

Relationship between Mindfulness and Enabling School Structure in Secondary School Teachers of Punjab



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Abstract: This quantitative research was undertaken with the purpose to explore the relationship between enabling school structure (ESS) and mindfulness in secondary school teachers of Punjab. The population for this research study was comprised of 48652 SSTs working in 662 government high schools spread across the province of Punjab. Using a two-stage random sampling technique, 1266 secondary SSTs were selected from 216 government high schools out of 18 districts. The response rate was 74.47%. Form-ESS and M-Scale were adapted with prior permission. A pilot study was conducted to confirm the validity as well as reliability of the instrument. Necessary changes were made in the light of pilot testing. It was correlational research, and data were collected through a cross-sectional survey. Descriptive and inferential statistics were employed to analyze the data. Perceptions of teachers were also aggregated at the school level. A positive relationship was observed between enabling school structure and mindfulness.

Key Words: Enabling Structures, Coercive Structures, Enabling School Structure, Faculty Mindfulness, Principal Mindfulness, Mindfulness

Introduction

Schools work as organizations with a hierarchy of authority which might be unsupportive to the requirements of the individuals in the organization. Weber contended that a bureaucratic organization is equipped for delivering the best level of efficiency while bureaucracies are frequently defamed as rigid structures that strangle innovation and exploit employees. It is regularly associated with inflexible rules, policies, and procedures. Schools can be planned with procedures and structures that help instead of hinder ([Hoy & Miskel, 2013](#); [Kensler, 2010](#)).

Inside each organization, there are mindful leaders and employees. Individuals may rehearse mindfulness and challenge old perspectives. In schools, headteachers and teachers practice mindfulness when they substitute their judgment for day-to-day reactions. Mindfulness entails flexibility and openness. It is practised by headteachers and teachers when they obey senseless orders and turn into mindful when they stand by their decisions for routine reactions ([Weick & Sutcliffe, 2007](#)).

Structures that are enabling might be mindless as they encourage inappropriate behaviors and practices. Mindfulness may be the remedy for amending

inappropriate goals and behaviors. Mindfulness makes every effort to monitor the activities, even the minute details and deviations. It inspires questions and openness. In mindful structures, inapt goals are targeted are identified to change. Structures can enable inappropriate things, but mindful structures continuously check their functioning for self-correction for errant ways ([Hoy, 2004](#)).

Centralization in ESS is the hierarchical authority that helps rather than hinders. In ESS, leaders, as well as teachers, work in a cooperative way while holding their particular jobs. ESS enables teachers to make decisions unafraid of reprisal from the head. This suggests behavioral conduct that depicts as mindful. ESS has a significant impact on school organizations. The repercussion for school administrators is to endeavor and implement ESS. The structure does not require being oppressive or authoritarian. They can be facilitating and encouraging ([Hoy & Sweetland, 2001](#); [Weick & Sutcliffe, 2001](#)).

ESS nurtures openness, flexibility, and cooperation to tackle problems. Coercive structure cultivates rigidity ([Hoy & Sweetland, 2000](#)). Mindfulness is portrayed by adaptability and flexibility ([Hoy et al., 2006](#); [Weick & Sutcliffe, 2001](#)).

Researchers pose that the subtleties of ESS are characterized by mindful conduct. Many researchers suggest a link between ESS and mindfulness ([Hoy & Sweetland, 2000](#); [Hoy & Miskel, 2013](#); [Sinden et al., 2004](#)). Some other researchers are also of the same view ([Bryk & Schneider, 2002](#); [Sweetland, 2001](#); [Hoy, 2002](#)).

Inflexible structures are not conducive to mindfulness. Structures can empower inappropriate things; however, mindful structures have constant procedures of filtering and checking. The success of schools relies on some organizational attributes. Research keeps on investigating these attributes to further characterize the relationship and their association with the effectiveness and performance of the schools. These are at the front line of educational research.

