

**Here Today, Gone Tomorrow, Back Again the Next Day:
Absenteeism and its Antecedents Among Federal Correctional Staff**

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Abstract

Correctional agencies are labor intensive, and many of the posts in a prison must be filled whether the normally scheduled worker comes to work on a given day or not. When a scheduled worker fails to report, the post must be covered by another worker, typically a worker being paid overtime to work an additional shift. Despite the high costs and inconvenience associated with unscheduled absenteeism in prisons, little empirical work has been conducted on the antecedents of sick-leave use by correctional workers. This paper used self-reports by workers in federal prisons in 1994 to address this shortcoming. In addition to examining the usual individual-level variables that have been shown in other work settings to be related to the use of sick leave, we examined whether there was a culture of sick-leave use at prisons that encouraged or discouraged workers to use sick leave. We found that decisions to use sick leave were independent of the culture of the prisons, and that many of the variables found to be associated with sick-leave use in other settings also applied to correctional settings. In particular, we found that job satisfaction, organizational commitment, job stress, and personal characteristics were associated with the use of sick leave. Surprisingly, tobacco use was not.

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Government budgets immense resources to operate and maintain prisons. As prisons are such critical and expensive public organizations, they have attracted the attention of social scientists. Correctional organizations affect large numbers of individuals, be it staff, families of staff, inmates, inmate family members, victims, or the general public. Research in corrections has traditionally investigated issues like inmate subcultures, prison violence, legal interventions, recidivism, and inmate prison life. Issues focusing on correctional staff, however, are just as theoretically complex, interesting, and important (Duffee, 1980). The simple fact is that there is an essential need to study the effects of work environment on the attitudes and behaviors of correctional staff. (Camp, 1994; Wright, 1993). Employees are critical elements of any correctional organization (Camp, Camp, & Fair, 1996). Archambeault and Archambeault (1982, p. XXII) state, "Correctional workers represent the single most important resource available to any correctional agency or institution in attempting to accomplish its mission, goals, and objectives." In turn, the work environment in a prison organization has substantial effects on the staff. According to Poole and Pogrebin (1991, p. 170), "We should be asking what the organization means to the worker instead of what the worker means to the organization."

In the past twenty years, there has been increased research on the attitudes and behaviors of correctional staff. Part of the increased interest in correctional staff, particularly correctional officers, has been the explosive growth of corrections in the past thirty years, and the fact that prisons have generally occupied an important, intriguing, and intractable place in the criminal justice system, as well as in society (Goodstein & MacKenzie, 1989). Most of the published correctional staff research to date have focused upon attitudes, particularly job satisfaction, and

the vast majority of these studies have looked at the antecedents of correctional staff job satisfaction (Lambert, Hogan, & Barton, 2002). Furthermore, most research on correctional staff attitudes has failed to examine the concept of organizational commitment (Lambert, Hogan, & Barton, 1999). From research in other fields, it has been found that organizational commitment is a highly salient factor in explaining employee behaviors. Finally, there has been only a limited number of empirical studies that have explored the potential causes of correctional staff behaviors. The few studies that have been done to date have mainly focused on turnover (e.g., Camp, 1994; Dennis, 1998; Jacobs & Gear, 1977; Jurik & Winn, 1987; Mitchell, Mackenzie, Styve, & Gover, 2000; Robinson, Porporino, & Simourd, 1997; Wright, 1993). While turnover is detrimental to correctional organizations, it is not the only negative form of employee behavior. Absenteeism is another form of negative employee behavior.

Correctional institutions are labor intensive organizations. In order to meet their myriad of tasks and objectives, correctional facilities need employees to report to work. Employee attendance is critical for managing the performance of any organization. If employees are frequently absent from work, the productivity and health of the employing organization will suffer, especially over the long term. Correctional facilities are no different. While absenteeism is a disruptive and costly worker behavior, there are only a handful of published articles that have explored correctional staff absenteeism (e.g., Gross, Larson, Urban, & Zupan, 1994; Lambert, 2001; Lombardo, 1981; Venne, 1997). In order to combat correctional employee absenteeism, it is necessary to identify and understand the antecedents of absenteeism. Therefore, there is a need to empirically study potential antecedents and correlates of correctional staff absenteeism.

