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An Analysis of the Financial Impact of Certified and Classified Employee Absenteeism Rates at a Mid-South Kentucky School District

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AN ANALYSIS OF THE FINANCIAL IMPACT OF
CERTIFIED AND CLASSIFIED EMPLOYEE ABSENTEEISM RATES
AT A MID-SOUTH KENTUCKY SCHOOL DISTRICT

A Dissertation Presented to
The Faculty of the Educational Leadership Doctoral Program
Western Kentucky University
Bowling Green, Kentucky

In Partial Fulfillment
Of the Requirements for the Degree
Doctor of Education

By
Milli McIntosh

December 2015

AN ANALYSIS OF THE FINANCIAL IMPACT OF
CERTIFIED AND CLASSIFIED EMPLOYEE ABSENTEEISM RATES
AT A MID-SOUTH KENTUCKY SCHOOL DISTRICT

Date Recommended 11-1-15



Randall H. Capps, Chair



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Dean, The Graduate School

1/19/16

Date

DEDICATION

This research is dedicated to my wonderful husband Mac and my amazing son Christjan...“my boys.” We often say that love is not a noun but a verb...that love isn’t something you say but something you do. Displaying your love daily through your encouragement, patience, and willingness to do the things I no longer had the energy to do allowed me to move forward and complete this journey. Having you guys by my side through all the trials and tribulations of life during this process has truly been a blessing and through it all; GOD’s Grace has truly been sufficient! All I have done in my life and all I ever accomplish in this life will be to Glorify HIM!

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This study examined absenteeism of both certified and classified employees ($N = 429$), to include teachers, administrators, and support staff, and selected demographic variables in one school district consisting of the following: one high school, three elementary schools, one middle school, one alternative school, one transportation department, one maintenance department, and a central office. The variables include gender, ethnicity, years of service, particular and total days missed.

The design of the quantitative study was based on secondary data analysis that encompassed running descriptive statistics for the purpose of determining the frequency of employee absence and the overall costs. An analysis of variance was used to examine the data and its significance. The study revealed that the average number of absences for certified employees was 14.53 days per year, and the average number of absences for classified employees was 15.29 days per year, with an estimated cost of \$491,000 over a two-year period.

The study confirms the need for further research into the areas of both certified and classified staff, which should include the tracking and monitoring of absenteeism as well as the causes and the overall costs related to employee absenteeism.

CHAPTER I: INTRODUCTION

You can revise curriculums, toughen graduation requirements, and sing the song of excellence until you're hoarse: If teachers fail to show up for work, all your good intentions will wither on the boardroom floor. (Freeman & Grant, 1987, p. 31)

While this statement appears to be clear on the surface, the far reaching impact of teacher absenteeism has not received sufficient attention to result in any marked changes since records have been officially maintained. This lack of attention to a problematic issue likely is one of the primary reasons for failing to make any meaningful strides to remedying the situation.

According to studies conducted by Ballou (1996) and Podgursky (2003), public school teachers in the United States are absent 5-6% of the days schools are in session, a higher rate of absenteeism than any other profession (Pitkoff, 1993). While most corporations know and understand the costs related to employees missing work, the public educational system appears not to know—and the related financial burden surpasses that of any other industry (Scott & Wimbush, 1991). This has been further substantiated in studies conducted by Bridges and Hallinan (1978), Bridges (1980), Klein (1985), and Jacobson (1989).

As corporate America continues to monitor absenteeism, along with its related expense, the eye-opening reality of the enormous cost is becoming increasingly evident and being addressed. However, regarding the public school system, in which the problem is even greater, ample studies revealing the problem have had little or no impact on efforts to address the issue. Corporate and private businesses as a whole bear an enormous expense due to absenteeism and school systems clearly experience it as well.

According to the U. S. Bureau of Labor Statistics (2010), of all expenses related to absence, unscheduled time off continues to have the biggest impact not only on profitability, but on productivity and morale as well. While employee absenteeism is a known expense to corporate America, educational institutions have a scant regard for the same documented truth. Therefore employee absence in schools is an expense that is not carefully monitored, is often misunderstood, and many think is immeasurable.

The massive number of non-educational organizations makes it impossible to confirm an exact figure related to employee absenteeism, but it has been estimated to be approximately \$20-\$25 billion a year nationally (Long & Ormsby, 1987). Educational Research Service Inc. (ERS, 1980) studied more than 470 school districts and reported that teachers were absent from their classrooms an average of eight days per year. With stipends for substitute teachers and associated administrative costs amounting to roughly \$4 billion annually (www.americanprogress.org), teacher absence clearly is expensive.

Mercer and Kronos (2010) conducted the first survey on the Total Financial Impact of Employee Absences, with results noted in two publications. Both confirmed that the total costs of absence, both direct and indirect, continue to be considerably high and equate to approximately 35% of payroll. These disturbing revelations often are overlooked, as the true costs are not easily visible or identified. Managers tend to think the cost is non-existent because it is associated with payroll and, therefore, viewed as an intangible that affects only morale, customer service, and staffing issues.

Rationale for the Study

Companies are plagued with organizational pressure to continually reduce costs, and the educational system is no exception. This process typically is in the form of downsizing, system enhancements, or through technological advancements. This study sought to bring overall awareness to employee absenteeism costs not only for teachers, but for support staff as well. This topic is important to all industries, including schools, as employee absenteeism is an issue that many organizations face on a daily basis.

Although absenteeism is a common occurrence, discovering the root cause, as well as the actual costs within many organizations, is difficult. Due to the direct, indirect, and unplanned incidental costs associated with absenteeism, it is important for organizations to determine whether they are experiencing unusually high levels. As with most issues, levels of acceptance exist. Therefore, research on this issue must begin with knowledge of that which is acceptable.

The South African Department of Labour's (n.d.) Basic Conditions of Employment Act of 1997 stated that an employee is entitled to 30 working days of sick leave in a three-year period. Bydawell (2000) asserted that, if the full entitlement is taken, a company would yield a 4% employee absenteeism rate, which is considered acceptable. School employees are granted a certain number of sick leave, personal leave, and non-contract days annually. When totaled, this easily could exceed the Employment Act's 30-day requirement. School systems must decide whether this number is acceptable.

Although the acceptable limits may be exceeded, a consideration is that some of the accumulated categories of leave are not paid. Another factor is whether or not

organizations take into consideration all days missed by an employee when calculating costs. Failing to do so results in an inaccurate absence cost analysis. According to Bydawell (2000), many companies exceed the 4% rate by as much as 8% without realizing it. Therefore, the rationale behind this study is threefold: (1) to collect data that clarify the magnitude of the problem monetarily and organizationally, (2) to reveal the most prominent areas of concern, and (3) to begin a constructive dialogue about strategies that help to reduce absenteeism and its related expense, as well as improve policies relative to absenteeism. Prior to this study, a practical means by which to address these three areas has not occurred in such a way that any measureable improvements could be reasonably expected. This study sought to develop such a means.

Statement of the Problem

Though the data are very limited, sufficient evidence can be found indicating that absenteeism is an expensive problem for both the organization and individuals and results in an unrecoverable loss to the educational system. This problematic phenomenon of the high cost of both certified and classified school employees has not been widely studied, primarily due to practically non-existent data. However, data have revealed that public school teachers in the U. S. are absent an average of 9 to 10 days per year (Miller, 2012); in 1984 absenteeism cost the U.S. economy an estimated \$38 billion dollars per year (Scott & McClellan, 1990). Furthermore, stipends for substitute teachers and associated administrative costs amounted to \$4 billion annually (Miller, 2012). According to a National Council on Teacher Quality (2014) study in which 40 districts were analyzed, approximately \$424 million dollars was spent on substitutes in 2012-2013. This did not take into account monies spent for recruiting, training, time, and other human resources.

Absences for these 40 districts cost an estimated \$1800 per employee to provide coverage.

While research has clearly demonstrated an obvious effect on student achievement when teachers are absent, the data are rather scarce when determining the costs associated with not only teachers' absences, but support staff as well. In light of the fact that employee absenteeism data are not being tracked by the State Department of Education, one must ask, why not? If educational reform is important, why is employee absenteeism excluded as a professional growth measurement? Monitor it, calculate it, and perhaps even use it as criteria when determining annual raises. What are the real reasons for the employee's absence, and are school districts aware of the magnitude of the problem? The National Council on Teacher Quality (2014) study reported that 10 districts included teacher attendance as a factor in their evaluation framework. Those districts used absenteeism as a measure for describing the professionalism competency of the staff.

The District Management Council (2004) reported that the average teacher misses approximately two weeks of school per year from sick days, personal days, and other excused absences, which costs districts through substitute salaries, absent teacher salaries, and other associated recruiting and administrative costs. Nationally, based on findings from the same study using NCES statistics from the year 2000, the total cost of teacher absenteeism was \$25.2 billion dollars. This literature has reflected what should be a "serious concern for finding both causes and solutions for excessive time away from the job" (Educational Research Service, 1980, p. 1).

It is imperative that school administrators, teachers, and classified staff have a better understanding of statistical absenteeism data in order to determine unique patterns and trends for better planning and forecasting purposes to control district costs.

Capturing and utilizing absenteeism data will enable districts to implement sustainable measures to monitor, control, and ultimately reduce absenteeism in the district. The purpose of this study was to examine the financial impact of absenteeism in a mid-south Kentucky school district. An examination was conducted on the financial relationship between certified and classified employees and selected variables. For the purpose of this study, three research questions were developed:

1. What is the financial impact of employee absenteeism on schools?
2. Does absenteeism differ for certified and classified employees?
3. Does the rate of absenteeism vary across demographics variables?

Leaders, managers, supervisors, and school administrators should begin to focus more attention on employee absenteeism and its effects on their organizations. All employee absences, whether excusable, can and will have a detrimental effect on a school district if managed ineffectively. With the continued scrutiny of districts' tax dollars and overall spending habits, not only by communities but by state and local governments, school administrators should attempt to unravel the facts and figures concerning employee absenteeism. Districts should seek to manage absences more effectively...creating an environment that allows for accountability in every form and aspect of absenteeism, monitoring policies more closely to ensure compliance and to identify trends and patterns of suspected abuse. When school districts begin to purposely

act to reduce absenteeism, its costs, and wide reaching effects on overall performance will continue to be a burden, regardless of whether it is recognized.

Definition of Terms

For the purpose of this study, the following definitions were used.

Unplanned incidental absences: Absences of five work days or less, such as casual sick days, where the occurrence was not known and approved ahead of time by the employee's supervisor (Mercer & Kronos, 2010).