A review of the literature ([Beard et al., 2008](#)) on educational institutions and particularly schools uncovers research studies that report a strong significant link between ESS and mindfulness. In this way, the fundamental research problem is whether a relationship exists between these three variables. All recently led research studies on the phenomenon have been in countries other than Pakistan. The setting of Pakistani secondary schools varies from that of other countries. Along these lines, the question arises whether the amount of relationship between these variables in the context of government high schools in Pakistan is of comparable outcomes and consistent with other research studies? Bringing issues to light, this research study aims to investigate the relationship between ESS and mindfulness in secondary school teachers.

Methodology

Quantitative research was the chosen method of investigation because the relationship between the constructs was explored. The variables were measured through cross-sectional surveys specifically designed for each construct. A positivist research paradigm was the chosen method of investigation. For this research study, the correlational research design is considered appropriate because the relationship between the variables

Population and Sampling

Secondary school teachers (SSTs) of Government High Schools employed in the School Education Department, Government of Punjab were the

population of this research study. Total 48652 SSTs are working in 6662 government high schools, which spread across the 36 districts of Punjab province. The researcher selected 18 districts (50%) from 36 districts of Punjab province using the random sampling technique (lottery method). Twelve high schools (six boys and six girls) were selected from each selected district using the table of random numbers. Each government high school was regarded as the cluster, and all the teachers working therein were part of the cluster. In this way, 216 government high schools were selected.

Instrumentation

The researcher adapted Form-ESS and M-Scale with prior permission taken via email.

Form-ESS was used to measure the perception of SSTs regarding ESS. The scale was developed by [Hoy and Sweetland \(2001\)](#). Form-ESS was used to measure the degree to which a school structure is enabling or hindering. It portrays school structure on a spectrum from hindering to enabling. It is a 12-item, Likert-type scale that ranged from Never (coded as 1) to Always (coded as 5). A high score on the 12-item scale indicates an enabling structure, whereas a low score on the scale indicates a hindering structure.

The scale is reported on 14-items by the faculty. The scale reflects faculty collective perception regarding the behavior of the principal as well as of the faculty on mindfulness. It was developed by [Hoy et al. \(2004\)](#). Scales including seven items each measure both aspects of school mindfulness. The scale ranged from Strongly Disagree (coded as 1) to Strongly Agree (coded as 6). The higher the score, the more mindful the school is. The scaled pilot tested to confirm validity through a panel of experts and field testing. To validate the instrument, it was discussed with three experienced secondary school teachers and three heads of government high schools, as well as three university teachers. Each of the measures was found to be reliable, according to the alpha coefficients, with ESS at .826 and M-Scale at .871.

Data Collection and Analysis

The units of measure for the data analysis of this study were considered as the teachers and the schools. Responses would be kept confidential, and the instruction regarding rating the statements was part of the instrument. This study posed no risk, and the results were kept confidential. An approximate

response rate of 74.47 % was obtained after receiving 1266 of 1700 distributed among teachers from 18 districts. The first phase in the process of analysis is to test assumptions. Analyses were conducted on the total of individual responses as well as on the total of individual responses by school means. Descriptive and

inferential statistics were applied to the data. The study was limited in the sense that it was cross-sectional. Another limitation addresses the generalizability of the results. Due to varying demographics, the results may not be generalizable to other provinces or other regions of Pakistan.

Descriptive Statistics

Table 1. Item Wise Mean and Standard Deviation of Form-ESS

Subscales	M	SD
Enabling Structure (ES)		
1 Rules enable communication between teachers and administrators	3.60	1.13
3 Administration enables teachers in their job	3.80	1.10
5 Administrative rules help rather than hinder	3.56	1.14
6 Hierarchy facilitates the mission of this school	3.72	1.15
10 Administrative rules guides to solutions	3.54	1.12
12 Administrators use authority to enable teachers in their job	3.74	1.14
Coercive Structure (CE)		
2 Red tape (bureaucracy) is the problem	3.06	1.30
4 Administrative hierarchy obstructs students' achievement	3.13	1.33
7 Administrative rules are used to punish teachers	2.73	1.42
8 Administrative hierarchy obstructs innovation	2.94	1.33
9 Administrative rules are substitutes for professional judgment	3.28	1.16
11 Authority is used to undermine teachers	3.02	1.30

