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School Mindfulness and Faculty Trust: Necessary Conditions for Each Other?

Wayne K. Hoy
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Background: *The paradox of relying on routines and standard practices, which protect institutional functioning from the vagaries of personality, often comes at the cost of thoughtful adaptability.*

Purpose: *The objectives are to conceptualize and apply the construct of mindfulness to schools and to explore trust as a school condition that fosters mindful actions.*

Setting: *A diverse sample of 75 middle schools was selected for study.*

Participants: *Twenty-six hundred teachers responded to survey instruments in 75 schools.*

Research Design: *An ex post facto test of a theoretical set of hypotheses was performed.*

Data Collection and Analysis: *Data were collected by researchers in regular faculty meetings and assessed using correlational, regression, and factor analyses.*

Findings: *Faculty trust and school mindfulness seemed necessary conditions for each other.*

Conclusions: *Mindfulness is a concept every school administrator should understand and practice, and a culture of trust seems necessary to achieve both the ends of understanding and practice. Principals need to lead in mindful ways. By encouraging faculty to play with ideas, to create novelty in their classrooms, to feel safe to take reasonable risks, to experiment, and to be resilient, the principal can have profound effects on school mindfulness.*

Keywords: *trust; mindfulness; principal; climate; culture*

“**A**vert the danger not yet risen” is an old Vedic proverb with contemporary meaning for school administrators. It is an injunction to catch the early signs of trouble before small difficulties become major crises. Early signals of change are harbingers of opportunity or catastrophe. Mindful administrators seize the moment of opportunity, but inattentive ones, having missed the sub-

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tleties of change, find themselves unpleasantly surprised and trapped by the unexpected. Mindful management of the unexpected is heeding early warnings of trouble.

The paradox of relying on routines and standard practices, which protect institutional functioning from the vagaries of personality, often comes at the cost of thoughtful adaptability. People are so accustomed and so efficient at one way of behaving that they become seduced by the nominal success of their routines. When the routines don't work well, their typical response is to do more of the same. Once habits are formed, it is difficult to break set and respond in novel ways, especially if the routines have been successful. Mindful behavior of individuals and organizations is more than simply being alert; it is a habit of mind that scans for subtle changes that cause trouble. The notion of individual mindfulness has been developed by Langer (1989) in a series of thoughtful and careful research studies. Weick and Sutcliffe (2001) move the level of discourse from the individual to the organization. We draw extensively from both as we theoretically and empirically apply the notion of mindfulness to schools.

There is likely an organizational environment that cultivates mindful actions. We expect that rigid bureaucracies are not conducive to mindfulness; in fact, they may produce a mindless standardization (Hoy, 2003). To develop habits of mindfulness, individuals need situations where they are not afraid to make mistakes and feel free to experiment. A culture of trust should provide a setting in which people are not afraid of breaking new ground, taking risks, and making errors. The objective of this inquiry is twofold: (a) to conceptualize and apply the construct of mindfulness to schools and (b) to explore trust as a school condition that fosters mindful actions.

CONCEPTUAL FRAMEWORK

The central concepts of this investigation are mindfulness and trust. We begin with a theoretical discussion of each and then turn to a theoretical rationale that links the two. Finally, we propose hypotheses to test our theory.

Mindfulness: Individual and Organizational

First, we consider the developmental evolution from individual mindfulness, associated with Langer's (1989) work, through organizational mindfulness (Weick & Sutcliffe, 2001), to school mindfulness (Hoy, 2003; Hoy, Gage, & Tarter, 2004).

Individual mindfulness. People use information more or less mindfully, much the same way as they act with differing degrees of reflection. Too often, individuals seize on standard classifications, use routine rules and procedures, and then proceed to become seduced by habits. On the other hand, it is overly simplistic to maintain that the use of rules and procedures can be equated to mindlessness. Blindly following rules and procedures is different from following reasonable rules and challenging unreasonable ones. There is in all of us an inclination toward a “habit of mind” that adopts sets of routine categories to order and simplify experience. Habit is a reason people find formal rules and regulations so appealing. Dogmas of all kinds justify our behavior because they provide us with identities, rules of action, and standard interpretations (Trungpa, 1973). Mindlessness relies on old categories, whereas mindfulness is the creation of new ones.

When teachers and administrators simply follow rules or comply with senseless orders, they are mindless; they turn mindful as they substitute their judgments for routine responses. Mindlessness grows out of routine and general comfort that things are being done “correctly,” that is, according to standard procedures. The single-minded pursuit of outcomes typically promotes mindlessness unlike an emphasis on process. For example, focusing on the outcome of tests often obscures the process of teaching. Process defines steps to achieve goals and is guided by the general principle, “There are no failures, only ineffective solutions” (Langer, 1989, p. 34). A process approach is conditional; that is, facts are true in only some situations but not in others. Thoughtful inquiry searches for appropriate conditions and encourages playfulness with ideas.

