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Measuring, Improving and Sustaining Healthy Learning Environments

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# Chapter 5 Organizational Health Profiles for High Schools<sup>1</sup>

Wayne K.Hoy and John A.Feldman

This chapter contrasts the notions of organizational culture and climate, and then uses the metaphor of health to conceptualize and measure the climate of secondary schools. First, the development of an organizational health instrument is detailed and profiles of healthy and unhealthy schools are described. Next, directions for administrating and scoring the health instrument are provided, and a hands-on example and interpretation of an actual school profile are presented. Finally, the chapter concludes with a brief review of research, implications, and cautions. In sum, a useful, reliable, and valid measure of school health is ready for teachers and administrators committed to improving the climate of their schools and for researchers interested in studying and changing schools.

Although it is fashionable to use the term "organizational culture" to identify the distinctive feel or ideology of the workplace, "organizational climate" also has a rich history in the study of organizations (Pace and Stern, 1958; Halpin and Croft, 1963; Litwin and Stringer, 1968; Taguiri, 1968; Hall, 1972; Poole, 1985). Both climate and culture attempt to capture the feel of organizational life. Individual organizations may have the same mission, but traditions and organizational ideologies often differ.

Organizational culture refers to the shared orientations that bind the organization together and give it its distinctive identity. There is, however, substantial disagreement about what are shared-norms, values, philosophies, tacit assumptions, myths, or ceremonies. Another issue is the intensity of the shared orientations. Do organizations have one basic culture or many cultures? Finally, there is disagreement on the extent to which organizational culture is conscious and overt or unconscious and covert (Hoy and Miskel, 1996).

Organizational climate is a characteristic of the entire organization. Climate has a number of features:

- it is based on collective perceptions of members;
- it arises from routine organizational practices that are important to the organization and its members;
- it influences members' behavior and attitudes (Poole, 1985).

Put simply, organizational climate is the set of internal characteristics that distinguishes one organization from another and influences the behavior of its participants. More specifically, school climate is a relatively enduring quality of theentire school that is experienced by members, describes their collective perceptions of routine behavior, and affects their attitudes and behavior in the school (Hoy and Miskel, 1996).

Although the definitions of climate and culture are blurred and overlapping, one suggested difference is that culture consists of shared assumptions, values and norms, while climate is defined by shared perceptions of behavior (Ashforth, 1985). There is not a large conceptual step from shared norms (culture) to shared perceptions (climate), but the difference is real, often meaningful, and important in selecting a research strategy or in developing an organizational improvement plan. We prefer the concept of climate. Because shared perceptions of behavior are easier to map than shared values, climate is a little less abstract (more descriptive and less symbolic) than culture and measurement is less a problem.

# School Climate: Conceptual Foundations of Organizational Health

A number of perspectives have been systematically developed to examine the organizational climate of schools (Halpin and Croft, 1963; Hoy and Clover, 1986; Hoy, Hoffman, Sabo and Bliss, 1996; Hoy, Tarter and Kottkamp, 1991; Pace and Stern, 1958; Stern, 1970). Perhaps the best-known conceptualization and measurement of school climate in educational administration is the pioneering work of Halpin and Croft (1963). Climate was viewed as the "personality" of the school and seen along a continuum from open to closed, much the same way that Rokeach (1960) viewed the personality and belief systems of open- and closed-minded individuals. Although the openness of organizational climate has been a useful perspective for viewing the atmosphere of the school, it has not been as successful in explaining student achievement in schools as the construct of organizational health (Hoy, Tarter and Kottkamp, 1991). Thus the focus of this paper is to view school climate in terms of its health.

*Health* is another metaphor for examining school climate. The idea of positive and healthy relations in an organization is not new and calls attention to conditions that foster effective organizational performance.

# Miles's Perspective on Organizational Health

The health metaphor was initially used by Matthew Miles (1969) to examine the properties of schools. He defines a healthy organization as one that "not only survives in its environment, but continues to cope adequately over the long haul, and continuously develops and expands its coping abilities" (1969: p. 378). Implicit in this definition is the idea that healthy organizations manage successfully with disruptive outside forces while effectively directing their energies toward the mission

and objectives of the organization. Operations on a given day may be effective or ineffective, but the long-term prognosis is favorable in a healthy organization. Miles developed a configuration of a healthy organization that consists of ten important properties. They are those which reflect the task needs (goals, communication, and power), the maintenance needs (resource use, cohesiveness, and morale), and the growth and development needs (innovativeness, autonomy, adaptation, and problem-solving capacity) of a social system. Unfortunately, attempts to operationalize Miles's formulation of organizational health with a set of reliable and valid measures have been unsuccessful (Hoy and Feldman, 1987; Kimpston and Sonnabend, 1975; Miles, 1975).