Table 2. Item Wise Mean and Standard Deviation of M-Scale

Items	M	SD
Faculty Mindfulness (FM)		
1 Headteacher often jumps to conclusions	3.85	1.49
2 In a crisis the, headteacher deals with it	4.36	1.24
4 Teachers do not trust the headteacher to admit the mistakes	3.61	1.25
5 Headteacher does not value the opinions of the teachers	3.33	1.53
6 Headteacher is an expert on teaching and learning	4.25	1.37
10 Headteacher negotiates faculty differences	4.02	.99
12 Headteacher welcomes challenges from teachers	4.07	1.33
Principal Mindfulness (PM)		
3 Teachers welcome feedback about ways to improve	4.21	1.31
7 Teachers jump to conclusions	3.91	1.44
8 People respect power more than knowledge	3.71	1.57
9 Teachers learn from mistakes and change	4.18	1.37
11 Teachers give up when things go bad	3.66	1.44
13 When things go badly, teachers bounce back quickly	4.11	1.29
14 Most teachers in this school are reluctant to change	3.75	1.49

Psychometric Properties of Form-Enabling School Structure (Form-ESS)

Table 3. Psychometric Properties of Form-ESS (Teachers Wise)

Variable	N	M	SD	MPI	Range		Skewness	Kurtosis
					Potential	Actual		
ES	1266	21.96	4.22	3.66	06-30	07-30	-.413	.140

Variable	N	M	SD	MPI	Range		Skewness	Kurtosis
					Potential	Actual		
CS	1266	17.84	4.42	2.97	06-30	07-30	.98	-.231
ESS	1266	39.79	6.42	3.32	12-60	16-58	.147	.065

Table 3 presents the description of Form Enabling School Structure (Form-ESS) on the basis of individual teacher responses. It also takes into account the subscales of Form-ESS, i.e. scales enabling structure (ES) and coercive structure (CS). The responses of Form-ESS ranged from 16 to 58 with an average of 39.79 ($SD=6.42$). The responses of ES ranged from 07 to 30 with an average of 21.96 and a standard deviation of 4.22. Table 4.2 indicates that teachers have the highest mean value on Enabling Structure ($M=21.96$, $SD=4.22$) which falls between the scale *Sometimes* marks (3) to *Fairly Often* (4). Whereas, Coercive

Structure (CS) has a lower mean value ($M=17.84$, $SD=4.42$) close to the scale mark *Sometimes* (3). Participants' overall mean score on Form-ESS is 21.96 ($SD = 6.42$), which is slightly above the scale mark *Sometimes* (3). Skewness and Kurtosis for the scale were also calculated. The above-given table indicates that all the fractions were conceived normally distributed because the values fall within the range of +1 and -1. Hence, the data is suitable for parametric testing. According to the rule of thumb, values within the range of +1 and -1 indicate that the data is normally distributed ([Westfall & Henning, 2013](#)).

Table 4. Psychometric Properties of Form-ESS (School Wise)

Variable	N	M	SD	Range		Skewness	Kurtosis
				Potential	Actual		
ES	216	3.67	.40	1-5	2.29-4.75	-.207	.701
CS	216	3.02	.45	1-5	1.58-4.33	-.584	.159
Form-ESS	216	3.35	.27	1-5	2.58-4.04	-.018	.189