Context controls our reactions and interpretations. When people confuse the context controlling the behavior of another with the context determining their own behavior, that is, assuming that motives of others are the same as their own (often not the case), they fall prey to what Langer (1989) calls “context confusion.” The consequence is narrowness in perspective, which impedes understanding behavior. Contextual confusion reinforces action viewed from one perspective only and limits the use of multiple perspectives. In sum, the causes of mindlessness that influence daily behavior are repetition, narrow mindsets, preoccupation with ends rather than means, and context confusion.

Mindfulness is continuous scrutiny and refinement of expectations based on new experiences, appreciation of the subtleties of context, and identification of novel aspects of context that can improve foresight and functioning (Hoy, 2003; Langer, 1989). Mindfulness requires flexibility, vigilance, openness, and the ability to break set.

Just as mindlessness is rooted in rigid categories, mindfulness blossoms in the creation of new ones. Mindfulness requires openness to new information and different points of view. Events have multiple interpretations, and mindful individuals search for variation and subtlety in meaning; impulsive can be spontaneous, rigid can be consistent, and weak can be sensitive. Mindfulness is playful and nimble and avoids the traps of narrow contexts and the anesthetic of routine by trying to notice the new and different.

Overall, individual mindfulness is a habit of mind that continuously seeks disconfirming evidence to test assumptions. Mindful administrators know that “believing is seeing,” and they are on guard—wary of the obvious and searching for “the danger not yet arisen.” They are suspicious of facile explanation as well as their own success.

Organizational mindfulness. Just as individuals vary in their mindfulness, so too do organizations; that is, mindfulness can be a collective property as well as an individual one. But a mindful organization is more than the sum of mindful individuals (Hoy, 2003).

Weick and Sutcliffe (2001) first sketched the characteristics of mindful organizations by analyzing high reliability organizations, ones that consistently avoided major mistakes and failure. Five processes promote mindfulness in organizations: preoccupation with failure, reluctance to simplify, sensitivity to operations, commitment to resilience, and deference to expertise (Weick & Sutcliffe, 2001).

Preoccupation with failure is counterintuitive. At first blush, it suggests a dysfunctional pessimism, but first impressions are often wrong. The key to this preoccupation is to identify small mistakes before they become major problems. Mindful organizations continuously scan for problems, large and small, but mostly small. Because success breeds complacency and sometimes arrogance, preoccupation with failure prevents being lulled into a false sense of organizational confidence. For example, when 90% of the students meet the state achievement standards, mindful schools focus on the 10% who failed rather than indulge in celebration.

Reluctance to simplify is another aspect of mindful organizations that promotes an understanding of the subtleties of the situation. Schools need to simplify less and see more. Knowing that life in schools is complex, teachers and administrators need to adopt multiple perspectives to understand the shadings that are hidden below the surface of the obvious. Reconciliation of different interpretations runs the risk of losing the nuances of diversity and complexity. The difference in perceptions between students and teachers toward fairness is best understood by considering rival explanations, each of which should be tested.

Sensitivity to operations means staying close to the core function of the organization, which in the case of schools is the teaching-learning process. Mindful organizations continuously search for problems in day-to-day operations. Surprises are not unexpected; mindful organizations anticipate them. Sensitivity to operations nurtures sensitivity to interpersonal relations. The continuous scan for problems requires a close relationship between teachers and administrators; teachers who refuse to act freely enact a system that knows less than it needs to know to be effective (Hoy, 2003). Lack of sensitivity to teaching and learning causes an information gap, which delays timely response.

Commitment to resilience is also a characteristic of mindful organization. No organization or school is perfect, and mindful principals know better than most that they must develop a capacity not only to identify mistakes early but also to bounce back and overcome them. No amount of anticipation is going to prevent mistakes, so resilience is critical. Schools must deal with the unexpected both by anticipation and by resilience (Wildavsky, 1991). School leadership and teachers must be strong and flexible enough to cope with the consequences of bad surprises.

Deference to expertise is the final property of mindful schools. Mindful schools avoid the error of embracing standard rules and rigid structures. Instead, the focus is on matching expertise with the problem regardless of rank and status. Decision making is fluid and defers to knowledge. Rigid structures are replaced by enabling ones, in which consulting with and listening to those with expertise are fundamental to problem solving (Hoy, 2003; Hoy & Sweetland, 2001).

In brief, mindful schools have teachers and administrators who develop the ability to anticipate surprise by focusing on failure, avoiding simplification, and remaining sensitive to operations. But when the unexpected happens, the organization rebounds with persistence, resilience, and expertise. Table 1 summarizes the characteristics of mindfulness.

