FEATURE

LEADERSHIP STYLE, SCHOOL CLIMATE, AND THE INSTITUTIONAL COMMITMENT OF TEACHERS

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ABSTRACT

This study explored the relationships among principals' leadership style, school climate, and the organizational commitment of teachers in Seventh-day Adventist secondary schools in the Philippines. The organizational commitment model developed by Steers (1977) served as the theoretical framework for the study. Data were obtained from 227 full-time teachers from 20 schools, with participants responding to the Organizational Commitment Questionnaire (OCQ), the Leadership Opinion Questionnaire (LOQ), and the Organizational Climate Description Questionnaire—Rutgers Secondary (OCDQ-Rs). The principal's leadership style, school climate, and the organizational commitment of teachers were found to be interrelated. Teachers perceived higher commitment under a leadership characterized by high consideration, regardless of the level of initiating structure. Teachers' organizational commitment was positively related to climate openness, characterized by supportive principal behavior and teacher engagement, intimacy, and low levels of teacher frustration. Furthermore, considerate leadership behavior was found to related positively to climate openness. Predictive models of organizational commitment, accounting for approximately 25% of the variance, include marital status, consideration leadership behavior, and aspects of school climate. Although the theoretical concept of leadership quadrants was upheld in the study, it appears that leadership behaviors, particularly the consideration dimension, are more useful in relationship to the areas of school climate and organizational commitment.

Organizations are established to serve specific purposes and to carry out designated missions. To this end, they provide resources, infrastructure, and necessary training to their employees to enable them to accomplish goals and objectives directed toward the greater mission. In a reciprocal way, it is important that employees of an organization share the vision of their organization, be committed to its mission and goals, and give unreservedly of themselves in order to attain these purposes.

The Seventh-day Adventist (SDA) Church operates a global network of educational institutions. In the Philippines, under the jurisdiction of the Southern Asia-Pacific Division, the SDA Church has established a university, 5 colleges, 22 secondary schools, and 307 elementary schools (Seventh-Day Adventist Yearbook, 1998). All these institutions share a basic philosophy and mission, and operate under similar educational policies.

Students' preparation for selfless service to God and to society is taken seriously by the SDA educational system. E. G. White (1952), a respected writer and visionary of the church, emphasized the solemn responsibility of providing an all-round, God-centered, service-oriented, faith-based, and kingdom-directed education for young people. Such an agenda, however, requires a considerable amount of vision sharing and commitment.

Teacher commitment may be directed toward a number of entities; for example, to the occupation of teaching, to student success, to specific programs, or to the school as an organization. Of these, the teachers' commitment to their schools as organizations served as the focus of the present study.

Given that commitment incorporates an attitudinal dimension, certain conditions have found necessary for its development. The leadership behavior of the principal, for example, can be a major influence on the level of teacher commitment to a school (Campisano, 1992). A second factor assumed to significantly influence teacher commitment level is the quality of the school climate (Davis, 1997; McDaniel, 1992; Pacifico, 1994). Both of these constructs were also explored in this study.

RELEVANT LITERATURE

The conceptual framework of the study was based on the Steers (1977) model of the antecedents and outcomes of organizational commitment. This model includes personal characteristics (e.g., age and tenure), role-related characteristics (e.g., job scope and role ambiguity), structural characteristics (e.g., decentralization and organization size), and work experiences (e.g., leadership style and organizational climate) as antecedents of organizational commitment. In this study, the focus was directed toward certain aspects of the work experiences of secondary school teachers, namely the leadership style of principals and school climate. The expected outcomes as per the model are teachers' (a) desire to remain with the school, (b) intent to remain with the school, (c) improved attendance, (d) low turnover, and (e) increased effort at the job.

Literature Focusing on Organizational Commitment

Commitment embodies a sense of being bound emotionally or intellectually to some course of action, which may include a person's relationship with another individual, group, or organization (Huntington, 1986). Commitment has also been defined as loyalty, identification, and involvement with some appropriate object (Buchanan, 1974). In an organizational setting, such loyalty involves feelings of attachment which develop as individuals share values in common with other members of the group. This identification, expressed through the adoption of organizational goals, occurs when individuals take pride in the organization, participate with intense interest in its activities, and speak positively about their connection with the organization (Etzioni, 1975; Mowday, Porter, and Steers, 1982).

Prior research has identified a number of factors that are related to organizational commitment, both in positive and negative terms. In educational institutions, positive factors include reduced role ambiguity (Campisano, 1992; Cintavey, 1995), teacher empowerment (Homung, 1995; Wu, 1994), clear organizational mission (Varona, 1991), and encouragement of innovation, continual professional development, and shared decision making (Veitenheimer, 1993). Other factors identified in studies involving school teachers were a confronting and cooperative conflict resolution style of principals as opposed to a withdrawing conflict resolution style (Byers, 1987; Hajzus, 1990), principal-teacher goal congruence (Derczo, 1987), and religiosity of the teacher (Ciriello, 1987).

Certain school and personal factors have been found to be negatively related to the organizational commitment of teachers. These include nonalignment of personal and organizational goals and values (Menzies, 1995), lack of communication and trust (Varona, 1991), high levels of interpersonal conflict (Booker, 1990), and an imposing or withdrawing conflict resolution style on the part of principals (Hajzus, 1990). In essence, it appears that organizational commitment may be fostered by minimizing these inhibiting factors that reduce commitment and by enhancing promoting factors such as administrative support, empowerment, collegiality, and a collaborative climate.

Literature Focusing on Leadership Style

Leadership can be broadly defined as the relationship between an individual and a group built around some common interest wherein the group behaves in a manner directed or determined by the leader. The leader thus becomes the interpreter of the interests and objectives of the group, as the group in turn recognizes and accepts the interpreter as its spokesperson (Aquino, 1985).

Leadership in a school setting is the result of the way principals use themselves to create a school climate that is characterized by staff productivity, student productivity, and

creative thought (Ubben & Hughes, 1987). Consequently, the principal's qualities and behavior determine to a large degree how the subordinates feel about their organization (Eblen, 1987). A particular leadership style may either foster or hinder teacher commitment. Leadership styles have been broadly conceptualized as a leadership based on power, or based on relationships. The "power" concept of leadership, researched by Kurt Lewin and his associates at the University of Iowa (Lunenberg & Ornstein, 1991), has identified at least three basic styles of leadership: authoritarian, democratic, and abdicratic (laissez-faire).

The "relational" concept of leadership, which is employed in the present study, began with the idea that poles of task-priority and people-priority were at opposite ends of a single continuum, and that a balance between both extremes made for strong, supportive, and respected leaders (Tartar, 1989). Leadership studies, however, conducted at the Ohio State University in the late 1940s (Stogdill, 1962), found that various combinations of these two concept were obvious in leaders and that the approaches to leadership were best represented in terms of two dimensions—initiating structure behaviors and consideration behaviors.

Initiating structure reflects the extent to which the leader attempts to organize work, work relationships, and goals. A leader high in initiating structure emphasizes schedules and specific work assignments, establishes channels of communication, and sees to it that the followers are working up to capacity (Lunenberg & Ornstein, 1991). C*onsideration* reflects the extent to which the leader maintains job relationships that are characterized by mutual trust, respect for subordinates, and regard for their feelings. A leader high in consideration listens to staff members and is approachable.

The leadership studies at Ohio State University (Stogdill, 1962) ultimately suggested that leaders exhibiting consideration and initiating structure behaviors can be grouped into four quadrants (see Figure 1).

