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AUTHOR Boyer, Charles Edwin  
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ABSTRACT

Teacher absenteeism is a formidable obstacle to cost-effective education, academic achievement, orderly school operation, and amiable school-community relations. This study examined the relationship between school district policies on sick leave and teacher attendance rates in Georgia--in particular, the degree to which policy provisions for the buy-back of sick leave deterred teacher absenteeism in Georgia school districts. "Buy-back" refers to the practice of school boards paying teachers a dollar amount for accumulated unused sick leave. Data were collected through a survey of 183 Georgia school-district superintendents. The initial response rate was 50 percent; however, 31 percent of the total surveys were usable. The survey requested data for the dependent variable, teacher attendance rate, and 15 independent variables for district policy. Pearson r and the independent t test for two samples were used to analyze the data. The tests confirmed the null hypothesis, which stated that there is no significant relationship between the amount of buy-back for sick-leave provisions and teacher attendance rates in Georgia. However, the directionality of the findings tended to support the notion that buy-back provisions reduce absences. These findings may be explained by the lack of collective bargaining in Georgia, the low dollar amount of payment for unused sick leave, or the predominance of small districts in the sample. Appendices contain a copy of the survey, sample cover and followup letters, and a definition of terms. Three tables are included.

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The Relationship between Buy-Back Provisions  
and  
Teacher Attendance Rates

by

Charles Edwin Boyer  
Georgia Southern University

(BUY-BACK PROVISIONS)

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### Abstract

This study examined the relationship between school district policies on sick leave and teacher attendance rates in Georgia. The teacher attendance rate was the dependent variable. The independent variables were: 1) the number of sick days; 2) the number of accumulated days which could be paid to the teacher; 3) the dollar amount given for each unused sick day; 4) the time frame for payment; 5) the size of the district; 6) the number of personal days; 7) the number of professional days; 8) the number of bereavement days; 9) the presence of a sick leave bank; 10) the presence of a leave transfer program; 11) a requirement to verify illness; 12) the number of days before verification is required; 13) whether or not the system calculates its attendance rate; 14) a requirement to contact the principal directly when taking sick leave; and 15) the presence of other pay incentives designed to reduce unnecessary or unwanted absences. Variables were correlated to the dependent variable using the Pearson  $r$ . Dichotomous variables were tested via the independent  $t$  test for two samples. All tests confirmed the null hypothesis.

The directionality of the findings, however, tend to support the notion that buy-back provisions reduce absences. Explication of these findings may center around the lack of collective bargaining in Georgia, the low dollar amount, or the predominance of small districts in the sample.

## The Relationship between Buy-Back Provisions and Teacher Attendance

### Introduction

The costly consequences of teacher absenteeism have alarmed many writers. When a teacher is absent, the school system must pay the teacher's salary, the substitute's wage, and for numerous administrative tasks. On any day, it is estimated that more than 200,000 teachers are absent. Lewis (1981) suggests "that teacher absenteeism nationwide annually costs upward of \$2 billion (including cost of substitutes, the lost productivity of regular teachers, and so on)" (p. 29). Moreover, a number of studies have concluded that student achievement suffers as a result of poor teacher attendance because it breaks the continuity of instruction, lowers effective use of class time, and raises the need for remediation (Foldes & Foster, 1989; Lewis, 1981; Skidmore, 1984).

Are school boards, administrators, and researchers engaged in a process which deals effectively with absenteeism at the policy-making level? "The study of the causes and effects of teacher absences from the classroom has received very little attention...Only a few studies deal, however, with how sick leave policies influence absenteeism" (Ehrenberg, R. A., Ehrenberg, R.

G., Ehrenberg, E., & Rees, D., 1991, p. 73). The policy aspect of the subject holds potential as a means to cut costs, raise academic standards, and increase credibility among educational publics. Absenteeism research is plentiful; its relationship to policy-making is scarce.

This study investigated the degree to which policy provisions for buy-back of sick leave act to deter absenteeism in the school districts of Georgia. It attempted to identify those aspects of policy which reduce absence rates among teachers, which policies have the greatest effect, and the relative differences between the impact of each of the policies examined. The policies regarding buy-back of sick leave, as determined by the limitations imposed by the State of Georgia, were: 1) the number of annual sick leave days given to teachers; 2) the number of accumulated days which can be paid by the system; 3) the time frame within which repayment is given; 4) the dollar value of each day; 5) the presence of a sick leave bank; 6) the presence of a leave transfer system; 7) the amount of personal leave; and 8) the amount of professional leave. Other policies examined were: 1) the number of bereavement days granted; 2) a requirement to verify illness with a doctor's statement; 3) the number of days before verification is required; 4) whether or not the system calculates its attendance rate; 5) a requirement to contact the principal directly when taking sick leave; and 6) the presence of other pay incentives intended to

reduce excessive absenteeism. One demographic variable, the size of the district, was also perused. The findings may influence school and community leaders to adjust these policy arrangements so as to cut costs and increase efficiency in the operation of schools.

### Problem Statement

Teacher absenteeism is a formidable obstacle to cost-effective education, academic achievement, orderly school operation, and school-community relations. Extensive research on the relationship between sick leave policy and absenteeism is lacking and the potential gains may be worth pursuing. It is particularly uncertain what the conditions are that affect the efficacy of specific policies and regulations which appear to increase teacher attendance rates. Hence, school and community leaders may have ignored an important tool in their quest to stem the tide of teacher absenteeism.

### Hypothesis

The following null hypothesis was tested: there is no significant relationship at the  $p < .05$  level between the amount of buy-back of sick leave provisions and teacher attendance rates in Georgia.