Defining Absenteeism and Its Impact

Absenteeism occurs when employees who were scheduled for work do not attend (Huczynski & Fitzpatrick, 1989)¹. Since scheduled work is the critical defining point, vacations and excused holidays are not considered forms of absence (Price & Mueller, 1986; Van der Merwe & Miller, 1976). In addition, absenteeism involves nonattendance from scheduled work in terms of hours and days rather than minutes (Adler & Golan, 1981), and, as such, is distinguishable from being late or tardy to work. There are various reasons why a person may not attend work, such as illness, family emergency, or just to have a day off from work.

Employee attendance is a vital element for managing productivity of any organization and its individual members (Huczynski & Fitzpatrick, 1989; Rhodes & Steers, 1990; Steers & Rhodes, 1978). According to Dilts, Deitsch, and Paul (1985, p. IV), “The elimination of excessive absenteeism is a necessary first step in achieving a more productive society.” Dilts et al., 1985 further argued:

Where mankind’s limited mastery of the physical sciences constrained growth and development during centuries past, today it is mankind’s inability to motivate and direct the workforce effectively that impedes further progress. Until understanding of basic behavioral relationships expands and begins to approach that in the natural sciences, further gains in economic well-being will be notably unspectacular (p. 11).

Absenteeism has both direct and indirect costs for organizations in general. According to Dilts et al. (1985) and Huczynski and Fitzpatrick (1989), the direct costs include sick pay, fringe benefits that still must be paid, overtime to fill the position, and over staffing (i.e., over staffing

is when an organization schedules additional workers to fill in for those employees who are absent). Indirect costs include disruptions, reduced productivity, loss of expertise and experience, management's time to revise work assignments, administration costs to monitor and administer the absence program, training costs for replacement workers, and morale of other employees (Lambert, 2001). In their study of absenteeism, Huczynski and Fitzpatrick (1989, p. 18) reported, "As one might expect, absenteeism had adverse effects on those employees who were good attenders. First, there was the natural resentment that they were being inconvenienced through the actions of others. Employees resented doing work for absentees, especially when they knew that there was no valid reason for them being away." In addition, workers are frequently shuffled around to fill in the positions of absent employees. "Employees may become disgruntled by frequent shifting from one job to another. This is especially true of situations where workers are shifted to less desirable or unfamiliar assignments" (Dilts et al., 1985, p. 21). All organizations suffer both direct and indirect costs from employee absenteeism.

It is logical to conclude that correctional organizations also suffer the detrimental effects and consequences of employee absenteeism, probably even more so than most organizations, since they rely so heavily on the human factor and are unable to obtain temporary replacements like so many other organizations. Unlike many other organizations, most posts in a prison cannot be vacated. Thus, there are the obvious overtime costs associated with filling the post. Even if the position is left vacant, the absence will mean that there is one less staff member able to monitor inmates and respond to emergencies should they arise, not to mention the extra work and responsibilities for the employees who are present (Farkas, 1990). Management must also expend valuable time to modify employee assignments to respond to absences. Furthermore,

aside from forcing attending employees to work assignments that they were not expecting or desiring to work during their shift, it is not uncommon to force employees to work overtime to fill vacant posts created by absent staff. This puts hardship on employees, particularly those expecting to go home at the end of their shift. Additionally, absenteeism can cause a temporary loss of social networks and contacts. Frequently, staff who temporarily fill in vacancies created by absenteeism do not have the extensive knowledge of the area and inmates that a regular staff member has developed over time from working at that post. In sum, absenteeism, particularly if it becomes commonplace, is costly for correctional organizations (Segal, 1976). There is a clear need to study the causes of correctional staff absenteeism.

Literature Review

As previously mentioned, there have been only a handful of studies that have examined the issue of correctional staff absenteeism. While stress was the major focus of the study, Gross et al. (1994) found that Michigan female correctional officers had a higher number of absences and use of sick leave as compared to their male counterparts. Among correctional officers at the Auburn facility in New York, Lombardo (1981) indicated that job dissatisfaction was related to absenteeism, but he only briefly discussed the matter. Venne (1997) examined the impact of twelve hour shifts on Canadian prison guards, and concluded that the shifts increased absenteeism. Finally, Lambert (2001) theorized about the importance of researching correctional staff absenteeism. Since no published study could be located that empirically tested possible antecedents of correctional staff absenteeism, it is important to research the antecedents of correctional staff absenteeism.

