professional staff?

40. How frequently do you participate in the decisions on the adoption of new policies?

41. How frequently do you participate in the decisions on the adoption of new programs?

Satisfaction (Teachers)

Instructions: Use the scale below to select the answer that best describes how you feel about the following aspects of your school.

1 = I am very dissatisfied with this aspect of the school.
2 = I am dissatisfied with this aspect of the school.
3 = I am neither satisfied nor dissatisfied with this aspect of the school.
4 = I am satisfied with this aspect of the school.
5 = I am very satisfied with this aspect of the school.
6 = I don't know how I feel about this aspect of the school, or I don't know whether this statement fits my school.

62. The administrators in your school.

63. Your pay, fringe benefits, and other compensation.

64. Your opportunities for career advancement in your school or district.

65. Student discipline and sense of responsibility.

66. The school curriculum and your job duties.

67. The competence, commitment, and level of cooperation of your fellow teachers.

68. Community and parent support for you school and its programs.

69. The availability and quality of school facilities, supplies, and maintenance.

70. The extent and quality of communication about school matters within the school and the district.

Commitment (Teachers)

Instructions: Use the scale to respond to items 15-23.

4 = Strongly agree
3 = Agree
2 = Neither agree nor disagree
1 = Disagree
0 = Strongly disagree

15. I feel very little loyalty to this school.

16. I am proud to tell others that I am a teacher at this school.

17. For me, this is the best of all possible schools in which to work.

18. Deciding to work for this school was a definite mistake on my part.

19. I really care about the fate of this school.

20. Often, I find it difficult to agree with this school's policies on important matters relating to its employees, teachers, or students.

21. I find that my values and the school's values are very similar.

22. I am committed to achieving the goals this schools sets.

23. I really feel that the school's problems are my problems.

Intention to Quit (Teachers)

Instructions: Use the scale to respond to items 24-26.

4 = Strongly agree
3 = Agree
2 = Neither agree nor disagree
1 = Disagree
0 = Strongly disagree

24. I often think about quitting.

25. I will probably look for a new job in the next year.

26. I will actively look for a new job in the next year.

Adjustment (Teachers)

Instructions: Use the scale to respond to items 27-32.

4 = Strongly agree
3 = Agree
2 = Neither agree nor disagree
1 = Disagree
0 = Strongly disagree

27. I feel I have the respect of the people with whom I work.

28. I feel sure of myself in this teaching position.

29. I feel I've adjusted well to working in this school.

30. I don't think my fellow teachers feel relaxed around me.

31. I think I work well with other teachers.

32. I feel that I have good system for doing my job.

Stress (Teachers)

Instructions: Use the scale below for items 33-37 to indicate how often you have experienced the following circumstances during this school year.

4 = Quite often
3 = Frequently
2 = Occasionally
1 = Rarely, just once or twice
0 = Never

33. Feeling that you have too heavy a workload, one you can't possibly finish in an ordinary work day.

34. Thinking that you'll not be able to satisfy the conflicting demands of various people for you time.

35 Feeling that you're not fully qualified to handle your job.

36 Feeling that your job tends to interfere with your family/personal life.

37. Generally feeling stress from your job.

Size (Principals)

Instructions: THE REMAINDER OF THE ITEMS SHOULD BE ANSWERED DIRECTLY ON THIS AND THE FOLLOWING PAGES, IN THE SPACES PROVIDED, BY THE SCHOOL PRINCIPAL OR HEADMASTER OR A KNOWLEDGEABLE REPRESENTATIVE.

How many teacher full-time equivalents (FTEs) are employed at your school?

_____

APPENDIX D

Intercorrelations Among Principal's[a] and Among Teacher's[b] Ratings of Importance on 14 Goals

GOAL	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	–	16	10	13	14	14	14	12	12	26	17	27	12	22
2	20	–	34	22	20	13	18	14	30	32	33	19	40	26
3	-06	17	–	42	12	25	25	23	19	27	35	14	34	33
4	07	28	42	–	27	24	26	21	20	26	24	27	14	14
5	19	22	03	23	–	30	16	13	37	36	17	34	10	07
6	14	18	14	17	29	–	31	13	26	30	26	28	15	14
7	16	23	06	21	25	30	–	16	23	24	19	28	15	16
8	13	20	12	20	20	18	17	–	29	34	36	22	28	33
9	28	24	-09	12	32	25	29	29	–	49	42	41	37	22
10	20	25	09	20	28	20	20	30	34	–	50	39	32	33
11	23	19	-01	14	22	23	28	17	43	29	–	39	32	34
12	16	22	09	23	29	25	24	22	30	31	37	–	24	24
13	22	32	12	17	22	23	21	21	31	28	28	37	–	44
14	20	24	-04	16	20	18	26	19	29	32	35	25	27	–

[a]Principal's goal intercorrelations are in the upper triangle.