Table 4 presents the results of Form-ESS aggregated overall as well as for each component of Form-ESS. The actual range of scores was between 2.58 and 4.40, with possible scores were from 1 to 5. The mean scores were calculated by averaging the scores for all 12 Form-ESS items. Of the components of Enabling School Structure (ESS), ratings of Enabling Structure (ES) was 3.67 ($SD=.40$) and for Coercive Structure (CS) was 3.02 ($SD=.45$) respectively. The higher the overall school score reflects, the greater the school enabling structure. The range of scores is 1

(Never) as the lowest and 5 (Always) as the highest. The participants' overall mean score was 3.35 ($SD=.27$), marginally above the scale mark *Sometimes* (3), indicating that secondary school teachers ranked their opinion on Form-ESS as slightly above the middle range. Additionally, the normality of score distributions was measured using skewness and Kurtosis. All calculated values of skewness and Kurtosis were within the range of -1 to +1, which suggests that score distributions met normality ([Meyers et al., 2017](#)).

Psychometric Properties of Mindfulness Scale (M-Scale)

Table 5. Psychometric Properties of M-Scale (Teachers Wise)

Variable	N	M	SD	MPI	Range		Skewness	Kurtosis
					Potential	Actual		
FM	1266	27.48	4.42	3.93	7-42	9-41	-.211	.684
PM	1266	27.53	4.87	3.94	7-42	12-40	-.059	-.080
M	1266	55.01	7.99	3.93	14-84	28-78	-.022	.429

Table 5 presents a description of the Mindfulness Scale (M-Scale) based on individual teacher responses. It also takes into account the subscales, i.e. Faculty Mindfulness (FM) and Principal Mindfulness (PM).

The responses of M-Scale ranged from 28 to 78 with an average of 55.01 ($SD=7.99$). The responses of FM ranged from 09 to 41 with an average of 27.48 and a standard deviation of 4.42. Table 4.5 also indicates

that teachers have the highest mean value on PM ($M=27.53$, $SD=4.87$), which falls near then the scale marks *Somewhat Agree* (4). Whereas FM has a slightly lower mean value ($M=27.48$, $SD=4.42$) which is also closer to the scale marks *Somewhat Agree* (3). Participants' overall mean score on M-Scale is 55.01 ($SD=7.99$), which is close to the scale mark *Somewhat Agree* (4). Skewness and Kurtosis for the scale were also

calculated. The above-given table indicates that all the fractions were conceived normally distributed because the values fall within the range of +1 and -1. Hence, the data is suitable for parametric testing. According to the rule of thumb, values within the range of +1 and -1 indicate that the data is normally distributed (Westfall & Henning, 2013).

Table 6. Psychometric Properties of M-Scale (School Wise)

Variable	N	M	SD	Range		Skewness	Kurtosis
				Potential	Actual		
FM	216	3.92	.358	1-6	2.54-5.14	-.286	.092
PM	216	3.94	.388	1-6	2.77-5.07	-.020	.142
M	216	3.93	.334	1-6	2.66-5.11	-.151	.843

Table 6 presents the results of the Mindfulness Scale (M-Scale) aggregated overall as well as for each facet of the scale. The actual range of scores was between 2.66 to 5.11, with possible scores were from 1 to 6. The mean scores were calculated by averaging the scores for all 14 M-Scale items. Of the facets of the M-Scale, ratings of Principal Mindfulness (PM) were 3.94 ($SD=.388$) and for Faculty Mindfulness (FM) were 3.92 ($SD=0.358$), respectively. The higher the overall school score reflects, the greater the school mindfulness. The range of scores was 1 (Strongly

Disagree) as the lowest and 5 (Strongly Agree) as the highest. The participants' overall mean score was 3.93 ($SD=.334$), which is near to the scale mark *Somewhat Agree* (4), indicating that secondary school teachers ranked their opinion on M-Scale slightly above the middle range. Additionally, the normality of score distributions was measured using skewness and Kurtosis. All calculated values of skewness and Kurtosis were within the range of -1 to +1, which suggests that score distributions met normality (Meyers et al., 2017).

