OCB, Justice & Optimism: Social Constructs that Impact School Effectiveness

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Since The Coleman Report (1966), educators have been searching for school-level organizational factors that influence student achievement beyond the influences of socio-economic status (SES) and family background.

Increasing achievement standards under NCLB (2001) require educators to seek practical and pedagogical steps to improve student performance.

Several school-level organizational properties consistently have been shown to correlate with student achievement:

- Organizational citizenship behaviors
- Collective teacher efficacy
What the Research Tells Us
Haertel and Walberg (1993, 1997)

- Meta-analysis of more than 10,000 statistical findings on the significant influences on learning.

- Results: In general, direct influences have a greater impact on student learning than indirect ones. The key to improving student learning rests with what happens in the classroom.

- One exception - school culture/climate makes an important difference by providing a school context that reinforces important teaching and learning practices.

- Instructional leadership - principal works with teacher colleagues to improve instruction by providing a school climate and culture where change is linked to the best knowledge about student learning.
School Culture & Climate

two contemporary perspectives for examining the
distinctive character of schools

The behavior of a group cannot be predicted solely from an understanding of the personality of each of its members. Various social processes intervene... In the context of the school organization, we can detect a unique "culture" and "climate."
A Climate of Organizational Citizenship Behavior (OCB)

- The willingness of participants to exert effort beyond the formal obligations of their positions has long been recognized as an essential component of effective organizational performance.

- Organizationally beneficial behavior of workers that was not prescribed but occurred freely to help others achieve the task at hand (Bateman & Organ, 1983).

- Employees go beyond their formal job responsibilities and freely give of their time and energy without expectation of reward or recognition.
Organizational Citizenship Behavior (OCB)

- teaching is a complex activity that requires professional judgments; it cannot adequately be prescribed in teachers’ job descriptions or contracts.
- OCB describes voluntary and discretionary teacher behavior that exceeds the formal requirements of the job.
- empirical research on the dimensions of organizational citizenship behaviors has generated somewhat conflicting results (context specific)
- data supported a two-factor structure, (organizational and interpersonal) which underlies organizational citizenship behavior (Williams, 1988;
Organizational Citizenship Behavior in Schools

- Organ’s concept of organizational citizenship (Organ, 1988; Organ & Ryan, 1995) was developed and applied to public schools (DiPaola & Tschannen-Moran, 2001)

- departs from most of the earlier OCB research in that all aspects of OCB fold into a single integrated conception of citizenship: both benefits to the organization (helping the organization) and benefits to the individual (helping individuals) combine into a single, bipolar construct.
Organizational Citizenship Behavior in Schools

- Original OCBSS (15 items - DiPaola & Tschannen-Moran, 2001) refined

- Organizational Citizenship Behavior Scale (OCB) measures the citizenship behavior of the school faculty

- 12 Likert items with a 6-point scale in which the response choices range from strongly agree to strongly disagree (DiPaola & Hoy, 2003)
A Culture of Organizational Justice: A Study of Its Relationship to School Climate and Faculty Trust
Organizational Justice as a Mediator of School Climate & Faculty Trust
**Correlation Analysis of Organizational Justice and School Climate.**

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**p < .01**
Regression Analysis of Organizational Justice and School Climate

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R² = .64
Adjusted R² = .58
S.E. = .36
Correlation Analysis of Organizational Justice and Faculty Trust.

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* p < .05
Regression Analysis of Organizational Justice and Faculty Trust

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$R^2 = .66$

Adjusted $R^2 = .62$

S.E. = .35
Implications for Practice

• Principals must attend to procedural and interactional justice if they want to build trust and influence the climate of their schools.
Procedural Justice

- Consistency
- Accuracy
- Bias-suppression
- Correctability
- Representativeness
- Ethicality

Interactional Justice

- Dignity
- Respect
- Thorough explanations
- Timely feedback
- Causal accounts
Principals should:

- Treat everyone with dignity & respect
- Provide adequate explanations when outcomes are unfavorable
- Ensure that allocative procedures are consistent and accurate
- Include those affected by a decision in a decision-making process that is ethical, unbiased & allows corrections
A Culture of Academic Optimism:

Its Relationship to Organizational Citizenship Behaviors & Student Achievement
Academic Optimism: A Unified Construct

- Hoy and his colleagues (McGuigan, 2005) view collective efficacy, trust, and academic emphasis as three distinct dimensions of a singular construct of schools called academic optimism—an overall collective belief among teachers that students can, should, and will achieve academically.

- Collective teacher efficacy is the cognitive group dimension; faculty trust in students and parents is the affective, emotional dimension; and academic emphasis is the behavioral dimension that represents purposeful academic actions (Hoy, et. al., 2006).
Academic Optimism: What is it?

