ELEMENTARY AND MIDDLE SCHOOL TEACHERS' PERCEPTIONS OF INSTRUCTIONAL TIME: IMPLICATIONS FOR SCHOOL ADMINISTRATORS

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ABSTRACT

Federal and state laws rely on multiple indicators to measure and improve student performance. However, inadequate attention has been directed at school climate as a means to improve student academic achievement even though there is a diverse body of research linking school climate to student achievement and academic performance. The specific purpose of this study is to examine elementary and middle school teachers' perceptions of the school climate dimensions of instructional time in an urban school district. Results indicated that while teacher groups purported an effective use of instructional time to collaborate, meet the needs of students, and non-instructional time, both groups of teachers feel that in order to optimize their time, more efforts should be made to minimize the required paperwork.

Keywords: Instructional Time, School Climate, Administrators.

INTRODUCTION

Inequalities in education exist, especially in urban schools, from the textbooks provided to the teacher qualifications, which in turn, ultimately affect the quality of education that inner-city children are receiving (General Accounting Office, 1995; Lewis, 2000). Socio-economic class segregates neighborhoods and the indigent population often lacks the same educational opportunities as the suburban population. The majority of American urban schools are in poor physical condition, and nearly one-quarter are overcrowded, pressuring school systems to invest in both improving existing facilities and adding new facilities to accommodate growing student enrollments (GAO, 1995; Lewis, 2000). The disproportion in construction spending across the nation is consistent with national studies showing that during the 1990s, schools serving high proportions of low-income and minority students are more likely to have inadequate facilities (GAO, 1995). In addition to the many challenges plaguing urban, low-income, high-risk schools and students, several factors can have a positive impact on urban education and level the field for improving student achievement. One of the most critical is time. Teachers need time to meet the needs of all students (Emerick, Hirsch, & Barry, 2005). They need time to adequately plan, collaborate with colleagues, attend professional development workshops, and time to physically rest. The crisis in urban schools and the achievement gap between upper-income and lower-income students is a monumental problem facing school districts all across the country (Education Report, 2011). Too few students are graduating from public schools prepared for college or a career. The nation's commitment to provide a free and public education in order to prepare children to participate in social equality is not living up to the promise.

Theoretical Framework

The theoretical foundation for this study draws on theories from psychological research on motivation, more specifically, Frederick Herzberg, (1959) Two-Factor Theory of Motivation and Bernard Weiner's (1974) Attribution Theory Framework. The theories of motivation

explain the behaviors and attitudes of employees, and aid this researcher in developing the foundation for this study (Rowley, 1996). Herzberg's (1959) theory serve as the primary theory for this study and provide context for the various factors that lead to teacher's job satisfaction and dissatisfaction. Weiner's (1974) theory provides the foundation for initial discussions on how to approach behavior modifications to offset the impact of teachers' adverse perceptions of school climate on student achievement. These theoretical frameworks clarify and guide the research as well as unify the data on the specific dimensions of school climate and teacher's perceptions.

LITERATURE REVIEW

Urban School Climate

Durket (2009) describes urban education as poorly funded with low achieving schools whose population is of low economic status. Considering Weiner's (1980) theory of attribution premise, teacher's use of instructional time, resource availability, and the facilities in which they work may attribute directly to the student academic deficiencies. Unfortunately, children, especially those from low socio-economic status that attend schools in less desirable school environments, tend to have poor academic results on standardized tests. Such concern over student success has led to an overwhelming teacher turnover rate. For example, the National Commission on Teaching & America's Future (NCTAF, 2014) commentary on teacher attrition highlights a spiraling condition of teacher turnover, particularly amongst new teachers in the profession. The commentary mentions a 2010 study conducted by NCTAF warning of the turn-over rate of novice teachers. The findings of this study (as indicated in NCTAF, 2014) state that large teacher turn-over rates result from a lack of support. Hence, the commentary explains, "New teachers find themselves working in "sink or swim" environments where they cannot find the structures or support needed to succeed in the classroom" (para. 3). As stated in Herzberg Motivation-Hygiene Theory (1959), a core hygiene factor (dissatisfier) is working conditions. With that in mind, it is understandable that teachers are less likely to remain employed in such working conditions. Not to mention that, Weiner's belief about perceptions could also attribute to the low employability of such school, in that such working conditions may not provide teachers with the resources that precipitates the gratification that can lead to a positive self image about self and the work place. The commentary explains, "The problem is clear – challenging teaching conditions and lack of professional and administrative support are driving new teachers out of the profession" (NCTAF, 2014, para. 3). These conditions within a school's climate present challenges to educators responsible for teaching students and increase the awareness for a national paradigm shift of school reform (Council of the Great City Schools 1992, p. 8).