High	QUADRANT III High Consideration and Low Initiating Structure	QUADRANT II High Consideration and High Initiating Structure
Consideration	QUADRANT IV Low Consideration and Low Initiating Structure	QUADRANT I Low Consideration and High Initiating Structure
Low		
	Low **Initiating Structure** **High**	

Figure 1. Stogdill and Coons' leadership behavior quadrants. From *Educational Administration: Concepts and Practices* (p. 134), by F. C. Lunenburg and A. C. Ornstein, 1991, Belmont, CA: Wadworth.

To briefly summarize, a *Quadrant I leader* is low on consideration and high on initiating structure. This leader is production-oriented and interested in getting the work done, often forgetting in the process that he or she is dealing with human beings. The *Quadrant II leader* has evidences both consideration and initiating structure behaviors. Such a leader is efficient and effective in managing both people and tasks. The *Quadrant III leader* is high on consideration but low on initiating structure. This leader maintains a friendly relationship with the subordinates and is concerned about subordinate welfare, but is ineffective in getting things done. The *Quadrant IV leader* is low on both consideration and initiating structure. This leader's management is accompanied by group chaos and ineffectiveness.

This present study uses the model of the Ohio State studies involving the two leadership behavior dimensions of consideration and initiating structure and the four leadership quadrants in order to determine the dominant leadership style of the school principal.

In terms of prior research, House (1971) found that styles of leadership that focused on initiating structure were most valuable when tasks that were stressful or dissatisfying, while the consideration styles were most appropriate for tasks that were clear and routine in nature. The styles high in initiating structure were also related to higher productivity, but tended to generate higher employee grievance rates and turnover. The consideration styles, by contrast, have been associated with satisfied subordinates and fewer absences (Immegart, 1988). Lunenberg and Ornstein (1991), however, point out principal leadership behaviors that are high both in consideration and initiating structure also result in high satisfaction and performance among school teachers. Overall, it seems that leadership style could be one of the best predictors of employee commitment (Glisson & Durick, 1988).

<center>Literature Focusing on School Climate</center>

School climate has been defined as the "feel" of a school (Halpin & Croft, 1963), as its "collective personality" (Norton, 1984). Climate is the human environment within which the teachers of a school do their work. Like the air in a room, climate surrounds and affects everything that happens in an organization (Freiberg, 1983). As one moves from school to school, it is possible to note that one school feels different from another. This is primarily the result of school climate.

During the past three decades a substantial amount of research has been conducted on the importance of school climate. Halpin and Croft (1963), the landmark study of organizational climate by yielded the *Organizational Climate Description Questionnaire* (OCDQ), an instrument to assess the climate of organizations. This instrument has been used extensively in hundreds of research studies to date. In 1986, Hoy and Clover revised the OCDQ for use in elementary schools, while Kottkamp, Mulhern, and Hoy (1987) adapted the instrument for use in secondary schools.

In their study of the organizational climate of schools (Halpin and Croft, 1963), conceived

of climate as being either open or closed. They came up with six types of climates on a continuum: open, autonomous, controlled, familiar, paternal, and closed. These climate types were based on various degrees of four teacher-related factors: hindrance, intimacy, disengagement, and esprit; and on four principal-teacher relations factors: production emphasis, aloofness, consideration, and thrust.

An *open* climate, for example, is characterized by low hindrance, low disengagement, average intimacy and high esprit of teachers; and low aloofness, low production emphasis, and high trust and consideration of the principal. By contrast, a *closed* climate is characterized by high disengagement, high hindrance, low esprit, and average intimacy of teachers; and high aloofness, high production emphasis, and high trust of the principal. In essence, the degree of openness of a school climate is the result of the quality of human interactions in the school. The present study employs this theoretical concept of school climate.

In prior research, an analysis of the perceptions of parents, teachers, and students regarding the climate of their schools was conducted biannually in the United States from 1979 to 1982 and discovered that the climate of the school was a function of several school-related factors (Freiberg, 1983). These factors included leadership qualities of principals, teacher-colleague relations, parent-teacher relations, student-teacher interpersonal relations, student-teacher instruction-related interaction, school buildings and facilities, and student-peer relations. Other indicators of a healthy school climate were identified in a study by Howard, Howell, and Brainard (1987). These indicators were the degree of respect, trust, opportunity for input, cohesiveness, caring, high morale, and school renewal.

Based on research in the Philippines, Andres (1981) identified eight climate factors that motivate Filipino employees to be efficient and productive in organizations. These factors were (a) a personalistic family atmosphere in the organization; (b) attention to the emotional aspect of the organization's life, such as individual self-esteem, reciprocity between management and employees; (c) respect for human dignity; (d) egalitarian treatment; (e) flexibility in work assignment, schedules, and deadlines; (f) supportive role on the part of the officers; (g) open communication and complete and genuine information; and (h) a cooperative and fraternal reward and promotion system (p. 62). These factors may be derived from the fact that Filipino culture tends to be relationship-oriented (Alegre, 1994; Andres & Ilada-Andres, 1987) and the Filipino employee perceives an open climate to be the result of a family atmosphere and supportive leadership in the organization.

Literature Focusing on Relationships Between Principal Constructs

A number of studies have explored the relationship between the leadership style of principals and teachers' commitment to the school. Findings indicate that in order to build strong teacher commitment, principals must provide strong, directive leadership in setting and developing school goals, creating a unity of purpose, facilitating communication, and

managing instruction (Cruz, 1995). Similarly, high correlations have been reported between the principal's leadership behaviors of buffering, caring, involving, and praising, and faculty trust in the principal and commitment to the school (Depasquale, 1996; Meade, 1994; Yakmalian, 1995). Other studies have highlighted a positive correlation of teachers' perceptions of the principal's leadership behavior with teacher morale (Houseknecht, 1990) and commitment to the school (Marschilok, 1993) and to the teaching profession (Everett, 1991). In the Philippines, David's (1990) study of lay teachers in selected Catholic elementary and secondary schools reported a positive relationship between a democratic leadership style and teachers' organizational commitment. Overall, these studies strongly suggest that there may be important relationships between a principal's leadership style and teachers' organizational commitment.

A number of studies have explored the relationships between teacher commitment and factors of school climate. Strong associations have been reported between organizational commitment and climate openness (McDaniel, 1992), collegiality (Combs, 1995; Firestone & Pennel, 1993), collaboration (Gibson, 1996; Hatton, 1996; Rosenholtz, 1989), and teacher empowerment (Hornung, 1995). Overall, these studies make a strong case for a relationship between the climate of a school and the level of teacher commitment.

It also seems quite evident from prior research that significant relationships could be expected between leadership style and school climate. Al-Gasim (1991), for example, found a strong relationship between an open climate and principals who were high in both consideration and initiating structure dimensions. Similarly, Bailey (1988) concluded that school principals who desire to improve their school climate need to exhibit both high task-oriented behaviors and high relationship behaviors with their teachers. Other studies have likewise underscored the importance of the leadership style of the principal to the development of a positive school climate (e.g., Bancroft, 1986; Bishop, 1991; Chen, 1990; Hayes, 1994; Marschilok, 1993). Overall, the evidence seems quite strong that since the school climate is the reflection of the quality of human interactions in the school, the leadership behavior of the principal is an important factor in building an open, facilitative climate at all educational levels.

Six demographic variables of teachers were included in this study—four personal factors: gender, age, marital status, and educational attainment, and two job-related factors: total years of teaching experience and years of teaching in the present school. The intent was to further explore the relationship of these factors to organizational commitment.