### Significance of the Study

It was important to do this study because school and community leaders in Georgia did not know if the few studies done on the relationship between buy-back provisions of sick leave and teacher attendance rates applied to their individual districts. The study's purpose was to extend the information base on teacher absenteeism in general and shed some light on the question of that absenteeism in non-unionized states. Doing so may contribute to the practical application of an absenteeism theory in situations where school leaders in non-unionized states are contemplating changes in their buy-back of sick leave provisions.

Studies such as this can affect a state's legislation appertaining to accumulation of sick leave. In some states, such as Oklahoma, accumulated unused sick leave transforms into an additional year of retirement. Since no pertinent studies have been done in Georgia, a contemporary study was appropriate because preparations are underway to introduce legislation in 1994 which would establish a statute allowing unused sick leave to become an additional year of retirement.

### Assumptions

It was presumed that Georgia's superintendents and those in charge of

sick leave for the districts were cognizant of the most basic district and state sick leave policies. These individuals should have been aware of the level of state contribution and the amount of additional district contribution, if any, in the following areas: 1) the number of days given to teachers annually; 2) the number of days of unused sick leave which can be accumulated during the term of a teacher's contract and paid to the teacher at retirement; 3) the dollar amount each day is worth; and 4) the time frame for repayment of unused sick leave.

It was assumed that most districts could afford to add to the state's minimum contributions. The notion that superintendents were aware of the compelling interest the local districts have in a high teacher attendance rate is also taken for granted. All areas which influence attendance rates could not have been studied in this project. Therefore it was limited to those factors which are considered in Title 20 of the Official Code of Georgia (1992) and those individual district policies which relate directly to teacher attendance rates.

### Review of the Literature

The extant literature covers research findings that are relevant to policy concerning buy-back of sick leave as it may influence teacher attendance. The



purpose was to extract useful information and deduce conclusions so as to form a basis of inquiry into the subject. This review begins with a cursory treatment of absenteeism research and leads to policy research and those pertinent factors which must be considered for a concise but thorough inquest.

### Absenteeism Research

At the broadest level, absenteeism has been studied by the corporate sector for over 50 years (Scott & Wimbush, 1991). The greatest amount of research in schools occurred from the middle 1970's to the early 1980's. Emphasis has been placed on numerous sociodemographic variables which were believed to influence teacher absence patterns. Policy research relative to attendance is a comparatively new area of exploration.

Age, experience, job satisfaction, race, gender, distance to work, marital status, number of dependents, and level of education have all been posited as affecting the rates of attendance by teachers (Foldesy & Foster, 1989). Teacher attendance has also been considered as an independent variable impacting student achievement, school climate, and student attendance (Madden, 1991; Lewis, 1982). Other studies have linked increased attendance rates with greater professionalism (Azumi & Madhere, 1983), extensive record keeping (White, 1990), teacher awareness plans (White, 1990), and regulations regarding reporting procedures (Skidmore, 1984; Hill, 1982).

As noted by Foster (1987), most findings in demographic domains have been mixed or inconclusive. That is, studies conflicted on the direction of significance, or research in the demographic area was not complete. Job satisfiers, discussed below, stands out as a variable which has consistently been confirmed as a significant factor in reducing absenteeism (Ehrenberg et al., 1991; Martin & Miller, 1986).

#### Policy and Attendance

Studies and reports on policy as related to absenteeism have delved into contractual arrangements, procedural aspects, hiring practices, pay incentive plans, inclusion of individual absence rates into yearly evaluations, and teacher awareness plans (White, 1990; Pitkoff, 1981). Policy studies are limited to those areas which theoretically could be manipulated in a legally defensible manner. This excludes many of the sociodemographic factors studied in the vast majority of research on absenteeism. Job satisfaction, however, encompasses both policy and demographic domains. Since sick leave provisions are part of a teacher's contract, they can be particularly useful to administrators and community leaders when considering ways to cut absences which may be unnecessary and unwanted.

In 1980, the Educational Research Service (ERS), as documented by Foster (1987), published its review of literature concerning employee

absenteeism and made recommendations. Among them were:

1. Initiate policy which allows employees to deposit unused sick leave in sick leave banks.
2. Establish a policy of unlimited sick leave.
3. Permit an unlimited number of sick days to be accumulated.
4. Allow employees to cash in unused sick days at full or partial salary rates.
5. Allow conversion of unused sick days into personal leave.
6. Establish policy which lets employees transfer unused sick leave when they move to another school.
7. Let teachers use all of the year's sick leave at the beginning of each school year.

While pay incentives have been found to significantly reduce absence rates (Jacobson, 1989a; Chaplik & Engel, 1984; Buford & McAndrew, 1983; Say, 1982), as late as 1991, the impact of sick leave policy on teacher attendance was an ignored area of educational research. As Ehrenberg et al. (1991) observes:

There have been only two studies of the effects of sick leave policy on teacher absenteeism. The first used data for 57 elementary schools in California and Wisconsin in 1974-75 and found that the presence of

income protection plans (for long-term sick leave) was associated with higher absenteeism, while the requirements that teachers provide proof of illness and report illness directly to the principals were associated with lower absence rates. (p. 73)

Whereas several primary sources considered district policy in relation to attendance, only three (Ehrenberg et al., 1991; Jacobson, 1989b; Winkler, 1980) bear direct association to buy-back of sick leave policy.

Winkler's project in California and Wisconsin (1980) tested whether or not a district's policy, which provided income to teachers who exhausted their sick days, affected absenteeism. Though it can be construed to be a pay incentive, teachers did not receive any cash benefit. This pay incentive proved to be a positive influence on absence rates. Teachers felt they could take sick days without having to "pay" for them. Other policies germane to the present study were not considered by Winkler (1980).