# A Parsonian Perspective on Organizational Health

After the unsuccessful attempts to operationalize Miles's dimensions of organizational health, we turned our attention to the theoretical analyses of Parsons et al. (1953) and Etzioni (1975), as well as the empirical literature on school effectiveness for a scheme to conceptualize and measure school health. All social systems must solve four basic problems if they are to survive, grow, and prosper adaptation, goal attainment, integration, and latency are essential to effectiveness. Parsons and his colleagues (1953) refer to these as the imperative functions of all social systems. In other words, schools must solve four basic problems:

- (i) the problem of accommodating to their environment
- (ii) the problem of setting and implementing goals
- (iii) the problem of maintaining cohesiveness within the school
- (iv) the problem of creating and preserving a unique culture

Healthy schools meet the instrumental needs of adaptation and goal achievement as well as the expressive needs of social and normative integration. Parsons (1967) also notes that schools, like all organizations, have three distinct levels of control over these needs—the technical, managerial, and institutional.

The technical level of the school is concerned with the teaching-learning process. The primary mission of the school is to produce educated students, and teachers and supervisors have primary responsibility for solving the problems associated with effective teaching and learning.

The managerial level controls the internal administration of the organization. Principals are the prime administrative officers of the school. They procure and allocate resources and coordinate the work effort. They must acquire the necessary resources for teaching (financial, personnel, and physical materials); find ways to develop teacher loyalty, trust, and commitment; motivate teachers; influence their own superiors; and mediate between the teachers and students.

The institutional or community level connects the school with its environment. Schools need legitimacy and support in the community. Both administrators and teachers need backing if they are to perform their respective functions in a harmonious fashion without undue pressure from individuals and groups from outside the school. Teachers need a buffer between themselves and hostile outside forces.

### School Health: A Conceptual Framework

The preceding broad Parsonian perspective provided the theoretical underpinnings for conceptualizing and measuring school health. Specifically, a healthy school is one in which the technical, managerial, and institutional levels are in harmony; and the school meets both its instrumental and expressive needs as it successfully copes with disruptive external forces and directs its energies toward it mission. In other words, healthy schools have relatively harmonious relations among the teachers, administrators, and board members. Such schools focus their energies on the accomplishment of the instrumental goals of achievement and intellectual growth as well as expressive goals of emotional growth and development.

After a series of exploratory pilot projects (Hoy, Tarter and Kottkamp, 1991), eight dimensions of organizational health were initially identified and defined as the framework for examining school health. These aspects represented the three Parsonian levels of organization as well as the four functional imperatives of all social systems. Each dimension is defined as follows under its associated level.

#### Institutional level

• *Institutional integrity* (instrumental need) is the school's ability to cope with its environment in a way that maintains the educational integrity of its programs. Teachers are protected from unreasonable community and parental demands.

### Managerial level

- Principal influence (instrumental need) is the principal's ability to influence the actions of superiors. Being able to persuade superiors, to get additional consideration, and not to be impeded by the hierarchy are important aspects of school administration.
- Consideration (expressive need) is principal behavior that is friendly, supportive, open and collegial. It represents a genuine concern on the part of the principal for the welfare of the teachers.
- *Initiating structure* (instrumental need) is principal behavior that is both task- and achievement-oriented. Work expectations, standards of performance, and procedures are clearly articulated by the principal.
- Resource allocation (instrumental need) refers to a school where adequate classroom supplies and instructional materials are allocated to teachers and extra materials are readily supplied if requested.

#### Technical level

- Morale (expressive need) is a collective sense of friendliness, openness, enthusiasm, and trust among faculty members. Teachers like each other, like their jobs, and help each other. They are proud of their school and feel a sense of accomplishment in their jobs.
- Cohesiveness (expressive need) is the extent to which the teachers and administrators form a coherent and integrated group. They identify with each other and the school.
- Academic emphasis (instrumental need) is the extent to which the school is driven by a quest for academic excellence: high but achievable academic goals are set for students; the learning environment is orderly and serious; teachers believe in their students' ability to achieve; and students work hard and respect those who do well academically.

# Organizational Health Inventory for High Schools<sup>2</sup>

Once the conceptual framework was developed, the next step in the project was to develop a reliable and valid set of measures for the aspects of organizational health, later called the OHI (Organizational Health Inventory). The strategy to operationalize each element of school health was straightforward: write short, descriptive statements of teacher-student, teacher-teacher, and teacher-administrator interactions and then ask teachers to describe the health of their schools using an anonymous questionnaire (OHI) composed of these items.