In prior research, women consistently been more committed to their employing organizations than men (Hrebiniak & Alutto, 1977; Reyes, 1992), and married employees more committed than those who were unmarried (Steers, 1997). Organizational commitment has been found to relate positively with age (Chang, 1990; Lieuallen, 1993; Reitz, 1987; Reyes, 1992; Thompson, 1989), and inversely with educational attainment (Mowday et al., 1982; Thompson, 1989). Research finding, however, seem to be mixed regarding the

relationship between length of teaching experience and organizational commitment (e.g., positive correlations in Cheng, 1989 and Kadyschuk, 1997; negative correlations in Reyes, 1992). Population differences may account for these discrepancies. Finally, length of organizational tenure has been found to be a significant positive predictor of the organizational commitment of employees (Frost, 1991; Hrebiniak & Alutto 1977; Steers, 1977; Tarr, 1992; Varona, 1991). This was also the case in a study of teachers in the Philippines (Rivera, 1994).

Based on this review of the literature, it was hypothesized that significant relationships would exist between principals' leadership style, school climate, and the organizational commitment of teachers. Furthermore, it was expected that certain demographic variables would relate significantly to organizational commitment.

RESEARCH METHODOLOGY

The purpose of this study was to investigate the predictive capacity of the dominant leadership style of principals, the perceived school climate, and certain demographic variables of teachers, in terms of the organizational commitment of teachers in the Seventh-day Adventist (SDA) secondary schools in the Philippines.

Validated instrumentation was used to measure respondents' perceptions of the three major constructs in this study. The *Organizational Commitment Questionnaire* (OCQ), developed by Mowday et al. (1982), was used to measure the organizational commitment of teachers. The *Leadership Opinion Questionnaire* (LOQ), adapted by Florido (1986) from an instrument developed by Fleishman (1969), was used to measure teacher perceptions of the dominant leadership style of principals. Finally, the *Organizational Climate Description Questionnaire—Rutgers Secondary* (OCDQ-Rs), a revision by Kottkamp, Mulhern, and Holy (1987) of the original OCDQ developed by Halpin and Croft (1963), was used to measure teacher perceptions of the climate in their schools. Six demographic variables were also collected: age, gender, marital status, educational attainment, teaching experience in other schools, and length of teaching in the present school. The last two variables were summed to calculate the total teaching experience variable which was then used in subsequent analyses.

The unit of analysis in this study was the teacher. The population consisted of teachers in all Seventh-day Adventist (SDA) secondary schools in the Philippines during the 1998-99 school year. At the time of study, there were 22 SDA secondary schools in the Philippines, with a total of 308 full-time teachers. The intended sample consisted of all teachers in these schools, with the exception of two schools which could not be contacted due to remoteness. The final sample, thus, consisted of 274 teachers (89% of the population) from 20 schools. Usable data were received from 227 teachers, representing a return rate of 83%.

Statistical analysis included Pearson product-moment correlations and step-wise multiple

regression analysis. The level of significance testing was set at ? =.05 for all research questions. Bonferroni alpha adjustment was used to account for multiple testing.

FINDINGS OF THE STUDY

The typical respondent in the study was a female teacher between 21 to 40 years of age, who had a bachelor's degree or less. This typical respondent had also taught for 5 years or less in the present school, with an overall teaching experience of 10 years or less (see Table 1).

Table 1
Description of Sample by Selected Demographic Variables

Demographic Variables	f	%
1. Gender		
Male	84	37.0
Female	140	62.1
Missing	3	0.9
2. Age		
21 - 30	77	33.9
31 - 40	64	28.2
41 - 50	50	22.0
51 - 60	27	11.8
61 - 70	4	1.7
Missing	5	2.2
3. Marital Status		
Married	151	66.5
Single	75	33.0
Missing	1	0.5
4. Educational Attainment		
Bachelor's Degree or Lower	181	79.7
Master's Degree or Higher	45	19.8
Missing	1	0.5
5. Total Teaching Experience (Years)		
1 - 5	91	40.6
6 - 10	45	20.1
11 - 15	28	12.5
16 - 20	19	8.5
21 - 25	22	9.8
26 - 30	11	4.9
31 - 35	6	2.7
36 - 40	2	0.9
6. Length of Teaching in Present School (Years)		
1 - 5	114	50.2
6 - 10	51	22.5
11 - 15	22	9.7
16 - 20	15	6.6
21 - 25	11	4.8
26 - 30	9	4.0
31 - 35	1	0.4
Missing	4	1.8

Findings Pertaining to Construct Levels

In this study, an OCDQ scale mean of 80.9 was obtained with a standard deviation of 11.53. This indicated that the mean level of commitment of teachers fell at the high end of the "average" category. Less than 1% of the respondents perceived their commitment to their school to be in the "low" category (see Table 2).

Table 2
Teachers' Perceptions of Their Organizational Commitment

Levels of Commitment	f	%
High Commitment	106	46.7
Average Commitment	120	52.9
Low Commitment	1	.4
Total for Scale	227	100.0

On the LOQ, the Consideration subscale yielded a mean of 71.3 ($SD = 12.61$), placing the considerate behaviors of principals in the "often" range. The Initiating Structure subscale yielded a raw score mean of 58.9 (SD=9.11), placing the average initiating structure behaviors of principals in the "occasionally" range.

Scores on the Consideration and Initiating Structure subscales were then employed to calculate four leadership style quadrants. This was possible given that these two subscales had demonstrated orthogonality (r =.07). Table 3 indicates the frequencies of teacher perceptions regarding the leadership style of their principals. In essence, 79% of the teachers perceived the leadership style of their principals to be characterized by high consideration and high initiating structure behaviors, thus placing the majority of the principals in leadership Quadrant II.

Table 3
Teacher Perceptions of the Leadership Styles of Their Principals

Leadership Style		f	%
Quadrant I	(Low Consideration, High Structure)	8	3.5
Quadrant II	(High Consideration, High Structure)	179	78.9
Quadrant III	(High Consideration, Low Structure)	35	15.4
Quadrant IV	(Low Consideration, Low Structure)	5	2.2

On the OCDQ-Rs, the overall Climate Openness Index mean was 572.29 (*SD* = 103.94), falling in the <u>high</u> openness category. Fifty-five percent of the respondents in this study perceived the degree of openness of their school climate to be from high to very high. Twenty-one percent of the respondents perceived their school climate to be low or very low (see Table 4).

Table 4
Teacher Perceptions of the Degree of Climate Openness

Degree of Climate Openness	f	%
Very High	94	41.4
High	30	13.2
Average	56	24.7
Low	19	8.4
Very low	28	12.3
Total Scale	227	100.0

In an analysis by schools, 9 (45%) schools overall emerged as having a <u>very high</u> climate openness, 5 (25%) schools had <u>high</u> degree of climate openness, and 5 (25%) schools had <u>average</u> openness. One (5%) school had <u>low</u> openness.

The three positive climate factors of supportive principal behavior, the engaged teacher behavior, and intimate teacher behavior fell in the *often occurs* range. The two negative climate factors of directive principal behavior and the frustrated teacher behavior fell in the *sometimes occurs* range.

In essence, the study revealed that teachers in the SDA secondary schools in the Philippines have a moderately high level of commitment to their schools. As perceived by the teachers, the dominant leadership style of the principals was characterized by high consideration and initiating structure behaviors, although with a greater emphasis given to the consideration aspect of leadership behaviors. Although there were important differences from school to school, teachers overall perceived the openness of their school climate to be high.

Findings Pertaining to Construct Relationships

Potential relationships of the four leadership quadrants to organizational commitment were tested (see Table 5). There was a significant positive relationship between the organizational commitment of teachers and a leadership style that is high in both consideration

and initiating structure behaviors (i.e., Quadrant II). Conversely, there was a significant negative relationship between the organizational commitment of teachers and a leadership style that is low in consideration and high in Initiating Structure behaviors (i.e., Quadrant I).

Table 5
Correlations Between Leadership Styles and Organizational Commitment

Leadership Style		r	r^2	p
Quadrant I	(Low Consideration; High Structure)	-.17	.03	.009*
Quadrant II	(High Consideration, High Structure)	.17	.03	.008*
Quadrant III	(High Consideration; Low Structure)	-.05	.00	.430
Quadrant IV	(Low Consideration; Low Structure)	-.13	.02	.039

*Significant at the Bonferroni adjusted probability of 0.012 (adjusted alpha = .05/4).