Qualitatively, this type of pay incentive is different from a buy-back plan available to school leaders in Georgia since there was no actual cash benefit. Winkler's design (1980) controlled for personal attributes of teachers and job characteristics including job satisfaction. Data was collected on individual teachers rather than comparing school district in one state.

Jacobson (1989b) studied the implementation of a plan for yearly

repayment of sick leave days in a New York State district. Using state funds, teachers could receive a share in a paramutual pool for each day of sick leave used below the mean number in the district. Significant negative influence on absenteeism was detected. The possibility of a Hawthorne Effect existed because the dollar amount was determined by the number of teachers who met the requirements for below average absenteeism. This study collected data on schools within one district.

The work of Ehrenberg et al. (1991) compared absenteeism from district to district within a state and dealt directly with buy-back of leave policy. It considered four key aspects of leave policy as they relate to teacher attendance and student achievement. These independent leave variables were the annual number of leave days given to teachers, the number of days which could be accumulated, the presence of buy-back provisions or other subsidies in lieu of cash payments, and the dollar amount per day paid for unused leave days.

*Ceteris paribus*, [other things being equal] a larger annual number of leave days permitted, the presence of "sick leave banks," a larger number of days granted for bereavement leave, and a smaller number of professional, visitation and conference days specified in the contract, are all associated with higher actual teacher usage of leave days...In

districts in which cumulated unused sick days can be "bought back," typically at retirement, increases in the number of days that can be "cashed-in," or in the dollars per day buyout are both associated, *ceteris paribus*, with lower leave usage. (Ehrenberg et al., 1991, p. 99)

To control for other pertinent factors, their work considered the size of district, urbanization of district, age of teachers, early retirement plans, and student attendance rates. "Quite strikingly, the leave variables all significantly influence teacher usage of leave days and the magnitudes of their effects are relatively insensitive to the inclusion of the other variables in the analysis" (Ehrenberg et al., 1991, p. 83). Moreover, these other variables had almost no effect on student achievement.

Other leave policies impact attendance rates. The number of personal days, like professional days, has been shown to affect teacher attendance. "Note that this reduction in sick leave use was accompanied by an increase in the number of teacher personal days" (Jacobson, 1989b, p. 385). White's study (1990) demonstrated that systems which keep complete records have increased teacher attendance rates.

Hill (1982) suggests that systems can reduce absences if they "reserve the right to request documentation of illness" (p. 3). Other coercive means, such as a requirement to call the principal directly to report an absence

(Skidmore, 1984), are touted as effective absence-reducing measures. Such recommendations, which are popularly believed to be accurate, have not been supported by empirical research data. Azumi and Madhere (1983) found these mild forms of coercion to be counterproductive in terms of increased attendance rates. "Absenteeism is higher and expectations are lower when the sanctions mode of control is utilized in these schools" (p. 12). Foster's research (1987) also reports of the futility of negative responses to absenteeism.

Best results in reducing teacher absenteeism have been noted when principals approach teacher attendance in a positive manner. In one New Jersey school system (Lewis, 1981) administrators learned to encourage good attendance, rather than spending time devising punishment for poor attendance, as part of a humane management technique. (p.22)

### Research Considerations

Job satisfiers were a controlled element in the works of Winkler (1980) and Jacobson (1989b). Though not considered by Ehrenberg et al. (1991), job satisfaction, job involvement, satisfaction with pay, and satisfaction with supervisor are variables which have been shown to influence absenteeism negatively (Scott & Wimbush, 1991). Findings to the contrary were not found

in this review of literature. This is particularly noteworthy because "...job satisfaction was specifically identified as being the single most important factor that affects attendance motivation" (Scott & Wimbush, 1991, p. 508). Though only 13% of the variance in their study could be attributed to these motivational variables, it could be a contaminate of any subsequent study dealing with policy and attendance.

To control for the effect of job satisfaction, Scott and Wimbush (1991) collected data for both short-term and long-term absences using the Steers and Rhodes (1978) model of attendance behavior. In essence, a large number of half or single day absences are associated with a lack of motivation to attend due to job dissatisfiers. A larger number of longer absences are associated with involuntary reasons for absence such as illness. "It is believed that most single-day or short-term absences are voluntary, or related to discretionary reasons for absence" (Scott & Wimbush, 1991, p. 512).

To recapitulate, two of the studies involving policy relative to attendance included job satisfaction (Jacobson, 1989b; Winkler, 1980), and controlled for the variable by dividing absence into short-term and long-term absence. Job satisfaction had the predicted significant influence in both. Ehrenberg et al. (1991) also found significant results but did not control for job satisfaction.



Though job satisfaction affects attendance rates, it was set aside in this study for these reasons: 1) Ehrenberg's et al. work (1991), the one most closely associated with this study, did not include it; 2) Winkler (1980) and Jacobson (1989b) did not compare school districts as was done here; 3) record-keeping in Georgia districts did not normally include data on long and short-term absences, and including it may have foiled attempts to achieve a large return of surveys; 4) other controlled elements in the Ehrenberg et al. study did not affect the findings; and 5) this study dealt strictly with policy.

Variability was not expected to be a problem in this study. In an effort to identify those policies which reduce absenteeism, Foster (1987) surveyed 75 school districts in 50 states and the District of Columbia which were characterized as high attendance rate districts. "Benefits and the percent and amount of monetary compensation varied in those districts providing provisions for recovery of unused sick leave" (p. 61). Of the 57 responding districts, 36 provided means whereby unused sick days could be bought back by the district. The range of variability for the number of days which could be bought back was wide: 10 days was reported as the lowest and 180 days as the highest. The other variables were also characterized as having sufficient variability (Ehrenberg et al., 1991; Jacobson, 1989b; Winkler, 1980).