Carnegie Foundation for the Advancement of Teaching (1988) reported that students who attend urban schools tend to have low student achievement, high dropout rates, and high unemployment. The report also stated that students who live in poverty are likely to attend schools with a high student mobility rate and high teacher turnover. There is clear evidence that the students do not perform well under these conditions. There are multiple examples of schools that achieve outstanding academic results in urban areas. In such examples, there may be motivators as described by Herzberg (1959) and /or perceptions of success as explained by Weiner (1980) that drive the efforts of the educators within the urban schools that have performed against the odds. One example is Forest Hills High School, in Jackson, Mississippi. Forest Hills High School serves a school population that is 90% African-American, of which 60% are eligible for free and reduced lunch. Forest Hills High School has no significant disparity in achievement scores between white and minority students nor does it have any large

disparity between low-income and high income student populations; both of which are driving factors in national educational reform movements. The school is committed to high student expectations. High expectations include rigorous and strict professional development plans set for teachers. These professional development plans include reflective teaching, continuous analysis of student progress, and peer review. In this school, professional development has led to teachers accepting responsibility for their students' achievement and learning. Forest Hills High School has created a positive, affective environment for students, inclusive of parental involvement.

Forest Hills High Schools is not the only urban school making a difference. Miami-Dade School District attacked the problem of poor test scores among urban students with a focused program in 39 schools in their district. Schools in the Zone (underachieving schools) were identified by three years of poor academic achievement, lower performance with feeder elementary, middle and secondary schools, and schools identified with leadership issues (McFadden 2009). The Zone Schools implemented extended reading and math periods, small-group instruction and intervention, and an extended school day by an hour and school year extended by two weeks. These initiatives included mandated reading, writing, mathematics, and science programs, bi-weekly and monthly assessments, intensive professional development for leadership, and increased staffing of support staff such as co-principals, and more curriculum specialists. The program was intensive and dramatically increased elementary performance on the third grade tests. The exemplar report of Miami-Dade's effort to overcome negative overshadowing views of urban education gives educators and stakeholders promise of educating youth in low-income environments.

In these examples, strategic and drastic changes to the schools' climate such as the implementation of new district-wide initiatives, adjusted instructional time, and enhanced professional development for teachers improved achievement for all students. Additionally, these examples support the Attribution Theory and the Motivation/Hygiene Theory, in that, teachers in low-income schools can improve student achievement when perceptions are changed and job dissatisfiers are addressed.

Instructional Time

The Department of Education for individual states sets requirements for instructional time for core content areas. In as much, United States Department of Education Secretary, Arne Duncan, made extended learning time a national term in education; this learning time is one of the main strategies that is being used across the nation to improve student achievement (Wolfe, 2009). Prater (1992) defines instructional time as time in which students participate in an approved courses, curriculum, or education- related activity under the direction of a teacher. In order to be effective, teachers must have ample instructional time to meet the needs of all students. Hollowood, Salisbury, Rainforth, &Palombaro (1995) studied time and reported that a limited portion of allocated time should be used for instruction and reported that 50% to 60% of allocated time is used. The concept of instructional time is best examined by Berliner. Berliner (1990) reported that time has many different classifications. However, it is this idea of instructional time that captures its description. Mosteller (1995) indicated a major complaint of teachers was the lack of time teachers spent meeting the needs of all students at various ability levels. He also reported that the teachers felt that students with disabilities needed extra attention to meet the goal identified in the students' Individualized Education Plans (IEP). Many of the student individualized plans require extra time to complete assignments or read aloud accommodations that cannot properly be met when classes exceed expected numbers. In