Relationship between Mindfulness and Enabling School Structure

Table 7. Relationship between Mindfulness and ESS (Teachers Wise)

Observed Variables	FM	PM	M	ES	CS
Faculty Mindfulness	--				
Principal Mindfulness	.51**	--			
Mindfulness	.88**	.85**	--		
Enabling Structure	.48**	.37**	.49**	--	
Coercive Structure	.11	.16	-.16	-.26*	--
Enabling School Structure	.58**	.33*	.53**	.40**	-.78**

Note. ** Correlation is significant at the .01 level (2-tailed) * Correlation is significant at the .05 level (2-tailed)

The first research question was, "Is there any relationship between mindfulness and enabling school structure?" Pearson product-moment correlation coefficient was run to answer the question. The data did not vary from normality and linearity. Hence, the assumptions were met. Table 4.17 contains the correlations between mindfulness and ESS. Twelve pairs of variables were found to be significantly correlated, keeping in view the guidelines suggested

by Cohen (1988). It can be seen that mindfulness and ESS had a positive correlation of 0.49 ($p<.05$). The positive correlation indicated that higher scores on mindfulness also tended to have higher ESS scores. The results of the correlation were significant, $r = .49$, $p<.05$, suggesting there was a moderate positive correlation between mindfulness and ESS as per the guidelines set by Cohen (1988). When mindfulness increased, ESS also tends to increase.

Table 8. Relationship between Mindfulness and ESS (Schools Wise)

Variables	FM	PM	M	ES	CS
Faculty Mindfulness	--				
Principal Mindfulness	.609**	--			
Mindfulness	.888**	.906**	--		
Enabling Structure	.391**	.225**	.340**	--	
Coercive Structure	.321**	.265**	-.325**	-.203**	--
Enabling School Structure	.559**	.389**	.525**	.572**	.687**

Note. ** Correlation is significant at the .01 level (2-tailed) * Correlation is significant at the .05 level (2-tailed)

Pearson correlation coefficient was computed to explore the possible relationship between mindfulness and ESS at the school level. Preliminary analysis ensured the variables to be normally distributed. Moreover, the assumption of linearity remained undisruptive. Fifteen pairs of variables were revealed to be significantly associated, keeping in view the guidelines suggested by Cohen (1988). The correlation between mindfulness and ESS was .525, indicating a strong positive correlation). This indicates that a relatively high level of mindfulness is likely to have a high ESS level.

Discussion

The perception of teachers regarding ESS portrays the structure of their school to be enabling. Researchers (Buluc, 2009; Erdogan, 2012; Wu et al., 2013; Hurt, 2015; Koster, 2016; McGuigan & Hoy, 2006; Messick, 2012; Ozer, 2010) explored similar findings like this study in their researches. Overall findings of this study support the present literature that exists regarding ESS (Anderson, 2012; Cerit, 2017; Geist, 2002; Mitchell et al., 2016). Although similarities exist between the findings of this study and the previous studies on ESS (Cerit, 2017; Gage, 2003; Gray, 2011; Marshall, 2013; Rhoads, 2009), yet there are some researches whose findings contradict with the present research Turner (2018) unveiled in his research that ESS of secondary schools is less enabling as compared to elementary schools. However, Hoy and Sweetland (2001) found this level equal. Contrarily, some other researchers (Cerit, 2012; Ozdemir & Kilinc, 2014) found their school structures having features of coercive structures. The possible reason behind such findings may be the attitude toward management and the way communication with teachers takes place. The use of power and authority can affect teachers' perceptions regarding ESS (Rhoads, 2009). In certain researches enabling structure (ES) subscale has a higher mean value than

the coercive structure (CS) subscale (Miller & Tjoe, 2009). Teachers were agreed with the idea that the structures of the schools are enabling on the basis of scores obtained from Form-ESS (Kalkan, 2016; Lennon, 2010).