Replacement labor expenses: The costs to employers for other individuals to perform work that an absent employee is unable to do. Replacement worker costs are hard-dollar expenses representing added pay and benefits for extra staffing or costs for overtime, temporary labor, and outside contractors. In the educational sector, these replacement workers are categorized as substitutes and are available for both certified (exempt) and classified (non-exempt) employees. Providing substitute teachers and the associated administrative costs amounts to \$4 billion annually, representing approximately 1% of federal, state, and local spending on K-12 public education (Miller, 2008).

Certified personnel: Teachers, principals, superintendents, and other school district employees who have been certified by the Kentucky Education Professional Standards Board as having fulfilled all education and internship requirements for teaching, supervising, and administering programs (Heine, 2011).

Classified personnel: School employees whose jobs do not require certification to include bus drivers, cooks, secretaries, custodians, and teacher aides (Heine, 2011).

Elementary school: Primary or kindergarten through fifth, sixth, seventh, or eighth grades, depending upon the structure of the schools in the local system; the law indicates primary through grade 8.

High school: Grades 9-12 or 10-12; for purposes of credits for graduation or college admission, grades 9-12.

Middle school: Grades 5 through 8, 6 through 9, or any combination thereof.

Alternative school programs: Programs or schools that offer students a different approach to schooling, often used for students with behavior problems who are unable to function in a regular school setting.

Paid time off (PTO): A bank of hours in which the employer pools sick, vacation, and personal days from which employees can draw as the need arises.

Preschool program: A school program for children who are not old enough for kindergarten or the primary program and intended as preparatory for elementary school. In Kentucky, preschool services are free of charge for children who are four years old by October 1; children whose family income is at or below 150% of the Federal poverty level; and children with disabilities ages 3 and 4, regardless of income, who require extra assistance to learn or perform that which most children of that age are learning and doing.

Pre-k/Pre-Kindergarten: Used interchangeably for preschool; a structured program, usually for 3 and 4 year-old children with a qualified teacher who structures the classroom environment using age-appropriate activities with a focus on preparing children for success in school.

Absenteeism: Absence as defined by Price (1995), the lack of physical presence in a behavior setting at which one is expected (Shapira-Lishchinsky & Rosenblatt, 2008).

Absenteeism is the temporary, voluntary, withdrawal from work (Bridges, 1980). Being absent from work; an expression of employee choice (Jacobson, 1989). Non-attendance for scheduled work (Price, 1995). “Absenteeism is any failure of an employee to report for or to remain at work as scheduled, regardless of reason” (Cascio, 2007, p. 82). While the derivation of such a definition is rooted in industrial relations and labor law considerations, a definition more specific to education is provided by Strickland (1998) as simply not attending school.

Age: The chronological age of the certified or classified staff at the time of the study.

For the purpose of this study, age was grouped as follows: (1) employees between 22-36 years of age, (2) employees between 37-48 years, and (3) employees 49 and above.

Deducts: For the purpose of this study, refers to days that employees were absent outside the districts’ originally approved contracted days. These days were non-paid. No official documentation was found to substantiate the usage of deduct days.

Ethnicity/race: Groups represented in the study to include African American, Asian, Latino, and Caucasian (White) (Davis, 1997).

Gender: Male and female (Unicomb, 1992).

Substitute: An individual compensated by the school district to carry out duties normally performed by a certified or classified member who is absent from his or her position (Porwoll, 1980).

Years of service (experience): For the purpose of this study, the number of years an individual has been employed in with the district (to include any allowed experience for pay purposes).

Limitations

A few limitations are noted regarding the current study. First, the research was narrowed to only one district spanning a two-year academic window. Second, the study did not investigate the relationship of teacher absence and its effect on student achievement. Several studies have been conducted regarding teacher absenteeism and its impact on student learning and academic growth. Many found a negative relationship between teacher absences and student achievement (Bayard, 2000; Beavers, 1981; Boswell, 1993; Cantrell, 2003; Lewis, 1981; Manatt, 1987; Pitkoff, 1993; Smith, 1984; Womble, 1990; Woods, 1997). However, these studies did not provide compelling evidence of a causal link between teacher absence and student achievement, primarily because “they do not deal explicitly with the potential correlation between unobserved levels of teacher skill and effort” (Miller, Murnane, & Willett, 2008).

Finally, an additional limitation was the assumption that district data were both authentic and accurate. The accuracy and integrity of the data were only as valid and reliable as those responsible for their inputs and their diligence and accuracy in recording the data. Other researchers (Harrison & Hulin, 1989) have raised questions about the accuracy of such record-keeping, which implied that it has not been conducted with precision and measurable accountability.

CHAPTER II: REVIEW OF THE LITERATURE

Absenteeism is a stubborn problem for which “there is no clear culprit and no easy cure” (Rhodes & Steers, 1990). After 50 years of research and hundreds of articles, the field of absenteeism remains fragmented among a number of disciplines with the majority of the research occurring in the 1970s and 1980s (Scott & Wimbush, 1991). Much of the research sought answers to specifics concerning employee behavior as it related to absenteeism and reviewed linkage to both demographic and organizational factors regarding the workplace. This problematic concern is not new, as the federal government attempted to identify specific employee absenteeism issues in their defense plants as early as World War II.

Organizations have been acutely aware of the financial costs of absenteeism for decades and have attempted to better understand it and find solutions. Literature on employee absenteeism in the private sector is quite abundant, which makes sense from Bydowell’s (2000) perspective because employers should be able to expect satisfactory attendance from those they employ. However, according to Unicom (1992), studies on the problem of teacher absenteeism have been minimal compared with studies in the corporate world. Furthermore, Ehrenberg, Ehrenberg, Rees, and Ehrenberg (1991) indicated that the lack of research in this area is somewhat of a problem. Given the fact that absenteeism is a complete loss to the educational system, it is puzzling that the cost of absenteeism of school employees both certified (administrative and teachers) and classified (support staff) has not been widely studied.

As previously stated, Educational Research Service (ERS, 1980) revealed a study of more than 470 school districts and found that teachers were absent from their

classrooms an average of eight days per year. Furthermore, teachers as a group exhibited a higher rate of absenteeism than employees in any other profession (Pitkoff, 1993). It is interesting to note that Jacobson (1989) stated approximately 10% of the workforce could be held accountable for 90% of all absenteeism, with costs in the billions. Overall, monetary costs of absenteeism in organizations nationally have been estimated from \$20-\$25 billion annually (Long & Ormsby, 1987). Obviously a large problem, it is apparent that controlling absenteeism can yield savings through effective management.

Ehrenberg et al. (1991) indicated that the lack of research in the areas of teacher absenteeism and its causes is a problem. According to Unicom (1992), teacher absenteeism clearly has not been studied sufficiently. Studies by Bridges (1980), Bridges and Hallinan (1978), and Jacobson (1989) have supported this as well. Scott and Wimbush (1991) examined absenteeism data from 265 secondary teachers using an existing model of attendance behavior as a guide to study both attitudinal and demographic data. While employee absenteeism is costly for many organizations, the authors concluded that the public education system is of utmost importance.

The financial cost of teacher absenteeism is significant; according to Miller (2008), providing substitute teachers and the associated administrative costs alone amounts to \$4 billion annually. This figure represents approximately 1% of federal, state, and local spending on K-12 public education. The rate of absenteeism for American teachers averages approximately 5% or nine days per 180-day school year (Clotfelter, Ladd, & Vigdor, 2006; Ehrenberg et al., 1991). Although other countries may experience a much lower rate of absenteeism, the rate among teachers is surprisingly higher than that of the rest of the American workforce, which averages approximately 3% (Clotfelter et

al., 2006). Furthermore, *A Nation at Risk* (National Commission on Excellence in Education, 1983) reported that teacher absenteeism is a major contributor to wasteful spending in school districts. A study conducted by Gaudine and Saks (2001) indicated the costs of absenteeism had risen to approximately \$40 billion per year for substitute teachers equating to an increase of 20 times that of Miller's (2008) study. An attempt will be made in this exploratory study to examine the costs related to substitutes for a Kentucky school district, specifically addressing the amount spent by the district during the two-year period.

In a recent analysis of the costs of substitute teacher pay, three school districts in northern Indiana were surveyed. The results showed that nearly 1% of the total operating budget for these districts was consumed by substitute teacher costs (Woods, 1997). It is not uncommon for average size districts to spend millions for substitute teachers. Kanawha County School District in West Virginia spent \$6.4 million for substitute teachers in 2001 alone, with an average teacher absenteeism rate of 8.3%. Kanawha County consists of 29,000 students, 2,150 instructional staff, and a substitute pool of 275 (Eyre, 2000).

Theoretical Framework

Numerous researchers and scholars have recognized absenteeism as an important organizational issue (Rhodes & Steers, 1990). According to Chadwick-Jones, Nicholson, and Brown (1982), a direct manifestation can be seen in the decision of an employee to withdraw from a work situation, which would suggest that in many cases absence occurring in the workplace is voluntary and "avoidable." Research by Dilts and Deitsch (1983) indicated that employee attendance is dependent upon three conditions: ability,

motivation, and opportunity. Are employees able to attend, are they willing to attend, and are they given a chance to attend? They believed that if any one condition is unfilled, employees make the decision to be absent.

In this basic model of work attendance, when job-social related variables are involved, the options of choosing higher paying positions are not chosen. Research has indicated that teachers would rather remain in the classroom, citing the rewards of academic achievement, perhaps more time off, or simply being with their students. Although the teachers may be motivated by the opportunity for daily work, the ability must be present as well. Twenty years of absenteeism literature by Harrison and Martocchio (1998) has shown that the majority of research has focused on its origin or causes. The authors divided the research into five basic themes or categories: personality, demographics, job attitudes, decision-making, and social context.

The most cited model used in a multitude of research on teacher absenteeism was the landmark study by Steers and Rhodes (1978), which reviewed all five categories in several ways. Their report was based on a review of 104 empirical studies on employee absenteeism and used a multi-variable approach that encompassed psychological as well as personal characteristics of teachers. Based on the concepts of Steers and Rhodes, demographic variables such as personal and family-related characteristics are considered, as well as psychological variables such as job satisfaction, motivation to be absent, and the ability to attend work. The model emphasizes that attendance is highly influenced by the practices of the organization; an absence of school culture; as well as employee attitudes, values, and goals. The authors' findings suggested that increases in responsibilities and challenges would improve the nature of an employee's position,

therefore substantially reducing or minimizing absenteeism. Job satisfaction was identified as the most significant factor.