Trust: Its Elements and Referents

Trust is a global concept with at least five facets; benevolence, predictability, competence, honesty, and openness are the elements of trust most frequently identified in the literature (Hoy & Tschannen-Moran, 1999, 2003; Tschannen-Moran & Hoy, 2000). All these elements are based on common beliefs that individuals or groups act in ways that are in the best interest of the concerned parties. Trust involves taking risks and making oneself vulnerable to another in the confidence that the other will act in ways that are not detrimental to the trusting party.

TABLE 1
Characteristics of Mindfulness and Mindlessness

<i>Characteristics of Mindfulness</i>	<i>Characteristics of Mindlessness</i>
Individual	Individual
Creation of new categories for analysis	Use of standard categories for analysis
Open to new information	Reliance of current information
Considers multiple perspectives	Trapped in a single perspective
Organizational	Organizational
Preoccupation with mistakes	Complacency
Reluctance to simplify	Oversimplification
Sensitivity to day-to-day operations	Insulated from day-to-day operations
Resilience	Rigidity
Deference to expertise	Reliance on formal authority

Benevolence may be the most common element of trust; it is confidence that those things one cares about will not be harmed (Baier, 1986; Cummings & Bromily, 1996). Benevolence is the “accepted vulnerability to another’s possible but not expected ill will” (Baier, 1986, p. 236). When there is no trust in the benevolence of the principal, teachers become excessively concerned about both real and imagined harm.

Reliability is the extent to which behavior is predictable and benefits the other party (Butler & Cantrell, 1984; Hosmer, 1995). It is not simply consistent behavior; it is behavior that combines with benevolence to be predictably well intentioned.

Competence is the ability to perform according to appropriate standards. Good intentions are not enough (Baier, 1986; Butler & Cantrell, 1984; Mishra, 1996). Trust depends on organizational tasks being carried out competently. The disorganized administrator, for example, is unlikely to elicit trust from the faculty.

Honesty refers to an individual’s character, integrity, and authenticity. Rotter (1967) defined trust as “the expectancy that the word, promise, verbal or written statement of another individual or group can be relied upon” (p. 651). Integrity is shown when statements correspond to deeds. Authentic behavior neither distorts the truth nor shifts responsibility (Tschannen-Moran & Hoy, 2000). Honesty and trust are inextricably part of one another (Baier, 1986; Cummings & Bromily, 1996).

Openness is a process in which relevant information is shared and often creates a vulnerability to another (Butler & Cantrell, 1984; Mishra, 1996). Openness signals confidence in both parties that neither the information nor

the individual will be exploited. Principals and teachers who guard information provoke suspicion, not openness and trust. The preceding analysis leads to the following definition: Trust is an individual's or group's willingness to be vulnerable to another party based on the confidence that the latter party is benevolent, reliable, competent, honest, and open (Hoy & Tschannen-Moran, 2003).

Because trust is relational, the referent (individual or group) of trust influences its meaning. In this analysis, three referents of faculty trust are of interest: faculty trust in colleagues, faculty trust in the principal, and faculty trust in clients (parents and students).

Theoretical Rationale

We have conceptualized school mindfulness as a collective capability to anticipate surprise by focusing on failure, avoiding simplification, and remaining sensitive to day-to-day operations. But when the unexpected happens, as it inevitably will, mindful schools are committed to resilience; they rebound with confidence and expertise. The general question of this inquiry is, What organizational conditions foster mindfulness in schools?

There is not an abundance of research on organizational mindfulness because it is a relatively new construct (Hoy, 2003; Weick & Sutcliffe, 2001); however, those few empirical studies that deal with organizational mindfulness provide some useful clues to its nature. Weick and Sutcliffe (2001) have analyzed high reliability organizations (HROs), which they view as prototypes of organizational mindfulness. They conclude that HROs are characterized by "an underlying style of mental functioning that is distinguished by continuously updating and deepening of increasingly plausible interpretations of what the context is, what problems define it, and what remedies it contains" (p. 3). In a word, mindful organizations are reliable.

Mindful organizations also manage the unexpected in its earliest stages, when the signals of trouble are subtle and weak. They encourage the reporting of errors and any failure, no matter how small, as a window to the functioning of the system as a whole (Weick & Sutcliffe, 2001). Managers in these organizations cultivate an atmosphere of openness and teamwork and encourage individuals to challenge each other's thought and behavior. The openness and trust, however, must be strong enough so the organization can use mistakes and failures as learning experiences rather than cause for censure and punishment. Weick and Sutcliffe (2001) identify several studies (Edmonson, 1999; Landau & Chisholm, 1995; Westrum, 1992) that are particularly relevant in this regard.