If buy-back plans decreased teacher absenteeism, the question of

generalizability remained an important issue. The studies which tested the influence of a district policy's on teacher attendance occurred in states where teachers were unionized. Frequently these extra financial incentives were negotiated with a teacher's union (Madden, 1991). Madden reported that an increase in teacher absenteeism was tied to educational policy because groups which represented teachers haggled with school boards for generous sick leave provisions.

Several studies reported by Foster (1987) showed dramatic increases in absenteeism as a direct result of the passage of legislation which allows collective bargaining for teachers. For example, Clark County in Nevada, saw an increase of absenteeism by 41% in the three years after introduction of such statutory law. It is conceivable that pay incentives are more significant in the reduction of absenteeism where teacher attendance has declined due to the lobbying efforts of unions for increased fringe benefits. Would the results of these studies show statistically significant differences in states that are non-unionized? Would the effects of buy-back provisions be more powerful in states with low salaries such as Georgia?

Laws governing sick leave begin at the state level, but accumulation and buy-back of unused sick leave may be increased by policies at the level the local school board. Georgia Statutes 20-2-851 to 20-2-870 establish the

framework within which school districts may use the funds earmarked for the buy-back provisions (Code of Georgia, 1992). These statutes, dated from 1970 to 1989, address eight areas which involve sick leave: 1) the number of days given per year; 2) the amount of accumulated sick leave; 3) the time frame for payment; 4) the dollar amount paid for each day; 5) transfer of sick days from one district to another; 6) establishment of sick leave banks; 7) the use of unused sick days for personal reasons; and 8) the use of unused sick days for professional purposes.

A maximum of 45 days accumulated leave is paid by the state so long as the teacher meets its criteria. Each school district is free to establish additional provisions under the eight categories by including it in local policy statements and in contracts. Since Georgia is a "right to work" state that bans public employee bargaining (except for two Federal Section Six School Districts), the question arises whether additional buy-back provisions would reduce teacher absenteeism.

#### Review of Literature Conclusion

School policy in the aggregate does appear to affect teacher attendance rates at a statistically significant level. An increase in buy-back of sick leave days is one aspect of policy which, by itself, has been shown to decrease teacher absenteeism. Its relative effect is influenced by four main factors: 1)

the total number of sick days granted; 2) number of days which can be accumulated and remunerated; 3) the dollar value placed on each day; and 4) the time frame for repayment. Other factors influencing the use of sick leave days are: 1) the presence of a sick leave bank; 2) the presence of a leave transfer program; 3) the number of personal, professional, and bereavement days granted; 4) requirements surrounding reporting impending use of sick leave; 5) the extent of record-keeping; and 6) the presence of additional pay incentives. The size of the district is a significant demographic factor. Job satisfaction is an important peripheral factor but it was rejected here because of the reasons noted above.

Studies in this area of attendance are limited and the task here was one of sifting through a complex issue with a simple goal in mind: discover the influence of buy-back provisions of sick leave on teacher attendance rates in Georgia. The results could increase teacher attendance rates, cut costs, increase student achievement, legitimize the teacher's efforts within the community, and perhaps help restore confidence in the process of education.

#### Definition of Terms

Accumulation of Leave. Refers to the number of leaves of absence which can be carried over from one year to the next.

Buy-Back Provisions. Refers to school boards paying a teacher a dollar amount for accumulated unused sick leave.

Leave Transfer Program. Refers to unused sick leave days which can be taken from one district to another within a state.

Policy. Refers to the written statements of a state or local school board as they relate to the work responsibilities of school personnel. These statements include contract agreements, attendance expectations, sick-leave provisions, awards, punitive measures, etc.

Personal Leave. Refers to leave granted to teachers used at the sole discretion of the teacher within regulatory guidelines.

Professional Leave. Refers to absences due to educationally-related duty outside the classroom and approved of by an administrator.

Pay Incentive. Monetary incentives for teachers which tend to discourage excessive use of sick leave.

Regulation. Refers to a school's written procedures which are followed in order to use leaves of absence.

Sick Leave. Refers to the number of days granted for use due to illness of the teacher or a member of his/her immediate family.

Sick Leave Bank. Refers to a pool of voluntarily contributed unused sick leave which may be used by participating employees. This definition

varies from state to state.

## Methods of Analysis

### Sampling

One hundred and eighth-three school districts in the state of Georgia represented the population for this study. All districts were solicited for information and usable responses represented the sample.

### Research Design

This was a correlational study intended to examine any association between buy-back of sick leave policy and teacher attendance rates.

### Instrumentation

A survey of 16 questions (Appendix A) was developed to collect information regarding extant district policies which surpass the minimums provided by Title 20 (Official Code of Georgia, 1992). The dependent variable was the teacher attendance rate. The independent variables were: 1) the number of sick days granted per year; 2) the number of accumulated days which could be remunerated; 3) the dollar value of each unused sick day; 4) the time frame for repayment; 5) the size of the district; 6) the number of personal days; 7) the number of professional days; 8) the number of bereavement days; 9) presence of a sick leave bank; 10) the presence of a

leave transfer program; 11) a requirement to verify illness; 12) the number of days before verification is required; 13) a requirement to contact a principal directly when taking sick leave; 14) whether or not the system calculates its attendance rate; and 15) the presence of other pay incentives designed to reduce unnecessary or unwanted absences.