Steers and Rhodes (1978) also identified personal characteristics such as education level, tenure, age, gender, and family size, which were previously mentioned in Harrison and Martocchio's 1998 demographics theme. According to the model, a positive relationship exists between age and absenteeism. Therefore, as employees grow older, they are more likely to be absent. A 1998 study by Gellatly confirmed this relationship. However, Steers and Rhodes suggested that the relationship exists because, as individuals age, the likelihood of illness also increases, minimizing the ability of an employee to work. Another interesting point mentioned in the study was that males are more likely than females to be absent as age increases (Martocchio, 1994). Steers and Rhodes further speculated that this difference may be due to health issues.

The Steers and Rhodes (1978) model found that females are absent more often due primarily to family responsibilities, as women typically care for the family and children. Consequently, it was not surprising to find that a study by Vistnes (1997) revealed that employees with children were absent more often than those without children. Farrell and Stamm (as cited in Harrison & Martocchio, 1998) also concluded that females were found to be absent more than males, more likely due to family-work conflicts than men. Steers and Rhodes (1978) also proposed that education and tenure influenced job satisfaction through employee expectations and values. This relationship was explained by indicating that individuals assigned different values to positions, going into the job with certain expectations, and a fulfilled position will lead to job satisfaction. In this particular study, educational level was used as the example; e.g., an employee with

a college degree may value and expect greater rewards from an organization than an employee with less education. Kalleberg (1977) found that educational level was significantly associated with rewards when considering only the financial aspect; employees viewed it from a return on investment perspective.

Steers and Rhodes (1978) researched older and tenured employees and indicated that they are more likely to be satisfied in their jobs than younger and untenured employees. The explanation was that older and more tenured employees, due to their veteran status, value and expect certain perquisites. Kalleberg's 1978 study found evidence to support this conclusion and further revealed that the relationship between age, tenure, and job satisfaction significantly increased when values and rewards were controlled, indicating that age and tenure are more likely to impact indirectly on job satisfaction.

In 2002 George and Jones maintained that many researchers attempted to discover ways to reduce absenteeism by studying its relationship to job satisfaction. Research conducted by Steers, Porter, and Bigley (1996) indicated that job dissatisfaction was a primary cause of absenteeism, which was supported by McShane (2004). McShane also indicated that employees who are dissatisfied with certain aspects of their jobs/employment are more likely to be absent. Job satisfaction was more associated with an employee's frequency of absence rather than the total number of days lost. Rhodes and Steers (1990) proposed that *motivation* to attend work, as well as an employee's *ability* to attend, affects absenteeism. The George and Jones study revealed that job satisfaction is indeed a factor affecting an employee's motivation to attend work. Other

variables affecting an employee's ability to attend a job include, but are not limited to family issues, responsibilities, and transportation issues.

Identifying and understanding these variables will enable managers to better deal with the reasons employees choose to be absent, particularly as managers attempt to discern the circumstances, such as actual illness, that genuinely affect the ability to come to work (Rhodes & Steers, 1990). Kalleberg (1977) reviewed three specific disagreements related to employee environment and job satisfaction and found that organizations providing support for the employee experienced less absenteeism. Employees who believed the organization valued their contributions and cared about their overall wellbeing reported to work regularly, resulting in the goals of the organization being met through greater attendance. Further research has supported the argument that school environment affects job satisfaction (Hoy & Miskel, 1996; Taylor & Tashakkori, 1995). Positive job satisfaction motivates personnel toward serving the organization, which leads to improved attendance.

Many researchers have studied the relationship between absenteeism and job satisfaction in an attempt to reduce worker absence (George & Jones, 2002). Steers and Rhodes (1978) noted an inverse relationship between job/organizational commitment and absenteeism, resulting in low absenteeism rates. Research regarding job satisfaction has indicated an assumption that dissatisfaction is a primary cause of absenteeism (Steers et al., 1996).

In a study by Niebrugge (1992), employees were asked to rank order 10 aspects they desired from their jobs. The employers were asked to guess the way in which the employees would rank the same 10 aspects. Table 1 illustrates some interesting and

surprising results. The top five items listed by employees were related to job satisfaction. Niebrugge found that organizations providing support for their employees experienced less absenteeism. According to the table, employees simply want to be engaged, appreciated, contributory, safe, and ultimately paid well. Employers on the other hand really missed the mark, particularly when ranking employees on feeling “in on things” and wages.

Table 1

Ten Aspects Employees Desired From Their Jobs

Employee's Rank	Aspect	Employer's Rank
1	Interesting work	5
2	Appreciation and recognition	8
3	Feeling “in on things”	10
4	Job security	2
5	Good wages	1
6	Promotion wages	3
7	Good working conditions	4
8	Personal loyalty	6
9	Tactful discipline	7
10	Sympathetic help with problems	9

Adapted from: “Declining employee morale: Defining the causes and finding the cure,” by V. Niebrugge, 1992, NOVA Group.

This research attempts to study replacement costs of certified and classified employee absenteeism in two Kentucky school districts. The research also analyzes employee absenteeism rates as they relate to age, gender, years of service, race, day of the week, and causation for certified and classified school employees.

Absenteeism Variables

Absenteeism Costs

A study by Lewis (1981) suggested that on a national level the “real” cost of teacher absenteeism approached \$2 billion dollars. Mercer and Kronos (2010) reported that employee absences accounted for over 36% of payroll expenses. However, many view these costs as unmeasurable and often misunderstood; e.g., industry typically measures most benefits and health insurance programs as having clearly defined costs. However, the true costs of absenteeism remain untapped and mostly unmonitored. According to the Mercer and Kronos study, absences often are viewed by industry as having no additional costs, as these costs typically are masked in payroll.

Mercer and Kronos (2010) further indicated in a report sponsored by Kronos Incorporated that three areas of financial impact exist: (1) direct costs, (2) indirect costs, and (3) administrative costs/expenses. Direct costs are for benefits or prevailing wages paid to employees during an absence. These types of absences can be identified as vacations, holidays, and disability benefits. Mercer and Kronos reported that 14.2% of payroll includes 10.2% for vacations and holidays (scheduled as PTO) and 4.0% for sickness, disability, and workers compensation. This survey was the first to attempt to separate employees by class to include exempts, non-exempts, salaried, non-exempt hourly and union hourly, as well as the type of actual absence.

According to the Department of Labor rules, exempt employees generally have supervisory or professional responsibilities and are not required to be paid at overtime rates for working longer hours. Non-exempt employees are defined as those subject to overtime pay requirements but typically paid a weekly or bi-weekly salary and often

found in administrative roles. Non-union hourly employees are those working under a collective bargaining agreement and also subject to overtime pay requirements. Union hourly employees under a collective bargaining agreement and are subject to overtime pay requirements, as per the Mercer and Kronos (2010) study. Participants were drawn from 455 organizations throughout the United States in all major industry segments, sizes, and regions. Each averaged a size of 5,022 full-time employees. Absences were classified as incidental, unplanned, planned and extended.

Mercer and Kronos (2010) indicated that unplanned incidental absences were those occurrences of five work days or less, such as casual sick days, in which the reason was unknown and approved ahead of time by the employee's supervisor. Planned absences were short or moderate duration absences such as vacations and holidays, of which the supervisor was aware and likely had approved the absence in advance. This type of absence averaged 26.6% of payroll. Extended absences lasted beyond one week, often unplanned and generally due to a disability and/or qualified as a leave under the federal Family and Medical Leave Act (FMLA) or state equivalent. Last, unplanned incidental and extended absences or absenteeism were defined as a combination of two of the above categories, representing the type of "lost time" that employers attempt to minimize or at least manage carefully.

Mercer and Kronos (2010) also defined indirect costs as those accounting for lost productivity or the potential replacement worker who replaced/covered for the absent employee in order to minimize productivity loss and, finally, administrative costs. These costs are incurred due to internal staffing and overhead or vendor services, which represent the actual costs to an organization. The indirect costs category consists of two

subsets or additional components. The first is replacement labor expense defined as the cost for employers to bring in an individual to perform the work of the absent employee. These costs are hard dollars that include the additional cost for staffing, benefits, overtime, and temporary labor and possible outside contractors. The second subset is net lost productivity value; a component considered a loss of potential revenue, as the work is not fully covered by the replacement. The replacement occasionally has training issues related to completing the same number of widgets as the original employee. As for the for-profit employer, lost productivity could be even higher because, beyond employee expenses, other losses may include business costs and return on profit.

As with industry, teacher absenteeism is equally, if not more expensive. According to the Warren (1998) study, teacher absenteeism averages between 8-10%, which equates to over one full year of every child's K-12 education being taught by a substitute. Research on substitute teaching also revealed that substitutes provide an inferior level of service, resulting in costs in addition to money. Three northern Indiana school districts surveyed the cost of substitute teacher pay and revealed that nearly 1% of the total operating budget was consumed by these expenses (Woods, 1997).

Eyre (2000) reported that \$6.4 million dollars was spent for substitute teachers in 2014 for Kanawha County School District in West Virginia, and the overall absenteeism rate for the district was 8.3%. A total of 29,000 students were in the Kanawha County School District, with 2,150 instructional staff and a substitute pool of 275. According to an April 2015 article in the *Charleston Gazette*, the Human Resource Director of Kanawha schools, Carol Hamric, indicated that teachers averaged 6.5 unexcused absences in 2014. Board members commented that teachers were missing more than the

children. The article also reported that the superintendent pushed for more precise and standardized information about employee absenteeism because, at the time of the article, absences were not sufficiently tracked and mechanisms for tracking were non-existent.

Age

The relationship between teacher age and absenteeism varies, which is a critical reason to study that issue. Research conducted by Bridges (1980) on 488 elementary teachers found that older teachers were absent less frequently, although a given employee may be absent for more days. These statistics are ample reason to measure the extent of absence by investigating the number of times absent versus the total number of days. A report by Winkler (1980) noted that older teachers were absent less than their younger counterparts. Elliott (1982) discovered that older teachers' rate of absenteeism was higher for sick leave, although the overall total of absences was higher among younger teachers.

Jacobson's 1989 study focused on the absenteeism concerns of 292 teachers employed in a school district in New York during the school years of 1985-1987. Jacobson found that teachers nearing retirement often are absent more than teachers further from retirement. The study by Ehrenberg et al. (1991) involving 700 school districts in New York found that teachers age 55 and older reported less absence from school. The study also revealed that the district leave policy was directly related to the outcome.

A study by Scott and McClellan (1990) found that older teachers used more leave than younger teachers. The results of a survey of 286 teachers in Richmond, Virginia indicated a positive relationship between greater absence and increased age (Merchant,

1976). However, the Bundren study of 1974 found no significant relationship between age and absenteeism. Thomson (2000) examined 23 schools in North Carolina, and the results indicated that the fewest numbers of days missed were taken by the second oldest group of teachers, ages 40-49, followed by teachers in the 30-39 age group. The study also revealed that teachers in the 20-29 age group were absent the second highest. The oldest age group, those in the 50+ range, was found to have the most absences; but no significance was found in the absences, only minor differences. Inconsistencies can be seen with the results of research conducted in this area, as data are available that substantiate both claims.