Westrum (1992) describes the Redstone missile development headed by Wernher Von Braun. After careful and painstaking preparation and much to the chagrin and puzzlement of everyone, an early test of the Redstone missile went out of control. It was surprising that one of the engineers reported that he may have accidentally caused a short circuit during the prelaunch testing. Further investigation revealed that indeed the engineer had caused the accident. His openness and honesty in confessing his mistake in the end saved time and money. Costly retesting and expensive redesigns were unnecessary. Upon hearing that the engineer had voluntarily reported the mistake that had caused the out-of-control missile, Von Braun sent the man a bottle of champagne. In many organizations, such mistakes are routinely hidden rather than admitted because punishment, not reward, is the typical consequence. It is in organizations that focus on uncovering failure for the sake of improvement that such open and honest behavior of subordinates is rewarded.

A similar incident is reported by Landau and Chisholm (1995). A seaman on the nuclear carrier *Carl Vinson* reported that he had lost a tool on the deck of the carrier. Unfortunately, all aircraft were aloft. The captain immediately diverted all planes to land bases, and a systematic search for the tool was conducted because an errant tool on the deck of a carrier is potentially dangerous for both men and planes. Only after the tool was found were the planes allowed to return and land. The next day, in a formal ceremony, the seaman was commended for his action. Again, we have the triumph of openness and honesty, and the reinforcement of catching mistakes early.

Finally, Edmonson's (1999) study of psychological safety and learning in work teams produced an unexpected finding; she found that high-performing nurses' units reported higher (not lower) rates for adverse drug use than low-performing units. She interpreted her surprising finding, however, *not* to mean that the higher performing units actually committed more mistakes, but rather that more mistakes were reported in those units because of the openness and trust. Edmonson theorized that mistakes were hidden in poor-performing units, whereas a culture of openness made nurses in the high-performing units more willing to admit and discuss mistakes, correct them, and learn from them. The message is similar: Openness, competence, and trust enable subordinates to engage in problem solving rather than defensive behavior.

There are a number of themes that run through these studies. First, the workers are competent, expert, and reliable. Their managers are benevolent and constructive in their interactions. Finally, an atmosphere of honesty and openness pervades a work environment that is focused on finding mistakes early, and correcting and learning from them. In fact, these studies strongly suggest that a work environment characterized by competence, reliability,

benevolence, honesty, and openness fosters mindful thought and action. Thus, we postulate that an atmosphere of trust is a necessary condition for school mindfulness. We hasten to add that mindfulness reinforces trust in schools, that is, the trust-mindfulness relation is a reciprocal one. In particular, we will test the relationships between three types of faculty trust—trust in the principal, trust in colleagues, trust in clients—and school mindfulness.

METHOD

We turn next to the methods used to test the relationships between trust and mindfulness. In particular, we describe the sample, data collection, and measures.

Sample of Schools

A diverse sample of 75 middle schools was selected for study because middle schools have the properties of both elementary and high schools (Herriott & Firestone, 1984). We also wanted to avoid the confounding effects of multiple school levels or types. These schools were distributed in 11 counties. Although the sample selected was not random, care was taken to ensure participation of urban, suburban, and rural schools. The current distribution of middle schools in Ohio is 39% rural, 34% urban, and 27% suburban. Correspondingly, the study's schools are distributed across 19% rural, 41% urban, and 40% suburban settings. Of the 612 school districts in the state, 43 participated in the study. Staff completed a total of approximately 2,600 usable surveys. The sample was similar to the population of middle schools in Ohio in terms of student enrollment, average teacher salary, average teacher experience, and the size of the faculty. In brief, the sample of schools was fairly typical of middle schools in Ohio.

Data Collection

Data were collected from the middle schools at regularly scheduled faculty meetings. A member of the research team explained the general purpose of the study, assured the confidentiality of all responses, and asked teachers to complete the questionnaires. Because this project was part of a larger study of organizational properties and because the unit of analysis was the school, a random group of teachers was selected to respond to the measures. No attempt was made to gather data from faculty who were not present at the meeting, but virtually all teachers returned usable questionnaires.

Measures

Two instruments, the School Mindfulness Scale and the Omnibus T-Scale, were administered to the teachers in each middle school.

School Mindfulness Scale (M-Scale). Hoy et al. (2004) used the conceptual framework of mindfulness summarized earlier in this article as a basis for developing the scale; that is, school mindfulness rested on five properties—a focus on mistakes, reluctance to simplify, sensitivity to teaching and learning, commitment to resilience, and deference to expertise in problem solving. The M-Scale is a 20-item Likert-type scale. Teachers are asked to respond to each item, descriptions of behavior, along a 6-point scale from *strongly disagree* (1) to *strongly agree* (6).