Without relevant correctional literature on the subject, it was necessary to utilize the

literature on non-criminal justice organizations. Compared to turnover, far fewer theoretical models concerning employee absenteeism have been developed. Nevertheless, several absenteeism models have been developed. In 1977, Nicholson presented one of the first theoretical explanations of employee absenteeism. He postulated that personal characteristics, work involvement and attachment to the organization (i.e., a form of organizational commitment), attendance motivation, and random factors (e.g., unpredicted factors, such as car breaking down) influenced a worker's frequency of attendance and absence. A year later, Steers and Rhodes (1978) introduced their model of employee attendance and absenteeism. They argued that personal characteristics (e.g., education, tenure, age, sex, and family size), job satisfaction, organizational commitment, ability to attend circumstances (e.g., illness, accidents, family responsibilities, transportation problems, etc.), and pressures to attend (e.g., reward and incentive systems, work group norms, etc.) influenced employee absenteeism. In 1986, Brooke proposed a model designed to explain absenteeism as opposed to attendance. He theorized that job satisfaction, organizational commitment, job involvement, kinship responsibility, organizational permissiveness, and health status, including the effects of substance abuse, influenced employee absenteeism. From the three explanations of potential causes of employee absenteeism, it appears that organizational commitment, job satisfaction, job stress, health issues, and personal characteristics appear to be important antecedents and correlates of worker absenteeism.

Organizational Commitment and Job Satisfaction

The postulation that organizational commitment and job satisfaction are important antecedents of absenteeism makes theoretical sense. Organizational commitment is generally

defined as having loyalty to the employing organization, identifying with the employing organization and its core values (i.e., pride in the organization and internalization of the goals of the organization), and having a cognitive desire for meaningful involvement in the organization (Cook & Wall, 1980; Mowday, Steers, & Porter, 1979). Therefore, those who have a strong commitment to their employer have a strong desire to be part of that organization and will put forth effort to ensure the success of the organization (Mowday, Porter, & Steers, 1982). In non-criminal justice literature, organizational commitment is hypothesized to have a negative relationship with absenteeism. Those with lower commitment usually feel less inclined to put forth extra effort or make sacrifices for the sake of the organization (Rhodes & Steers, 1990; Steers & Rhodes, 1978). For example, one worker with low organizational commitment might see severe weather as an excuse to stay home, while another employee with high organizational commitment might see the same situation as an obstacle to be overcome. Therefore, organizational commitment influences whether or not an employee feels it is appropriate to take unauthorized leisure time (e.g., unscheduled three day weekend) or to remain home for minor illnesses (e.g., common cold) or family illnesses/problems.

Job satisfaction is an affective response by an employee concerning his or her particular job in an organization (Cranny, Smith, & Stone, 1992). It is basically the degree to which a person likes his or her job (Spector, 1996). Job satisfaction is often predicted to have an inverse effect on employee absenteeism. Scott and Taylor (1985, p. 599) pointed out that “a frequent explanation for this inverse relationship is a hedonistic calculus: employees will withdraw or be absent from a work situation that is painful and dissatisfying.” Rhodes and Steers (1990, p. 11-12), likewise, contended that “absenteeism can be symbolic of deeper feelings of hostility or

perceptions of inequitable treatment in the job situation.” According to Fitzgibbons and Moch (1980, p. 355), “For dissatisfied workers, the nature of their jobs may act as a disincentive to attend.” Besides trying to escape from a dissatisfying job, absenteeism can also be a way for the worker to retaliate against the organization for causing him or her dissatisfaction.