A further analysis was used to test the relationship of the two leadership behavior dimensions, Consideration and Initiating Structure, to the organizational commitment of teachers (see Table 6). There was a significant positive relationship between the Consideration subscale and the organizational commitment of teachers, accounting for 16% of the variance.

Table 6
Correlations Between Leadership Subscales and Organizational Commitment

Subscales	r	r^2	p
Consideration	.40	.16	.000*
Initiating Structure	.01	.00	.862

*Significant at the Bonferroni adjusted probability of .025 (adjusted alpha=.05/2).

The relationships between school climate and organizational commitment were explored. A significant positive relationship ($r = .45$, $p = .000$) was found between the Climate Openness Index and the organizational commitment of teachers, explaining 20% of the variance. A supplementary analysis was conducted to test for relationships between the five climate subscales and the organizational commitment of teachers (see Table 7). Out of the five climate subscales, three subscales were significantly related in a positive way to the organizational commitment of teachers, while one subscale was significantly related in a negative way.

Table 7
Correlations Between Climate Subscales and Organizational Commitment

Climate Subscales	r	r^2	p
Supportive Principal Behavior	.36	.13	.000*
Directive Principal Behavior	-.03	.00	.693
Engaged Teacher Behavior	.37	.14	.000*
Frustrated Teacher Behavior	-.20	.04	.003*
Intimate Teacher Behavior	.24	.06	.000*

*Significant at the Bonferroni adjusted probability of .01 (adjusted alpha=.05/**5**).

The four leadership quadrants were tested for relationships with the Climate Openness Index (see Table 8). The Climate Openness Index evidenced a significant negative relationship to Quadrants I and IV styles of leadership, explaining 4% and 5% of the variance respectively.

Table 8
Correlations Between Leadership Quadrants and Climate Openness Index

Leadership Style		r	r^2	p
Quadrant I	(Low Consideration; High Structure)	-.22	.04	.001*
Quadrant II	(High Consideration; High Structure)	.07	.00	.307
Quadrant III	(High Consideration; Low Structure)	.13	.01	.051
Quadrant IV	(Low Consideration; Low Structure)	-.24	.05	.000*

*Significant at the Bonferroni adjusted probability of .012 (adjusted alpha =.05/4).

A supplementary analysis utilizing correlation procedures was carried out to test the relationships of the four leadership quadrants to the five climate subscales (see Table 9). Quadrant I related negatively and significantly with the Supportive Principal Behavior and positively and significantly with the Frustrated Teacher Behavior subscales. Quadrant II related positively and significantly with the Directive Principal Behavior and the Engaged Teacher Behavior subscales. Quadrant III related negatively and significantly with the Directive Principal Behavior and the Frustrated Teacher Behavior subscales. Quadrant IV related negatively and significantly with the Supportive Principal Behavior and the Engaged Teacher Behavior subscales.

Table 9

Correlations Between Leadership Quadrants and Climate Subscales

Leadership Style	Climate Subscales	r	r²	p
Quadrant I	Supportive Principal Behavior	-.28	.08	.000*
	Directive Principal Behavior	-.03	.00	.665
	Engaged Teacher Behavior	-.12	.01	.075
	Frustrated Teacher Behavior	.15	.02	.002*
	Intimate Teacher Behavior	-.06	.00	.301
Quadrant II	Supportive Principal Behavior	.19	.04	.004
	Directive Principal Behavior	.33	.11	.000*
	Engaged Teacher Behavior	.23	.05	.001*
	Frustrated Teacher Behavior	.19	.04	.005
	Intimate Teacher Behavior	.11	.01	.089
Quadrant III	Supportive Principal Behavior	-.02	.00	.717
	Directive Principal Behavior	-.32	.10	.000*
	Engaged Teacher Behavior	-.09	.01	.173
	Frustrated Teacher Behavior	-.29	.08	.000*
	Intimate Teacher Behavior	-.07	.00	.276
Quadrant IV	Supportive Principal Behavior	-.22	.05	.001*
	Directive Principal Behavior	-.11	.01	.106
	Engaged Teacher Behavior	-.25	.06	.000*
	Frustrated Teacher Behavior	.04	.00	.519
	Intimate Teacher Behavior	-.06	.00	.338

*Significant at the Bonferroni adjusted probability of .002 (adjusted alpha =.05/20).

An analysis was carried out to test the relationships between the two leadership behavior subscales and the Climate Openness Index (see Table 10). The Consideration Subscale related positively and significantly with the Climate Openness Index and explained 44% of the variance. There was also a significant through small inverse relationship between the Initiating Structure Subscale and the Climate Openness Index, accounting for 3% of the variance.

Table 10

Correlations Between Leadership Subscales and Climate Openness Index

Leadership Style	r	r^2	p
Consideration	.66	.44	.000*
Initiating Structure	-.17	.03	.011*

*Significant at the Bonferroni adjusted probability of .025.

The final analysis tested for relationships between the two leadership subscales and the five climate subscales (see Table 11). The Consideration Subscale related significantly and positively with all climate subscales with the exception of the Frustrated Teacher Behavior Subscale. These positive correlations accounted for 4% to 69% of the variance. The Initiating Structure subscale related significantly and positively with the Directive Principal Behavior and the Frustrated Teacher Behavior subscales, accounting for 28% and 17% of the variance respectively. It should be noted that these two subscales were negative factors in the calculation of the Climate Openness Index.

Table 11

Correlations Between the Leadership Subscales and the Climate Subscales

Leadership Subscales	r	r^2	p
Consideration and			
Supportive Principal Behavior	.83	.69	.000*
Directive Principal Behavior	.20	.04	.002*
Engaged Teacher Behavior	.54	.29	.000*
Frustrated Teacher Behavior	-.11	.01	.086
Intimate Teacher Behavior	.34	.12	.000*
Initiating Structure and			
Supportive Principal Behavior	-.01	.00	.009
Directive Principal Behavior	.53	.28	.000*
Engaged Teacher Behavior	.17	.03	.010
Frustrated Teacher Behavior	.41	.17	.000*
Intimate Teacher Behavior	.17	.03	.009

*Significant at the Bonferroni adjusted probability of .005 (adjusted alpha=.05/10)

In essence, the organizational commitment of teachers was related primarily to the consideration leadership behaviors of principals. Teacher commitment was also related to the degree of school climate openness as perceived by the teachers. Climate openness, in turn, was related largely to the consideration leadership behaviors of the principal.

Findings Pertaining to Predictive Models

In the first predictive model analysis, the Climate Openness Index, the four leadership quadrants, and the demographic variables were entered. Utilizing stepwise multiple regression with a *p* to enter of 0.05, four variables entered the equation. These variables were marital status (married), the Climate Openness Index, and Quadrant II (high consideration and initiating structure behaviors) and Quadrant III (high consideration and low initiating structure behaviors), together accounting for 28% of the variance in organizational commitment (see Table 12).

Table 12
Predictive Model 1 of Organizational Commitment

Variable	B	Beta	p
Marital Status (Married)	4.26	.17	< .01
Climate Openness Index	.04	.42	< .01
Quadrant II (High Consideration; High Structure)	11.01	.39	< .01
Quadrant III (High Consideration; Low Structure)	6.88	.21	.05
Constant	46.97		< .01
Total variance accounted for = .28			

In the second analysis, the Climate Openness Index, the Consideration and Initiating Structure leadership subscales, and the demographic variables were entered. Employing stepwise multiple regression, three variables—marital status (married), Climate Openness Index, and the Consideration Subscale—entered the equation, accounting for 25% of the variance in organizational commitment (see Table 13).