A series of factor analytic studies demonstrated that the M-Scale had two significantly correlated factors: mindfulness of the principal and mindfulness of the faculty, each measured by 10 items. Both factors measure all five elements of mindfulness for the principal and faculty, respectively. Samples of items are as follows.

Focus on Mistakes and Failure

- In my building, teachers hide mistakes (reversed).
- Teachers in my building learn from their mistakes and change things so they do not happen again.

Reluctance to Simplify

- My principal negotiates differences among faculty without destroying the diversity of opinions.
- Teachers negotiate differences among each other without destroying the diversity of opinions.

Sensitivity to Teaching and Learning

- My principal is an expert on teaching and learning.
- In this school, teachers welcome feedback about ways to improve.

Commitment to Resilience

- When a crisis occurs, the principal deals with it so we can get back to teaching.
- When things don't go well, the teachers bounce back quickly.

Deference to Expertise

- The principal of this school does not value the opinions of the teachers (reversed).
- Teachers in this school value expertise more than authority.

The construct and predictive validity of the scale has been supported in a comprehensive factor-analytic study (Hoy et al., 2004). Likewise, reliability coefficients for all the scales are consistently high, that is, .90 or greater. Similarly, a factor analysis of data for the middle schools in this sample supported the factor structure of the instrument and the high reliabilities (see Table 2). Finally, as expected, the variance of school mindfulness was greater across all schools (.60) than it was within schools (.31), which suggests that school mindfulness is a collective property.

Omnibus Trust Scale (Omnibus T-Scale). The Omnibus T-Scale is a measure of faculty trust, which has three subtests: faculty trust in colleagues, in principal, and in clients (parents and students). Each measure is grounded in the faculty's willingness to be vulnerable to one group or individual in the confidence that the other party would be benevolent, reliable, competent, honest, and open. The Omnibus T-Scale is a 26-item scale. Teachers were asked the extent to which each statement characterizes their school along a 6-point scale from *strongly disagree* to *strongly agree*.

A series of factor analytic studies has supported the validity and reliability of the three faculty trust subtests of the Omnibus T-Scale for elementary and high schools (Hoy & Tschannen-Moran, 2003). Alpha coefficients of reliability for each scale are consistently above .90. To check the consistency of the factor structure for our sample of middle schools, we replicated the factor analysis with our current sample (see Table 3). The results confirm the factor structure of the Omnibus T-Scale for middle schools. The three factors of trust explain about 86% of the variance, and all the alpha coefficients of reliability are strong (.98 for trust in principal, .97 for trust in colleagues, and .98 for trust in clients).

DATA ANALYSIS

We turn to the descriptive statistics and intercorrelations among the variables of the study and then to a multivariate analysis of the relationships.

TABLE 2
Factor Analysis of the 20-Item School Mindfulness Scale (M-Scale)

<i>Item</i>	<i>Principal Mindfulness</i>	<i>Faculty Mindfulness</i>
Principal		
The principal welcomes challenges from teachers.	.88	
When a crisis occurs, the principal deals with it so we can get back to teaching.	.81	
My principal negotiates faculty differences without destroying the diversity of opinions.	.83	
The principal of this school does not value the opinions of the teachers.	-.92	
My principal is an expert on teaching and learning.	.87	
My principal often jumps to conclusions.	-.75	
Teachers do not trust the principal enough to admit their mistakes.	-.87	
Mistakes are seen as important sources of information.	.56	
In times of crisis, it takes my principal too much time to effectively deal with the situation.	-.58	
My principal does not really know what is happening in most classrooms.	-.76	
Faculty		
When things don't go well, teachers bounce back quickly.		.77
Teachers in my building learn from their mistakes and change so they do not happen again.		.91
In this school, teachers welcome feedback about ways to improve.		.78
Teachers negotiate differences among each other without destroying the diversity of opinions.		.74
Too many teachers in my building give up when things go bad.		-.80
Teachers in this school value expertise more than authority.		.62
Most teachers in this building are reluctant to change.		-.55
Teachers in this school often jump to conclusions.		-.55
People in this school respect power more than knowledge.		-.64
In my building, teachers hide mistakes.		-.67
Cumulative variance	52.61	66.16
Alpha coefficient	.96	.93

NOTE: Numbers represent the factor loadings.