Gender

The Pennsylvania School Board Association (PSBA, 1978) found that female teachers were absent more than males. That study investigated not only incidences associated with absenteeism, but it reviewed possible solutions as well. Of the 504 school districts in the state, 135 schools were studied. Over 25,000 teachers took part in the study, including 11,000 elementary teachers and approximately 14,000 secondary teachers. The study revealed that, on average, males were absent 7.2 days per year, while females averaged 8.9 days.

Manthei (1988) conducted an investigation involving 940 elementary and secondary teachers to determine the relationship of stress and various patterns of absence. The study revealed an increase in the number of days of absence for females, concluding that they missed two days more than males. The Ehrenberg et al. (1991) study of school districts in New York in the 1986-1987 school year revealed that male teachers missed an average of 4.5 days per year, and females missed an average of 6.9 days. Scott and

McClellan (1990) stated that a study completed in 1980 also revealed that females were absent significantly more than men; females 5.29 days a year and men 3.39 days per year. This study included 539 teachers, counselors, and librarians in a mid-Atlantic school district consisting of 72% females and 28% males. Unicom (1992) also indicated that females were absent significantly more than men in a study of nine Nova Scotia schools to include 273 participants, of which 108 were elementary and 163 were secondary teachers. The study also found a difference in the pattern of absences between men and women. Men in their 30s were absent more often, while women's absences increased with age. In another study, 1,150 payroll records in Durham County Schools in North Carolina were reviewed by Thomson (2000). This study involved certified teachers in 23 districts conducted over a five-year period. Thomson used a multiple regression analysis and found that female teachers were absent more than males, but the results indicated no statistical significance.

A study by Worthington (1997) of 585 randomly selected full-time teachers in middle Tennessee indicated no significant difference between the absentee rate of males and females. Data were taken from the 1995-1996 school year, and significance was determined by use of a *t*-test. Finding no marked difference, Worthington reported that the mean absence of women was slightly higher than men: 7.67 days during the school year for women 6.52 days for men.

Winkler (1980) agreed with business and industry findings that females are absent more often than males, but these absences occurred for shorter periods of time (ERS, 1980; PSBA, 1978). However, overall, men were absent more days than women. Globerson and Ben-Yshai (2002) showed a contrasting result with male participants

having more absences than their female counterparts. A more recent study by Rosenblatt and Shirom (2004) demonstrated that men and women are similar in terms of their absence frequency. Inconsistencies were noted with the results of research conducted in this area, as research data are available that can substantiate both claims.

Years of Service

Inconsistencies also were found with the results of research conducted in the area of teaching experience and absenteeism. Prowoll (1980) reported that teachers with 2-4 years of teaching experience, as well as those with 23-35 years, were absent the least. The Chamber of Commerce of Greater Newark (1974) reported that teachers with greater years of service were absent more than those with only a few years of service. Doran (1986) studied more than 525 teachers in Lee County, Florida that included elementary, middle, and high school teachers grouped by teaching experience of 0-5 years, 6-10 years, and 11-15 years of experience. The results revealed that those with the least experience also were absent the least.

Most researchers have indicated little or no significance in years of teaching experience and teacher absenteeism (Foster, 1984; Manlove & Elliott, 1979). In another study by Pitkoff (1993) of 17 Brooklyn high schools consisting of more than 3,000 human resource records, using a Pearson product correlation coefficient, concluded that no relationship existed between teacher absenteeism and the years of teaching experience. In addition, Researchers such as Kohler and Mathieu (1993) and Rosenblatt and Shirom (2004) were unable to find any relationships between the years of service and employee absenteeism rates.

The research by Ehrenberg et al. (1991) revealed that teachers 55 and older used the least number of sick days. Their findings indicated that the fewer absences taken by the older teachers likely were due to the anticipated or expected payoff for future unused sick days. Furthermore, years of service could be correlated with increased job satisfaction and more pleasant working conditions, which can lead to a reduction in absenteeism for elderly teachers (Vistnes, 1997). Leigh (1988) suggested that employees with many years of service may have a higher sense of job security and, thus, worry less about repercussions from missing work. Rosenblatt and Shirom (2004) as Hackett (1990), indicated that, unlike age, no strong relationship was seen between years of service and absenteeism. Similar results were presented in a study by Globerson and Ben-Yshai (2002) on unionized Israeli teachers, as well as research by Price (1995). They reported that past studies also have shown no relationship between years of service and absenteeism. Although years of service and absenteeism have been examined for many years by multiple researchers, the evidence remains unclear.

Ethnicity/Race

Studies focusing on the relationship of ethnicity to teacher absenteeism were somewhat inconclusive, as per Foster (1984). In the St. Louis area, Black teachers were reported to have more absences than White teachers in a Missouri public school (Murphey, 2003). Similarly, White teachers in a semi-rural school system also had fewer absences than Black teachers (Marlin, 1976). Other factors were deemed to possibly influence the results of some of these studies; e.g., Holefelder (1982) found that most of the Black teachers in his study were female. Also, the number of Black teachers typically used in research samples is small. In one case 286 teachers in Virginia were studied via

questionnaire by Merchant (1976); although the results of this study revealed a relationship between ethnicity and teacher absenteeism, it was negligible. Malick (1996) studied 754 full-time teachers from a large urban school district and found no significant difference in ethnicity and teacher absence. Much remains to be discovered about ethnicity and school district employee absenteeism.

Day of the Week

In a study of nine schools in Nova Scotia, Unicomb (1992) found that research was inconclusive regarding teachers thought to be absent more often on Monday and Friday, as previously believed. However, the results indicated that teachers were reported to be absent more often on Wednesday, and Monday absences were the least. Elliott (1982) reported that most teachers were absent most often on Monday and Friday. Prowoll (1980) also reported the same results. Malick's 1996 study of 754 teachers revealed that Monday had a higher level of absenteeism than Friday. Research by Jacobson (1989) indicated that Tuesday experienced more absenteeism than any other day of the week. In contrast, the Jackson School District of Mississippi reported teacher absenteeism of 12% on Tuesday, Wednesday, and Thursday, and 13.5% on Monday and Friday, the equivalent of approximately two years of substitute teachers (Manlove & Elliott, 1979). In conclusion, results appear to indicate that teacher absence related to particular days of the week is of little concern.

Summary

A review of literature was conducted to ascertain the current understanding regarding absenteeism for both certified and classified employees. In addition to most research being very dated, the available information excluded specific data regarding

classified employees. Such information was found to be nearly non-existent during the research process. This particular area requires additional studies. The available data revealed that the relationship between teacher age and absenteeism varied; due to this variation, studies on this relationship are greatly needed. A report by Winkler (1980) stated that the older teachers' rate of absenteeism was higher for sick leave, but overall the total of absences was higher among younger teachers. The majority of the research showed a clear relationship between age and absenteeism.

A study by Worthington (1997) of 585 randomly selected full-time teachers in middle Tennessee indicated no significant difference between the absentee rate of males and females. However, several other studies reported higher absenteeism rates for females than for males.

Inconsistencies were found in the results of research conducted in the area of teaching experience and absenteeism. Porwoll (1980) reported that teachers with 2-4 years of teaching experience, as well as those with 23-35 years of service, were absent the least. The evidence remains unclear.

Existing studies found thus far have indicated that the relationship of ethnicity to teacher absenteeism is somewhat inconclusive, as per Foster (1984). Although research has shown that Black teachers are absent more often than White teachers, the number of Black teachers used in the samples was small. As previously stated, much remains to be learned about ethnicity and absenteeism.

Varied results were noted concerning the particular days of the week missed, although most research has revealed that teachers are absent more on Monday and Friday.

However, Malick's 1996 study revealed that Monday had a higher level of absenteeism than Friday.

Data continue to indicate the most significant cost incurred by school districts is for substitutes. However, recent research by Mercer and Kronos (2010) revealed three additional areas of financial impact: direct, indirect, and administrative costs/expenses. Many researchers possess varying opinions on three primary factors regarding employee absenteeism: its definition, the true costs, and real reasons. Some have debated strongly in favor of theories about job satisfaction, while others have relented due to inconsistencies and discrepancies. Overall, a tremendous need remains for further research on employee absenteeism in schools, particularly by employee type.

School districts and administrators must use a more holistic approach to reviewing the overall impact of employee absenteeism. Although limited data are available on certified and classified staff and the related costs, districts remain blind to the larger picture. Therefore, the direct, indirect, and administrative costs of both certified and classified employees remain uncovered. Furthermore, additional research is needed to fully discover and enumerate the actual cost of employees by type in school districts; studies must include monitoring of both certified and classified employees in order to determine the true impact of absenteeism.

CHAPTER III: METHODOLOGY

The purpose of this study was to examine absenteeism rates of both certified and classified employees across demographic variables, and the costs associated with employee absenteeism in a mid-south Kentucky school district. This chapter describes the participants, sampling procedure, methods used for gathering data, and subsequent data analysis procedures. The range and depth of details in the data collected for this study was considered substantive for a clear picture of the impact of employee absence. The results are anticipated to provide some direction for improvements in this costly area of the U. S. educational system.

Participants/Population

This study considered the following: (1) the district costs of replacement employees; (2) the absenteeism rates of certified (teachers, administrative staff) and classified (support staff) employees; (3) the causation of employee absenteeism; and (4) the relationship of selected demographic variables to absenteeism. The data collected included all full-time and part-time employees within a county school district in mid-south Kentucky and covered the academic school years of July 1, 2010, through June 30, 2012.

The study consisted of a review of data involving 230 full-time certified employees, 227 full-time classified employees, and 1 part-time employee from a Kentucky county school district. Utilizing a method of quantitative analyses, the data included the following information: gender, ethnicity, years of service, day of the week, number of days missed, and rate(s) of pay referred to as step. The data analyses for the study included descriptive statistics, *t*-tests, ANOVAs, and Tukey Post hoc. The

dependent variable was the total number of absences taken, and the independent variables were demographic information such as age, gender, ethnicity, and years of service. Data were collected for the two consecutive school years of a mid-south Kentucky school district as stated, July 1, 2010, through June 30, 2012. Table 2 summarizes study participants by district.