Results in the study support the existence of mindfulness as well as the subscales of mindfulness. The results are parallel to the research on mindfulness conducted by Gage (2003) in Ohio State. Results regarding the subscales (principal mindfulness and faculty mindfulness) are in accordance with the findings of the previous researches like Steele (2008) reported similar results regarding principal mindfulness and faculty mindfulness. Kearney et al. (2013) also reported the magnitude of principal mindfulness elevated than faculty mindfulness. The same results are illustrated by many previous studies consistent with the literature (Gage, 2003; Steele, 2008; Youngs, 2018; Watts, 2009). The findings are also supported by the vast array of researchers (Gage, III, 2003; Gray, 2011; May 2016; Sims, 2011, Reb et al., 2018; Steele, 2008; Watts, 2009; Youngs, 2018).

This study revealed a positive relationship between mindfulness and ESS. A positive relationship indicates that higher scores on mindfulness tended to have higher ESS scores. The relationship between mindfulness and enabling structure (ES) is positive, while this relationship is negative with coercive structure (CS). This study unveiled a positive relationship between ESS and subscales of mindfulness which is also confirmed by literature (Gage, 2003; Tracy, 2007). Researchers (Hoy, 2003; Marshall, 2013; Messick, 2012; Watts, 2009) found that ESS helped develop mindfulness (Anderson, 2012).

Implications

Mindfulness appeared to have connections with ESS. This study might serve as confirmation that mindfulness is positively related to ESS (Gage, 2003; Marshall, 2013) which is backed by many research

studies ([Hoy, 2003](#); [Hoy & Sweetland, 2001](#); Hoy et al., 2004). Literature provides supports to these findings ([Gage, 2003](#); [Marshall, 2013](#); [Tracy, 2007](#)). Furthermore, this study makes an addition to the literature by exploring a positive association between the variables of research. This research study vitalizes the features in a school which eventually boost a positive school environment. Leadership in a school that endeavors to influence the change should seriously ponder the findings of this research as the source for developing positive characteristics. This study confirmed the positive relationship between Mindfulness and ESS. These are the organizational properties that promote effective teaching and learning. Paying attention to these organizational characteristics, school leaders can make apt decisions regarding the implementation and execution of the finest practices.

Recommendations

This research suggests encouraging self-reflection on the part of the leadership. Leadership might view

problems through the eyes of their subordinates to create a cooperative, collaborative, and helpful culture for teaching and learning. They may enquire regarding rules, regulations, and procedures which they observe to be obstructing teaching and learning and sincerely talk about the reasons. Leadership might maintain flexibility in interpreting and applying rules, regulations, and procedures. They might utilize different perspectives while taking decisions. They may encourage reflective discussion regarding potential problems that may arise. Leaders might share information and view failure as a means of improvement. It might generate trust and confidence among the faculty. Time spent with students and teachers might be the best gauge of school climate. The researcher comments that this research might be replicated in varied populations and geographic regions. Possibly other locations or areas might be fertile ground for future study. The researcher hopes that a more extensive sample size would yield more promising insights.

