Recent school effectiveness research has underscored the importance of teachers' personal investment and commitment—not just to education, but to the particular mission operating in their own school setting. There is growing evidence that aspects of the school organization are related to both job satisfaction and commitment. Employing path analysis techniques with a sample of 101 teachers from four schools in the Champaign, Illinois, area, the study summarized in this paper tests a causal model linking leadership behavior to school culture to teacher job satisfaction and commitment causal model. Results provide support for the model. A school culture that stresses accomplishment and recognition is likely to elicit job satisfaction and commitment, whereas a culture emphasizing affiliation is of lesser significance. Power has a negative influence on these orientations. The perception of an organizational emphasis on accomplishment and recognition is associated with specific types of action taken by principals. Surprisingly, the principal's active involvement in supervising instruction and monitoring student progress does not emerge as an important factor. Further research is needed to substantiate these findings. (31 references) (MLH)
Teacher Commitment and Job Satisfaction

Martin L. Maehr, Julia Smith, and Carol Midgley
The University of Michigan
The National Center for School Leadership
Committed to Leadership and Learning

Office of Educational Research and Improvement
Ronald Anson, Liaison

National Advisory Panel

David Clark, Chair
Professor of Educational Administration, University of Virginia

Martin Covington
Professor, Psychology, University of California at Berkeley

Gary Gottfredson
Professor, Center for Research on Elementary and Middle Schools, Johns Hopkins University

Milbrey McLaughlin
Professor and Director, Center for Research on the Context of Secondary School Teaching, Stanford University

Kent Peterson
Professor and Co-Director, National Center for Effective Schools Research and Development, University of Wisconsin at Madison

Marilyn Rauth
Director, Education Issues, American Federation of Teachers

Laraine Roberts
Director, Leadership in Educational Administration Development (L.E.A.D.) Project, California

Ynn St. James
Principal, Lindblom Technical High School, Chicago

Scott Thomson
Executive Director, National Association of Secondary School Principals

Lonnie Wagstaff
Professor, Educational Administration, University of Texas at Austin

Project Investigators

University of Illinois at Urbana
Carole Ames, Chair, Educational Psychology
Alan Peshkin, Professor, Educational Psychology
Paul Thurston, Head and Professor, Administration, Higher and Continuing Education
Frederick Wirt, Professor, Political Science

The University of Michigan
C. Philip Kearney, Professor, Education and Psychology
Martin Maehr, Professor, Education and Psychology
Carol Midgley, Project Associate
Karl Weick, Rensis Likert Collegiate Professor, School of Business

MetriTech, Inc.
Samuel Krug, President
Stephan Ahadi, Project Investigator
Chris Scott, Project Investigator

Illinois State Board of Education
Dianne Ashby, Program Development and Delivery

Visiting Scholars
William Boyd, Professor, Education, Penn State University
Robert Crowson, Professor, Educational Administration, University of Illinois at Chicago
Charles Kerchner, Professor, Education and Public Policy, Claremont Graduate School
Douglas Mitchell, Professor, Education, University of California at Riverside
About The National Center for School Leadership

Our objectives are to produce new knowledge about school leadership and influence the practice and preparation of school leaders. Through various research programs and dissemination activities, we aim to give school leaders effective strategies and methods to influence teaching and learning.

The Center is funded by a grant from the Office of Educational Research and Improvement (Grant No. R117C80003). Any opinions, findings, and conclusions expressed in this publication are those of the National Center and authors and do not necessarily reflect the views of the supporting agency.

Center staff
Paul Thurston, Director
Martin Maehr, Co-Director
Stephanie Parker, Assistant Director

© Copyright 1990 The National Center for School Leadership
Teacher Commitment and Job Satisfaction

Martin L. Maehr
Co-Director of the National Center for School Leadership
Professor, Education and Psychology
The University of Michigan

Julia Smith
The University of Michigan

and

Carol Midgley
Project Associate
The University of Michigan
Abstract

This report is concerned with teacher job satisfaction and commitment. In particular, it is concerned with how the school context may affect these two sequentially related hypotheses. First, the school culture as perceived by teachers was related to reported job satisfaction and school commitment. School culture was in turn related to reported leadership behavior. Path analysis methods were employed in testing a causal model in which leadership behavior "causes" school culture, which, in turn, "determines" teacher job satisfaction and commitment. Preliminary support for the model was found. A school culture which stresses Accomplishment and Recognition is likely to elicit job satisfaction and commitment, whereas a culture stressing Affiliation is of lesser significance. Power has negative influences on these orientations. The perception of an organizational stress on Accomplishment and Recognition is associated with specific types of action taken by principals.
Teacher Commitment and Job Satisfaction: The Role of School Culture and Principal Leadership

The personal investment of employees at all levels is the sine qua non of any effective organization. People have to be willing to give at least a day’s work for a day’s pay. They must be willing, at times, to adjust their needs to those of the organization, modify their personal schedules as the job demands, pitch in to help out even when their job definition does not specify it (Maehr, 1989a, 1989b). It is difficult to imagine a truly effective organization in which there are not significant numbers of employees who are loyal, committed, and personally invested. What appears to be true of organizations in general is no less true of schools in particular. Recent research on school effectiveness has underscored the importance of the personal investment and commitment of teachers—not just to education in general but to the particular mission that operates in their own school setting (Rosenholtz, 1989).