Table 13
Predictive Model 2 of Organizational Commitment

Variable	B	Beta	p
Marital Status (Married)	4.57	.19	< .01
Climate Openness Index	.31	.33	< .01
Consideration leadership subscale	.19	.21	< .01
Constant	46.80		< .01

Total variance accounted for = .25

In the third analysis, the five climate subscale scores, the four leadership quadrants, and the demographic variables were entered. Utilizing the stepwise multiple regression, four variables entered the equation. These variables were marital status (married), the Engaged Teacher Behavior climate subscale, the Supportive Principal Behavior climate subscale, and Quadrant I (low consideration, high structure) leadership style (as a negative factor). Together they accounted for 23% of the variance in commitment (see Table 14).

Table 14
Predictive Model 3 of Organizational Commitment

Variable	B	Beta	p
Marital Status (Married)	5.14	.21	< .01
Engaged Teacher Behavior climate subscale	.74	.28	< .01
Supportive Principal Behavior climate subscale	.43	.20	< .01
Quadrant I (Low Consideration; High Structure)	10.09	-.16	< .01
Constant	47.63		< .01

Total variance accounted for = .23

In the fourth model, the five climate subscales, the two leadership subscales, and the demographic variables were entered. Utilizing stepwise multiple regression and with a *p* to enter of 0.05, four variables entered the equation. The variables were marital status (married), Directive Principal Behavior climate subscale (inverse direction), Engaged Teacher Behavior climate subscale, and the Consideration leadership subscale. These variables together accounted for 24% of the variance in organizational commitment (see Table 15).

Table 15
Predictive Model 4 for Organizational Commitment

Variable	B	Beta	p
Marital Status (Married)	4.56	.19	< .01
Directive Principal Behavior climate subscale	-.56	-.17	.02
Engaged Teacher Behavior climate subscale	.82	.31	< .01
Consideration leadership subscale	.28	.30	< .01
Constant	43.42		< .01

Total variance accounted for = .24

In summary, predictive models of organizational commitment explained around 25% of the variance. These models typically included marital status, some component of school climate, and some component of principal leadership style.

DISCUSSION OF FINDINGS

Considering that this study focused on full-time teachers in SDA secondary schools in the Philippines, a number of findings emerged from a descriptive analysis of the demographic variables of this group.

Demographics

As might be expected, there were almost twice as many female as male teachers. It appears that secondary-level teaching is more attractive to Filipino females than to males, or that male teachers in the Philippines have more options available to them at other educational levels, such as in tertiary education.

The fact that nearly two-thirds of the teachers were between 21 to 40 years of age indicates that SDA secondary school teachers in the Philippines constitute a young set of individuals. This may be explained either by an expanding educational system or, more likely, that older teachers move into administrative positions or into teaching positions at the tertiary level, perhaps with a commensurate rise in their own educational attainment.

Given that 80% of the secondary level teachers held only a bachelor's degree or less, is cause for concern. It may be that provisions for upgrading programs of teachers are nonexistent or that not enough teachers can be accommodated in these programs to change the ratio appreciably. Furthermore, the few teachers who do get upgraded may either move into administration or into service in other educational levels.

Half of the respondents had taught five years or less at their present school. The teaching

sample was quite young overall. Nearly two-thirds of the teachers had less than ten years of total teaching experience which seems to be the trend similar to that reported in prior studies by Tobing (1976) and Salazar (1978). Tobing found that 41% of his sample from private high schools in the Caloocan area in the Philippines had taught for 1 to 6 years, whereas Salazar's study of SDA secondary school teachers in Northern Philippines reported that 51% of the respondents had taught in their present school for less than 6 years. These findings may also indicate a high turnover rate and could merit further research.

Organizational Commitment

The overall mean of 5.4 for organizational commitment of teachers in the SDA secondary schools was moderately high compared to mean levels obtained in prior studies. For example, Mowday et al. (1982) reported mean levels ranging from 4.0 to 6.1 in the nine samples where they administered the OCQ. For denominationally sponsored educational institutions in the Philippines, however, this finding may be quite normal. David (1990), for example, reported a mean level of 5.6 for the organizational commitment of lay teachers of selected Catholic schools in the Philippines. A mean level of 5.6 for organizational commitment was also reported by Oberholster (1998) in his study of teachers in six SDA colleges in the Philippines.

Given the religious orientation and educational philosophy of the SDA organization to which the schools belong, it was believed that teachers would indicate a high level of commitment to their schools. This indeed seems to be the case and is in line with prior research that indicates that teachers in parochial church-operated schools typically exhibit a high level of commitment (David, 1990; Tarr, 1992). Such high commitment levels for SDA secondary school teachers in the Philippines are encouraging as they imply that the teachers in these schools support the values and mission of their schools and actively assist their schools in achieving organizational objectives.

Although this study focused explicitly on the commitment of the teacher to the educational institution where service was rendered, teacher commitment in the SDA schools under study could primarily be to the larger organization, and secondarily to the individual school. Perhaps a comparative study of commitment to the SDA denomination as contrasted with commitment to the SDA educational system overall and to the particular institution would be fruitful.

Leadership Style

The two leadership behavior dimensions of consideration and initiating structure were assessed in this study in order to determine the leadership style of principals. This study found these two dimensions to be orthogonal. The presents of orthogonality lends empirical support to the theoretical perspective utilizing these two dimensions to form the four leadership

style quadrants (Stogdill , 1962).

In this present study, 79% of the respondents perceived their principals to be in leadership Quadrant II, characterized by high consideration and high initiating structure behaviors. Stogdill (1962) stated that a Quadrant II leader was efficient and effective in managing both tasks and people. Thus, a balance between the two leadership dimensions seems desirable, especially in improving the school climate (Bailey, 1988). However, several studies pointed out that a leadership style leaning more toward consideration tends to build better teacher commitment (Burns, 1990; Fjelstad, 1990) and a more open school climate (Chen, 1990; Higgins, 1993; McCombs, 1993).

Ratings on the underlying Consideration subscale in this study were generally higher than on the Initiating Structure subscale. The Consideration subscale mean of 71.3, out of a possible total of 100, indicates that principals were often perceived as displaying considerate behavior. By contrast, the Initiating Structure subscale mean of 58.9, out of a possible total of 100, indicates teachers perceived a display of initiating structure behaviors only occasionally.

This finding is not surprising as Filipino people are relationship-oriented and tend to be warm and friendly (Alegre, 1994; Andres & Ilada-Andres, 1987). In the Philippines, as in much of Asia, interpersonal relations tend to take priority over structural achievements. The importance of the consideration dimension of leadership style seems to have important implications in terms of organizational commitment. A supportive and considerate leadership behavior has been found to build faculty trust (Depasquale, 1996) and organizational commitment (Salancik, 1977).

Openness of School Climate

In this present study, more than half of the respondents perceived the climate openness of their schools to be either high or very high. Furthermore, 70% of the schools were perceived to have highly open climates. It should be reiterated that an open climate is perceived as having more of the supportive behavior of principals and the engaged behavior of teachers and less of the directive behavior of principals and the frustrated behavior of teachers (Kottkamp et al., 1987).

The findings of this study thus indicate that teachers in SDA secondary schools in the Philippines enjoy support from their principals and feel engaged in school programs and planning. Only at times did teachers report directive principal behavior or frustrated teacher behavior. On-site observation by the researcher of teacher and principal behaviors in some of the schools in the study corroborates this finding. In essence, it appears that SDA secondary schools in the Philippines on the whole enjoy open climates. This is an encouraging finding and prepares the way for enhanced organizational commitment on the part of teachers (Burns, 1990; Combs, 1995; Hornung, 1995; McDaniel, 1992).