Table 2

Study Participants by School District

<u>School District</u>	<u>Employee Classification</u>			<u>District Totals</u>
	<u>Full Time Certified</u>	<u>Full Time Classified</u>	<u>Part Time</u>	
County	230	227	1	458

Three core research questions guided the study:

1. What is the financial impact of employee absenteeism in a Kentucky school?
2. Does the rate of absenteeism differ between certified and classified employees?
3. Does the rate of absenteeism vary across demographic variables?

The researcher met with the superintendent of the school district and was granted both written and verbal approval to conduct the study. The data were retrieved collaboratively from both the Accounting and Human Resources Departments at the district's central office. The Kentucky State Employee Management System (commonly known as MUNIS) was the reporting system utilized to gather demographic and absenteeism data. All demographic data was extracted from MUNIS, the financial software system used in 174 Kentucky school districts; employee names and other personal information were excluded. The district captured demographics regarding

substitutes, or replacement employees, via an Excel spreadsheet. Data from MUNIS, along with aforementioned spreadsheets, were ultimately exported for analysis by SAS (Statistical Analysis System) software.

Procedure

Absentee data from the mid-south Kentucky county school district in this study were collected from MUNIS and a manual substitute replacement system recorded in an Excel spreadsheet provided by the Human Resources Department for each location, listing all available substitutes. Other than names and personal information, the spreadsheet included demographic data such as preferred area/location to work, preferred date and time to work, as well as applicable certifications. An employee of each school within the district was tasked with responsibility as the staffing agent. The process continued with staffing agents of the schools spending an estimated 2-3 hours per day attempting to locate replacements via phone. Once approved, the school secretary/attendance clerk entered the information from the attendance verification form directly into MUNIS prior to the next pay period. The verification forms were submitted to the Human Resource Department, filed, and retained for future reference at the Central Office.

Data Analysis

The researcher utilized a three step data collection process. Step 1 consisted of extracting information from the employee Master file. This file included the following: employee ID number, dates of absence from and to, number of days used, job class, description, employee location, gender, race, step, annual salary, daily rate, reason code, day of the week absent and employee date of birth. Step 2 consisted of extracting

information for a substitute data set, which included all following: substitute employee ID number, employee type, date of absence from and to, and cost of paying the substitute.

Step 3 involved merging Steps 1 and 2 data. The process was challenging due to duplicate data records, absentee dates that spanned weekends, incomplete employee ID numbers, along with incomplete absentee dates. However, these challenges were addressed in a satisfactory manner. Upon completion of Step 3 data, the resulting file served as the master data set for all subsequent analyses.

CHAPTER IV: RESULTS

Introduction

The purpose of this explorative study was to examine employee absenteeism in a mid-South Kentucky county school district for two consecutive years, with the expectation that it may lead to helpful answers and solutions. Specifically, this study examined district annual costs in regard to replacement employees; absenteeism rates for certified and classified employees, including reasons (sick, personal, or other); and the association of certified and classified employee demographics on absenteeism.

Research Questions

This chapter presents selected data and the findings resulting from the statistical analysis relative to the research questions. The techniques used for analysis of the data included descriptive statistics (means, standard deviations, and frequency counts); *t*-tests; and analysis of variance (ANOVA). The research questions utilized for this study and the associated techniques for analysis follow:

RQ1: What are the replacement costs associated with employee absenteeism?

Addressed by use of industry district-wide board approved standardized cost formulas.

RQ2: Is there a significant difference in the rate of absenteeism between certified and classified employees? Addressed with a *t*-test.

RQ3: Is there a significant difference in the rate of absenteeism by employee type and age? Addressed with a two-way ANOVA.

RQ4: Is there a significant difference in the rate of absenteeism by employee type and experience? Addressed with a two-way ANOVA.

RQ5: Is there a significant difference in the rate of absenteeism by employee type and gender? Addressed with a two-way ANOVA.

RQ6: Is there a significant difference in the rate of absenteeism by employee type and race? Addressed with a two-way ANOVA.

RQ7: Is there a significant difference in the rate of absenteeism by employee type and reason? Addressed with a two-way ANOVA.

RQ8: Is there a significant difference in the rate of absenteeism by employee type and day of the week? Addressed with a two-way ANOVA.

The findings reported in this chapter are grouped into three sections. The first outlines the data screening process used to conduct the study. Section two provides the demographics data describing population and sample participating in the study. Section three displays the statistical findings that address the eight research questions.

Data Screening

Data for this study were collected from a mid-south Kentucky county school district for two consecutive school years. Of the data collected 73% was complete, usable, and sufficient for the purpose of this study. Table 3 summarizes the results.

District Demographics

The county schools served approximately 3,000 students, of which 62% attended at no cost and received lunch at a reduced cost. The collective body of students was served by the following: one high school, three elementary schools, one middle school, one alternative school, one transportation department, one maintenance department and one centralized office. Of the 429 employees studied, 239 were certified and 190 were

Table 3

*Composition of Raw Inputs Records for Kentucky County School Districts for 2010-2012**

Raw Inputs Records							
District	Year	Employee Type	Trans Employee	Trans Sub	Match Process	Info Usable	Usable Percent
County	2010-11	Certified	2,364	1,989	165	114	69%
		Classified	1,065	1,452	112	98	88%
	Year Total	3,429	3,441	277	212	77%	
	2011-12	Certified	2,817	2,271	194	125	64%
		Classified	1,303	1,542	118	92	78%
	Year Total	4,120	3,813	312	217	70%	
Two-Year Totals			7,549	7,254	589	429	73%

*Note. Processed match was the ability to link data from the employee data files with substitute employee data

considered classified. Their ages ranged from 22-71, with an average age of 43.3 years.

Employees' experience ranged from less than 1 year to as much as 31 years, with an average level of experience for all employees of 10.7 years. Table 4 summarizes employee unduplicated demographics.

District Absenteeism

The study focused on employees who were contracted with the district during the July 1, 2010-June 30, 2012 school years. Data captured included employees contracted with as few as 180 days and as many as 250 days, as well as those who were hired mid-year. Analyzing data from two complete school years provided the necessary longitudinal view of the absence patterns and behaviors of both the certified and classified employees needed for a valid study. During the school year 2010-2011, 212 employees were absent one or more times, totaling 3,077 days away from school. Of this particular group, 114 (53.77%) were certified and 98 (46.22%) were classified.

Table 4

Employee Mean Age, Level of Experience by Employee Type, Gender and Race

<u>Employee</u> <u>Type</u>	<u>Gender</u>	<u>Race</u>	<u>Age</u>			<u>Experience</u>		
			<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
Certified	Female	White	176	38.30	9.92	176	11.17	7.88
		Black	9	36.33	5.94	9	9.33	5.05
		All	185	38.21	9.76	185	11.08	7.77
	Male	White	54	39.31	9.47	54	13.69	7.73
		All	54	39.31	9.47	54	13.69	7.73
		Certified Totals		239	38.46	9.69	239	11.44
Classified	Female	White	144	49.18	9.95	144	9.58	7.79
		Black	13	53.00	9.25	13	1.38	5.12
		Other	1	42	-	1	0.0	-
		All	158	49.45	9.90	158	9.58	7.61
	Male	White	28	49.64	13.78	28	13.32	9.81
		Black	4	53.75	13.05	4	1.25	2.50
		All	32	50.16	13.56	32	11.81	10.04
		Classified Totals		190	49.57	10.57	190	9.39
Study Totals		429	43.38	11.49	429	10.79	7.94	

For the school year 2011-2012, 217 employees were absent one or more times, totaling 3,302 days absent. Of this group, 125 (57.60%) were certified and 92 (42.40%) were classified. Table 5 summarizes employee absenteeism by employee type and year.

Statistical Analyses and Discussion of Research Questions

RQ1: *What are the replacement costs associated with substitute employees by employee type?*

When addressing this question, absenteeism costs were calculated and analyzed for combined years and by employee type using a standardized district calculation. The process for calculating the costs also included identification of all subs by employee type. As the pay structure for certified employees is determined at a daily rate and classifieds at an hourly rate, the data was transformed into like comparisons in order to create consistency in the calculations.

Table 5

Employee Absenteeism by Employee Type and School Year

Employee Type	Employee Days Absent											
	2010-2011 School Year				2011-2012 School Year				Total 2010-2012			
	<i>N</i>	Total Days Abs	Mean Days Abs	<i>SD</i>	<i>N</i>	Total Days Abs	Mean Days Abs	<i>SD</i>	<i>N</i>	Total Days Abs	Mean Days Abs	<i>SD</i>
Certified	114	1,660.10	14.56	14.92	125	1,813.50	14.51	14.50	239	3,473.60	14.53	14.47
Classified	98	1,417.40	14.46	16.47	92	1,488.60	16.18	16.18	190	2,906.00	15.29	14.88
Total	212	3,077.50	14.52	15.61	217	3,302.10	15.22	13.65	429	6,379.60	14.87	14.64

1. Certified employees are paid from the certified board approved salary schedule using a daily rate calculation, which is determined by dividing the annual salary by contracted days. From that, an hourly rate is calculated by taking the daily rate and dividing it by the number of hours worked per day. This district used 7.5 hours per day.
2. Classified employees are paid at an hourly rate. This rate is determined by a board approved district pay schedule using a graduated pay scale.

The analysis revealed that certified employees were paid an average of \$1,089.27 per year, with a minimum rate of \$31.53 per day and maximum of \$7,885.30 per year. Classified employees were paid an average of \$1,213.89 per year, with the minimum of \$45.26 per day and a maximum of \$9,290.00 per year. An increase was noted in costs paid to classified substitute employees in 2012. Table 6 summarizes this analysis.

Table 6

Total Costs Paid to Substitutes by Employee Type for School Years 2010-2012

<u>Year</u>	<u>Employee Type</u>	<u>N</u>	<u>Average Cost paid</u>	<u>Minimum Costs</u>	<u>Maximum Costs</u>	<u>Total Costs Paid</u>
10-11	Certified	114	\$1,042.78	\$31.53	\$6,295.92	\$118,887.97
	Classified	98	\$1,111.15	\$45.26	\$9,290.00	\$108,892.51
	All	212	\$1,074.38	\$31.53	\$9,290.00	\$227,769.48
11-12	Certified	125	\$1,131.67	\$37.03	\$7,885.30	\$141,459.18
	Classified	92	\$1,323.33	\$80.30	\$7,647.99	\$121,746.61
	All	217	\$1,212.93	\$37.03	\$7,885.30	\$263,205.79
10-12	Certified	239	\$1,089.27	\$31.53	\$7,885.30	\$260,336.14
	Classified	190	\$1,213.89	\$45.26	\$9,290.00	\$230,639.12
	All	429	\$1,144.46	\$31.53	\$9,290.00	\$490,975.27

RQ2: *Is there a significant difference in the rate of absenteeism between certified and classified employees?*

To address RQ2, the appropriate employee data were matched and cross-referenced with data from the substitute data file: substitute employee ID number, date of absence, and cost paid to the substitute for each day worked. A *t*-test was performed to determine whether a significant difference existed in the rate of absence by employee type. With certified employees absent an average of 14.53 days per year (*SD* = 14.48), and classifieds 15.29 days per year (*SD* = 14.88), the applied *t*-test revealed no significant difference between certified and classified employees. Descriptive statistics for employee absenteeism rates are summarized in Table 7.