Descriptive Statistics and Intercorrelations

The descriptive statistics and intercorrelations between the major variables are summarized in Table 4. As expected, the two aspects of school mindfulness—principal and faculty—were significantly correlated with each other ($r = .59, p < .01$), which supported our decision to compute an overall measure of school mindfulness by combining principal and faculty

TABLE 3
Trust Factor Structure Compared to Hoy and Tschannen-Moran (2003)

<i>Item</i>	<i>Elementary School</i>	<i>High School</i>	<i>Current Middle School</i>
Trust in principal			
The teachers in this school have faith in the integrity of the principal.	.92	.92	.92
The principal in this school typically acts in the best interests of the teachers.	.94	.94	.92
The principal doesn't tell the teachers what is really going on.	-.89	-.84	-.79
Teachers in this school trust the principal.	.88	.97	.90
The principal of this school does not show concern for the teachers.	-.91	-.84	-.83
The teachers in this school are suspicious of most of the principal's actions.	-.86	-.91	-.89
Teachers in this school can rely on the principal.	.94	.97	.94
The principal in this school is competent in doing his or her job.	.92	.91	.92
Alpha coefficient	.98	.98	.98
Trust in colleagues			
Teachers in this school typically look out for each other.	.91	.83	.88
Teachers in this school trust each other.	.91	.74	.88
Even in difficult situations, teachers in this school can depend on each other.	.93	.79	.85
Teachers in this school have faith in the integrity of their colleagues.	.92	.73	.77
Teachers in this school are suspicious of each other.	-.89	-.66	-.64
Teachers in this school do their jobs well.	.71	.43	.57
When teachers in this school tell you something, you can believe it.	.84	.63	.67
Teachers in this school are open with each other.	.91	.74	.81
Alpha coefficient	.93	.93	.97
Trust in clients (students and parents)			
Teachers in this school trust their students.	.79	.72	.80
Students in this school can be counted on to do their work.	.90	.83	.84
Students in this school care about each other.	.89	.80	.84
Students here are secretive.	-.75	-.30	-.56
Teachers here believe that students are competent learners.	.75	.81	.82
Teachers can count on parental support.	.91	.82	.89
Teachers in this school believe what parents tell them.	.84	.72	.79
Teachers think that most of the parents do a good job.	.90	.90	.85
Parents in this school are reliable in their commitments.	.91	.81	.89
Teachers in this school trust the parents.	.89	.89	.83
Alpha coefficient	.94	.94	.97
Cumulative percentage of variance	a	a	85.66

NOTE: Numbers represent the factor loadings.
a. Not reported.

mindfulness. Also, as expected, the three aspects of faculty trust were significantly correlated with each other; faculty trust in clients was related to trust in principal ($r = .49, p < .01$) and trust in colleagues ($r = .78, p < .01$), and faculty trust in principal and in colleagues were related to each other ($r = .49, p < .01$).

As predicted, school mindfulness and aspects of faculty trust were strongly correlated with each other: $r = .67, p < .01$ for faculty trust in clients; $r = .90, p < .01$ for faculty trust in principal; and $r = .73, p < .01$ for faculty trust in colleagues. Faculty trust in principal was a very strong predictor of principal mindfulness ($r = .97, p < .01$), and faculty trust in colleagues was likewise a strong predictor of faculty mindfulness ($r = .90, p < .01$). Faculty trust in clients, however, was moderately related to principal mindfulness ($r = .49, p < .01$) but strongly related to faculty mindfulness ($r = .78, p < .01$).

Multiple Regression Analysis

We turn to multiple regression analysis to get a finer picture of the relationships. Multiple regression permits us to analyze the effect of all of the independent variables simultaneously on each dependent variable as well as the individual contribution that each makes controlling for all the others. Three regression analyses were performed; the set of three faculty trust variables was used to explain the variance in school mindfulness, principal mindfulness, and faculty mindfulness. Because our primary interest was on mindfulness, we selected the trust variables to predict mindfulness, even though we assumed that the relationship was reciprocal. Multiple regression analysis does not demonstrate causality; it shows the strength of the relationships (Pedhazur, 1982).

It is not surprising that the best predictor of faculty mindfulness is faculty trust in colleagues, which has a strong independent effect on faculty mindfulness ($\beta = .71, p < .01$); however, both faculty trust in clients and faculty trust in principals also have independent effects on faculty mindfulness ($\beta = .15, p < .05$ and $\beta = .17, p < .05$, respectively). Together, as expected, the three faculty trust variables explain a large and significant amount of the variance in faculty mindfulness ($R = .92$ with an adjusted $R^2 = .85, p < .01$).

In some contrast to the explanation of faculty mindfulness, but not unexpected, faculty trust in the principal is the strongest predictor of principal mindfulness ($\beta = .95, p < .01$); in fact, the other two faculty trust variables have no effect on principal mindfulness ($\beta = -.04, ns$ and $\beta = .08, ns$). More than 90% of the variance of principal mindfulness is explained by faculty trust in the principal.