Relationships of Leadership Style and
Organizational Commitment

Theory had postulated that there should be a strong relationship between leadership style and organizational commitment of teachers. Salancik (1977), for example, observed that high levels of employee commitment should be associated with supervision that was not overly tight or close. Mowday et al. (1982) reported two studies that found the organizational commitment of employees to be related to the initiating structure leadership behavior. Thus, organizational commitment should quite strongly relate to leadership styles defined in terms of consideration and initiating structure leadership behaviors.

The present study, however, found only a small proportion of shared variance (3%) between but two of the four leadership styles and the organizational commitment of teachers. Perhaps, in reality, the particular leadership style is not all that crucial after all, at least not as it pertains to the organizational commitment of teachers.

Examining the underlying subscales of leadership behaviors, however, revealed a new dimension. There was a much stronger relationship between the consideration leadership behavior of principals and the organizational commitment of teachers, accounting for some 16% of the variance. Such a relationship indicates that under a considerate leadership, teachers evidence greater commitment to the organization.

This finding that teachers feel committed to their school when the principal's leadership style is supportive and enabling is in harmony with prior studies (Burns, 1990; David, 1990; Fjelstad, 1990). David, for example, found a democratic leadership style in selected Catholic schools in the Philippines to be significantly and positively related to teachers' organizational commitment. This is in harmony with theoretical perspectives. Reyes and Shin (1995), for example, have stated that job satisfaction must be present for organizational commitment to develop.

In the light of the above findings, one may conclude that a leadership style high in consideration is associated with teachers' organizational commitment. This, perhaps, is due to the fact that considerate or supportive behavior of the principal is most often characterized by mutual trust, two-way communication, and concern for teachers' personal welfare. It is not surprising, then, that teachers respond to principal support by being committed to the school organization. This may be the case, particularly, in the Philippines. Alegre (1994) and Andres and Ilada-Andres (1987) point out that Filipinos tend to be relationship-oriented and work better under a considerate leadership. The implication of this finding is that principals everywhere, but especially in the Philippines, need to practice considerate leadership behavior in order to encourage teacher commitment.

Relationships of School Climate and
Organizational Commitment

Teacher commitment was found to be positively related to the degree of climate openness, and accounted for 20% of the variance. This finding agrees with McDaniel's (1992) study that explored the relationship of elementary teachers' organizational commitment and school climate openness and found a positive relationship between these two factors. Hatton (1996), likewise, in her study of high-performing, low socioeconomic border elementary schools in Texas, found that a positive social and collaborative climate was related to organizational commitment of teachers.

The Supportive Principal Behavior, the Engaged Teacher Behavior, and the Intimate Teacher Behavior subscales correlated positively with organizational commitment of teachers, explaining 13%, 14%, and 6% of the variance respectively. The Frustrated Teacher Behavior Subscale correlated negatively with the organizational commitment of teachers, explaining 4% of the variance. The contribution of the positive factors to teacher commitment and the detrimental role of the negative factor of teacher frustration is supported by the literature (Cheng, 1989; Kottkamp et al., 1987; Pitman, 1993; Tartar et al., 1989).

In the present study, teachers who worked in a climate of openness characterized by principal support, engaged and intimate teacher behaviors, and the absence of frustrated teacher behavior, reported a positive commitment to their school. This may be explained by the fact that individuals enjoy working under conditions that allow them freedom to use their discretion and to be participative. Kottkamp et al. (1987) described the principal and teacher behavior in an open climate:

> The principal leads through example and the teachers respond with enthusiasm. Teachers work well with each other and with the principal. Given the dynamic leadership of the principal, and a committed faculty, there is no need for burdensome busywork, close supervision, impersonality, or a plethora of rules and regulations. (p. 34)

The findings of this study suggest that if the right climate conditions can be created in the SDA secondary schools in the Philippines, teachers will enjoy their work and experience a high degree of organizational commitment.

Relationships of Leadership Style and School Climate

This study found a significant negative correlation between the Climate Openness Index and the Quadrant I and IV styles of leadership. These two quadrants reflect low consideration behaviors. By the same token, the Climate Openness Index related positively (r^2=.44) to

Consideration Subscale, but negatively (r^2=.03) to Initiating Structure Subscale.

Prior studies have similarly found significant relationships between leadership style and school climate. Holley (1995), for example, concluded from her study of high school administrators and staff members of an urban school district that the leadership style of the administrators can create a climate that is conducive and supportive of the instructional emphases in the school. Withrow (1993), in his study of 801 secondary school teachers in Halifax, found a significant correlation between the scores on the *Leader Behavior Description Questionnaire* and the scores on the *School Climate Survey*. Likewise, Higgins (1993) found that participative leadership style was perceived by his sample of 120 teachers of Catholic secondary schools in Texas as promoting a positive school climate.

At least two prior studies have supported the relationship of a high-consideration high-structure leadership and an open climate. Al-Gasim's (1991) study of middle school climate involving 39 schools and 354 teachers in Saudi Arabia reported that a leadership high in both dimensions was related to an open school climate. Bailey (1988) found that high school teachers in West Virginia perceived a positive relationship between their principals' leadership styles and the school climate. The findings indicated that high school principals who desire to improve their school climate need to exhibit high task and high relationship behaviors with their teachers.

Further insights may be derived from the relationships between the leadership behavior and climate subscales. The consideration leadership behavior was found to correlate positively with all climate subscales except the Frustrated Teacher Behavior Subscale. This relationship was particularly powerful in the case of supportive principal behavior and engaged teacher behavior, and accounted for 69% and 29% of the variance respectively. The initiating structure leadership behavior was found to correlate positively with directive principal behavior and frustrated teacher behavior. In the case of directive principal behavior, the relationship explained 28% of the variance. Both directive principal behavior and frustrated teacher behavior enter the calculation of the Climate Openness Index as negative factors.

The relationships between leader behavior and teacher behaviors may be summarized as follows: In schools, where the principal's leadership style is high both in consideration and structure, the teachers experience engagement in school plans and programs and perceive their principals as manifesting directive behaviors. As the consideration leadership behavior is reduced and the initiating structure behavior is maintained, teacher frustration increases and there is a reduction in perceptions of supportive behaviors on the part of their principals. As initiating structure behavior is reduced and consideration behavior is maintained, teachers see their principals as less directive in their behavior and feel less frustrated. When both consideration and initiating structure behaviors are reduced, teachers perceive their principals as unsupportive and disengage themselves from school plans and programs. In essence, principals who initiate structure are seen as directive and tend to frustrate many teachers. Leaders who manifest consideration, on the other hand, are seen as supportive, and teachers

become actively engaged in school life—constructs closely allied to organizational commitment. This meshes well with the finding in the present study that considerate leadership behaviors of the principals were strong indicators of the organizational commitment of teachers. Thus, considerate leadership behavior would appear to be an important factor in ensuring teacher engagement and absence of frustration.

In essence, this study lends support to the concept that a leadership emphasis on task and performance without the cushioning effect of warmth, respect, consideration, and empowerment creates a closed, and sometimes oppressive, climate. In such a climate, teachers do what they have to do without much enthusiasm and there is an increase in absenteeism and turnover (Mowday et al., 1982).

Predictive Models

Statistically, the best predictive model of organizational commitment was comprised of marital status (married), the Climate Openness Index, and Quadrants II and III leadership styles. Together, these variables accounted for 28% of the variance in organizational commitment.

The most parsimonious predictive model, however, in terms of the number of variables used, was comprised of marital status (married), Climate Openness Index, and the Consideration Subscale from the LOQ. Together, these variables accounted for 25% of the variance in organizational commitment.