# Developing Items

Our earlier exploratory work had produced 29 items (Hoy and Feldman, 1987) that tapped some of the proposed dimensions of health. New items were needed and written by the researchers either independently or jointly, but none was included unless there was consensus on its conceptual and content validity. All descriptive statements were assessed using the following criteria:

- (i) each item reflected a property of the school;
- (ii) the statement was clear and concise;
- (iii) the statement had content validity;
- (iv) the statement had discriminatory potential.

In all, 95 items were selected for testing in another pilot study. Respondents were asked to indicate the extent to which each statement characterized their school along a four-point Likert scale as rarely occurs, sometimes occurs, often occurs, or very frequently occurs. Examples of items include the following: "Teachers are protected from unreasonable community and parental demands"; "The principal gets what he or she asks for from superiors"; "The principal looks out for the professional welfare of faculty members"; "The principal lets faculty members know what is expected of them"; "Extra materials are available if requested"; "There is a feeling of trust and

confidence among the staff"; "The school sets high standards for academic performance", and "Community demands are accepted even when they are not consistent with the educational program".

#### Pilot Study

This preliminary version of the OHI contained 95 potential, mostly untested items. An initial task was to reduce the number of items as the factor structure of the instrument was explored. A sample of 72 secondary schools was identified, which included urban, suburban, and rural schools and represented a diverse subset of secondary schools. Data were collected from a random sample of teachers in each school. Because the unit of analysis was the school, data were aggregated at the school level for each item, and the exploratory procedures were performed to reduce the number of items and determine the factor structure of the instrument.

Three criteria were used to refine the OHI. First, the criterion of simple structure was employed in all factor analyses; only items that loaded high on one factor and weak on all others were retained. Next, in addition to their mathematical contribution to the factor (high factor loadings), items were evaluated for conceptual clarity and fit; that is, items were retained only if they were clearly related to the concept being measured. Finally, items were eliminated if they reduced substantially the internal consistency of the subtests as measured by Cronbach's coefficient alpha. School mean scores were generated for each item and the item-correlation matrices were factored.

Using the criteria specified above, a series of exploratory factor analyses of the pilot data was performed, and the number of items was reduced by one half. Ultimately, using a principal components factor analysis with a varimax rotation, a seven-factor solution was selected. Instead of the eight-factor solution that was expected, only seven factors were identified. The morale and cohesiveness items merged to produce one strong morale dimension. Forty-four items remained in the refined OHI, which defined seven dimensions of school health. The final set of items is summarized in Appendix 5.1.

# A Test of the New Measure (OHI)

Having completed the data reduction and conceptualization of the OHI in the pilot study, the 44-item instrument was ready to be tested with a new data set to demonstrate the stability of the factor structure, to confirm the validity and stability of the subtests, and to explore the second-order factor structure.

Sample. Seventy-eight secondary schools in New Jersey agreed to participate in the study. A separate, new random sample of at least five teachers was drawn from each of the 72 pilot schools and from 6 additional schools that were added to the sample. Although not a random one, the school sample was diverse representing a broad range of districts and spanning the entire range of socio-economic status. Participating schools represented 17 of 21 counties in that state. If any group of

schools was underrepresented it was the urban one; only 7.5 per cent of the schools came from urban districts.

Typically, data were collected by a researcher at a regular faculty meeting, but in a few schools a faculty member collected the anonymous questionnaires. The faculty, selected at random, responded to the OHI and the others responded to another battery of instruments, which was part of a larger research project (Hoy, Tarter and Kottkamp, 1991). In total, 1131 teachers and principals in 78 secondary schools participated in the study.

Factor analysis. School mean scores were calculated for each item, and the itemcorrelation matrix from the 78 schools was factor analyzed. Seven factors with eigenvalues form 14.28 to 1.35 explaining 74 per cent of the variance were retained. The seven-factor solution, after the varimax rotation, is summarized in detail by Hoy and his colleagues (1991).

The results strongly support the factor structure discovered in the pilot study. The items loaded on the appropriate subtest, and the reliability scores for each subtest were relatively high. The alpha coefficients were as follows: institutional integrity (0.91), principal influence (0.87), consideration (0.90), initiating structure (0.89), resource support (0.95), morale (0.92), and academic influence (0.93). A comparison of the pattern of factor loadings with those of the pilot study were remarkably similar. In fact, the factor structures for both data sets were virtually identical.

The stability of the factor structure of the OHI also supports the construct validity of the seven dimensions of school health. Factor analysis enables the researchers to study the constitutive meanings of constructs and, thus, their construct validity (Kerlinger, 1976). In the present investigation, seven hypothetical entities, dimensions of organizational health, were constructed. The relations among the items consistently held up as theoretically expected; that is, the items (variables) measuring each dimension were systematically related as predicted.