[b]Teacher's goal intercorrelations are in the lower triangle.

Intercorrelations Among Principal's and Teacher's Ratings of Importance on 14 Goals

		PRINCIPAL'S GOALS													
	GOAL	1	2	3	4	5	6	7	8	9	10	11	12	13	14
T	1	04	-02	-01	-02	01	-01	01	02	00	02	00	01	00	-01
E	2	-01	05	03	-01	-02	01	02	00	00	01	01	-01	05	00
A	3	01	04	08	00	-04	00	02	02	-01	-02	03	-01	05	02
C	4	02	01	03	05	-01	00	01	04	00	00	01	-01	02	01
H	5	03	-01	-02	03	08	00	00	00	02	02	-03	01	-01	01
E	6	03	00	05	-02	00	06	03	03	03	02	01	01	04	03
R	7	02	04	00	00	-01	01	11	02	01	01	01	01	03	04
'S	8	04	02	06	06	02	00	07	20	04	07	07	06	03	07
	9	02	00	00	01	04	02	02	06	07	05	02	04	02	01
G	10	04	00	00	01	01	-02	01	02	03	07	01	03	00	04
O	11	03	-01	02	01	00	01	03	04	03	04	06	03	01	06
A	12	01	02	02	01	01	03	02	04	03	04	04	06	02	03
L	13	-02	05	09	00	-01	04	06	05	05	03	04	03	13	03
S	14	07	03	04	-03	-02	-02	01	02	00	05	05	05	02	18

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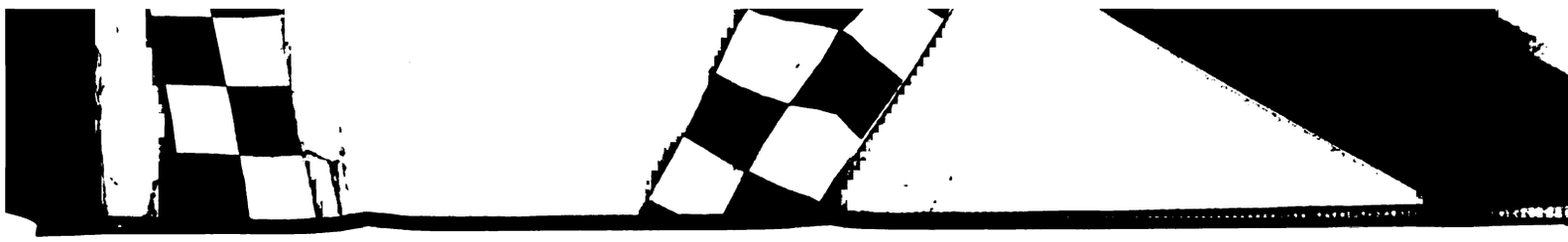

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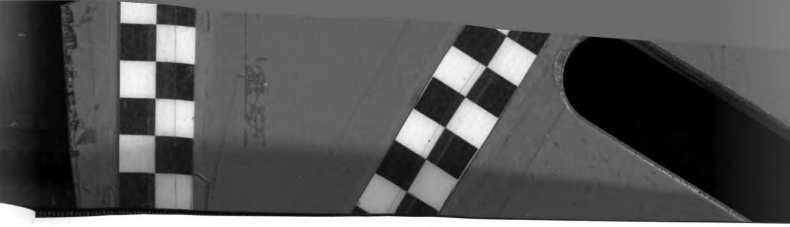

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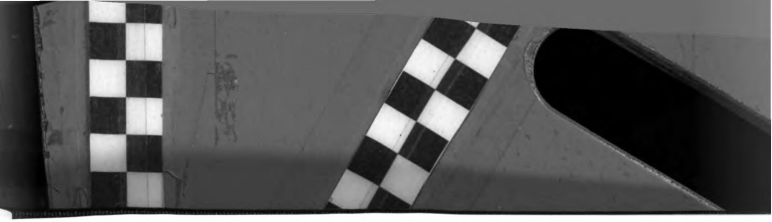

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