The ability to respond to detailed questions pertaining to absenteeism data varied from district to district in Georgia. This was due in part to the state's method of collecting data from the individual districts. A computer program called *Genesis* was developed by the Georgia Department of Education for record-keeping purposes of individual districts. Use of the program is widespread but not mandatory. The program allows for considerable variation in how the data are organized. When all the capabilities of the program are utilized, the particular data solicited in this study were easy to determine. A modified program was introduced one year ago. In the interest of obtaining the largest possible number of returns, the survey was gauged to suit the record-keeping limitations of districts which hand-post the data requested.

Questions one through five furnished information which allowed the calculation of the teacher attendance rate. The rate for each district was computed by multiplying the number of teachers in the system by the number

of teacher work days. That amount was divided into the total number of leave days taken by all teachers in the system. Subtract from 100 and that accounted for the dependent variable, teacher attendance rates.

Questions six through nine supplied data concerning the number of accumulated days allowed and the time frame for repayment. The accumulated number of leave days was canvassed in two questions in order to avoid confusion on this point. Both questions were tested for significance but the second question was the primary aim of this part of the survey.

The state's provisions beyond 45 days are meager and it was expected that the amount of buy-back provided by the district would vary in terms of the time frame for repayment. Some systems allowed teachers to be paid for all accumulated leave at the end of each year starting with the first year. Others required the teacher to wait until retirement to have access to the local funds. A few districts allotted the amount of buy-back provisions according to the number of tenured years the teacher had attained. The question asked only if teachers could collect all accumulated leave at any time other than retirement, and how long they must wait.

The amount of payment for each accumulated day was similarly complicated by differences at the district level. Some districts paid the substitute wage. Others paid the teacher's daily rate of pay and some paid a



percentage of the teacher's daily rate of pay based on years in the system. Since the actual amount varied within some districts, the district was asked in questions 10 and 11 to provide the dollar amount paid or an average amount for the 1992-93 school year if the amount varied. All possible variations for accumulation of days and the amounts of payment could not be specifically represented on the survey. That would have made the survey overly complex and difficult to understand. Questions 12, 13, 14, 15, and 16 were included to discover the cumulative effect of the independent variables dealing with the amount of sick leave provisions coupled with these additional policies and regulations.

Content validity was checked through Administration Services of the State Department of Education, Atlanta, Georgia and through the personnel departments of Bulloch County, Glynn County, Liberty County, and Ft. Stewart Schools. Special attention was given to questions dealing with the dependent variable. The survey was piloted after the end of the 1992-1993 school year because the data required for calculating teacher absenteeism could not be collected until after the last work day. The pilot was conducted at Ft. Stewart Schools.

### Procedures

Since the survey applied to the 1992-93 school year, they were mailed

the following summer. Each superintendent received a cover letter (Appendix B), the survey (Appendix A), a list of definitions (Appendix C), and a self-addressed envelope.

The mailing address and the cover letter used the superintendent's individual name in the greeting of the letter. This personalization was intended to increase the likelihood of a response. A follow-up letter (Appendix D) was sent two weeks after the initial mailing.

### Data Analysis and Interpretation

#### Statistical Analysis

If the conclusions of Elrenberg et al. (1991), White (1990), Jacobson (1989b), Azumi and Madhere (1983), and Winkler (1980) were applicable to this study, the variables expected to increase teacher attendance rates would have been: 1) a higher number of accumulated days which could be paid to the teacher; 2) a higher dollar amount paid for each day; 3) a lower number of years before repayment; 4) an increase in personal days; 5) an increase in professional days; 6) systems which calculate their own attendance rate; 7) the presence of other pay incentives; and 8) the presence of a leave transfer program. A decrease in teacher attendance would have been accounted for by: 1) an increase in the total number of days granted per year; 2) an increase in

the size of the district; 3) an increase in bereavement days; 4) the presence of a sick leave bank; 5) a requirement to verify illness; 6) fewer days required to verify illness; and 7) a requirement to report teacher absence directly to the principal.

The attendance rate was computed and associated with the amount of buy-back provisions to detect any significant relationship via Pearson  $r$ . Dichotomous variables were examined using a two-sample independent  $t$ -test. Statistical Package for the Social Sciences (SPSS) was utilized for this purpose.

### Findings

Fifty percent of the districts returned the survey. Thirty-one percent of the districts returned a usable response. The most frequent reason for disqualification was the lack of an entry on question number four. Without a response, the teacher attendance rate could not be calculated.

Four outliers were deleted. Three districts entered data which resulted in a 1% absence rate or lower; two of these provided responses that did not seem to indicate an understanding of the questions. Another district entered data which was not in the form asked and could not be calculated with a reasonable expectation of accuracy.

Statistical analysis revealed a trend in Georgia that tends to support the major research findings noted above but no correlational test or two-sample  $t$

test achieved statistical significance. That is, a higher amount of buy-back provisions appears to be associated with lower absence rates but there was more than a 5% probability that such a deduction would have been arrived at merely by chance. Thus, the null hypothesis was affirmed.

Attendance rates followed the predictions of Administrative Services of the Georgia Department of Education which was 95.53%. The sample studied here revealed a mean attendance rate of 95.48% with a standard deviation of 1.20. This lends credibility to the data collected (see Table 1).

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Insert Table 1 about here

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A higher number of days given per year correlated negatively to increased attendance rates, but the Pearson  $r$  of  $-.1713$  was  $.1777$  points shy of statistical significance at the  $p < .05$  level (see Table 2).

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Insert Table 2 about here

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The number of days accumulated per year which could be paid to the teacher at retirement correlated positively to increased attendance rates. The critical value of  $r$  for the Pearson correlation coefficient was  $.1631$ , but the

value needed for significance was .273.