A focus on the importance of teachers’ personal investment in the schools in which they teach raises questions not only about teacher commitment but also
about teacher satisfaction. The current concern about the state of the nation’s schools has generated talk of a crisis in teacher motivation. Commitment to their schools and satisfaction with their jobs are important ingredients in teachers' motivation. While the literature on teacher job satisfaction does not allow one to assume that satisfaction is directly and ineluctably tied to commitment (Lester, 1988), one can hardly investigate personal investment without considering both of these dimensions.

If teachers are dissatisfied with their work lives and lack commitment to their organizations, not only will they suffer, but their students will suffer as well (Bryk & Driscoll, 1988; Csikzentmihalyi & McCormack, 1986; Firestone & Rosenblum, 1988; Rosenholtz, 1989). As Lee, Dedrick, & Smith (1989) point out, it is difficult to imagine that teacher satisfaction would not somehow translate into important effects in the teaching/learning process. Indeed, teacher "enthusiasm" has in the past been used as a simple index of teaching effectiveness (Ashton & Webb, 1986). Clearly it is important, especially as we consider the mandate to restructure the nation’s schools, to delineate the factors that enhance teacher job satisfaction and commitment.
There is growing evidence that aspects of the school social organization are related to both satisfaction and commitment. In a recent study of 8,488 teachers from the High School and Beyond data base, Lee et al. (1989) found that teacher satisfaction was unrelated to gender, experience, salary level, or minority status. Student type (based on teacher reports of the ability level of the students they were teaching compared to the ability level in the school as a whole) was weakly correlated with teacher satisfaction. At the school level, both demographic factors and aspects of the social organization (as perceived by the teachers) were considered. Two demographic factors were found to be related to satisfaction: the school average SES and school size. Teachers were more satisfied in high SES and large schools. Four measures of the social organization of schools were strongly related to mean satisfaction: teacher control over resources and strategies, sense of community, principal leadership, and student disorder. Schools where teachers reported more control over their teaching, those with a stronger sense of community, and those where the principal was seen as a strong leader had more satisfied teachers. Schools with less orderly environments were likely to have less satisfied teachers.
Using data from a large sample of high school teachers, Sweeney (1981) defined teacher satisfaction in terms of the discrepancy between actual opportunities in the school environment and teachers' preferences for those opportunities. He found that teacher satisfaction was related to teacher age, with older teachers expressing more satisfaction than younger teachers, and to student ability level, with teachers of high ability students expressing more satisfaction than teachers of average ability students, who, in turn, were more satisfied than teachers of low ability students. The most striking finding was at the organizational level. The more that teachers felt they were able to exercise control over professional matters (i.e., curriculum and policy formulation), the greater their overall satisfaction.

Looking at teachers' commitment to the schools in which they work, aspects of the school organization once again emerge as important factors. In an exploratory study in ten urban high schools, Firestone and Rosenblum (1988) identified five organizational factors that influenced teacher commitment: sense of purpose about the work, mutual respect and affiliation, administrative support, principals' high expectations for the quality of teacher instruction, and opportunities for
Teacher Commitment/Job Satisfaction

decision-making. In a review of studies relating teacher commitment to school workplace conditions, Ashburn (1989) concludes that the importance of the school context emerges with "glaring clarity" across these studies.

The importance of school organizational factors is not unexpected. Recent work on "organizational culture" has suggested an interesting set of possibilities in this regard. In particular, it has been hypothesized that the culture of an organization can have a pervasive influence on the motivation and personal investment of individuals in the organization (Schein, 1990; Yukl, 1989). Following up on this suggestion, a program of research has been initiated that has explored the effects of school culture on the motivation and achievement (Maehr & Fyans, 1989). The present study grows out of this program of research, but it looks specifically at the effects of the school culture on teachers' satisfaction with their jobs and commitment to the schools in which they teach. One might reasonably assume that teachers' personal investment is not only worthy to consider in its own right but potentially critical in affecting the school experience of students.