Second-order factor analysis. Next, attention turned to the underlying structure of the seven dimensions of the OHI. Is there a more general set of factors that defines the health of a school? To answer this question, subtest scores for each school were computed and a correlation matrix among the subtest was derived. Since many of the correlations among the subtests were moderate, it was appropriate to perform a second-order factor analysis on the subtest correlations.

One strong general factor emerged that accounted for 45 per cent of the variance. This factor was the only one to meet Kaiser's (1960) criterion of an eigenvalue greater than one. A scree test (Rummel, 1970) yielded the same second-order factor. All of the dimensions of organizational health had strong factor loadings on this general factor: institutional integrity (0.563), principal influence (0.747), consideration (0.633), initiating structure (0.722), resource support (0.607), morale (0.707), and academic emphasis (0.703). The factor identified schools that were relatively strong on all seven dimensions. Accordingly, the factor was called school health. An index of the health of a school can be determined simply by adding the standard scores on the seven subtests; the higher the score, the healthier the school dynamics. It is possible to sketch a description of the prototype for each of the poles of the continuum, that is, for very healthy and unhealthy schools.

# Healthy School

A healthy school is protected from unreasonable community and parental pressures. The school board successfully resists all narrow efforts of vested interest groups to influence policy (high institutional integrity). The principal of a healthy school is a dynamic leader, integrating both task-oriented and relations-oriented leader behavior. Such behavior is supportive of teachers and yet provides high standards for performance (high consideration and initiating structure). Moreover, the principal has influence with her or his superiors demonstrated by the ability to get what is needed for the effective operation of the school (high influence). Teachers in a healthy school are committed to teaching and learning. They set high but achievable goals for students, maintain high standards of performance, and promote a serious and orderly learning environment. Furthermore, students work hard on their school work, are highly motivated, and respect other students who achieve academically (high academic influence). Classroom supplies, instructional materials, and supplementary materials are always available (high resource support). Finally, in healthy schools, teachers like each other, trust each other, are enthusiastic about their work, and identify positively with the school. They are proud of their school (high morale).

# Unhealthy School

The unhealthy school is vulnerable to destructive outside forces. Teachers and administrators are bombarded by unreasonable parental demands, and the school is buffeted by the whims of the public (low institutional integrity). The school is without an effective principal. The principal provides little direction or structure (low initiating structure), exhibits little encouragement and support for teachers (low consideration), and has little clout with superiors (low influence). Teachers do not feel good about either their colleagues or their jobs. They act aloof, suspicious, and defensive (low morale). Instructional materials, supplies, and supplementary materials are not available when needed (low resource support). Finally, there is little press for academic excellence. Neither teachers nor students take academic life seriously. In fact, academically oriented students are ridiculed by their peers and viewed by their teachers as threats (low academic emphasis).

# Administering and Scoring the OHI

The OHI is a 44-item Likert questionnaire on which educators are asked to describe the extent to which specific behavior patterns occur in the school. The responses vary along a four-point scale defined by the categories "rarely occurs", "sometimes occurs", "often occurs", and "very frequently occurs". The entire instrument is presented in Appendix 5.1.

# Administering the Instrument

The OHI is best administered as part of a faculty meeting. It is important to guarantee the anonymity of the teacher respondents Teachers are not asked to sign the questionnaire, and no identifying code is placed on the form. Most teachers do not object to responding to the instrument, which takes less than ten minutes to complete. We recommend that someone other than an administrator be responsible for collecting the data. It is important to create a non-threatening atmosphere where teachers give candid responses.

#### Scoring the Instrument

The items are scored by assigning 1 to "rarely occurs", 2 to "sometimes occurs", 3 to "often occurs", and 4 to "very frequently occurs". When an item is reversed scored, "rarely occurs" receives a 4, "sometimes occurs" a 3, and so on. Each item is scored for each respondent, and then an average school score for each item is computed by averaging the item responses across the school. The school is the unit of analysis. The average school scores for the items comprising each subtest are added to yield school subtest scores. The seven subtest scores represent the health profile for the school. For example, if school A has 60 teachers responding to the OHI, each individual questionnaire is scored and then an average score for all respondents is computed for each item. Thus, the average score for the 60 teachers is calculated for item 1 and then item 2 and so on. The average school scores for the items comprising each subtest are added to yield school subtest scores. The seven subtest scores represent the health profile for the school. To score the OHI, do the following:

- Score each item for each respondent with the appropriate number (1, 2, 3, or 4). Be sure to reverse score items 8, 15, 20, 22, 29, 30, 34, 36, 39.
- Calculate an average school score for each item. In the example above, add all 60 Step 2: scores on each item and then divide the sum by 60. Round the scores to the nearest hundredth. This score represents the average school item score. You should have 44 school item scores before proceeding.
- Sum the average school item scores as follows: Institutional Integrity (II)=Items 1 +8+15+22+29+36+39 Initiating Structure (IS)=Items 4+11+18+25+32 Consideration (C)=Items 3+10+17+24+31 Principal Influence (PI)=Items 2+9+16 +23+30 Resource Support (RS)=Items 5+12+19+26+33 Morale (M)=Items 6+13 +20+27+34+37+40+42+44 Academic Emphasis (AE)=Items 7+14+21+28+35+38 +41 +43

These seven scores represent the health profile of the school. You may wish to compare your school profile with other schools. To do so, we recommend that you use the norms developed in an earlier study of a large, diverse sample of high schools from New Jersey.<sup>3</sup> The average score for schools in this normative sample and their standard deviation on each health dimension (respectively) are as follows: Institutional Integrity (18.61, 2.66), Initiating Structure (14.36, 1.83), Consideration (12.83, 2.03), Principal Influence (12.93, 1.79), Resource Allocation (13.52, 1.89), Morale (25.05, 2.64), and Academic Emphasis (21.33, 2.76). To standardize your school's scores using these norms, simply take your raw score for each subtest and subtract from it the corresponding normative score (use the means above), multiply the difference by 100, divide the product by the corresponding standard deviation (use standard deviations above), and add 500 to the result.

When you have standardized your school scores against the normative data provided in the New Jersey sample, your school's score will be somewhere between 300 and 800. This standardization process makes the scores more meaningful. The scores are interpreted just like GRE or SAT scores from Educational Testing Service. An average score for each dimension is 500 and the standard deviation is 100. For example, if your school score is 700 on institutional integrity, it is two standard deviations above the average score on institutional integrity of all schools in the sample, that is, the school has more institutional integrity than 97 per cent of the schools in the normative sample. Likewise, a score of 400 indicates that the score is one standard deviation below the average. To give you a fuller understanding of these scores, examine the ranges presented below:

If the score is 200, it is lower than 99 per cent of the schools in the sample. If the score is 300, it is lower than 97 per cent of the schools in the sample. If the score is 400, it is lower than 84 per cent of the schools in the sample. If the score is 500, it is average.

If the score is 600, it is higher than 84 per cent of the schools in the sample. If the score is 700, it is higher than 97 per cent of the schools in the sample. If the score is 800, it is higher than 99 per cent of the schools in the sample.

#### Computing a Health Index

Once the seven subtest scores have been standardized, an overall index of school health can be computed as follows:

 $\underline{\text{Health}} = (\text{SdS for II}) + (\text{Sds for IS}) + (\text{Sds for C}) + (\text{SdS for PI}) + (\text{SdS for RS}) + (\text{SdS for M}) + (\text{SdS for AE})$ 

Simply add the seven standard scores and divide by seven. This health index is interpreted the same way as the subtest scores, that is, the mean of the "average" school is 500. Thus, a score of 650 on the health index represents a very healthy school, one that is one and a half standard deviations above the average school.

#### School Health Profiles

After the subtest and overall index scores have been computed, it is simple to array the data as a profile of school health. To help in this regard, we have supplied prototypes for healthy and unhealthy schools. Then we provide an actual example of a health profile and its interpretation. First consider the following prototypic profiles:

	Healthy	Unhealthy
Institutional Integrity	605	443
Initiating Structure	659	404
Consideration	604	390
Principal Influence	634	360
Resource Support	598	404
Morale	603	402
Academic Emphasis	603	383
Overall Health Index	615	398

These two extreme profiles represent composite profiles of high schools with healthy and unhealthy school climates. Compare your school's profile with these prototypes to get a sense of the health of your school. To illustrate, we have changed the numbers into categories ranging from high to low by using the following conversion table:

Above 600	Very High
551–600	High
525-550	Above Average
511–524	Slightly Above Average
490-510	Average
476-489	Slightly Below Average
450-475	Below Average
400-449	Low
Below 400	Very Low

# Example

A concrete example may help further. Consider the profile of the Buchanan High School, an urban school in New Jersey with nearly 1500 students:

#### Health Profile for Buchanan High School

Institutional Level

Institutional Integrity 441 (Low)

#### Health Profile for Buchanan High School

Managerial Level

Initiating Structure 463 (Below average)

Consideration 521 (Slightly above average)

Buchanan is an unhealthy school. This is a real school, but the name has been changed. The OHI profile is a snapshot of what is wrong. Buchanan is a school in which outside groups are attempting to influence educational decisions within the school (low institutional integrity). Instructional materials and supplies are difficult to obtain (low resource support), and the principal, while seen as relatively friendly, supportive, and collegial (slightly above average consideration), has no apparent influence with superiors, who do not take him seriously (very low principal influence). The principal's attempts to maintain structure within the school are below the average of other high schools. Teachers do not get much sense of accomplishment from their jobs, nor are they confident in their fellow teachers or even friendly with them (low morale). The press for academic achievement in Buchanan is abysmal. Teachers simply have no confidence in the students to achieve.