- Shared belief among faculty that faculty has the capacity to help students achieve (collective efficacy),
- students and parents can be trusted to cooperate with them in this endeavor (trust in student/parent), and
- academic achievement is important (academic press).  (McGuigan & Hoy, 2006)
Academic Optimism (AO)  
“Triadic Set of Interactions”

- Collective efficacy = cognitive
- Trust in students & parents = affective
- Academic press = behavioral

(Hoy, Tarter, & Woolfolk Hoy, 2007)
Recent studies of 146 elementary and 96 high schools found that academic optimism is a unitary construct attributable to differences in student achievement, even after controlling for students’ SES (Hoy, et. al., 2006).
Methodology – Sample Selection & Instrumentation

• Convenience sample of 1,218 full-time professional instructional staff from 36 public high schools serving grades 9-12.

• Surveys items measured each of the three dimensions of academic optimism and OCB in schools:
  • Collective teacher efficacy: 12-item CE short form (Goddard, 2002);
  • Academic emphasis: 8 items from OHI (Goddard, Hoy, et. al., 2000);
  • Faculty trust: 10-item measure from Omnibus Trust (Hoy & Tschannen-Moran, 2003);
  • OCB: 12-item OCBS (DiPaola & Hoy, 2005).

• Student achievement results: 2006-07 mean school scores for English 11: Reading, English 11: Writing, Biology, and United States History
• First Research Question: Is academic optimism a single, unified, characteristic of schools manifested through collective teacher efficacy, academic emphasis (press), and faculty trust in students and parents?

✓ Factor analysis confirms the unitary nature of the construct. Initial unrotated factor analysis found that all three dimensions of academic optimism loaded as a single principal factor (32% of variance).

✓ Rotational analysis further confirmed this unitary characteristic by identifying three distinct, primary components aligning with each of the three dimensions (35% of variance).
• First Research Question: Is academic optimism a single, unified, characteristic of schools manifested through collective teacher efficacy, academic emphasis (press), and faculty trust in students and parents?

✓ Correlational analysis confirms strong relationships among all three dimensions of the construct, even when controlling for SES:

- 1. Collective Teacher Efficacy \( r = .89^{**} \)
- 2. Academic Emphasis \( r = .84^{**} \)
- 3. Faculty Trust in Students and Parents

**p < .01
Second Research Question: Is there a relationship between academic optimism and student achievement?

Correlational analysis confirms strong relationships between academic optimism and all four achievement variables, even after controlling for SES:

1. Academic Optimism
   - .57**
   - .43**
   - .45**
   - .36*

2. Biology SOL
   - .44**
   - .61**
   - .56**

3. United States History SOL
   - .69**
   - .62**

4. English 11: Reading SOL
   - .88**

5. English 11: Writing SOL

*p<.05
**p<.01
Second Research Question: Is there a relationship between academic optimism and student achievement?

The dimensions of academic optimism also share strong relationships with student achievement:

- Collective Teacher Efficacy was the most significant predictive variable for Biology achievement ($r=.58^{**}$).
- Academic Emphasis was the most significant predictor of United States History ($r=.49^{**}$), English Reading ($r=.50^{**}$), and Writing achievement ($r=.42^{**}$).
- Faculty Trust in Students and Parents was the least significant predictor—and insignificant for English Writing achievement.

** $p<.01$
• Second Research Question: Is there a relationship between academic optimism and student achievement?

✓ Additional regression analyses found strong, independent effects for academic optimism on each achievement measure, even after factoring for student socioeconomic status.

✓ Academic Optimism had a stronger independent effect than SES for achievement in Biology ($R^2=.50^{**}$) and United States History ($R^2=.34^{**}$).

✓ For United States History achievement, academic optimism was the only significant predictive variable.
Second Research Question: Is there a relationship between academic optimism and student achievement?

Additional regression analyses for each of the three dimensions of academic optimism found strong, independent effects for collective teacher efficacy and academic emphasis, even after factoring for student socioeconomic status.

Similar to the correlational analysis, collective teacher efficacy had a stronger independent effect than SES for achievement in Biology (R² = .51**)

Similar to the correlational analysis, academic emphasis had a stronger independent effect than SES for achievement in United States History (R² = .35**) 

For English Reading (+12%**) and Writing (+8%*), academic emphasis was a secondary significant, independent, predictive variable behind SES.
**Third Research Question:** Is there a relationship between academic optimism and organizational citizenship behaviors (OCB) in schools?

Correlational analysis confirms strong relationships between OCB, academic optimism (unitary), and its three component dimensions, even after controlling for SES:

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<td>5. Faculty Trust in Students and Parents</td>
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**p < .01

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Regression analyses were performed that included OCB, academic optimism, SES, and the four achievement variables.