In addition to considering school culture influences on teachers, the present study will look at
Teacher Commitment/Job Satisfaction

the role of the principal in promoting a school culture that is associated with teacher satisfaction and commitment. A number of studies have considered principal leadership to be an element in the school culture rather than an influence on the school culture. In studies by Lee et al. (1989); Firestone and Rosenblum (1988); Misel, Fevurly, & Stewart (1979); and Nidich & Nidich (1986) principal leadership is one of the elements in the school organization that is associated with teacher satisfaction and commitment. Leadership is considered to be a unidimensional variable on a continuum from positive to negative, or strong to weak. Other studies have looked at a specific style of school leadership and its relation to teachers' investment in their work. For example, studies by Myers (1966) and Thompson (1971) indicate that more "supportive" styles of leadership are associated with higher levels of job satisfaction. However, little attention has been given to the relationship between leadership and school context variables (Blase, 1987). Our study contributes to the study of contextual influences on teachers by identifying the relative impact of different leadership behaviors on teacher satisfaction and commitment and by determining the mediating role of teacher perceptions of
Teacher Commitment/Job Satisfaction

the school culture. Specifically considered is the general validity of the model outlined below:

Teacher Commitment

School Leadership---→ School Culture---→

Teacher Job Satisfaction

Method

The data reported here were collected as part of a large scale study of instructional leadership behavior and school culture conducted under the auspices of the National Center for School Leadership at the University of Illinois in collaboration with MetriTech, Inc.

Sample

The sample includes 101 teachers from four schools in the area around Champaign, Illinois. The data were gathered in the late winter and spring of 1988 by contacting districts and schools directly.

Measures

The instrument used in this study is called the "Instructional Climate Inventory: Form T" (Maehr, Braskamp, & Ames, 1988). This instrument is designed to assess administrator leadership behavior, school culture, and job satisfaction and commitment from the teachers' perspective. In previous studies, multiple
correlations between principals' self-reports of their leadership behavior and teacher reports of their principals' leadership behavior were found to be reasonably high, leading to the conclusion that "although teachers may use a somewhat different rubric to classify instructional leadership behaviors than principals, overall, they are in general agreement that the behavior is occurring (Krug, Ahadi, & Scott, 1990, p. 8)." Information about the reliability, validity, structure, and utility of these teacher ratings can be found in Ahadi, Scott, & Krug (1990). Table 1 includes a description of the scales.

---

Insert Table 1 here

---

**Administrator Leadership Behavior.** This measure asks teachers how frequently the administrator in their school performs 48 instructional leadership tasks that have been associated with measurable improvements in student achievement (Brandt, 1987). Five response options are provided that range from "Almost Never" to "Almost Always". These items focus on five broad categories of instructional leadership: Defines
Table 1  
Summary of Variables

<table>
<thead>
<tr>
<th>Source</th>
<th># of Items</th>
<th>Alpha</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADMINISTRATOR LEADERSHIP BEHAVIOR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defines Mission</td>
<td>ICI-T</td>
<td>8</td>
<td>.84</td>
</tr>
<tr>
<td>Manages Curriculum</td>
<td>ICI-T</td>
<td>8</td>
<td>.85</td>
</tr>
<tr>
<td>Supervises Teaching</td>
<td>ICI-T</td>
<td>10</td>
<td>.84</td>
</tr>
<tr>
<td>Monitors Student Progress</td>
<td>ICI-T</td>
<td>10</td>
<td>.85</td>
</tr>
<tr>
<td>Promotes Instructional Climate</td>
<td>ICI-T</td>
<td>11</td>
<td>.88</td>
</tr>
<tr>
<td>SCHOOL CULTURE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accomplishment</td>
<td>ICI-T</td>
<td>9</td>
<td>.88</td>
</tr>
<tr>
<td>Recognition</td>
<td>ICI-T</td>
<td>9</td>
<td>.90</td>
</tr>
<tr>
<td>Power</td>
<td>ICI-T</td>
<td>5</td>
<td>.69</td>
</tr>
<tr>
<td>Affiliation</td>
<td>ICI-T</td>
<td>9</td>
<td>.87</td>
</tr>
<tr>
<td>Strength of Culture</td>
<td>ICI-T</td>
<td>5</td>
<td>.79</td>
</tr>
<tr>
<td>OUTCOME VARIABLES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commitment to School</td>
<td>ICI-T</td>
<td>9</td>
<td>.79</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>ICI-T</td>
<td>9</td>
<td>.91</td>
</tr>
</tbody>
</table>

*Instructional Climate Inventory - Form T
Teacher Commitment/Job Satisfaction

Mission, Manages Curriculum, Supervises Teaching, Monitors Student Progress, and Promotes Instructional Climate.

School Culture. This measure consists of 37 brief, multiple-choice statements that require about 10 minutes to complete. This measure assesses perceived organizational stress on Accomplishment, Recognition, Power, and Affiliation, as well as teacher reports of the degree to which the staff holds common values (Strength of Culture). Five options are provided from "Strongly Disagree" to "Strongly Agree." This measure was adapted from a previously validated and extensively researched instrument, SPECTRUM (Braskamp & Maehr, 1985). In the original version, the focus is on organizational settings. In this adaptation, items have been modified to fit the school context.