These data about Buchanan supply some hints about its problems, but the profile simply describes the school. It does not explain the conditions. This may well be a school that is being starved for support and resources. The principal seems to be in an untenable position. He is reasonably well-liked by the teachers, but he has no influence with his superiors in the central administration. He has been unable to get what the teachers feel are the necessary instructional materials to do a good job. His faculty is demoralized. In fact, it seems as though they have given up. The problems of Buchanan may not be merely school problems; they appear to be part of a district pattern of neglect.

It would be tempting to suggest changes that ought to be made at Buchanan, but it would probably not be productive. The teachers and administrators at Buchanan are the best people to explain why this pattern of unhealthy dynamics exists, and they are critically placed to suggest and implement possibilities for change. Any program of successful change must involve the teachers at Buchanan. The OHI is a tool that can be used to describe a number of important organizational features. Once the description is made, the cooperative work of finding causes for the patterns of behavior remains. But how does one begin?

There is no one way to engage in school improvement. In cases where the health is very poor, it may be necessary to enlist the help of an outsider, one who specializes in organizational development. In other cases, the principal may take the initiative to organize change around a professional development or in-service activity for the faculty. For those who are interested in some authentic cases of principals who have initiated successful improvement activities in schools, there is help. Hoy and Tarter (in press) describe a number of such cases in detail using an

organizational development approach. They predicate their change model on the following assumptions:

- · Change is a property of healthy organizations. You cannot eliminate change, but you can harness it.
- Change has direction. Progressive change is movement consistent with objectives and eventual solutions.
- Organizational learning is possible. Schools can develop their own processes to solve problems.
- · Schools should be learning organizations where teachers create and expand their capacity to learn.
- · Healthy schools are not only ends-in-themselves, but also a means to the development of learning organizations.

Regardless of your strategy for change, it will not occur unless both teachers and administrators are committed. Ultimately, they must recognize the difficulties and take responsibility for their solution. The OHI and the health profile are tools, but they do not guarantee progress. Only the teachers and principals themselves, working together can change a school.

# Some Research Findings

The OHI has proved itself a useful research instrument. Studies using the OHI have shown that dimensions of school health are consistently related to important school outcomes. We focus on three such outcomes-student achievement, teacher commitment and faculty trust.

We begin with faculty trust. Most discussions of the term occur at the global level rather than specifying its dimensions. After a careful review of the literature, Hoy and Kupersmith (1985) used the work of Rotter (1967) and Golembiewski and McConkie (1975) to conceptualize two important aspects of faculty trust. Trust is associated with a general confidence and overall optimism in occurring events. In more specific terms, trust is a generalized expectancy held by the work group that the word, action, and written or oral statement of another individual, group, or organization can be relied upon (Hoy and Kupersmith, 1985). The focus of this definition implies that trust can be viewed in relation to a variety of reference groups -student, colleague, or principal. One would trust a person, not simply in the sense of consistency of action, but in the sense of reliance to act in one's best interest. The present analysis considers two specific aspects of trust. Faculty trust in the principal is the faculty's confidence that the principal will keep his/her word and will act in the best interests of the teachers. Faculty trust in colleagues is the faculty's belief that colleagues can depend and rely upon one another in a difficult situation.

While the concepts of health and trust are not identical, they are complementary. Thus, it was assumed that the seven elements of health should predict faculty trust in the principal and in colleagues. Healthy schools should have teachers who trust each other and their principal, and they do (Tarter and Hoy, 1988).

Commitment is another important aspect of organizational life and has been associated with effective outcomes. Organizational commitment is the strength of identification and involvement with the organization (Steers, 1977). It can be characterized by a belief in and acceptance of the organization's goals and values, a willingness to exert substantial effort on behalf of the organization, and a desire to maintain membership in the organization (Porter et al., 1974). March and Simon (1958) argue that such commitment is commonly a function of an exchange in which the inducements offered by the organization are sufficient to prompt not merely participation in the organization, but commitment to the organization. Commitment in this sense is not simply loyalty or compliance but rather a whole-hearted support of organizational ventures and values. Again, it was assumed that the seven elements of health should predict faculty trust in the principal and in colleagues. Healthy schools should have teachers who are highly committed to the school and its mission, and they do (Tarter, Hoy and Kottkamp, 1990).