Initial regression results found that OCB had no significant relationship with any of the achievement variables. For reading and writing achievement, the effect even was slightly negative.

Subsequent regression analyses (with academic optimism removed) found that OCB did have significant, positive, independent effects on Biology, United States History, and English Reading; however, it had no effect on English Writing.

Academic optimism appears to mask the effects of OCB.
Researchers have long sought to identify organizational variables that contribute to achievement beyond the effects of SES (Tarter, Hoy, & Woolfolk-Hoy, 2006; McGuigan & Hoy, 2005). A number of such school-level variables have been identified, and one such variable—academic optimism—appears to be a robust force for student achievement.

Although SES consistently demonstrated a negative relationship with nearly all achievement variables, school-level optimism for achievement was a stronger predictor of Biology and U.S. History achievement than even SES.
Academic optimism characterizes teachers’ cognitive, affective, and behavioral perceptions about learning in their schools.

Aggressive academic focus and the concurrent effects of teacher and school appear to be more critical factors in student achievement in singular courses with distinct and time-specific learning objectives.

Higher achievement in reading and writing appears to be protracted as a cumulative development of skills, rather than achievement confined to a singular course.

Academic optimism harnesses teacher perceptions about knowledge, skills, ability (efficacy), and trust into teacher and school organizational behaviors (academic emphasis) that influence student learning.
How can school leaders engender academic optimism and OCB in schools?

Some strategies involve enhancing the component parts.
Collective Teacher Efficacy

- Develop and implement quality professional development programs that foster growth and mastery or vicarious experience (Bandura, 1989). Examples include: targeted instructional strategies and curriculum development; mentoring; peer coaching; professional release time; recognition of quality performance; etc.

- Model efficacious behaviors by structuring schools in ways that promote collegiality, shared responsibility, mastery, or vicarious experience.

- Lead by example—"loose grip with sensitive fingertips."

- These actions can encourage and reinforce desired teacher behaviors.
Academic Emphasis

- Establish opportunity to learn as the central focus of the school.
- Establish high achievement and behavioral goals for students and teachers.
- Review achievement data and channel assistance and resources wherever and whenever necessary.
- Recognize and celebrate hard work and exemplary performance.
- Balance high expectations with a reasonable, incremental approach to achievement.
● **Faculty Trust in Students and Parents**

- Communicate regularly and openly with students and parents.
- Establish channels of open professional dialogue with teachers.
- Build capacity for shared school leadership among teachers.
- Promote exemplary academic achievement of students—and professional achievement of teachers.
- Operate the school in ways that teachers see as enabling the work they do to help students.
• **Organizational Citizenship Behaviors**

✓ Promote and recognize examples of outstanding professional behavior.

✓ Model timeliness and respect for time by adhering to schedules and following through on requests.

✓ Model helpful behaviors. Be accessible and available for assistance.

✓ Promote organizational informality by establishing less-restrictive rules and hierarchies.
Hypotheses

• After controlling for SES, student achievement will be a function of academic optimism.

• Academic optimism will be a function of an open, healthy climate.
Results: Correlations

• Strong correlation between AO and Biology achievement and AO and History achievement

• Strong correlations among AO and community engagement and teacher professionalism, with CE having the strongest correlation
Results: Predictors

• AO a more significant predictor than SES on student achievement in Bio (59% of variance) and History (40% of variance in mean school scores)

• Other 3 dimensions of climate explained 51% of the variance on AO

• Community engagement was the strongest climate dimension to predict AO ($\beta = .60$, $p < .01$)
Path Model for the Development of Student Achievement

- **Community Engagement**
  - **Collective Efficacy**: $0.98$

- **Academic Optimism**
  - **Trust in Students & Parents**: $0.96$
  - **Academic Press**: $0.96$

- **Student Achievement**
  - **Socioeconomic Status**
  - $-0.37^* \text{(Bio)}$
  - $-0.31^* \text{(Hist)}$
  - $0.52^{**} \text{(Bio)}$
  - $0.44^{**} \text{(Hist)}$

- **Academic Achievement**
  - **Achievement**
  - $0.60$

The model indicates the relationships and correlations between the variables.
Conclusions

• In schools where there were high levels of community engagement, there tended to be high levels of AO, which in turn strongly predicted student achievement, controlling for SES

• Mobilizing the community and forming partnerships with schools can have a positive impact on student achievement
We Can’t Change the Socioeconomic Status of our Students, BUT Working Together, Teachers and Principals Can Improve the Contextual Elements that Have a Significant Relationship to Engagement and Student Achievement:

- A Culture of Efficacy, Trust, Justice and Academic Optimism
- A Climate of Openness and Citizenship
“Insanity is doing the same thing over and over, and expecting to get different results.”

Albert Einstein