TABLE 4
Means, Standard Deviations, Reliabilities, and Correlations

<i>Variable</i>	<i>M</i>	<i>SD</i>	<i>SM</i>	<i>PM</i>	<i>FM</i>	<i>TCl</i>	<i>TP</i>	<i>TCo</i>
School mindfulness (SM)	4.11	.44	.95 ^a					
Principal mindfulness (PM)	4.13	.59	.94*	.96 ^a				
Faculty mindfulness (FM)	4.09	.38	.84*	.59*	.93 ^a			
Trust in clients (TCl)	3.53	.62	.67*	.49*	.78*	.97 ^a		
Trust in principal (TP)	4.42	.73	.90*	.97*	.57*	.49*	.98 ^a	
Trust in colleagues (TCo)	4.46	.44	.73*	.50*	.90*	.78*	.47*	.97 ^a

a. Alpha coefficient of reliability.

* $p < .01$.

Overall school mindfulness is explained by faculty trust in the principal (beta = .72, $p < .01$) and faculty trust in colleagues (beta = .36, $p < .01$). The combined prediction of the faculty trust variables on school mindfulness was very strong ($R = .97$, adjusted $R^2 = .94$), with virtually all the variance explained by faculty trust in principal and colleagues. The results of the regression analyses are summarized in Table 5.

DISCUSSION

This inquiry focused on two constructs: school mindfulness and faculty trust. Our initial task was to examine the theoretical and empirical components of each. We did factor analyses of each measure to ensure that the factor structures were stable and consistent with both the theoretical underpinnings and empirical outcomes. The 20-item mindfulness measure (M-Scale) was consistent with earlier analyses (Hoy et al., 2004). School mindfulness was made up of two highly related concepts—principal mindfulness and faculty mindfulness—that combine to provide a good index of overall school mindfulness.

A factor analysis of the Omnibus T-Scale also supported the validity of faculty trust and the reliability of its measure. In fact, the factor structure was stable and the results demonstrated that the scale worked as well or better in this sample of middle schools than it did in samples of elementary and high schools. Both scales appear to be valid and reliable measures of the two constructs.

Next, we examined the interrelationships between the components of school mindfulness and the aspects of school trust. As expected, the correlations between the faculty trust variables and mindfulness variables were

TABLE 5
Multiple Regressions of Teacher, Principal,
and School Mindfulness on Dimensions of Trust

Variable	Standardized Beta		
	Faculty Mindfulness	Principal Mindfulness	School Mindfulness
Trust in clients	.15*	-.04	.04
Trust in colleagues	.71**	.08	.36**
Trust in principal	.17**	.95**	.72**
<i>R</i>	.92**	.97**	.97**
Adjusted <i>R</i> ²	.85**	.94**	.94**

NOTE: *N* = 75 schools.

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

strong. In fact, faculty trust in clients and faculty mindfulness shared 61% of the variance with each other, and the shared variance of faculty trust and principal mindfulness was even stronger (94%). Both of these findings supported our theoretical rationale that trust and mindfulness were inextricably related and were likely necessary conditions for each other.

The multiple regression analyses also supported this conclusion. Trust in clients had limited influence on mindfulness; in fact, only with respect to faculty mindfulness did it have a significant independent effect, that is, controlling for the influence of the other two types of faculty trust. Overall school mindfulness is best explained by both trust in colleagues and trust in the principal; together, they explain almost 94% of the shared variance. It seems unlikely that schools can be mindful without a school environment in which teachers trust the principal and each other. Faculty trust in the school principal is most important, but teachers' trusting each other is a strong complementary buttress for school mindfulness.

Are trust and mindfulness necessary conditions for each other? Our results provide a resounding yes to the question; trust and mindfulness go hand in hand. Faculty trust promotes school mindfulness and mindfulness reinforces trust. Both the theoretical and empirical underpinnings for this relationship are strong. Trust requires a group's willingness to be vulnerable to another party based on the confidence that the latter party will be benevolent, reliable, competent, honest, and open. These same characteristics of trust are necessary for school mindfulness. Recall, the prototype for organizational mindfulness was the high reliability organization; reliability is critical (Weick & Sutcliffe, 2001). Moreover, creating an atmosphere in which members, including leaders, are competent, open, honest, and benevolent is important. Trust is essential if errors are to be openly and honestly admitted

rather than hidden, if catching mistakes early is the objective rather than only celebrating success, and if mistakes are to be perceived as learning opportunities rather than times for censure. Openness, honesty, competence, reliability, and benevolence enable organizational members to be continuously attentive to small mistakes and multiple interpretations of events. A productive climate of rival explanations is possible only when competent individuals respect each other and are open and honest (Edmonson, 1999; Landau & Chisholm, 1995; Westrum, 1992). It seems axiomatic that trust is essential if the organization's objectives are focusing on mistakes, discussing them, learning from them, and engaging in successful problem solving. The results of the research clearly support this conclusion. In addition, when things go wrong and surprises occur, trust is critical in creating an organizational resilience to bounce back and work together with problem solving anchored in expertise regardless of rank or status. Theoretically and empirically, trust is necessary for school mindfulness and school mindfulness reinforces a culture of trust.