The dollar amount each accumulated day was worth also correlated positively to higher attendance rates. The Pearson  $r$  value of .1935 was not enough to surpass the .273 value needed for significance at the  $p < .05$  level.

Question nine, which sought to detect any relationship between the time frame of payment and attendance rates, contained data which could not be used for the two-sample independent  $t$ -test (see Table 3). Therefore, the value of  $t$  was not reliable. This was due to the extremely uneven sample sizes for the two groups. The other two-sample independent  $t$ -tests for the secondary variables resulted in scores which were not significant at the  $p < .05$  level.

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Insert Table 3 about here

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Though the research of Ehrenberg et al. (1991), Jacobson, (1989b), Azumi and Madhere (1983), or Winkler (1980) was not confirmed from a statistical point of view, the data showed parallel directionality for the following variables: 1) the number of days sick days granted; 2) the number of accumulated days paid to the teacher; 3) the dollar amount paid to teachers; 4) the presence of a sick leave bank; 5) presence of other pay incentives; 6) size of school district; 7) the number of personal days; 8) the number of

professional days; 9) the number of bereavement days; 10) a verification of illness requirement; and 11) the number of days allowed before verification was required.

The presence of a leave transfer system as an additional pay incentive did not fall in direction anticipated. Since the mean for the dollar value was low, teachers may have thought that using the sick days was more profitable than receiving the \$40.11. This dollar value represents less than one-third the daily rate of pay for most teachers who are beginning their careers.

A requirement to report use of sick leave directly to the principal did not support the findings of Azumi and Madhere (1983). However, the difference in the mean for yes and no answers was rather small at .0368. The direction of the *t* value for question five concerning record-keeping was not consistent with the work suggested by White (1990).

If more than one provision was found significantly positive at the  $p < .05$  level, those variables would have been analyzed via multiple regression to predict what attendance rates might have been if those policies were in place. Significant secondary variables that were dichotomous would have been dummy-coded for multiple regression analysis.

#### Explication

The confluence of directionality lends some meaningfulness to the

research of Ehrenberg et al. (1991), Jacobson (1989b), Foster (1987), Azumi and Madhere (1983), and Winkler (1980). Though the findings were not as dramatic as those in New York or Wisconsin, the lack of statistical significance may be due to the non-unionized condition of Georgia's educational system and/or the low dollar amount each unused day was worth. If unionization was a factor, this research on the relationship between buy-back provisions and attendance rates could supply a degree of credibility to the works of Madden (1991) and Foster (1987). The predominance of small districts in the sample is another plausible reason for non-significant results.

One may then legitimately ask "Do buy-back provisions of sick leave affect attendance rates more in states where teachers are unionized?" Additionally, a school leader may wonder what monetary value, if any, reduces absenteeism at a statistically significant level.

Due to the irregularities of record-keeping, some districts may have found it too time consuming to respond to the survey. This potential weakness should not be under-estimated. It is possible that some respondents took shortcuts to complete the survey. Fifty percent of the school districts did not respond.

The interrelationship between buy-back provisions and the amount of other pay incentives was not explored here. For example, the amount of a

yearly stipend for perfect attendance may weigh more heavily on attendance than either the number of accumulated days allowed or the amount paid for each cumulated day.

### Summary

A survey was developed to detect the relationship between school district policies on buy-back of sick leave and teacher attendance levels. It was sent to the school superintendents in the state of Georgia. The dependent variable was the teacher attendance rate. The independent variables were: 1) the number of sick days granted per year; 2) the number of accumulated days which could be remunerated; 3) the dollar value of each unused sick day; 4) the time frame for repayment; 5) size of the district; 6) the number of personal days; 7) the number of professional days; 8) the number of bereavement days granted; 9) presence of a sick leave bank; 10) the presence of a leave transfer program; 11) a requirement for teachers to report impending use of sick leave directly to the principal; 12) a doctor's verification of illness; 13) the number of days before verification is required; 14) presence of additional pay incentives; and 15) the extent of record-keeping as measured by whether or not the system calculates its teacher attendance rate.

The data returned were perceived to be reliable. No primary or



secondary independent variable was found statistically significant at the  $p < .05$  level. Consequently, the null hypothesis was confirmed.

A conclusion that the amount of buy-back provisions do not or could not affect teacher attendance rates in Georgia must be tempered by acknowledgement of the following: 1) the lack of collective bargaining in Georgia; 2) the low average amount of payment for each day of unused sick leave; and 3) the predominance of smaller sized school districts in the state.

The study was limited to those areas which could be legally manipulated by policy makers. Age, race, gender, distance to work, and other demographics were excluded even though they are popularly believed to influence absenteeism. It was also tailored to the state of Georgia which was a critical factor in devising an instrument which was succinct but comprehensive. Whereas the inquiry was not exhaustive, it was of sufficient breath to reasonably assess any relationship between buy-back of sick leave policy and teacher attendance in Georgia.

Georgia's teacher absenteeism rate of 4.52% is higher than the 4% absence rate of industry (Hill, 1982). It is possible that it is appropriate for teachers to be absent more than other workers. Yet, attendance for a teacher is a professional matter. In keeping the interest of the child at heart, quality instruction should be provided when a teacher is indisposed for any reason.

The findings did not suggest that this design should be replicated. However, continued study of the relationship between states with and without collective bargaining may be useful. Any implications for school districts should be scrutinized by school leaders for applicability in the individual districts. Buy-back provisions are only one area which can be considered in relation to teacher attendance; its impact on policy changes is contingent on many other factors too. That is, what works in a large district may not necessarily work in a small one, etc.