Commitment and Satisfaction. Two scales, each with nine items, assess teacher reports of their commitment to their school and satisfaction with their career. Five options are provided from "Strongly Disagree" to "Strongly Agree." These scales were derived from SPECTRUM and have been tested and refined over a period of many years. The Satisfaction scale includes items that correspond to major facets of job satisfaction identified in the research literature: satisfaction
Teacher Commitment/Job Satisfaction

with work itself, with pay, with promotion, with supervision, and with co-workers. The Commitment scale measures acceptance of, and loyalty to, the school as an organization. A similar term often used in this line of inquiry is "teacher engagement". It does not focus on teachers' persistence in their jobs as has been done in a number of studies of commitment (see Ashburn, 1989). Rather, it measures sense of pride and ownership in the school.

Results

A series of three analyses were conducted. The first set examined the relationship between teachers' perceptions of their school culture, their satisfaction with teaching, and their commitment to the school. The second set examined the relation between teachers' perceptions of principal leadership behavior and their perceptions of the school culture. A final set of analyses examined the full range of these relationships, from perceptions of leadership to perceptions of culture to teacher satisfaction and commitment.
Relationship between Perceptions of School Culture and Teacher Outcomes

The correlation matrix for the school culture scales and the satisfaction and commitment variables is presented in Table 2. Although the sample size is not large (n=101), most of the correlations were significant at a probability level of less than .01 and were positive. In general, both teacher Satisfaction with their job and Commitment to the school were strongly and positively associated with a perceived stress on Recognition, Accomplishment, and Affiliation in the school and with a feeling of unit: regarding the mission of the school (average r=.74).

An exception to this trend occurred in the case of the Power dimension of school culture. This variable was significantly, but negatively, related to teacher Satisfaction and Commitment, and to an Accomplishment and Affiliation orientation in the school (r=.22*, -.39***, -.21*, -.38*** respectively). This result implies that teachers who feel that the school
<table>
<thead>
<tr>
<th></th>
<th>Accomplishment</th>
<th>Affiliation</th>
<th>Power</th>
<th>Strength of Culture</th>
<th>Satisfaction</th>
<th>Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognition</td>
<td>.76***</td>
<td>.78***</td>
<td>-.11</td>
<td>.70***</td>
<td>.75***</td>
<td>.72***</td>
</tr>
<tr>
<td>Accomplishment</td>
<td></td>
<td>.78***</td>
<td></td>
<td></td>
<td>.73***</td>
<td>.82***</td>
</tr>
<tr>
<td>Affiliation</td>
<td></td>
<td></td>
<td></td>
<td>.72***</td>
<td>.75***</td>
<td>.75***</td>
</tr>
<tr>
<td>Power</td>
<td></td>
<td></td>
<td></td>
<td>-.34***</td>
<td>-.22*</td>
<td>-.39***</td>
</tr>
<tr>
<td>Strength of Culture</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.65***</td>
<td>.72***</td>
</tr>
<tr>
<td>Satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.74***</td>
</tr>
</tbody>
</table>

***  $p<.001$
**   $p<.01$
*    $p<.05$
emphasizes competition and power-based relationships also perceive a decreased emphasis on Accomplishment and Affiliation, and feel less satisfied with their work and less committed to their school.

In addition to this zero-order correlational analysis, multiple regression was used to analyze the collective and separate contributions of the independent variables to variation in Satisfaction and Commitment. Figure 1 shows the model estimated from these relationships. The direction of the relationship is given by plus (+) or minus (−) signs, while strength of the relationship is given by the number of signs (i.e., +++=positive relationship with p.<.001). The beta weights corresponding to these paths are provided in Table 3. Because the strength or saliency of the mission of the school (Strength of Culture) was not significantly related to either Commitment or Satisfaction after taking the other culture variables into account, it was dropped from further consideration. Examining first the outcome of teacher Satisfaction, the strongest path is a positive relation between perceptions of the school culture as stressing Recognition (beta=.33**). Thus, the more a teacher perceives an organizational emphasis on Recognition in the school, the more satisfied that teacher is with the
Teacher Commitment/Job Satisfaction

daily work involved in teaching. In addition, there were positive relationships between Satisfaction and a perceived organizational stress on Accomplishment (beta=.26*) and Affiliation (beta=.28*). Given earlier discussions of the high correlations between these culture variables, it is perhaps surprising that significant relationships persist even after adjusting for their overlapping effects. Finally, an organizational emphasis on Power (status and social competition) was not significantly related to either an increase or a decrease in teacher Satisfaction.