In terms of economy in instrumentation, however, another model could prove to be most useful. This model utilized only 37 items (two climate subscales and the Consideration Subscale) of the 70 items as employed in the best predictive model in statistical terms. Furthermore, it still accounted for 24% of the variance in organizational commitment. This model was comprised of marital status (married), Directive Principal Behavior and Engaged Teacher Behavior climate subscales from the OCDQ-Rs, and the Consideration Subscale from the LOQ.

It should be noted that each of these three models included the demographic variable of marital status (married), a climate factor, and a leadership component. Thus, these three predictive models seem to point to a conceptually stable root.

Perhaps a comment is merited regarding marital status, which emerged as a consistent predictor in the regression models. Aquino (1993) had already noted that married persons were more committed to their organization than younger, unmarried persons. This might be explained by the fact that married persons are generally older and often have tenure in the organization. These persons have invested time and effort and have their careers more fully developed. Married persons also have more family responsibilities and need more security in their jobs. Unmarried persons, on the other hand, have greater interorganizational mobility and freedom to consider career alternatives.

CONCLUDING REMARKS

Overall, perhaps the most important finding in this study is the significant relationships between the three major constructs: the principals' leadership style, organizational climate, and the organizational commitment of SDA secondary school teachers. In an educational setting, this finding suggests that the considerate leadership of the principal makes it possible for teachers to feel socially and professionally engaged in school life. This combination of principal support and teacher engagement creates an open climate characterized by mutual respect, principal-teacher goal congruence, professional exchange of ideas, participative decision making, and teacher input in program planning. As a result of this enabling climate, teachers may experience fulfillment and develop a high level of commitment to the school.

The major findings of this study lead to a number of implications for professional practice. First of all, teachers should be given the opportunity and encouraged to participate in team-building activities, such as membership on committees, involvement in curriculum planning, and the organization of school events.

Second, the promotion of individuals to principalship should involve a process of evaluation, including assessment of their preferred or evidenced leadership style and determination of their ability to motivate teachers using constructive criticism and setting an example through hard work, helpful attitudes, genuine concern for the personal and professional welfare of teachers, and support directed toward teachers' social needs and task achievement.

Those individuals serving as principals should recognize that their dominant leadership style is directly related to the school climate and the organizational commitment of their teachers. There may, in fact, be cause-effect linkages here. A periodic self-evaluation, therefore, by the principals of their leadership style followed by corrective actions toward a more relationship-oriented approach may ultimately enhance commitment of teachers to the school.

Finally, it seems that it would be well to assess leadership behavior, school climate, and teacher commitment as part of periodic internal program evaluation and of accreditation visits. The Directive Principal Behavior and the Engaged Teacher Behavior subscales from the OCDQ-Rs, the Consideration Subscale from the LOQ, and the score from the OCQ might be utilized as efficient instrumentation to assess these important areas of institutional life.

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REFERENCE LIST

Alegre, E. N. (1994). Pinoy na pinoy!: Essays on national culture. Metro Manila, Philippines: Anvil.

Al-Gasim, S. S. (1991). *The relationship between principal leader behavior and middle school climate in Hail District, Saudi Arabia* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 53/01.

Andres, T. D. (1981). Understanding Filipino values: A management approach. Quezon City, Philippines: New Day Publishers.

Andres, T. D., & Ilada-Andres, P. B. (1987). Understanding the Filipino. Quezon City, Philippines: New Day Publishers.

Aquino, C. G. (1993). Non-monetary incentives of public tertiary level teachers and their organizational and professional commitment. Unpublished master's thesis, College of Education, University of the Philippines, Quezon City.

Aquino, G. (1985). *Educational administration.* Quezon City: Rex Printing.

Aven, F. F, Jr., (1988). *A methodical examination of the attitudinal and behavioral components of organizational commitment* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 49/11.

Bancroft, R. M. (1986). Principal's leadership style and school climate [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 47/07.

Bailey, S. S. (1988). *The relationship between leadership styles of high school principals and school climate as perceived by teachers* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 50/09.

Bishop, H., & Dagley, D. (1991). *The relationship between leadership behavior or principals and organizational climate within selected middle schools* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 52/03.

Booker, R. T. (1990). *A study of conflict, attributed conflict resolution, teacher activity,* and commitment in senior high schools [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 51/09.

Buchanan, B., II. (1974). Building organizational commitment: The socialization of managers in work organizations. Administrative Science Quarterly, 19, 553-546.

Burns, P. J., Jr., (1990). Teacher morale as related to the perceived administrative leade*rship style of principals in selected group IV high schools in the state of New Jersey* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 51/07.

Byers, K. A. (1987). Relationships between principals' and teachers' perception of conflict, conflict resolution behavior, leader personality, and organizational commitment [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 48/04.

Campisano, F. A. (1992). A theoretical model for the effects of the school work environment in Jesuit high schools [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 54/01.

Chang, D. (1990). A study of teacher commitment and performance in the public junior *high schools of Taiwan* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 51/10.

Chen, M. T. (1990). *Relationships between principals' leadership styles and school climate in senior industrial high schools in Taiwan, the Republic of China* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 51/07.

Cheng, Y. C. (1989). *An investigation of the relationship of organizational commitment and job attitudes to organizational culture, organizational structure, leadership, and social norms* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 50/11.

Cintavey, K. O. (1995). *Outcome or performance-based education and organizational commitment: A predictive study of educational change on kindergarten through twelfth grade public school teachers* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 56/06.

Ciriello, M. J. (1987). *Teachers in catholic school: A study of commitment* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 48/03.

Combs, J. R. (1995). *Teacher commitment to change: A case study of an elementary school* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 56/09.

Cruz, P. A. (1995). *The leadership actions of principals in schools that have experienced academic success with Hispanic students* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 56/10.

David, M. A. M. (1990). *Factors affecting the organizational and occupational commitment of lay teachers of the RVM schools in the Philippines*. Unpublished doctoral disssertation, College of Education, University of the Philippines, Diliman.

Davis, C. (1997). *An analysis of selected variables regarding teacher absenteeism in selected urban elementary schools* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 58/09.

Depasquale, F. J. (1996). *Principal leadership behavior and faculty trust: Is there a connection?* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 57/04.

Derczo, M. T. (1987). *Effective school leadership: A test of an adapted model from a study of principals and teachers of Dade County, Florida* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 49/04.

Eblen, A, L. (1987). Communication, leadership, and organizational commitment [CD-ROM]. *Central States Speech Journal, 38*(3), 181-195. Abstract from: Dialog on Disk File: ERIC Item: EJ 377 365.

Etzioni, A. (1975). *A comparative analysis of complex organizations.* New York: The Free Press.

Everett, G. L. (1991). *Teacher attitudinal commitment: A function of the school, the teacher, and the principal's leadership* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 52/08.

Firestone, W. A., & Pennell, J. R. (1993). Teacher commitment, working conditions, and differential incentive policies. *Review of Educational Research, 63*(4), 489-525.

Fjelstad, N. L. (1990). *Superintendent leadership behavior and its relationship to trust and commitment of Wisconsin principals* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 52/03.

Fleishman, E. A. (1969). *Manual for leadership opinion questionnaire*. Chicago: Science Research Associates.

Florido, R. L. (1986). *An evaluation of the management capabilities and leadership behavior of school administrators in relation to the job satisfaction of the faculty in region-supervised government tertiary schools, S. Y. 1985-86: Its implications to improved educational management*. Unpublished doctoral dissertation, Cebu State College, Cebu City, Philippines.

Freiberg, J. H. (1983). *Improving school climate—A facilitative process.* Paper presented at the Seminar in Organizational Development in Schools, University of La Verne, La Verne, CA.

Frost, R. A. (1991). *An investigation of faculty commitment to the university* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 52/09.