such cases, students may benefit from small group instruction; but teachers have a difficult time providing small group instruction. Partin (2009), who studied classroom interruptions, reported that an interruption is created when someone or some event causes you to stop an activity; at least temporarily. When considering interruptions, most teachers think of external intrusions such as visitors, messengers, intercom announcements, or fire drills, but some interruptions are self-imposed. According to the Association of Middle Level Education (AMLE, 2011), a middle school in a large urban district in the midwestern region of the United States analyzed the amount of instructional time and found that teachers were only teaching about 20 minutes of the 50-minute block. Indeed, instructional time is essential to the effectiveness of the teaching and learning process (Prater, 1992). Although there are multiple variables that can impact the instructional time within a school day, teachers tend to use the lack thereof as a factor for not meeting the needs of students. Overall, instructional time remains a key aspect addressed in the literature that impacts a school's climate as it relates to the teacher's perceptions of their working conditions.

The purpose of this study was to examine teachers' perceptions of instructional time in an urban school district. The study adds to the research on school climate as it pertains to the understudied indices of instructional time and levels of access to instructional resources within schools. School leaders may benefit from the study by ensuring that all school climate elements are provided and nurtured to improve the academic achievement of students. In addition, college leadership departments that have principal preparation programs can use the study findings to improve student's knowledge of the role of school climate, instructional time, in improving student academic achievement. Therefore, this study is guided by the following research questions:

1. How do urban elementary teachers perceive the use of instructional time at their schools and do these perceptions differ by school type?
2. How do urban middle schools teachers perceive the use of instructional time at their schools and do these perceptions differ by school type?
3. What differences are observed between urban elementary and middle teachers' perceptions of their use of instructional time?

METHODOLOGY

The researchers submitted three questions to be answered by this study. In order to answer the research, this study used a quantitative methodology that facilitates an analysis of the variables in the study. The researchers determined that a non-experimental approach utilizing descriptive and correlational statistics would be the most appropriate for a secondary data analysis study. The survey for this study is the MET (Measures of Effective Teaching) Working Conditions Survey (New Teacher Center, 2009). The MET Working Conditions Survey analyses presented are based on the responses to a survey instrument that was based on the North Carolina Teacher Working Conditions Survey (Hirsch & Church, 2009), but customized to Tennessee. For this study, the construct of Instructional Time was analyzed.

Population and Sample

Schools in this study were elementary and middle schools, all located in a large district in the Southeastern United States that was selected based on the grade configuration. The total enrollment for the large urban district was 102, 798 students in 2009 school year. The teacher sample for this study consisted of only elementary and middle school teachers as displayed in

Table 1. The MET (Measures of Effective Teaching) Working Conditions Survey was administered to 5007 respondents at 206 district "sites" (Swanlund, 2011).

Table 1: Demographic Characteristics of Teacher Respondents to the 2010 Administration of the Measures of Effective Teaching Working Conditions Survey (n = 3453)

Group	Elem (n = 2565) %	Middle (n = 888) %
Total Years Employed as an Educator		
First Year	3.0	7.0
2 to 3 Years	6.9	12.2
4 to 6 Years	9.2	17.6
7 to 10 Years	18.6	17.7
11 to 20 Years	33.1	25.8
20 + Years	29.0	19.5
Not Answered	0.2	0.3

Data Analysis

A descriptive analysis was performed on the sample group to obtain a clear understanding of the group. Measures of central tendency and distribution were conducted. Researchers determine means, medians, and percentiles based on the data input. Standard deviations were determined during data analysis and reported as well. This quantitative study utilized correlation analysis to analyze the data. In the correlation analysis, researchers were able to determine the strength of the relationships between instructional time and student achievement. The results of the analysis procedures were interpreted and evaluated for implications.