On the other hand, a perception of an emphasis on Power had a significant negative relationship to teachers' Commitment to the school in which they taught (beta=-.23**). While perceptions of a stress on Accomplishment in the school had a moderate relationship
Figure 1: Path analysis modeling the effect of perceptions of school culture on teacher outcomes

Teachers' Perceptions of School Culture

Accomplishment 1

Recognition 2

Power 3

Affiliation 4

Teacher Outcomes

Satisfaction 5

Commitment 6

Note: $r_{xy}$ indicates a correlation between variable $x$ and variable $y$

$P_{xy}$ indicates a causal path from variable $x$ to variable $y$

Relationships are indicated according to direction (positive or negative) and significance level. (For example, +++ = positive relationship with $p < .001$).
### Table 3
Teachers' Perceptions of School Culture and Satisfaction and Commitment Using Multivariate Regression

<table>
<thead>
<tr>
<th>Variable</th>
<th>Satisfaction</th>
<th>Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affiliation</td>
<td>.28*</td>
<td>.04</td>
</tr>
<tr>
<td>Power</td>
<td>-.02</td>
<td>-.23***</td>
</tr>
<tr>
<td>Accomplishment</td>
<td>.26*</td>
<td>.57***</td>
</tr>
<tr>
<td>Recognition</td>
<td>.33**</td>
<td>.22*</td>
</tr>
</tbody>
</table>

R²

<table>
<thead>
<tr>
<th></th>
<th>Satisfaction</th>
<th>Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.65***</td>
<td>.75***</td>
</tr>
</tbody>
</table>

*** p<.001
**  p<.01
*   p<.05

Note: Each column represents a separate regression analysis, with satisfaction or commitment as the outcome. All regression coefficients are given as standardized beta weights.
Teacher Commitment/Job Satisfaction

16

to teacher Satisfaction, they appear to have a much stronger relationship to teacher Commitment (beta=.57***). Similarly, while perceptions of an organizational emphasis on Recognition had the strongest relationship to Satisfaction, the relationship of these perceptions to Commitment is moderate, though significant (beta=.22*). Finally, contrary to some arguments made about the importance of an affiliative and collegial environment for organizational commitment (Forsyth & Hoy, 1978; Rosenholtz, 1987), the results here show no relationship between teachers' Commitment and their perceptions of a stress on Affiliation after adjusting for the effects of Power, Accomplishment, and Recognition.

Relationship between Perceptions of School Leadership and School Culture

In the first set of analyses, dimensions of the school culture were found to have a bearing on teacher Satisfaction and Commitment. In the second set of analyses, the possible role of administrator leadership in regard to school culture is examined. The intercorrelations of the leadership and school culture dimensions are found in Table 4. Of particular interest are the results of a series of multiple regressions linking leadership perceptions to perceptions of school
Of the five leadership variables, only Promoting an Instructional Climate and Defining Mission were related to the school culture variables. The other leadership variables (Managing Curriculum, Supervising Teaching, and Monitoring Student Progress), do not appear to be related to perceived school culture. In addition, perceptions of leadership appear to be primarily, if not exclusively, related to the Recognition, Accomplishment, and Affiliation school culture dimensions. Perceptions of leadership appear to be unrelated to perceptions of a school culture that stress Power. Only 4% of the variance in this variable was explained by the five leadership dimensions.
<table>
<thead>
<tr>
<th></th>
<th>Perceptions of Leadership</th>
<th>Perceptions of Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Curriculum</td>
<td>Teaching</td>
</tr>
<tr>
<td>Mission</td>
<td>.77***</td>
<td>.83***</td>
</tr>
<tr>
<td>Curriculum</td>
<td>.75***</td>
<td>.74***</td>
</tr>
<tr>
<td>Teaching</td>
<td>.76**</td>
<td>.67***</td>
</tr>
<tr>
<td>Students</td>
<td>.61**</td>
<td>.38***</td>
</tr>
<tr>
<td>Climate</td>
<td></td>
<td>.58***</td>
</tr>
<tr>
<td>Recognition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accomplishment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*** p<.001  
** p<.01   
* p<.05
Table 5
Teachers' Perceptions of School Culture and School Leadership Using Multivariate Regression

<table>
<thead>
<tr>
<th>Variable</th>
<th>Recognition</th>
<th>Accomplishment</th>
<th>Power</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate</td>
<td>.50***</td>
<td>.22</td>
<td>-.14</td>
<td>.56***</td>
</tr>
<tr>
<td>Curriculum</td>
<td>-.09</td>
<td>-.02</td>
<td>-.11</td>
<td>.03</td>
</tr>
<tr>
<td>Students</td>
<td>-.06</td>
<td>-.16</td>
<td>.31</td>
<td>-.22</td>
</tr>
<tr>
<td>Teaching</td>
<td>-.19</td>
<td>-.05</td>
<td>.01</td>
<td>-.13</td>
</tr>
<tr>
<td>Mission</td>
<td>.43*</td>
<td>.53**</td>
<td>-.04</td>
<td>.26</td>
</tr>
<tr>
<td>R²</td>
<td>.37***</td>
<td>.28***</td>
<td>.04</td>
<td>.31***</td>
</tr>
</tbody>
</table>