Gibson, N. C. (1996). *A state mandated initiative and the role of the high school principal as a change agent: A case study of quality review in five Illinois high schools* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 57/06.

Glisson, C., & Durick, M. (1988, March). Predictors of job satisfaction and organizational commitment in human service organizations. *Administrative Science Quarterly, 33*(1), 61-81. Abstract from: Dialog on Disk File: ERIC Item: EJ 377 472.

Hajzus, T. J. (1990). *Conflict resolution styles attributed to principals and organizational commitment of secondary teachers in the context of differing problem situations* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 51/06.

Halpin, A. W., & Croft, D. B. (1963). *The organizational climate of schools.* Chicago: Midwest Administrative Center, The University of Chicago.

Hatton, S. A. (1996). *Teacher organizational commitment in high performing, low socio-economic status, border elementary schools* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 58/01.

Hayes, C. A. (1994). *An analysis of the relationship between participative decision-making practices and school climates in elementary schools of the Elk Grove Unified School District* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 57/02.

Higgins, D. J. (1993). *The relation of participative leadership style to two measures of school effectiveness in the Catholic high schools of the Archdiocese of San Antonio (Texas)*[CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 54/07.

Holley, V. I. (1995). *Relationship of administrative style toward attitudes and implementation of arts education* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 57/01.

Hornung, C. S. (1995). *The relationships between conflict resolution styles, level of conflict, commitment and teacher empowerment* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 56/09.

House, R. J. (1971). A path-goal theory of leader effectiveness. Administrative Science Quarterly, 16, 321-338.

Houseknecht, S. E. (1990). The relationship between perceived leadership behaviors and the morale of elementary classroom teachers [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 51/10.

Howard, E., Howell, B., & Brainard, E. (1987). Handbook for conducting school climate improvement project. Bloomington, IN: The Phi Delta Kappa Educational Foundation.

Hoy, W. K., & Clover, S. I. R. (1986). School climate: A revision of the OCDQ. *Educational Administration Quarterly, 22*(1), 93-100.

Hrebiniak, L. G., & Alutto, J. (1977). Personal and role-related factors in the development of organizational commitment. *Administrative Science Quarterly, 17*, 555-572.

Huntington, R. (1986). Perceived organizational support. *Journal of Applied Psychology, 17*(3), 131-146.

Immegart, G. (1988). Leadership and leader behavior. In N. J. Boyan (Ed.), *Handbook of Research on Educational Administration* (pp. 259—277), New York: Longman.

Kadyschuk, R. (1997). *Teacher commitment: A study of the organizational commitment, professional commitment, and union commitment of teachers in public schools in Saskatchewan* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 58/12.

Kottkamp, R. B., Mulhern, J. A., & Hoy, W. K. (1987). Secondary school climate: A revision of the OCDQ. *Educational Administration Quarterly, 23*(3), 31-48.

Lieuallen, K. B. (1993). *A study of attitudes toward distributive and procedural aspects of* the grievance procedure and organizational commitment [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 54/04.

Lunenberg, F. C., & Ornstein, A. C. (1991). Educational administration: Concepts and practices. Belmont, CA: Wadsworth.

Marschilok, E. S. (1993). *A study of the relationship between leadership behavior of high school principals and selected areas of educational achievement* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 54/06.

McCombs, L. A. (1993). *A study of the relationships among student involvement in activities, leadership of the principal, and school climate* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 54/07.

McDaniel, A. K. (1992). *A comparison of elementary and secondary schools with respect to levels of conflict, conflict resolution behaviors, teacher commitment, and organizational climate* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 53/07.

Meade, G. A. (1994). *The principal's role in developing and maintaining teacher commitment* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 35/02.

Menzies, T. V. (1995). *Teacher commitment in colleges of applied arts and technology: Sources, objects, practices and influences* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 57/04.

Mowday, R. T., Porter, L. W., & Steers, R. M. (1982). *Employee-organization linkages: The psychology of commitment, absenteeism, and turnover.* New York: Academic Press.

Norton, M. S. (1984). What's so important about school climate? *Contemporary Education, 56*(1), 43-45.

Oberholster, F. R. (1998). *Spiritual experience and the organizational commitment of faculty in SDA tertiary educational institutions in North Philippines*. Unpublished master's thesis, Adventist International Institute of Advanced Studies, Silang, Cavite, Philippines.

Pacifico, E. (1994). *School climate and teacher commitment*. Unpublished master's thesis, College of Education, University of the Philippines, Diliman.

Pitman, B. (1993). *The relationship between charismatic leadership behaviors and organizational commitment among white-collar workers* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 54/03.

Reitz, J. H. (1987). *Behavior in organizations* (3rd ed.). Homewood, IL: Irwin.

Reyes, P. (1992). Preliminary models of teacher commitment: Implications for restructuring the workplace. Madison, WI: Center on Organization and Restructuring of Schools.

Reyes, P., & Shin, H. S. (1995, January). Teacher commitment and job satisfaction: A causal analysis. Journal of School Leadership, 5, 22-39.

Rivera, E. S. (1994). Competence, commitment, satisfaction and participation in exte*nsion/ community service of two groups of physical education secondary school teachers.* Unpublished doctoral dissertation, College of Education, University of the Philippines, Diliman.

Rosenholtz, S. J. (1989). *Teachers' workplace: The social organization of schools.* New York: Longman.

Salancik, G. (1977). Commitment and the control of organizational behavior. In Staw, B. M., and Salancik, G. (Eds.). *New Directions in Organizational Behavior* (pp. 1-53). Chicago: St. Claire Press.

Salazar, A. M. (1978). Attitudes of secondary school teachers towards faculty meetings in the eight senior academies of NPUM. Unpublished master's thesis, Philippine Union College, Puting Kahoy, Philippines.

Seventh-day Adventist Yearbook, 1998. (1997). Siver Spring, MD: General Conference of Seventh-day Adventists.

Steers, R. M. (1977). Antecedents and outcomes of organizational commitments. *Administrative Science Quarterly, 22*, 46-56.

Stogdill, R. M. (1962). *Handbook of leadership.* New York: Alfred A. Knopf.

Tarr, H. C. (1992). *The commitment and satisfaction of Catholic school teachers* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 53/03.

Tartar, C. J., & Others. (1989). Principal leadership and organizational commitment: The principal must deliver [CD-ROM]. *Planning and Changing, 20*(3), 131-140. Abstract From: Dialog on Disk File: ERIC Item: EJ 410 228.

Thompson, F. L. (1989). *The relationship between leadership style and organizational commitment in selected Wisconsin elementary schools* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 51/05.

Tobing, T. L. (1976). *Problems of behavior which confronted teachers in the private high schools of the Division of City Schools, Caloocan 1975-1976.* Unpublished master's thesis, Philippine Union College.

Ubben, G. C., & Hughes, L. W. (1987). *The principal: Creative leadership for effective schools*. Wells Avenue, NM: Allyn & Bacon.

Varona, F. (1991). *Communication satisfaction and organizational commitment* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 53/09.

Veitenheimer, J. R. (1993). *Employee-organizational linkages: Teacher and principal organizational commitment in high-performing and low-performing elementary schools* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 54/04.

White, E. G. (1952). *Education*. Mountain View, CA: Pacific Press.

Withrow, J. W. (1993). *An investigation of the influence on and the relationship between principal leadership style, school climate, and school and teacher variables in secondary schools of Halifax county—Bedford district school board, Nova Scotia, Canada* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 54/07.

Wu, Y. (1994). *Relationships among teachers' perceptions of empowerment, job satisfaction, and organizational commitment in public schools* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 55/09.

Yakmalian, K. M. (1995). *Informal relationships between elementary school teachers: The art of interaction and influence* [CD-ROM]. Abstract from: ProQuest File: Dissertation Abstracts International Item: 56/12.