RESULTS

Frequencies and percentages were obtained for each of seven "time-related" items on the MET/Working Conditions Survey for all elementary school teacher respondents (Table 2) and middle school teacher respondents (Table 3). Complementing these two tables of frequencies and percentages are two additional tables in which means and standard deviations were computed and compared for subgroups of elementary and middle school teachers given the responses of individuals as the unit of analysis (Table 4) and responses aggregated to the school- or faculty-level as the unit of analysis (Table 5). With all of these responses pertinent to some aspect of the time invested in improving a climate of academic achievement in schools, these seven "time-related" items read as follows:

1. Class sizes are reasonable such that teachers have the time available to meet the needs of all students.
2. Teachers have time available to collaborate with colleagues.
3. Teachers are allowed to focus on educating students with minimal interruptions.
4. The non-instructional time provided for teachers in my school is sufficient.
5. Efforts are made to minimize the amount of routine paperwork to do.
6. Teachers have sufficient instructional time to meet the needs of all students.
7. Teachers are protected from duties that interfere with their essential role of educating students.

Research Question 1: *How do urban elementary school teachers perceive the use of instructional time at their schools and do these perceptions differ by school type?*

Table 2: Frequencies and Percentages for Time-Related Items: Elementary Level Respondents

Item	Strongly Disagree		Disagree		Agree		Strongly Agree		NA	
	n	*%*	*N*	*%*	*N*	*%*	*n*	*%*	*n*	*%*
Class sizes are reasonable such that teachers have the time available to meet the needs of all students.	357	12.9	805	29.1	1194	43.2	390	14.1	19	0.7
Teachers have time available to collaborate with colleagues.	194	7.0	520	18.8	1450	52.4	531	19.2	70	2.5
Teachers are allowed to focus on educating students with minimal interruptions.	311	11.2	824	29.8	1212	43.8	354	12.8	64	2.3
The non-instructional time provided for teachers in my school is sufficient.	317	11.5	878	31.8	1211	43.8	290	10.5	69	2.5
Efforts are made to minimize the amount of routine paperwork teachers are required to do.	640	23.1	998	36.1	859	31.1	197	7.1	71	2.6
Teachers have sufficient instructional time to meet the needs of all students.	284	10.3	940	34.0	1227	44.4	250	9.0	64	2.3
Teachers are protected from duties that interfere with their essential role of educating students.	321	11.6	725	26.2	1333	48.2	326	11.8	60	2.2

Table 2 displays the frequencies and percentages of time-related items for elementary teachers. Inspection of the percentages of agreement and strong agreement for these items reveal that only with respect to efforts to reduce paperwork do less than a majority of elementary teachers view the use of time as less than optimal (38.2%) At the other extreme, some 71.6% of the respondents agree that time is available for elementary school teachers to collaborate with

colleagues, while 60% of the respondents feel protected from duties that interfere with their role of educating students.

Research Question 2: *How do urban middle school teachers perceive the use of instructional time at their schools and do these perceptions differ by school type?*

Table 3: Frequencies and Percentages for Time-Related Items: Middle Level Respondents

Item	Strongly Disagree		Disagree		Agree		Strongly Agree		NA	
	n	*%*	*N*	*%*	*n*	*%*	*n*	*%*	*n*	*%*
Class sizes are reasonable such that teachers have the time available to meet the needs of all students.	155	17.5	287	32.3	311	35.0	129	14.5	7	0.8
Teachers have time available to collaborate with colleagues.	71	8.0	166	18.7	481	54.2	154	17.3	16	1.8
Teachers are allowed to focus on educating students with minimal interruptions.	138	15.5	283	31.9	344	38.7	108	12.2	15	1.7
The non-instructional time provided for teachers in my school is sufficient.	97	10.9	238	26.8	436	49.1	99	11.1	18	2.0
Efforts are made to minimize the amount of routine paperwork teachers are required to do.	200	22.5	286	32.2	310	34.9	72	8.1	20	2.3
Teachers have sufficient instructional time to meet the needs of all students.	87	9.8	274	30.9	402	45.3	108	12.2	17	1.9
Teachers are protected from duties that interfere with their essential role of educating students.	122	13.7	238	26.8	412	46.4	98	11.0	18	2.0

Displayed in Table 3 are the frequencies and percentages pertinent to middle school teachers' responses to the time-related items. As with the elementary school teachers, the time-related item obtaining the lowest percentage of agreement/strong agreement among middle school teachers is for the item "efforts are being made to minimize the amount of routine paperwork teachers are required to do" (43%). Again, as with the elementary school teachers, more than

70% of the middle school teachers seem to agree that "teachers have time available to collaborate with colleagues." However, somewhat more middle school teachers (60.1%) than elementary school teachers (54.3%) seemed to agree that "the non-instructional time" provided to them was sufficient.