Student achievement in basic skills is one outcome that most people agree is a component of effective schools. Although there is more to school effectiveness than student achievement, few would argue that student achievement is not an important instrumental outcome of schooling. Healthy schools with their press for high academic standards, strong leadership, and cohesive interpersonal relations, should provide an organizational context for high student achievement, and they generally do (Hoy, Tarter and Bliss, 1990). Surprisingly, however, institutional integrity is not positively related to student achievement; in fact, pressure from the outside seems functional for student achievement.

#### Some Implications

The OHI is a parsimonious and reliable instrument ready for use by both researchers and practitioners. It is one of the few climate measures that has been designed for use in secondary schools. The health inventory provides measures of seven important attributes of student-teacher, teacher-teacher, teacher-principal, and principal-superior relationships, which fit together in a way that yields a global index of the state of organizational health.

For researchers interested in studying the school workplace, the OHI and its conceptual underpinnings provide a framework for the study of leadership, motivation, decision making, structure, communication and school effectiveness, as well as a perspective for evaluating school improvement programs. Although the OHI was developed for use in secondary schools, the framework is sound for work in elementary schools and middle schools, and versions of the health inventory are available at these levels as well (Hoy and Tarter, 1997).

For those administrators who are seriously interested in improving school effectiveness, the OHI offers a simple diagnostic tool. Improvement of instruction, curriculum development, and critical inquiry into the teaching-learning process

are likely only in schools with healthy organizational climates. Healthy climates can be facilitated by enlightened and secure administrators who are willing to evaluate systematically the state of health of their schools. The OHI can be used to provide baseline data on seven critical dimensions as well as a general index of organizational health. Principals and superintendents can not only determine the health of their schools, they can compare their own perceptions of the working atmosphere with the perceptions of their teachers. Discrepancies are often at the heart of many school problems.

The position taken here is that improvement in the state of organizational health should be the prime target of change efforts in schools because only when the systems' dynamics are open and healthy will more specific change strategies be effective. Successful innovation requires self-study, security, and commitment of the professional staff. Change is a systematic process that demands not only modifying individual attitudes but also developing new relationships among members in group settings. Focusing efforts on groups and relationships, and increasing the flow of information about the organization to participants often alters existing norms that regulate interpersonal transactions in groups.

We agree with Miles (1969) that the state of organizational health will likely tell us more than anything else about the probable success of most change efforts: "Economy of effort would suggest that we should look at the state of an organization's health as such, and try to improve it—in preference to struggling with a series of more or less inspired short-run change efforts as ends in themselves" (p. 388). This is not to say that schools must be in a perfect state of health before any meaningful change can occur, but rather that the basic innovation should be one of organizational development itself.

#### A Conclusion and a Caution

Why use the organizational health inventory? Will it make schools better? There are no quick fixes. But healthy schools are better places to work and learn than unhealthy ones. Teachers are more productive, administrators are more reflective, and students achieve at higher levels. Academic emphasis is an integral part of a healthy school. True, the health of a school can be positive and student achievement not high, but when healthy interpersonal dynamics are linked with a press for achievement—that is, high but achievable student goals are set; the learning environment is orderly and serious; teachers believe students can achieve; and students are committed to doing well-schools are successful and students achieve at high levels.

The OHI provides administrators and teachers with an important tool to analyze sytematically the quality of their workplace. The measure is easy to use and teachers rather enjoy the experience. In fact, there is usually an initial phase of enthusiasm with the measures as administrators see both a way to capture the tone of their school and a direction for improvement. Administrators who have used the OHI testify to its usefulness. They claim they are better able to sort out how they are

received by their teachers. For most of them, the news is mixed. Often the message is blunt. The principal burdens teachers with trivia and busywork and doesn't go to bat for them.

The typical principal response is "I disagree", or, "that's wrong". But the issue here is not who is right and who is wrong. The feelings of the teachers are real and based on something. The principal may indeed behave as described or may be misperceived as behaving that way. It really doesn't matter. Teachers act on their beliefs and perceptions. Principals need to come to understand the basis of the beliefs of the teachers so that they can respond directly and adroitly. The OHI does not explain, it simply describes. It is a tool for reflection and action.

We believe in the efficacy of the OHI, but we would not want to overpromise its benefits or see it used inappropriately. The health profile of a school mirrors the interaction patterns in a school. The profiles are the foundations for self-analysis and organizational improvement. We believe, and there is research evidence (see Hoy, Tarter and Kottkamp, 1991), that the OHI measures important sets of variables that are related to positive teacher and student performance. Healthy schools are good places. People like each other and they like their schools. Trust, commitment, cooperation, loyalty, and teamwork are the hallmarks of such schools. Healthy schools are transformed into educational communities where individuals come to respect each other and help each other. We caution against using the OHI for summative evaluation. To do so would be to weaken its utility as a tool for organizational development and improvement.