There is empirical support among non-criminal justice employees that organizational commitment and job satisfaction are salient antecedents of absenteeism. With respect to the relationship between organizational commitment and absenteeism, a few non-correctional studies (e.g., Brooke & Price, 1989) have reported no significant relationship, but most have found a statistically significant negative relationship between organizational commitment and employee absenteeism (Clegg, 1983; Hammer, Landau, & Stern, 1981; Hendrix & Spencer, 1989; Mowday et al., 1979; Steers, 1977; Terborg, Lee, Smith, Davis, & Turbin, 1982). In addition, in a meta-analysis, Farrell and Stamm (1988) found a significant negative correlation between organizational commitment and absenteeism. With respect to the relationship between job satisfaction and absenteeism, a few studies have observed no relationship (Dittrich & Carrell, 1979; Hammer et al., 1981), but again most studies have found that job satisfaction has an inverse relationship with employee absenteeism across a wide array of organizations (Brooke & Price, 1989; Garrison & Muchinsky, 1977; Hackett & Guion, 1985; Jamal, 1981; Johns, 1978; Popp & Belohlav, 1982; Terborg et al., 1982; VandenHeuvel & Wooden, 1995), including a prison (Lombardo, 1981). In a meta-analysis of published studies, McShane (1984) reported that workers who are dissatisfied are more likely to be absent. In a later meta-analysis, Farrell and Stamm (1988) also found a significant negative correlation between job satisfaction and both frequency of absence and time absent. On the other hand, Scott and Taylor (1985) found a

positive correlation between job satisfaction and absenteeism in their meta-analytic study.

However, Scott and Taylor attributed the positive correlation to the small sample size used, and instead concluded that the relationship between job satisfaction and absenteeism was probably negative.

Job Stress and Health

Prolonged and intense stress has been found to have serious consequences, both physically and mentally (Cheek & Miller, 1983; Ivancevich & Matteson, 1980). These adverse effects may influence a person to leave the organization temporarily due to stress related illnesses or simply to escape the stress (Matteson & Ivancevich, 1987; Rhodes & Steers, 1990). While it is theorized that job stress is positively linked with worker absenteeism, the empirical results are not as clear. Galloway, Panckhurst, Boswell, Boswell, and Green (1984), Gupta and Beehr (1979), and Jackson and Schuler (1985) found job stress was positively associated with absenteeism. Bhagat, McQuaid, Lindolm, and Segovis (1985), on the other hand, found no association, while Arsenault and Dolan (1983) and Jackson (1983) reported a negative effect of work stress on employee absenteeism. It appears that Rhodes and Steers (1990) were correct in their conclusion, based upon a review of the literature, that the results on the relationship between work stress and absenteeism are mixed and inconclusive and may vary by the type of organization being studied.

Employee health has been theorized to also be a potential causal factor in worker absenteeism (Brooke, 1986; Rhodes & Steers, 1990; Steers & Rhodes, 1978). Employees who are in poor health are more likely to suffer from illnesses and diseases, and, as such, more likely to use sick leave. The empirical findings suggest that healthy workers in non-criminal justice

organizations are more likely to attend work, and when they are absent, they tend to miss less time (Leigh, 1991). In addition, use of drugs, alcohol, and tobacco products have been linked to employee absenteeism (Brooke, 1986; Brooke & Price, 1989).

Personal Characteristics

Personal variables have been frequently utilized to predict worker absenteeism. Gender, age, tenure, and education are the four most common characteristics reported in the absenteeism literature. Gross et al. (1994) found among 1000 Michigan correctional officers that females had higher rates of absenteeism than did male officers. In a study of five large urban police departments, Martin (1990) found that female officers had higher use of sick leave as compared to male officers. In non-criminal justice organizations, Rhodes and Steers (1990) and Huczynski and Fitzpatrick (1989) also reported that female employees had on average higher absenteeism rates as compared to their male co-workers. Indeed, Johns (1978) reported in his study of workers in a paper product manufacturing organization that gender was the best predictor of absence, with women being more likely to be absent than men.

Most studies attribute the gender difference in absenteeism as mainly due to the fact that females tend to be primary care givers of dependents, especially young children. Leigh (1983) found that females with children had higher rates of absenteeism. Similarly, Beatty and Beatty (1975) found that family size positively associated with absenteeism, and Gupta and Beehr (1979) found family responsibility (i.e., female and number of dependents) was a significant predictor of absenteeism among workers across a variety of organizations. However, Leigh (1991) found females with children to be positively related to absenteeism only when the dependents were less than five years of age.