*** p<.001

Note: Each column represents a separate regression analysis, with the culture construct as the outcome. All regression coefficients are given as standardized beta weights.
relationship to any of the four culture variables were removed from the analysis. The results are modeled in Figure 2, and beta weights are provided in Table 6. Teachers who perceived the school leaders as being influential in Promoting an Instructional Climate in the school also saw the culture of the school as emphasizing both Recognition (beta=.44***) and Affiliation (beta=.51***). However, teachers' perceptions of the leaders as Promoting an Instructional Climate were not linked to a cultural stress on Accomplishment. On the other hand, perceptions of the school leader as being influential in Defining the Mission of the school were associated with an emphasis on Accomplishment (beta=.37***), but no other dimension of culture. Even after eliminating the other variables, perceptions of school administrators as Defining Mission or Promoting an Instructional Climate remained unrelated to perceptions of an emphasis on Power in the school.
Figure 2: Path analysis modeling the effect of perceptions of school leadership on perceptions of school culture

Teachers' Perceptions of School Leadership

Promotes Instructional Climate 1

P14 = +++

r12 = +++

Defines Mission 2

P16 = +++
P23 = +++

Teachers' Perceptions of School Culture

Accomplishment 3

r36 = +++

r34 = +++

r35 = -

Recognition 4

Power 5

Affiliation 6

Relationships are indicated according to direction (positive or negative) and significance level. (For example, +++ = positive relationship with p < .001).

Note: rxy indicates a correlation between variable x and variable y
Pxy indicates a causal path from variable x to variable y
Table 6
Teachers' Perceptions of School Culture Based on Perceptions of School Leadership
Reduced Regression Analyses -- Limited to Significant Paths

<table>
<thead>
<tr>
<th>Variable</th>
<th>Recognition</th>
<th>Accomplishment</th>
<th>Power</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotes Instructional Climate</td>
<td>.44***</td>
<td>.19</td>
<td>-.12</td>
<td>.51***</td>
</tr>
<tr>
<td>Defines Mission</td>
<td>.19</td>
<td>.37***</td>
<td>.11</td>
<td>.04</td>
</tr>
<tr>
<td>R²</td>
<td>.35***</td>
<td>.27***</td>
<td>.01</td>
<td>.29***</td>
</tr>
</tbody>
</table>

*** p<.001

Note: Each column represents a separate regression analysis, with the culture construct as the outcome. All regression coefficients are given as standardized beta weights.
The Full Causal Model

Finally, regression analyses were undertaken linking all these constructs together, following the theoretical model:

School Leadership ---\(\rightarrow\) School Culture ---\(\rightarrow\) Teacher Commitment

Teacher Job Satisfaction

To do this, all predictor variables that did not have a significant relationship to an outcome measure at one of the levels of analysis were dropped. For example, although in the first model Affiliation had a significant relationship to teacher Satisfaction, this relationship dropped to insignificance after accounting for the effects of perceptions of the principal as Defining Mission and Promoting an Instructional Climate, and therefore the variable does not appear in the final model. In addition, we considered the possibility that the causal direction of these variables might in fact be opposite to what is modeled here. Using LISREL analysis, we found no significant differences in the fit.

-------------------
Insert Table 6 here
-------------------
of the model when constructing causal paths in the other direction.

The results of the full regression analysis are modeled in Figure 3. Because the correlational relationships between variables in the same level are identical to those in the early models, they are not shown. The beta weights for this analysis are provided in Table 7. The relationships between leadership behaviors and aspects of the culture have already been described in the previous section. At the second stage of this analysis, when both endogenous and exogenous independent variables are used to predict teacher Satisfaction and teacher Commitment, there are no direct links between leadership behavior and the two outcome variables.

-----------------------------
Insert Figure 3 here
-----------------------------

-----------------------------
Insert Table 7 here
-----------------------------
Figure 3: Full path analysis modeling the effect of perceptions of school leadership and culture on teacher outcomes

Teachers' Perceptions of School Leadership

- Promotes Instructional Climate 1
  - P14 = +++

- Defines Mission 2
  - P23 = +

Teachers' Perceptions of School Culture

- Accomplishment 3
  - P36 = +++

- Recognition 4
  - P46 = +++
  - P47 = +

Teacher Outcomes

- Satisfaction 6
  - P37 = +++

- Commitment 7
  - P57 = ---

Note: Pxy indicates a causal path from variable x to variable y. Relationships are indicated according to direction (positive or negative) and significance level. (For example, +++ = positive relationship with p < .001)