References

- Anderson, K. (2012). Examining relationships between enabling structures, academic optimism and student achievement (Order No. 1033785182) [Doctoral dissertation, Auburn University]. Pro Quest Dissertations & Theses Global.
- Beard, J. L. (2008). Why iron deficiency is important in infant development. *The Journal of Nutrition*, 138(12), 2534-2536.
- Bryk, A. S., & Schneider, B. (2002). Trust in schools: A core resource for improvement. Russell Sage Foundation.
- Buluc, B. (2009). The relationship between bureaucratic school structure and leadership styles of school principals in primary schools. *Education and Science*, 34(152), 1-15.
- Cerit, Y. (2012). The relationship between bureaucratic school structure and classroom teachers' professional behaviors. *Educational Administration: Theory and Practice*, 18(4), 497-521.
- Cerit, Y. (2017). The mediating effect of LMX in the relationship between school bureaucratic structure and teachers' proactive behavior. *Leadership & Organization Development Journal*, 38(6), 780-793.
- Erdogan, U. (2012). The relationship between the bureaucratic structures of elementary schools and organizational socialization levels of school teachers (Unpublished master's thesis). Inonu University.
- Gage, C. Q. (2003). The meaning and measure of school mindfulness: An exploratory analysis (Order No. 3119233) [Doctoral dissertation, Ohio State University]. Pro Quest Dissertations & Theses Global.
- Geist, J. R. (2002). Predictors of faculty trust in elementary schools: Enabling bureaucracy, teacher professionalism, and academic press (Order No. 3081919) [Doctoral dissertation, Ohio State University]. Pro Quest Dissertations & Theses Global.
- Gray, J. A. (2011). Professional learning communities and the role of enabling school structures and trust (Order No. 3478583) [Doctoral dissertation, University of Alabama]. Pro Quest Dissertations & Theses Global.
- Hord, S. (2004). Learning together leading together: Changing schools through professional learning communities. *Teachers College Press*.
- Hoy, A. W., Hoy, W. K., & Kurz, N. M. (2006). Teachers' academic optimism: The development and test of a new construct. *Teaching and Teacher Education*, 24(4), 821-835.
- Hoy, W. K. (2002). Faculty trust: A key to student achievement. *Journal of School Public Relations*, 23(2), 88-103.
- Hoy, W. K. (2004). An analysis of enabling and mindful school structure: Some theoretical, research and practical considerations. *Journal of Educational Administration*, 41(1), 87-108.
- Hoy, W. K., & Miskel, C. G. (2013). Educational administration: Theory, research, and practice (9th ed.). McGraw-Hill.
- Hoy, W. K., & Sweetland, S. (2000). School bureaucracies that work: Enabling, not coercive. *Journal of School Leadership*, 10(6), 525-541.
- Hoy, W. K., & Sweetland, S. (2001). Designing better schools: The meaning and measure of enabling school structures. *Educational Administration Quarterly*, 37(3), 296-321.
- Hoy, W. K., Gage, C. Q., & Tarter, C. J. (2004). Theoretical and empirical foundations of mindful schools. In W. K. Hoy, & C. G. Miskel (Eds.) *Educational organizations, policy and reform: Research and measurement* (pp. 305-335). Information Age Publishing.
- Hoy, W. (2012). School characteristics that make a difference for the achievement of all students. [*Journal of Educational Administration*, 50\(1\), 76-97.](#)
- Hurt, M. H. (2015). Investigating the intersection of school structure and teacher leadership: A mixed-methods study (Order No. 3710212) [Doctoral dissertation, Ohio State University]. Pro Quest Dissertations & Theses Global.
- Kalkan, F. (2016). Relationship between professional learning community, bureaucratic structure and organizational trust in primary education schools. *Educational Sciences: Theory and Practice*, 16(5), 1619-1637.
- Kearney, W. S., Kelsey, C., & Herrington, D. (2013). Mindful leaders in highly effective schools: A mixed-method application of Hoy's