Table 7

Employee Absence by Employee Type for School Years 2010-2012

Employee Type	N	<i>M</i>	<i>SD</i>
Certified	239	14.53	14.48
Classified	190	15.29	14.88
Total	429	14.87	14.56

RQ3: *Is there a significant difference in the rate of absenteeism by employee type and age?*

To address RQ3, a 2x3 ANOVA was performed. Employee type (certified and classified) formed one group, and the second was formed by grouping classified employees into three age categories: (1) employees between 22-36 years of age, (2) employees between 37-48 years of age, and (3) those age 49 and above. These groupings were formed based on the total age distribution and by dividing them into three evenly

distributed groups (33% in each), which provided a low, medium, and high age range distribution. The results of the ANOVA revealed that no significant differences exist between groups, nor was any employee by age group interaction effect seen. Table 8 summarizes the descriptive statistics for this analysis.

Table 8

Employee Absenteeism by Employee Type and Age Group

Employee Type	Age Group	<i>N</i>	<i>M</i>	<i>SD</i>
Certified	22-26	113	15.51	14.75
	37-48	78	15.57	16.53
	49+	48	10.53	8.61
Classified	22-26	19	11.34	9.15
	37-48	65	15.60	15.78
	49+	106	15.81	15.14

As shown in Table 8, certified employees in the 22-26 and 37-48 age groups missed an average of 15.5 days; whereas, in the 49+ group, the more seasoned employees were absent an average of only 10.5 days. Classified employees in the 22-26 group, the younger employees, missed approximately one third less than those in the 37-38 and 49+, who averaged greater than 15.5 days per year. Certified employees' absenteeism levels decreased with age, whereas classified employees increased with age.

RQ4: *Is there a significant difference in the rate of absenteeism by employee type and experience?*

To address this question, a 2x3 ANOVA was utilized. Employee type (certified and classified) formed one group, and the second was formed by grouping classified employees into three experience categories: Group I (0-6 years), Group II (7 -13 years), and Group III (14+ years), which provided entry level, mid-career, and veteran

experience categories. As shown in Table 9, both certified and classified employees tended to have fewer days absent as their experience increased. The sample means and associated statistics also are displayed.

Table 9

Mean Days Absent By Employee Type and Years Teaching Experience Grouping (Years 2010-2012)

Employee Type	Years Experience	<i>N</i>	<i>M</i>	<i>SD</i>
Certified	0-6	73	19.49	18.91
	7-13	79	13.66	11.74
	14+	87	11.16	11.07
Classified	0-6	79	18.25	17.47
	7-13	51	14.43	14.43
	14+	60	13.13	10.32

The ANOVA revealed a significant main effect for the experience categories, $F(2,423) = 9.63, p < 0.0001$ (see Table 10). No significant difference was found for the main effect for employee type or the interaction between experience group and employee type. Post Hoc (Tukey's HSD) tests revealed that employees in the 0-6 years of experience group had significantly more days absent than subjects in either of the other two group, with no other meaningful differences related to experience.

RQ5: *Is there a significant difference in the rate of absenteeism by employee type and gender?*

To address RQ5, a 2x2 ANOVA was performed to determine whether absenteeism rates differed by employee type and gender. Employee type (certified and classified) formed one group the second was formed by grouping classified employees

Table 10

ANOVA Results for Research Question 4

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>R</i> ²
Years Experience (A)	2	3985.5	1992.7	9.63*	0.04
Employee Type (B)	1	2.85	2.85	0.01	0.00
A X B Interaction	2	108.87	54.43	0.26	0.00
Within Groups	423	87572.1	207.02		
Total	428	91807.2			

**p* < .0001

into two gender categories (male and female). The ANOVA revealed no significant difference existed for either of the two main effects, as well as no significant interaction effect. Table 11 summarizes the results of this analysis.

Table 11

Mean Absentee Rates by Employee Type and Gender

Employee Type	Employee Gender	<i>N</i>	<i>M</i>	<i>SD</i>
Certified	Female	185	14.30	13.64
	Male	54	15.32	17.14
Classified	Female	158	14.61	11.78
	Male	32	18.67	25.16

RQ6: *Is there a significant difference in the rate of absenteeism by employee type and race?*

Due to the disproportionate number of African Americans in this study, a degree of caution was used when drawing conclusions from the analysis of RQ6. Results for this research question are presented with the qualification that the cell sizes did not support an

ANOVA design. However, as is the case in “real world research,” the data shown are the actual population and speak to the differences within the school district. Table 12 provides an estimate of the absenteeism rates by race. Given that the data reflect the population of this study and are not sample estimates for a generalized study, the results can be viewed as quantifiable differences.

As displayed in Table 12, Caucasian certified employees were absent an average of 14.66 days during the study period ($SD = 14.69$), whereas African American certified employees were absent less, with an average of 11.33 ($SD = 6.79$). Caucasian classifieds were absent an average of 14.92 days during the study period ($SD = 13.55$), and African American Classifieds were absent an average of 18.24 days.

Table 12

Employee Absenteeism by Type and Race

Employee Type	Race	School Year 2010-2011			School Year 2011-2012			School Years 2010-2012		
		<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
<u>Certified</u>										
	Caucasian	111	14.60	15.11	119	14.71	14.36	230	14.66	14.69
	African American	3	13.00	4.44	6	10.50	7.96	9	11.33	6.79
<u>Classified</u>										
	Caucasian	88	13.65	13.58	84	16.26	13.47	172	14.92	13.55
	African American	10	21.64	32.82	7	13.37	4.57	17	18.24	25.13
	Other	-	-	-	1	29.00	-	1	29.00	-
Study Totals		212	14.52	15.62	217	15.22	13.66	429	14.87	14.65

RQ7: *Is there a significant difference in the rate of absenteeism by employee type and reason?*

To address RQ7, a 2x3 ANOVA was performed. Employee type (certified and classified) formed one grouping; the second was performed by grouping the employee's

reason for absence (Sick, Personal, or Other—for the purpose of this study “other” included all causes not listed, to include worker’s compensation, FMLA, professional days, etc.). Three distinct reasons were analyzed for employee absence: other, personal, and sick, but excluded two categories: dock days and non-contract days. Dock days are non-paid days taken outside of originally contracted days and non-contract days are those that figured into the original contract, also non-paid. Both were excluded, as their cell sizes did not support an ANOVA design. Overall, the highest cause of reported absence was “other,” with an average of 8.73 absent transactions per school year for certified employees and an average of 12.16 for classified. The second highest was “sick” for both certified and classified (see Table 13).

Table 13

Mean Days of Absenteeism by Employee Type and Reason

Employee Type	Absenteeism Category	School Year 2010-2011			School Year 2011-2012			School Years 2010-2012		
		<u>Nt*</u>	<u>M</u>	<u>SD</u>	<u>Nt*</u>	<u>M</u>	<u>SD</u>	<u>Nt*</u>	<u>M</u>	<u>SD</u>
<u>Certified</u>										
	Sick	156	7.09	5.51	180	7.70	7.50	336	7.41	6.65
	Other	140	8.03	12.62	174	9.29	10.69	314	8.73	11.58
	Personal	134	2.44	1.43	137	2.52	2.40	271	2.48	1.98
	Certified Total	430	5.95	8.30	491	6.82	8.37	921	6.41	8.34
<u>Classified</u>										
	Sick	103	5.50	4.47	107	7.89	8.48	210	6.72	6.91
	Other	28	13.39	17.42	35	11.18	13.20	63	12.16	15.13
	Personal	80	1.93	1.25	76	2.11	1.12	156	2.01	1.19
	Classified Total	212	5.17	7.88	218	6.40	8.61	430	5.80	8.27

*Nt = Number of transactions in the absenteeism category.

ANOVA results indicated a significant Employee Type x Reason interaction effect $F(2, 1244) = 5.69, p = 0.0035$ (see Table 14). This analysis revealed that classified employees displayed higher rates of absence in the “other” category than certified, while personal and sick transaction absences were nearly the same for each group (see Figure

1). ANOVA results also demonstrated a simple effect for “other absent transactions” by employee type, $F(1, 375) = 4.13$, $p = 0.04$.

Table 14

ANOVA Results for Research Question 7

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>R</i> ²
Employee Type (A)	1	140.03	140.03	2.29	.01
Reason (B)	2	10308.13	5154.06	84.14	.01
A X B Interaction	2	696.71	348.35	5.69*	.00
Within Groups	1344	82331.84	61.25		
Total	1349	93607.36			

* $p < .001$

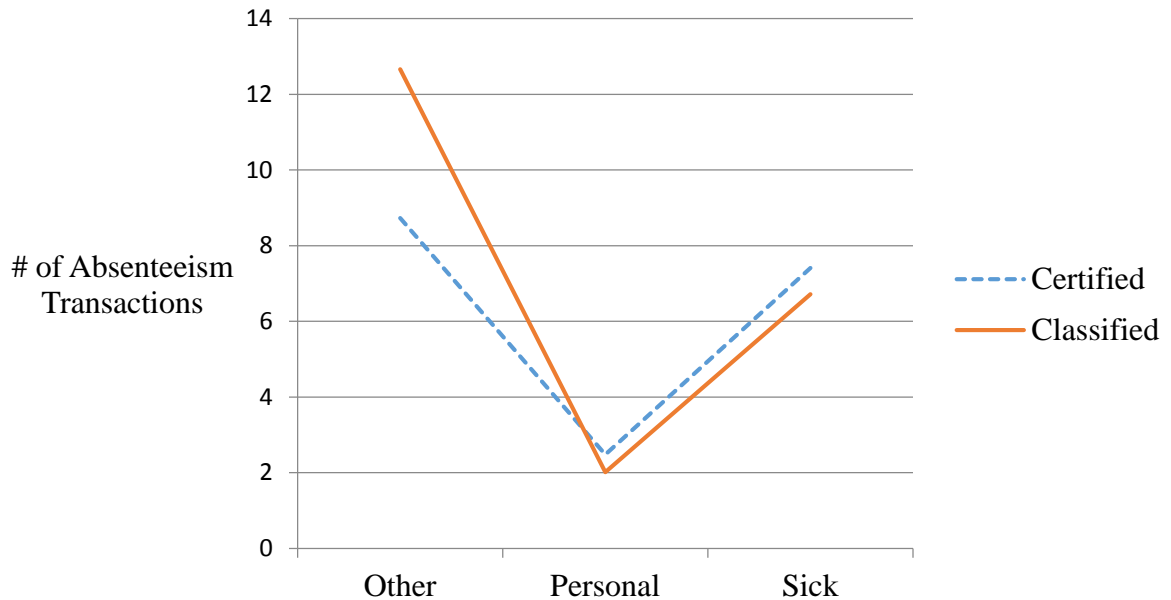


Figure 1. Mean levels of absenteeism as a function of interaction between employee type and reason for absenteeism (school years 2010-2012 combined).