Key

- = direct effect

- = indirect effect
### Table 7
Causal Model Linking Perceptions of School Leadership, School Culture, and Teacher Satisfaction and Commitment

<table>
<thead>
<tr>
<th>Variable</th>
<th>Recognition</th>
<th>Accomplishment</th>
<th>Power</th>
<th>Satisfaction</th>
<th>Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defines Mission</td>
<td>.19</td>
<td>.37**</td>
<td>.11</td>
<td>-.03</td>
<td>.03</td>
</tr>
<tr>
<td>Promotes Climate</td>
<td>.44***</td>
<td>.19</td>
<td>-.12</td>
<td>.17</td>
<td>.001</td>
</tr>
<tr>
<td>Recognition</td>
<td></td>
<td></td>
<td></td>
<td>.37***</td>
<td>.24**</td>
</tr>
<tr>
<td>Accomplishment</td>
<td></td>
<td></td>
<td></td>
<td>.37***</td>
<td>.58***</td>
</tr>
<tr>
<td>Power</td>
<td></td>
<td></td>
<td>-.09</td>
<td>-.24***</td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>.35***</td>
<td>.27***</td>
<td>.01</td>
<td>.64***</td>
<td>.75***</td>
</tr>
</tbody>
</table>

*** p<.001  
**  p<.01

Note: Each column represents a separate regression analysis. All regression coefficients are given as standardized beta weights.
The relationships between culture perceptions and Satisfaction are slightly different than those appeared in the first analysis. After adjusting for the effects of the other variables in the model, perceptions of school culture as emphasizing Recognition and Accomplishment appear to contribute equally to feelings of satisfaction on the part of teachers (beta=.37***). After adjusting for the other variables in the model, a culture emphasizing Accomplishment continues to have the strongest relationship to teachers' Commitment to the school (beta=.58***). An emphasis on Recognition in the school is also positively associated (beta=.24**) with commitment. The more a teacher perceives that the school culture emphasizes Accomplishment and Recognition, the more committed that teacher is to the school. In contrast, Power is negatively associated with commitment (beta=-.24***). The more a teacher perceives that the school culture emphasizes Power, the less committed that teacher is to the school (beta=-.24***).

Finally, the direct and indirect effects of leadership perceptions on teacher Satisfaction and Commitment are compared in Table 8. In each instance, while the direct relationship between these constructs and teacher outcomes is not large, the indirect effects
Teacher Commitment/Job Satisfaction

are fairly sizeable, averaging about $\beta=.23$. While this procedure does not include a test for significance, a direct effect of .24 was earlier found to be significant at $p<.01$. Thus, while teachers' perceptions of the leadership of the school do not appear to influence teacher Satisfaction and Commitment directly, their effect on perceptions of the school culture results in an indirect influence of some impact.

Discussion

The results of this study are interesting in a number of different respects. Considering first the features of the school culture associated with teacher Job Satisfaction and Commitment, the results are not only interesting but, at points, somewhat surprising. The results of the regression analyses (Table 3) indicated that a large share of the variance in Commitment (75%) and Satisfaction (65%) could be explained by four cultural variables. Moreover, the various analyses, including especially the path
Table 8
Direct and Indirect Effects of Teachers' Perceptions of School Leadership on Teachers' Satisfaction and Commitment

<table>
<thead>
<tr>
<th>Leadership Variables</th>
<th>Satisfaction</th>
<th></th>
<th>Commitment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Direct Effects</td>
<td>Indirect Effects</td>
<td>Direct Effects</td>
<td>Indirect Effects</td>
</tr>
<tr>
<td>Defines Mission</td>
<td>-.03</td>
<td>.20</td>
<td>.03</td>
<td>.23</td>
</tr>
<tr>
<td>Promotes Instructional Climate</td>
<td>.17</td>
<td>.24</td>
<td>.001</td>
<td>.24</td>
</tr>
</tbody>
</table>

Note: Direct effects are generated from standardized regression coefficients (beta weights). Indirect effects are the product of regression paths through intervening variables.
analyses, indicated that the culture does mediate the relationship between leadership behaviors and teacher Job Satisfaction and Commitment.

Focusing on the elements of culture that seem to make a difference, one is struck, first of all, by the importance of a school culture that emphasizes Accomplishment and Recognition. The overall picture portrayed in the results is not that of a school as a cozy club. In the full path model, it is Accomplishment and Recognition that emerge as especially crucial to Job Satisfaction and Commitment. To be sure, some of the analyses suggest that one cannot rule out the importance of Affiliation as far as Job Satisfaction is concerned. Perhaps the central message here is that as in other organizations (Maehr & Braskamp, 1986), Affiliation in schools is not unimportant. It is, perhaps, of limited importance—not only for employee performance but also for commitment and possibly satisfaction.