Research Question 3: *What differences are observed between urban elementary and middle teachers' perceptions of their use of instructional time?*

Table 4: Means and Standard Deviations computed for individual for individual teacher responses for Time-Related Items and Scale by Grade Level

Item	*Elementary*			*Middle*		
	n	*M*	*SD*	*n*	*M*	*SD*
Class sizes are reasonable such that teachers have the time available to meet the needs of all students.	2548	2.57	0.89	882	2.47	0.95
Teachers have time available to collaborate with colleagues.	2501	2.84	0.81	872	2.82	0.81
Teachers are allowed to focus on educating students with minimal interruptions.	2513	2.57	0.85	873	2.48	0.90
The non-instructional time provided for teachers in my school is sufficient.	2507	2.52	0.83	870	2.62	0.83
Efforts are made to minimize the amount of routine paperwork teachers are required to do.	2503	2.20	0.89	868	2.29	0.91
Teachers have sufficient instructional time to meet the needs of all students.	2512	2.52	0.80	871	2.61	0.83
Teachers are protected from duties that interfere with their essential role of educating students.	2517	2.59	0.84	870	2.56	0.87
Statistics for Scale	2284	2.54	0.64	814	2.54	0.66

Table 5: Means and Standard Deviations Computed from School-Level Teacher Responses for Time-Related Items and Scale by Grade Level

Item	*Elementary* (n = 112)		*Middle* (n = 39)		*t*	*d*
	M	*SD*	*M*	*SD*		
Class sizes are reasonable such that teachers have the time available to meet the needs of all students.	2.65	0.42	2.62	0.50	0.37	0.03
Teachers have time available to collaborate with colleagues.	2.88	0.30	2.88	0.30	0.08	0.01
Teachers are allowed to focus on educating students with minimal interruptions.	2.62	0.40	2.57	0.50	0.55	0.05

The non-instructional time provided for teachers in my school is sufficient.	2.56	0.34	2.67	0.41	-1.64	-0.13
Efforts are made to minimize the amount of routine paperwork teachers are required to do.	2.27	0.40	2.42	0.50	-1.77†	-0.15
Teachers have sufficient instructional time to meet the needs of all students.	2.58	0.31	2.73	0.40	-2.05*	-0.17
Teachers are protected from duties that interfere with their essential role of educating students.	2.64	0.36	2.62	0.42	0.28	0.02
Statistics for Seven-Item Scale	2.60	0.30	2.64	0.38	0.73	0.06

† $p < .10$. * $p < .05$

With respect to the item-level means and standard deviation for individuals (Table 4) and groups (Table 5), few differences are observed. Among individuals, it is noteworthy that the means obtained across all seven items were exactly for the same for both elementary teachers (M = 2.54, SD = 0.64) and middle school teachers (M = 2.54, SD = 0.66). In contrasting the-means for groups, only two items proved to be significantly different. A significant difference in the elementary and middle school teacher responses with respect to minimizing the amount of paperwork that teachers are required to do was observed (t (149) = -1.77, $p < .10$, d = -0.15) as was a significant difference in elementary and middle school teacher responses to the item concerning the sufficiency of instructional time to meet the needs of all students (t (149) = -2.05, $p < .05$, d = -.0.17). In both instances, the differences favored the middle school teachers' collective responses.