This study was conceived by the investigator as an examination of the relationship between an abstract conviction to service and the outward manifestation of attendance. It extends the study of educational policies in their relationship to the professionalism of teachers. Policies can be changed to reflect the changing society, but dedication and perseverance are intangible and non-observable.

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Appendix A  
Buy Back of Sick Leave Survey

1. How many full-time certified teachers are in your system? \_\_\_\_\_
2. How many work days are there for teachers each year? \_\_\_\_\_
3. How many days of leave are granted to teachers annually (include state and local allocations)?
  - Sick Days \_\_\_\_\_
  - Personal Days \_\_\_\_\_
  - Professional \_\_\_\_\_
  - Bereavement \_\_\_\_\_
  - Other \_\_\_\_\_ Describe \_\_\_\_\_
  - Total \_\_\_\_\_
4. For the 1992-93 school year, how many Total Leave Days were taken by all certified teachers in your system and counted against accrued leave (not jury duty, leave without pay, etc.)? \_\_\_\_\_
5. Does your system calculate the average number of Total Leave Days taken by certified teachers?  
 YES    NO
6. How many Total Leave Days can be accumulated each year and carried to the following year?  
 \_\_\_\_\_
7. How many Total Leave Days can be accumulated during the teacher's tenure regardless of whether or not they can be bought back? \_\_\_\_\_
8. How many days of Accumulated Leave can be paid to the teacher at retirement? \_\_\_\_\_

9. Does your system provide for buy-back of Accumulated Leave at any time other than retirement?

YES NO

If yes, how many years must certified teachers wait before all accumulated leave may be "paid back"? \_\_\_\_\_

10. What was the dollar amount of payment for each day of Accumulated Leave? \$ \_\_\_\_\_

If this amount varies for any reason, answer question #11 instead.

11. What was the average dollar amount your system paid to teachers for Accumulated Leave during the 1992-93 school year? \_\_\_\_\_

12. Does your system provide a Sick Leave Bank? YES NO

13. Is there a Leave Transfer Program in your system? YES NO

14. Are teachers required to provide a doctor's verification of illness when Sick Leave is taken?

YES NO

If yes, how many days, if any, may elapse before a verification is required? \_\_\_\_\_

15. When Sick Leave is taken, is the teacher required to report it directly to the principal (as opposed to the secretary)?

YES NO

16. Disregarding provisions for buy back of unused leave, does your system have any Pay Incentives designed to reduce of absenteeism? YES NO

If yes, describe. \_\_\_\_\_

Comments

## Appendix B

Cover Letter

Charles E. Boyer, Graduate Student  
Georgia Southern University  
Statesboro, Georgia

July 25, 1993

Name  
Title  
School System Name  
Address

Dear Dr. Doe:

As part of the requirements in fulfillment of an advanced degree in Educational Administration at Georgia Southern University, I am conducting a survey of school district policy on sick-leave and teacher absenteeism in Georgia.

As you know, Georgia's law addresses several aspects of sick leave. The state establishes a minimum number of days given per year, the number of days which can be accumulated and paid for by the state, the dollar amount each day is worth, etc. Each districts is free to make policies which go beyond these minimums. The study purpose is to investigate the potential relationship between these additional district provisions and absenteeism rates.

The data collected in this survey will allow for the calculation of your district's teacher attendance rate. This attendance rate will then be compared to the number of annual leave days allotted, the number of accumulated days, the dollar amount paid for accumulated leave, and the time frame for payment. The name of your system is not solicited and all information collected is confidential. Please complete the survey and return it in the enclosed envelope. Thank you.

Perhaps knowing the effect of buy back provisions on attendance will be useful information to school leaders. If you would like to know the results of this survey, please complete the enclosed form and return it with this survey or under separate cover. Please feel free to contact me at (\*\*\*) \*\*\* \*\*\*\*\* for any questions you may have. Thank you.

Professionally,

Charles E. Boyer  
Graduate Student

enclosures

## Appendix C

### Definition of Terms

Accumulation of Leave. Accumulation of leave refers to the number of leaves of absence which can be carried over from one year to the next.

Buy Back Provisions. Buy back provisions denote the practice of school boards which pay a teacher a dollar amount for accumulated unused sick leave.

Certified Teachers. All teachers, counselors, resource teachers, librarians, and others commonly referred to as teachers and certified as such.

Leave Transfer Program. The ability of a teacher to take accumulated sick leave days from one system to another system within the state of Georgia.

Personal Leave. Personal leave applies to leave granted to teachers used at the sole discretion of the teacher within regulatory guidelines.

Professional Leave. Professional leave applies to absences due to educationally related duty outside the classroom and approved of by an administrator. It is counted against annual leave.

Pay Incentive. Pay incentives are monetary gains for teachers which tend to discourage excessive use of sick leave.

Sick Leave. Sick Leave is the number of days granted for use due to illness of the teacher or a member of his immediate family.

Sick Leave Bank. A sick leave bank is a pool of voluntarily contributed unused sick leave which may be used by participating employees. This definition varies from state to state.



## Appendix D

Follow-Up Letter

Charles E. Boyer  
Graduate Student  
Georgia Southern University  
Statesboro, Georgia

Name  
Title  
School System  
Address

Dear Dr. Doe:

Three weeks ago I sent you a survey as part of a research project I have undertaken at Georgia Southern University. The subject of teacher absenteeism is one that is important to many administrators and community members alike.

Frequently, school leaders are asked why teachers have an absenteeism rate twice as high as industry. The answers are not apparent. Yet, currently there is work being done to address the problem. At this writing, legislation is being prepared which could drastically change the way we treat sick leave in Georgia. If passed, accumulated unused sick days will turn into an additional year of retirement.