RQ8: *Is there a significant difference in the rate of absenteeism by employee type and day of the week?*

To address RQ8, a 2x5 ANOVA was performed to determine whether absenteeism rates differed by employee classification and day of the week. Employee type (certified and classified) formed one group; the second was formed by grouping the day of the week (Monday, Tuesday, Wednesday, Thursday, and Friday) by school year (see Table 15).

Table 15

Employee Absenteeism by Type and Day of the Week

Employee Type	Absenteeism Category	School Year 2010-2011			School Year 2011-2012			School Year 2010-2012		
		<u>Nt*</u>	<u>M</u>	<u>SD</u>	<u>Nt*</u>	<u>M</u>	<u>SD</u>	<u>Nt*</u>	<u>M</u>	<u>SD</u>
<u>Certified</u>	Monday	137	3.29	3.25	159	3.86	3.04	296	3.60	3.14
	Tuesday	136	3.27	3.28	167	3.89	3.05	303	3.61	3.17
	Wednesday	138	3.47	3.30	163	3.67	3.05	301	3.58	3.17
	Thursday	144	3.84	3.95	175	4.32	3.05	319	4.10	3.49
	Friday	150	4.18	3.62	176	4.13	3.35	326	4.16	3.47
	Certified Total	705	3.62	3.51	840	3.96	3.12	1545	3.82	3.30
<u>Classified</u>	Monday	78	2.75	2.76	83	3.13	3.13	161	2.95	2.96
	Tuesday	77	2.56	2.69	92	3.05	3.41	169	2.83	3.10
	Wednesday	77	2.76	3.31	92	3.24	3.74	169	3.02	3.55
	Thursday	86	2.74	2.91	96	2.88	3.28	182	2.81	3.10
	Friday	87	2.70	2.69	90	3.11	3.10	177	2.91	2.91
	Classified Total	405	2.70	2.89	453	3.08	3.33	858	2.90	3.12

*Nt = Number of absenteeism transactions per day of week.

The results of the ANOVA indicated no interaction effect, as well as no difference for day of week missed. However, a significant difference was found for the main effect of employee type $F(1, 2393) = 42.94, p < 0.0001$, with certified employees missing significantly more days than classified (3.82 vs 2.90). Table 16 summarizes the results.

Table 16

ANOVA Results for Research Question 8

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>R</i> ²
Employee Type (A)	1	451.84	451.84	42.94*	0.01
Reason (B)	4	31.34	7.83	0.74	0.00
A X B Interaction	4	51.07	12.76	1.21	0.00
Within Groups	2393	25182.70	10.52		
Total	2402	25757.90			

**p* < .001

This chapter presented the statistical analyses and findings of the research study, while Chapter V summarizes the findings and offers conclusions and recommendations for additional research.

CHAPTER V: DISCUSSION

This study examined absenteeism rates of 239 full-time certified and 190 full-time classified employees spanning two academic years (July 1, 2010-June 30, 2012) of a mid-south Kentucky county school district, to include the following: (1) cost related to replacement employees, (2) association of employee demographics on absenteeism, and (3) causation. The data collected included gender, ethnicity, years of service, day of week missed, number of days missed, and rate of employee pay. The design for this study was a quantitative analysis. Employee absenteeism and its obvious effect on student achievement was not discussed during the research. Common sense suggests that teacher absences impact student learning, despite the use of substitute teachers in the classroom.

Discussion of Findings

RQ1: *What are the replacement costs associated with substitute employees?*

According to the District Management Council (2004), the average teacher misses approximately two weeks of school per year from sick days, personal days, and other excused absences, which costs districts through substitute salaries, absent teacher salaries, as well as other associated recruiting and administrative costs. Nationally, based on findings from the same study using NCES statistics from 2000, the total cost of teacher absenteeism was \$25.2 billion dollars. Clearly, employee absenteeism affects the entire educational system.

This particular study revealed a cost of \$500,000 to the school district for both certified and classified replacement employees for the two-year period observed. Classified substitutes grossed \$35.14 more during the first year of the study. Certified employees were paid an average of \$1,089.27 per year with a minimum rate of \$31.53

per day and a maximum rate of \$7,885.30 per year. Classified employees were paid an average of \$1,213.89 per year, or a minimum of \$45.26 per day and a maximum of \$9,290.00 per year. This increase may have been due to classified employees being allowed to sub in various positions throughout the district, therefore receiving multiple hourly wages for each position in which they served. During the two-year study, substitutes cost the district 1% of the allotted \$58,216,150.98 two-year budget, which was consistent with a 1996 study of three northern Indiana districts in which results showed that “nearly 1% of the total operating budget for these school districts was consumed by substitute teacher costs” (Woods, 1997, p.307). Though 1% may seem trivial, simply put it equates to 12 additional teachers.

RQ2: *Is there a significant difference in the rate of absenteeism for certified and classified employees?*

The ANOVA revealed no significant difference in the rate of absenteeism of certified and classified employees. According to Ballou (1996) and Podgursky (2003), teachers are absent 5-6% of school days annually, which equates to 9-11 school days. Certified employees within the district often would mention that classified employees missed more days, thereby costing the district more money. An unexpected finding surfaced during the analysis. Certified employees missed 567 more days during the two-year period than classified employees. One reason the numbers were elevated may be due to certified employees having more professional development, lending credence to the increase in the number of days missed, which requires additional research.

The original research plan was to conduct absenteeism research on two mid-south Kentucky school districts similar in demographics, student population, employee

population and overall size. An overwhelming and somewhat frustrating finding was the inaccurate, inaccessible, inconsistent, and irregular entries of absenteeism data being captured and reported by the districts. Very little focus was discovered on employee absenteeism, as evident by the lack of proper absenteeism tracking tools and resources. If absenteeism data are not properly tracked a determination of the area in which the costs are incurred is nearly impossible. Therefore, managing employee absenteeism costs also are nearly impossible. Due to the inconsistency of data collection, data processing, data entry errors, and the lack of a sound systematic approach to capturing absenteeism data, only 23% of the data was usable for one district. This district was removed, and only the district with 73% usable information was used for the study. The study revealed that school districts need more reliable systems to not only report absenteeism data, but also to provide informational platforms for daily review and analysis. Without specific tracking and monitoring, employee and substitute absenteeism costs cannot be adequately estimated. Assigning an overseer to review and report absenteeism data could potentially create awareness and focus for districts.

Another unexpected noteworthy discovery was the use of “deducts,” which are days taken by an employee outside of the originally agreed contract. Deducts, though considered a negative behavior, are monitored and tracked as district employee absences and, surprisingly, yield a positive cash flow to the district, as the absent full-time employee does not receive scheduled contracted pay when deducts are taken. In deduct scenarios, only the direct cost of the replacement employee is considered a district charge; therefore, the costs captured are rather conservative. Because the full-time absent employee receives no pay from the district, when a substitute is required, even at a lower

pay, indirect costs are incurred in locating the substitute and completing all requirements associated with it. Though deducts were indicated as negatives in the data, the related costs and information obtained could have somewhat compromised the results.

Additional research of this particular phenomenon should prove useful.

RQ3: *Is there a significant difference in the rate of absenteeism by employee type and age?*

The ANOVA revealed no significant differences between the certified and classified groups, with no employee age group interaction effect. Ehrenberg et al. (1991) studied 700 school districts in New York and indicated that teachers 55 years of age and older reported less absence from school. Based on the formation of three evenly distributed age groupings for this study, certified employees in the 22-26 and 37-48 age groups missed an average of 15.5 days, whereas employees in the 49+ group, the more seasoned employees, were absent an average of only 10.5 days. However, classified employees in the 22-26 age group, the younger employees, missed less days than those in the 37-38 age group, and the 49+ averaged greater than 15.5 days annually. Interestingly, certified employees' absenteeism levels decreased, but classified increased. The results were consistent with earlier studies conducted by Elliott (1982), Jacobson (1989), and Winkler (1980). One could speculate that nearing retirement age and awareness that benefits are adjusted based on leave balances may be one reason for the decrease in absenteeism. Additional research is needed to determine the true cause.

RQ4: *Is there a significant difference in the rate of absenteeism by employee type and experience?*

The ANOVA revealed no significant difference for either of the two main effects and no significant interaction effect regarding employee type and experience. However, inconsistencies existed with the results of research conducted in the area of teaching experience and absenteeism. Participants of this study were categorized into three experience groups by employee type: Group I (0-6 years), Group II (7 -13 years), and Group III (14+ years). Results revealed that certified and classified employees tended to have fewer days absent as their experience increased. Employees in the 0-6 year experience group had significantly more days absent than subjects in either of the other two groups. No other experience group comparisons were measurably different.

RQ5: *Is there a significant difference in employee absenteeism rate by employee type and gender?*

The ANOVA revealed no significant difference for either of the two main effects and no significant interaction effect regarding employee absenteeism by type and gender. Certified males were absent one day more often than certified females, and classified males were absent four days more often than classified females. The results possibly were due to the disproportionate number of males in this study, but the results are consistent with a study by Rosenblatt and Shirom (2004) that demonstrated men and women do not differ in terms of their absence frequency. Winkler (1980) agreed with business and industry, finding that females were absent more often than males, although these absences are taken for shorter periods of time (ERS, 1980; PSBA, 1978). However, Winkler found overall that men were absent for more days than women. A study by

Globerson and Ben-Yshai (2002) indicated a contrasting result, with male participants having more absences than their female counterparts.

Based on the research of Unicom (1992), gender and life stage play an important part in determining the profiles of teachers who are absent from the instructional environment. Female teachers were discovered to be absent more as they increased in age. Male teachers were out more days in their 30s than at any other time in their teaching career. In another study by Scott and McClellan (1990), male teachers missed fewer days than women by a ratio of 3.39 to 5.29 days per academic year. Inconsistencies were noted with the results of research conducted in this area, as data are available to substantiate both claims.