DISCUSSION AND IMPLICATIONS

Researchers sought to identify aspects found in high achieving schools' climates that could attribute to their success. The literature identified multiple contributors; however, for this study researchers analyzed the responses from classroom teachers by the use of a secondary data set related to the teachers' perception about the use of time during the school day. According to the data results, overall, elementary and middle school teachers believe there is good use of their time during the school day. Both groups of teachers believe they have time to collaborate, meet the needs of students, and non-instructional time. However, both groups of teachers feel that in order to optimize their time, more efforts should be made to minimize the required paperwork. Conversely, 60% of the elementary teachers feel protected from duties that interfere with their role of educating students, yet 62% believe there is too much required paperwork. This observation is somewhat contradictory in that, how is time protected, when paperwork requires time to complete? Additionally, although both groups of teachers agree that there is sufficient non-instructional time; middle school teachers had a higher response to this item. Such a high response rate may be due to the daily planning period that may vary from 45-60 minutes daily, opposed to the 2 hour and 15 minutes per week guaranteed to elementary teachers. Lastly, when considering the mean responses from both groups, middle school teachers had a higher response rate related to the use of time-related items. In light of the continuous search for school reform models that effectively consider all aspects of the school organizational structures, the researcher addressed considerations from the teachers'

perceptions about their working environment. The aspects, of the school environment found in the literature and substantiated by the surveyed respondents that motivate teachers to perform at high academic standards is the use of instructional time.

The context for this study was centered on the climate of schools in urban, low-income settings. Although, the literature indicated that the school climate does impact student achievement, it also identified that a learning environment must have certain attributes in order to facilitate effective teaching and learning. Based on the surveyed items related to instructional time, the responding teachers did not see these aspects as a major concern that hindered teaching and learning, or were they considered as dissatisfies for job performance. In essence, urban schools continue to search for teachers who can make a difference in educating the students they serve. It is the role of the school leaders to provide a work environment that facilitates student success. Based on the information found in this study, elementary and middle school leaders in the Midwestern region of the United States should consider the following recommendations concerning the elements of the school climate as it relates to use of instructional time in order to motivate teachers to achieve high levels of academic success for students.

First, school leaders must consider allocating funds to purchase new technology, and provide access to technology and supplies for teachers to use at will to accomplish desired academic related task, as well as reliable internet access and computer-based instructional material to aid teaching and learning. Secondly, systems must be put in place to minimize the required paperwork teachers are expected to routinely complete in order to free up time to educate students. A third recommendation specific to elementary principals is to consider scheduling structures that can provide teachers with more non-instructional time similar to that of middle school teachers. Because teachers perceive that they need more time to meet the need of students, leaders may want to consider opportunities for extended year programs, and/or the organizational structure of the school day. When considering interruptions, most teachers think of external intrusions such as visitors, messengers, intercom announcements, or fire drills, but some interruptions are self-imposed. Partin's work (2009) revealed that 62% of the teachers feel that teachers have sufficient instructional time to meet the needs of all students. Sixty-eight percent of the teachers agree that teachers have time available to collaborate with colleagues, and only 63% of educators reported that professional development is differentiated to meet the needs of individual teachers. Captivatingly, Partin's (2009) results closely mirrors the findings in this study.

Researchers also deemed it necessary to provide specific recommendations to school leaders who lead schools that have proficient scores on state assessments in order to perpetuate the results and monitor working conditions so that the dissatisfies of the job do not impact performance. Therefore, school leaders should consider ways to limit interruptions during the school day and structure other duties so that they do not interfere with instruction. Also consider that in order to effectively meet the needs of students, the class sizes must be small enough to individualize the instruction via a low number of students per class or support personnel available to assist in differentiating the instruction.

CONCLUSIONS

Collectively and individually, a positive school climate can have a major impact on the success of all students in the school (Loukas, 2006). Moreover, a positive school climate can have a major impact on teachers and their job satisfaction and efficacy (Taylor &Tashakkori, 1995). However, there is insufficient research from teachers' perceptive in relationships to the

elements of instructional time. School climate not only affects the students, it also affects the teachers sense of satisfaction and contributes to higher retention (Taylor &Tashakkori, 1995). Lezotte, et al. (1980) notes that teacher' perceptions of school climate and culture could affect their ability to connect with the student thus affecting their ability to be effective teachers. Since teachers are mostly responsible for educating the students, it is imperative, that their perspective be added to the research in the field of education.

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