- M-scale. *Educational Management Administration & Leadership*, 41(3), 316-325.
- Kensler, L. A. W. (2010). Designing democratic community. *International Journal of Urban Educational Leadership*, 4(1), 1-21.
- Koster, G. L. (2016). The relationship between school structure and collective student trust in teachers (Order No. 10190244) [Doctoral dissertation, Oklahoma State University]. Pro Quest Dissertations & Theses Global.
- Lennon, P. A. (2010). The relationship of bureaucratic structure to school climate: An exploratory factor analysis of construct validity (Order No. 3421862) [Doctoral dissertation, St. John's University]. Pro Quest Dissertations & Theses Global.
- Marshall, R. P. (2013). Teacher flow and its relationship to school mindfulness and enabling school structure (Order No. 3612112) [Doctoral dissertation, University of Alabama]. Pro Quest Dissertations & Theses Global.
- May, J. D. (2016). The effects of individual and school mindfulness on the academic optimism in schools in North Alabama (Order No. 10162705) Doctoral dissertation, University of Alabama]. Pro Quest Dissertations & Theses Global.
- Mc Guigan, L., & Hoy, W. K. (2006). Principal leadership: Creating a culture of academic optimism to improve achievement for all students. *Leadership and Policy in Schools*, 5(3), 203-229.
- Messick, P. P. (2012). Examining relationships among enabling school structures, academic optimism and organizational citizenship behaviors (Order No. 3520487) [Doctoral dissertation, Auburn University]. Pro Quest Dissertations & Theses Global.
- Meyers, L. S., Gamst, G., & Guarino, A. J. (2017). Applied multivariate research: Designs and interpretation (3rd ed.). SAGE Publications.
- Mitchell, R. M., Mendiola, B. J., Schumacker, R., & Lowery, X. (2016). Creating a school context of success: The role of enabling school structure & academic optimism in an urban elementary & middle school setting. *Journal of Educational Administration*, 54(6), 626-646.
- Mitchell, R., & Tarter, C. (2016). A path analysis of the effects of principal professional orientation towards leadership, professional teacher behavior, and school academic optimism on school reading achievement. *Societies*, 6(1), 5-9.
- Ozdemir, S., & Kiliç, C. (2014). The relationship between bureaucratic school structure and teachers' level of academic optimism. *Journal of Theory and Practice in Education*, 10(1), 1-23.
- Ozer, N. (2010). An investigation of primary schools in terms of organizational dynamism, bureaucracy and organizational norms (Unpublished doctoral dissertation). Inonu University.
- Reb, J., Chaturvedi, S., Narayanan, J., & Kudesia, R. S. (2018). Leader mindfulness and employee performance: A sequential mediation model of LMX quality, interpersonal justice, and employee stress. *Journal of Business Ethics*, 160(3), 745-763.
- Rhoads, D. H. (2009). Enabling structure and collective efficacy: A study of teacher perceptions in elementary divisions of American schools in Mexico (Unpublished doctoral dissertation). Seton Hall University.
- Sinden, J. E., Hoy, W. K., & Sweetland, S. R. (2004). An analysis of enabling school structure: Theoretical, empirical, and research considerations. *Journal of Educational Administration*, 42(4), 462-478.
- Steele, M. M. (2008). Leading high reliability schools: The effects of organizational mindfulness on collective efficacy (Order No. 3337156) [Doctoral dissertation, University of Texas]. Pro Quest Dissertations & Theses Global.
- Tracy, J. C. (2007). Mindfulness and enabling structure as predictors of school effectiveness (Order No. 3252948) [Doctoral dissertation, St. John's University]. Pro Quest Dissertations & Theses Global.
- Turner, V. (2018). Dramas, fields, and metaphors: Symbolic action in human society. Cornell University Press.
- Watts, D. M. (2009). Enabling school structure, mindfulness, and teacher empowerment: Test of a theory (Order No. 3390602) [Doctoral dissertation, University of Alabama]. Pro Quest Dissertations & Theses Global.
- Weick, K. E., & Sutcliffe, K. M. (2001). Managing the unexpected. Jossey-Bass.

- Weick, K. E., & Sutcliffe, K. M. (2007). Managing the unexpected: Resilient performance in an age of uncertainty (2nd ed.). Jossey-Bass.
- Westfall, P. H., & Henning, K. S. (2013). Understanding advanced statistical methods (p. 543). CRC Press.
- Wu, J. H., Hoy, W. K., & Tarter, C. J. (2013). Enabling school structure, collective responsibility, and a culture of academic optimism. *Journal of Educational Administration*.
- Youngs, C. E. (2018). Organizational mindfulness and mindful organizing in effective high schools: A mixed-methods study of department leaders' perceptions (Order No. 10936519) [Doctoral dissertation, Point Park University]. Pro Quest Dissertations & Theses Global.