RQ6: *Is there a significant difference in employee absenteeism rate by employee type and race?*

This particular question was analyzed with extreme caution due to the disproportionate number of African Americans in the study. As is often the case with “real world research,” the data gathered were reflective of the actual population, and, therefore, spoke to the overall differences within this particular school district. Due to the disproportionate sample size of both certified and classified Caucasian and African American employees, the data were weakened but show a higher absenteeism rate for African American employees.

These results are consistent with a study conducted by the National Education Association in 1980 in which African American teachers in the St. Louis area were reported to have more absences than Caucasian teachers. In another study, Caucasian teachers in a semi-rural school system had fewer absences than African American

teachers (Marlin, 1976). Other factors may alter or influence the results of some of these studies. However, given that the data herein reflects the population of this study, and are not sample estimates for a generalized study, the results can be viewed as actual differences where noted. Studies have consistently indicated the relationship of ethnicity to teacher absenteeism as somewhat inconclusive, as per Foldsey and Foster (1989). Holefelder (1982) found that most African American teachers in his study were female, which was the case with the current study as well.

In Virginia, 286 teachers were studied via questionnaire by Merchant (1976), and results revealed a relationship between ethnicity and teacher absenteeism. Caucasian certified employees were absent more days during the study period than African Americans, whereas Caucasian classified employees were absent less. When reviewing the results of the data by race only (African American, Caucasian, or other) for each school year and the combined years, no significant differences were found. The “other” race category was eliminated due to only a single data point. As the number of African American teachers was small, additional research could prove helpful in addressing the reasons for the lack of African American employees in this district. Much remains to be discovered about race and school district employee absenteeism.

RQ7: Is there a significant difference in the rate of absenteeism by employee type and reason?

The results of the ANOVA for this study revealed no significant difference interaction effect between employee type and reason. No significant difference was found for the main effect of employee type, although a significant difference was found for the main effect of reason. The study revealed no significant main effect for certified

or classified employees in terms of taking a personal or sick day. However, a significant difference was found for the main effect with regard to the reason code of “other.”

***RQ8:** Is there a significant difference in the rate of absenteeism by employee type and day of the week?*

The ANOVA revealed no significant interaction effect between employee type and day of the week, and no real difference was found for the main effects of employee type or day of the week as well. A 1992 study by Unicomb found that Wednesday was missed more often than any other day, and Monday had the fewest number of days missed. The results indicated the number of transactions for certified employee absences doubled that of classified employees’ absences for Friday, and the total absent transactions by certified employee type also was doubled. This could be due to the multitude of meetings, training, and professional development classes required of certified employees in order to obtain and satisfy state and district mandates. Classified employees are not required to attend as many.

Recommendations for Future Research

One of the ways in which to build continually on this type of study is for districts to not only think in terms of implementing time and attendance systems for addressing absenteeism issues, but also to realize the true value of the data being captured. Listen intently to that which the data are saying, but also read between the lines as information is tracked and thoroughly analyzed. This should aid in creating district processes, leading to a much needed roadmap for helping them make improvements in this problematic area.

To further extend the findings of this study, the following opportunities should be addressed:

1. Study employee absenteeism costs as they relate to the use of six-sigma methodology and Kaizen to control and track employee absenteeism in educational systems.

2. Though somewhat futuristic thinking, researchers should conduct a study to track absenteeism costs of certified and classified employees by adopting an Automatic Time-Keeping Management System utilizing advanced tracking methods such as biometric and/or retinal scans. The inaccuracy of recordkeeping of absenteeism adds to the problem of its effective study (Harrison & Hulin, 1989); e.g., while reviewing a city school's data, though easily accessible and collectable, it was found to be incomplete for this study. During the Step 3 merging process, only 23% of data was determined usable. The data sets were incomplete due to a variety of data entry errors, missing data fields, as well as inconsistencies.

3. Researchers should consider a study on absenteeism using Human Resource Metrics to predict, forecast, and control absenteeism costs such as cost per hire, time to fill ratios, turnover rates, and healthcare costs per employee as they relate to certified and classified employees.

4. Studies should be conducted on more long-term costs, i.e., workers compensation, FMLA, and short-term disability, to determine and predict absenteeism patterns within the district.

5. Studies should be conducted to compare absenteeism rates, costs, and demographics of multiple like-type educational institutions to include both K-12 and P-16 settings.

6. Also advisable is a study on supervisory styles and their effect on employee absenteeism rates.

Conclusion

As is true with most costly problems, continuing with the status quo proves to be detrimental to school districts. Clearly, research has indicated a rebirth of interest in employee absenteeism by some school districts and their need to not only capture, but measure and reduce, both direct and indirect leave related costs. To better control absenteeism, school districts must have a clear understanding of the nature of the problem. Doing so requires continual research and monitoring of all school employees, certified and classified, at all levels of education, to include State Governing Agencies. As a growing number of districts make use of computer-based “formative assessments” of student skills, such data may be available for studies on the effects of employee absenteeism in the near future. Monitoring of certified and classified employee absenteeism by the Kentucky Department of Education via the Auditor’s Expenditure Report could be used to display the way in which districts’ “absenteeism function” compares to the state’s overall employee absenteeism average. The related budgets could be compared per absenteeism fund by location, which may minimize overspending of a district’s allotted absenteeism funds by providing a continual snapshot of absenteeism budgeted information. Any significant differences in the schools’ versus the state’s absenteeism data could cause the districts to make necessary adjustments to absenteeism systems or processes based on accurate, real-time employee data retrieved from a legitimate system. Critical decisions based on information and technological facts, rather

than theory, can then be made to control employee absenteeism for both exempt and non-exempt employees; using educational terminology, certified and classified employees.

Employee absenteeism is a key factor in school districts' costs, which lack systematic control due to few schools, districts, or states routinely measuring absenteeism. As absenteeism is not clearly measured, it cannot be monitored or acted upon in an effective manner. Therefore, if districts simply measure and monitor absenteeism with some direction and accountability, much can be done to improve utilization of existing resources. The following three emblematic examples of actively and progressively dealing with the issue indicate the reasons and the way in which absence can be significantly reduced: schools should properly use data to build a culture of regular and expected district-wide attendance. A few policy changes are needed at the federal, state, and local levels. A number of low cost, high impact actions can be taken to quickly improve employee absenteeism. At the simplest level, the federal government, states, local communities, school districts, and schools should begin to properly measure and monitor absenteeism and take appropriate action, which would reduce the problem. Some examples follow.

At the Federal Level

The U.S. Department of Education's Office of Civil Rights annual school survey could add questions about the extent of employee absenteeism (i.e., number of employees missing 10% or more of school) and regular attendance (i.e., number of employees missing five or fewer days in a year). This is the fastest and most efficient route in obtaining data on absenteeism at the school level, resulting in nationwide impact. This in

turn would provide communities with the information needed to target support efforts for the most impacted schools.

As part of a broader early warning system, add measuring, monitoring, and responding with evidence-based strategies to the list of required elements in the school turnaround model that indicates states seeking flexibility waivers are required to be completed for the lowest performing 5% of schools. Also, this could be considered a part of the requirements for school districts and schools receiving school improvement grants, resulting in positive change.

At the State Department of Education Level

Districts could measure and monitor absenteeism and make certain the results are reported in state, district, and school report cards. They could also examine state policies that involve employee attendance to ensure they are not counterproductive (e.g., suspending employees who are chronically absent).

At the Local Level

Districts could add a measure of accountability by making available real-time data on employee absenteeism to schools, teachers, and administrators. Monthly, public reports could be generated on school-level regular attendance rates, which would enable the more effective and efficient targeting of resources and aid the examination of attendance patterns over time and across schools. Furthermore, this could help to identify the times of year when extra attention is required, and schools reporting low absenteeism rates can share their success with others.

Schools could conduct a school policy audit to ensure the policies support and encourage regular school attendance. Make certain policies and penalties related to

tardiness are not onerous and encourage employees who may run a little late to skip the entire day of school. Monitoring should occur of school-level absenteeism and the strategies used to respond to it, as this is one of the issues on which superintendents review principals.

School systems may investigate the possibility of implementing biometric scanning and cameras placed strategically throughout district locations in an effort to capture employee absences electronically. Policies should be implemented and monitored more closely to ensure compliance and to identify trends and patterns of suspected abuse. Scott and Taylor (1985) believed that “a good attendance policy also includes a progressive discipline clause” (p. 601). Employees under this guidance must receive consistent and increasing levels of punishment for more severe or repeated violations of the organization’s policy with the goal to motivate and shape the employee’s behavior and to provide the information to clearly understand the consequences of their actions. The policy should be procedural and must be ingrained throughout the academic year to staff members.

Until school districts make a point of purposely acting to reduce absenteeism, both the costs and effect on overall business performance will continue to create an unnecessary burden on educational systems. Though data on the costs of absenteeism for certified employees (teachers/administrators) are available, but sketchy, the data related to classified (support) employees are virtually non-existent and merit further investigation and study.

This study served as a mere glimpse into the world of education and the challenging issue of certified and classified employee absenteeism, with the purpose of

gaining the attention of decision makers and ultimately leading to marked absenteeism rate improvements. The expectation of this research is that the potential for reducing costs and improving systems for addressing employee absenteeism will make this study worthwhile to many school districts.

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APPENDIX: IRB Approval Letter



A LEADING AMERICAN UNIVERSITY WITH INTERNATIONAL REACH
OFFICE OF COMPLIANCE

DATE: March 18, 2013

TO: Milli McIntosh, Ed.D
FROM: Western Kentucky University (WKU) IRB

PROJECT TITLE: [327893-1] The Financial Impact of the Cost of Absenteeism on a KY School District (Certified & Classified Employees)

REFERENCE #: IRB 13-292
SUBMISSION TYPE: New Project

ACTION: APPROVED
APPROVAL DATE: March 18, 2013

REVIEW TYPE: Exempt from Full Board Review

Thank you for your submission of New Project materials for this project. The Western Kentucky University (WKU) IRB has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This submission has received Exempt from Full Board Review based on the applicable federal regulation.

Please note that any revision to previously approved materials must be approved by this office prior to initiation. Please use the appropriate revision forms for this procedure.

All UNANTICIPATED PROBLEMS involving risks to subjects or others and SERIOUS and UNEXPECTED adverse events must be reported promptly to this office. Please use the appropriate reporting forms for this procedure. All FDA and sponsor reporting requirements should also be followed.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to this office.

This project has been determined to be a Minimal Risk project.

Please note that all research records must be retained for a minimum of three years after the completion of the project.

If you have any questions, please contact Paul Mooney at (270) 745-2129 or irb@wku.edu. Please include your project title and reference number in all correspondence with this committee.