IMPLICATIONS

The significance of both trust and mindfulness in schools is indisputable. They are inextricably related, and both create a climate for success. Both have reliable and valid measures, which should encourage their research use in schools. The conceptualization and measure of mindfulness of schools is in its early stage. We invite other researchers to use and refine the concept. Qualitative case studies, for example, would be helpful in demonstrating specific examples of mindful and mindless behavior. The concept needs to be fleshed out.

Trust has already been linked to student achievement (Bryk & Schneider, 2002; Goddard, Tschannen-Moran, & Hoy, 2001; Hoy, Smith, & Sweetland, 2002), leadership success (Bennis, 1989; Zand, 1997), moral authority (Sergiovanni, 1992), and sound, healthy interpersonal relationships in schools (Hoy & Sabo, 1998). Organizational mindfulness has received much less attention (Hoy, 2002; Weick & Sutcliffe, 2001), yet the construct has the potential to make schools more productive workplaces. For example, consider the following sample of research questions:

- What structural properties foster mindfulness in organizations?
- How do organizational politics improve or distract from school mindfulness?
- What individual motivations enhance or hinder mindfulness?
- What climate properties promote mindfulness?

- To what extent is school mindfulness related to student achievement?
- What personality traits of principals promote and impede mindfulness?
- To what extent do mindful teachers promote mindful students?
- Is school mindfulness a necessary condition for effective school reform?

Mindfulness in schools warrants more attention and has strong potential to increase our understanding of effective school organizations. We suspect that positive school leadership is pivotal in promoting mindful and productive school operations.

Weick and Sutcliffe (2001) offer several practical suggestions for mindful leadership, some of which are particularly germane to schools and school leaders. Building on Weick and Sutcliffe (2001), here are a few recommendations for school leaders:

1. Restate goals as failures that must not occur; this will focus the lens of the organization more directly on unexpected events and reliability.
2. Create an awareness of vulnerabilities in the school. Teachers need to be aware of weaknesses so they are not surprised and overwhelmed by the unexpected.
3. Inculcate humility so educators are not blinded by successes. Although success is good, it can be damaging because it often ushers in complacency.
4. Welcome the bad day. None of us particularly likes bad days, yet they provide experiences inherently filled with learning opportunities.
5. Create a mistake-friendly learning atmosphere. Teachers and administrators need to be free to experiment, make mistakes, and learn from them.
6. Cultivate skepticism in the school. This might at first seem unproductive; skepticism, however, is the opposite of complacency. Skeptical teachers will make an effort to refute information, which in the end is a positive form of redundancy.
7. Reinvent the wheel periodically. Most of us do not want to reinvent the way we do things; however, each time a task is revisited, the process can be improved, and experiences since the last revisit are brought to bear on the process.
8. Embrace uncertainty. Uncertainty is a good sign that you are in touch with reality because there is little that is certain in school organizations.
9. Test your assumptions. It is easy to overestimate the accuracy of your information and expectations, so don't assume, test.
10. Encourage rival hypotheses. There are usually competing explanations for events. Encourage others to find and test them.

Mindful schools develop open and trusting relationships between administrators and teachers. Both faculty and principal mindfulness are important, but principal mindfulness is especially critical. Principals need to lead in mindful ways. By encouraging faculty to play with ideas, to create novelty in their classrooms, to feel safe to take reasonable risks, to experiment, and to be resilient, the principal can have profound effects on school mindfulness.

CONCLUSION

Mindfulness is a concept every school administrator should understand and practice, and a culture of trust seems necessary to achieve both the ends of understanding and practice. Mindfulness may seem like common sense and good practice, but it is much more. The focus on failure is an abrupt departure from common practice; the news of mistakes is typically not well received.

With the recent growth of high stakes tests, unfunded mandates from legislators, and a shrinking pool of resources, the five elements of mindfulness should aid administrators in their quest to improve teaching and learning. Educators who can implement novel ideas with a fresh perspective, who can take the old ways of doing things and reframe them to make them new, and who challenge others to search out the latent failures in the system will achieve higher levels of mindfulness. Although this study was not concerned with student achievement, a strong case can be made that mindful schools facilitate higher student achievement. Thus, the development and elaboration of school mindfulness should be seen as a beginning, not an end. Ultimately, designing schools to improve student learning is a continuing challenge, and school mindfulness seems an important piece of the puzzle.

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