Over the years there has been an ongoing debate in the organizational literature (e.g., Yukl, 1989) regarding the relative merit of an emphasis on human relations or achievement. Recently, there has been considerable discussion in the educational literature regarding the value of collegiality and opportunities for social interaction among school professionals. What
the present results seem to suggest is that, whereas
collegiality and good interpersonal relationships may be
important, they dare not supersede a stress on
Accomplishment. While it might be assumed that
organizational stress on Accomplishment is an
appropriate basis for effective performance, the present
results suggest that this stress is also important for
Job Satisfaction and Commitment.

All in all, then, the present results suggest that
the perception that a school is concerned with
accomplishment and recognizes productivity and good work
is a positive contributor to teacher job satisfaction
and organizational commitment. That is a factor to keep
in mind as one considers what kind of school work
environment is desirable.

Focusing specifically on the results in the case of
Recognition, the findings are again interesting--and
perhaps problematic. Across a variety of organizational
settings, Krug, Maehr, Braskamp, and their colleagues
have found Recognition to be an important factor in
influencing Job Satisfaction and Organizational
Commitment. So, these results do not come as a
surprise. What is problematic about these results stems
from a finding recently reported by Ames (1990). He
reports that among the many activities engaged in by
principals, Recognition is not one with which they are especially concerned. In Ames' results, principals did not spend a great deal of time or effort in creating ways to recognize teachers for excellence in teaching. If Ames is correct, then a problem is evident. On the one hand, Recognition seems to loom as especially important in the present results. On the other hand, it may not currently be a matter of concern to those who could or should have an influence on the nature of the emphases in the school culture.

Not surprisingly, Power emerges as a negative factor. Thus, one might surmise that the stress on Accomplishment and Recognition must be structured in a non-competitive way in order to be most effective. One might wonder, then, whether practices designed to enhance teacher motivation and performance which are anchored in a socially competitive framework are desirable. There is of course, considerable evidence concerning the negative effects of competition on motivation in a variety of settings, particularly in classrooms (e.g., Ames & Archer, 1988; Maehr, 1987, 1989a, 1989b). Increasingly, the organizational literature is stressing the importance of a cooperative climate (e.g., Kanter, 1989). The present results provide another piece of evidence of some interest to
those who lead and manage organizations in general and schools in particular.

The results have both indirect and direct implications for leadership. First, as has also been noted before (e.g., Maehr, 1989a, 1989b) perceived stresses in the organizational context, the climate, and the type of culture, do make a difference in how teachers feel about their job. It is obvious that those in school leadership roles cannot ignore this. But given the importance of the school environment, what, if anything, can school leaders do to enhance the work world of teachers and thereby improve not only their satisfaction but also their commitment? Here the results also provide a clue or two.

Apparently the two most important things for school leaders to focus on are the set of actions associated with the factors identified here as "Influencing School Climate" and "Influencing School Mission." And, these two action areas appear to have qualitatively different influences on the culture. The articulation of an overall sense of mission and purpose seems to be especially associated with an Accomplishment culture; working to improve the instructional climate in the school is associated with a perceived stress on Recognition (and possibly also, Affiliation). Given
Teacher Commitment/Job Satisfaction

that Accomplishment, Recognition, and Affiliation (to a degree) are all important, it is clear where leadership must concentrate its efforts.

The currently popular notion of encouraging principals to become intimately involved in supervising the instructional process and monitoring student progress does not emerge as an important factor. This may be a particularly important finding. If the current stress on developing instructional leadership in schools includes training principals to become more actively involved in these pursuits, good things may result, but it does not appear that the influence on teacher Job Satisfaction or Commitment will be among them.

In conclusion, the results provide support for a model in which the school leader is portrayed as acting on the school culture to influence the Job Satisfaction and Commitment of teachers. Embedded in that overall picture are a number of interesting findings that deserve further study and analysis. Of course, the present results are preliminary in nature. They certainly fit together in a way which is not only in accord with the causal model, but which also articulates well with other evidence and theory. The relationships found seem to have a durability about them. Yet, some caution must be voiced in considering the viability of
the full causal model proposed. Whether the flow of actions and events is rightly construed as being initiated with leadership action, followed by contextual conditions which eventuate in teacher orientations toward work, cannot be asserted definitively on the basis of the present results. The initially proposed causal model remains a reasonable hypothesis but not one for which we can report definitive evidence. The LISREL analysis did not allow us to rule out the possibility that the flow of events was the reverse of that proposed: the test of the differences in goodness of fit in this regard did not decide the issue. However, it should be pointed out that the sample size was relatively small to expect such a definitive answer. Thus, while the results are interesting and theoretically supportable, they need to be replicated. These caveats and disclaimers aside, a first step in tying leadership behavior to culture and to teachers’ personal investment in the instructional endeavor has been made. That is a conclusion worthy of the effort.
References


Teacher Commitment/Job Satisfaction


Teacher Commitment/Job Satisfaction