Rather than merely giving a vague impression of school atmosphere, the OHI provides reasonably valid and reliable descriptions of school health. The measure is relatively unobtrusive, simple to administer, and easy to score. If teachers are guaranteed anonymity, there is no difficulty in getting them to respond. In fact, teachers enjoy the opportunity to express honest opinion without fear of retaliation. The instrument requires no more than ten minutes to administer and we recommend it be given to teachers as part of a regular faculty meeting. We encourage the use of the OHI. Simply reproduce it (see Appendix 5.1) and use it.

#### Notes

- 1 This chapter draws heavily from two sources, Hoy and Feldman (1987) and Hoy, Tarter and Kottkamp (1991). For the reader interested in more of the technical details of the instrument and its development, both are good sources.
- 2 A similar framework and measures have been developed for elementary and middle schools (see Hoy and Tarter, 1997, elementary edition).
- 3 For more details on the norms and scoring directions, see Hoy, Tarter and Kottkamp (1991). The scoring is easy and simple, but for those interested, a PC computer scoring program for the OHI can be purchased from Arlington Writers, 2548 Onandaga Drive, Columbus, OH 43221. The program will automatically score the data and standardize the scores using the current norms so that comparisons can be easily made.

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# Appendix 5.1: Organizational Health Inventory (OHI

Directions: the following are statements about your school. Please indicate the extent to which each statement characterizes your school by circling the appropriate response. RO = rarely occurs SO = sometimes occurs O = often occurs VFO = very frequently occurs

1	Teachers are protected from unreasonable community and		
	parental demands	RO SO C	) VFO
2	The principal gets what he or she asks for from superiors		
3	The principal is friendly and approachable		
4	The principal asks that faculty members follow standard rules		
	and regulations	RO SO	) VFO
5	Extra materials are available if requested		
6	Teachers do favors for each other		
7	The students in this school can achieve the goals that have been		
	set for them	RO SO	) VFO
8	The school is vulnerable to outside pressures	. RO SO (	O VFO
9.	The principal is able to influence the actions of his or her		
	superiors	. RO SO (	) VFO
10	The principal treats all faculty members as his or her equal		
11	The principal makes his or her attitudes clear to the school	. RO SO (	O VFO
12	Teachers are provided with adequate materials for their		
	classrooms	. RO SO (	O VFO
13	Teachers in this school like each other	. RO SO (	O VFO
14	The school sets high standards for academic performance	. RO SO (	O VFO
15	Community demands are accepted even when they are not		
	consistent with the Educational program	. RO SO (	O VFO
16	The principal is able to work well with the superintendent	. RO SO (	O VFO
17	The principal puts suggestions made by the faculty into		
	operation		
18	The principal lets faculty know what is expected of them	, RO SO (	O VFO
19	Teachers receive necessary classroom supplies	. RO SO (	O VFO
20	Teachers are indifferent to each other	. RO SO (	O VFO
21	Students respect others who get good grades	. RO SO (	O VFO
22	Teachers feel pressure from the community	RO SO (	O VFO
23	The principal's recommendations are given serious		
	consideration by his or her superiors		
24	The principal is willing to make changes		
25	The principal maintains definite standards of performance		
26	Supplementary materials are available for classroom use		
27	Teachers exhibit friendliness to each other		
28	Students seek extra work so they can get good grades		
29	Select citizen groups are influential with the board		
30	The principal is impeded by the superiors	RO SO (	O VFO
31	The principal looks out for the personal welfare of		
	faculty members		
32	The principal schedules the work to be done		
33	Teachers have access to needed instructional materials		
34	Teachers in this school are cool and aloof to each other	RO SO (	O VFO

35	Teachers in this school believe that their students have the		
	ability to achieve academically	RO SO O VFO	
36	The school is open to the whims of the public	RO SO O VFO	
37	The morale of the teachers is high	RO SO O VFO	
38	Academic achievement is recognized and acknowledged by		
	the school	RO SO O VFO	
39	A few vocal parents can change school policy	RO SO O VFO	
40	There is a feeling of trust and confidence among the staff	RO SO O VFO	
41	Students try hard to improve on previous work	RO SO O VFO	
42	Teachers accomplish their jobs with enthusiasm	RO SO O VFO	
43	The learning environment is orderly and serious	RO SO O VFO	
44	Teachers identify with the school	RO SO O VFO	
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