Studies such as this one can influence legislation and other policy decisions. If you have not returned the survey, I hope that you will find the time to do so. Surely, knowing the absenteeism rate of the teachers in your district is valuable information to school and community leaders.

If you have already returned the survey, please accept my sincere appreciation for your time and energy. I will endeavor to use the information in the best interests of the children of Georgia. Please feel free to call me at (\*\*\*) \*\*\*-\*\*\*\* if you have any questions. Thank you.

Professionally,

Charles E. Boyer  
Graduate Student

Enclosures

Table 1

Dependent Variable

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Attendance Rate

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Cases	Mean	Standard Deviation	Median	Mode	Range
58	95.48	1.2	95.6	96.4	5.6

Table 2

Independent VariablesPearson Correlation

	Cases	Mean	Srd Dev	r
Total Leave days/year	35	13.07	1.88	-.1713
Days Accumulated/paid	55	9.04	28.55	.1631
Dollar Value/day	57	40.11	65.84	.1935
Size of District	58	541.60	903.04	-.1026
Personal Days	55	3.03	.27	.0170
Professional Days	58	.79	1.73	.1496
Bereavement Days	58	.91	1.82	-.0590
Days to Verify Illness	18	5.06	2.84	.1402

Table 3  
Independent Variables: Two-Sample Independent t Test

Independent samples of Question #5:

Does Your System calculate the average number of total leave days taken by certified teachers?

Group 1: YES                      Group 2: NO

t-test for: Attendance Rate

	Number of Cases	Mean	Standard Deviation	Standard Error
Group 1	16	95.2244	1.292	.323
Group 2	39	95.6079	1.173	.188

		Pooled Variance Estimate			Separate Variance Estimate		
F Value	2-Tail Prob.	t Value	Degrees of Freedom	2-Tail Prob.	t Value	Degrees of Freedom	2-Tail Prob.
1.21	.609	-1.07	53	.290	-1.03	25.70	.314

Independent samples of Question #9:

Does your system provide for buy-back of accumulated leave at any time other than retirement?

Group 1: YES                      Group 2: NO

t-test for: Attendance Rate

	Number of Cases	Mean	Standard Deviation	Standard Error
Group 1	3	94.8400	2.391	1.380
Group 2	54	95.5109	1.141	.155

		Pooled Variance Estimate			Separate Variance Estimate		
F Value	2-Tail Prob.	t Value	Degrees of Freedom	2-Tail Prob.	t Value	Degrees of Freedom	2-Tail Prob.
4.39	.034	-.94	55	.354	-.48	2.05	.676

Independent samples of Question #12:

Does your system provide a Sick Leave Bank?

Group 1: YES                      Group 2: NO

t-test for: Attendance Rate

	Number of Cases	Mean	Standard Deviation	Standard Error
Group 1	14	95.4407	1.124	.300
Group 2	43	95.4886	1.247	.190

		Pooled Variance Estimate			Separate Variance Estimate		
F Value	2-Tail Prob.	t Value	Degrees of Freedom	2-Tail Prob.	t Value	Degrees of Freedom	2-Tail Prob.
1.23	.712	-.13	55	.899	-.13	24.29	.894

Independent samples of Question #13:

Is there a Leave Transfer Program in your system?

Group 1: YES                      Group 2: NO

t-test for: Attendance Rate

	Number of Cases	Mean	Standard Deviation	Standard Error
Group 1	35	95.3909	1.022	.173
Group 2	20	95.7185	1.364	.305

		Pooled Variance Estimate			Separate Variance Estimate		
F Value	2-Tail Prob.	t Value	Degrees of Freedom	2-Tail Prob.	t Value	Degrees of Freedom	2-Tail Prob.
1.78	.139	-1.01	53	.317	-.93	31.35	.357

Independent samples of Question #14:

Are teachers required to provide a doctor's verification of illness when Sick Leave is taken?

Group 1: YES

Group 2: NO

t-test for: Attendance Rate

	Number of Cases	Mean	Standard Deviation	Standard Error
Group 1	18	95.3028	1.258	.297
Group 2	37	95.5054	1.196	.197

		Pooled Variance Estimate			Separate Variance Estimate		
F Value	2-Tail Prob.	t Value	Degrees of Freedom	2-Tail Prob.	t Value	Degrees of Freedom	2-Tail Prob.
1.11	.770	-.58	53	.565	-.57	32.29	.573

Independent samples of Question #15:

When Sick Leave is taken, is the teacher required to report it directly to the principal (as opposed to the secretary)?

Group 1: YES

Group 2: NO

t-test for: Attendance rate

	Number of Cases	Mean	Standard Deviation	Standard Error
Group 1	31	95.4968	1.256	.226
Group 2	25	95.4600	1.189	.238

		Pooled Variance Estimate			Separate Variance Estimate		
F Value	2-Tail Prob.	t Value	Degrees of Freedom	2-Tail Prob.	t Value	Degrees of Freedom	2-Tail Prob.
1.12	.789	.11	54	.912	.11	52.58	.911

Independent samples of Question #16:

Disregarding provisions for buy-back of unused leave, does your system have any Pay Incentives designed to reduce absenteeism?

Group 1: YES

Group 2: NO

t-test for: Attendance Rate

	Number of Cases	Mean	Standard Deviation	Standard Error
Group 1	30	95.5260	1.076	.196
Group 2	26	95.3212	1.309	.257

		Pooled Variance Estimate			Separate Variance Estimate		
F Value	2-Tail Prob.	t Value	Degrees of Freedom	2-Tail Prob.	t Value	Degrees of Freedom	2-Tail Prob.
1.48	.309	.64	54	.523	.63	48.51	.529