Nevertheless, family responsibilities may not be a significant factor in differences between female and male absenteeism. While females were more likely to be absent than males, VandenHeuvel and Wooden (1995) found that neither marital status nor number of dependent children had any significant effect on unscheduled and unanticipated absenteeism. Likewise, Scott and McClellan (1990) reported no impact of number of dependent children on absenteeism for both male and female school teachers. Garrison and Muchinsky (1977) also found that family size and absenteeism were unrelated, and Allen, Hitt, and Greer (1982) concluded that factors other than home and family account for the differences between female and male absenteeism observed in their study. According to Johns (1978), position and type of work in the organization may be more important in accounting for differences in absenteeism between male and female employees than family background structure and characteristics. According to Nicholson, Brown, and Chadwick-Jones (1976), female workers may have developed different work norms than male workers that support absence from work (i.e., created an absence subculture). According to Allen et al. (1982), while males and females receive the same socialization towards absenteeism (from their co-workers) within an organization, women may respond more strongly to the socialization that it is acceptable to be absent than their male counterparts. Finally, females and males may perceive or even receive different socialization towards work in general and the organization in specific. While it is unclear why there is a difference, empirical research indicates that there is typically a difference in absenteeism between female and male employees.

Age is also hypothesized to be related to absenteeism. Rhodes and Steers (1990) reported that age is inversely related to absenteeism. Among paper product workers, Johns (1978) found a significant inverse relationship between age and frequency of absence. Huczynski and

Fitzpatrick (1989, p. 56) wrote, “There is a general, although not unanimous, consensus in the research literature that younger workers have more frequent absence spells than their older colleagues.” In general, younger and newer workers are generally more likely to be absent than are older employees and those with a long work history with the organization. It is unclear if this relationship is the result of effects of aging, a cohort effect, or a combination of both. One explanation is that young people tend to place a greater emphasis on leisure or free time. Likewise, young workers may have a different life style as compared to their older counterparts. Young people may place a greater importance on attending time-consuming and physically demanding social events (e.g., parties that last late into the night or participatory sports, such as basketball or racquetball) than do older individuals. Therefore, younger workers may be absent more often in order to attend these functions or to recover from them. Furthermore, younger workers generally have more familial demands placed on them, such as young children. Conversely, it is possible that the differences between younger and older workers in terms of absenteeism are due to different socialization (i.e., cohort effects). It is possible that older employees feel that sick leave is more a privilege than a right, while younger employees feel the opposite. It could also be an issue of maturity, with older workers feeling greater responsibility to attend work.

Tenure has been linked to absenteeism. Fitzgibbons and Moch (1980) found that tenure was negatively associated with absenteeism among assembly and packing workers. In a meta-analysis, Farrell and Stamm (1988) found negative association between tenure and absenteeism. There are several general explanations why tenure is inversely related to worker absenteeism. First, many organizations “weed out” employees who take excessive sick leave, especially during the probationary period of employment (Riphahn & Thalmaier, 1999). Another

explanation is that those who have been with the organization for a long time have probably found a position in the organization with which they are satisfied, and as such as less likely to be absent. On the other hand, tenure was found to be positively related to absenteeism among manufacturing employees (French & Harkin, 1998), suggesting that the relationship between tenure and absenteeism may vary by organizational setting (Hackett, 1990).

Finally, there are no theoretical or empirical indications that workers engage in absences from work at different rates based solely as a function of their educational level, but educational level is frequently included as a control variable. Both Johns (1978) and Stumpf and Dawley (1981) found no significant relationship between education level and absenteeism among paper product manufacturing employees and bank tellers respectively, as did Leigh (1991) in a national sample of U.S. workers.

Research Question

There is a growing body of literature on absenteeism; however, little of the literature has been conducted on correctional staff absenteeism. As Bennett (1997) contends, “Unlike researchers in organizational behavior, criminal justice scholars have shown little interest in employee job satisfaction, performance, commitment, *absenteeism*, and turnover” (emphasis added) (p. 295). Just as importantly, the research in the organizational sciences has been largely conducted on organizations in the private sector (O’Leary-Kelly & Griffin, 1995), and the vast majority of the research which has been conducted in the public sector has excluded corrections, important and expensive organizations in society.

Correctional organizations are uniquely different from private and most public organizations. Corrections agencies are not involved in processing or producing inanimate

objects, or providing services to willing customers. Prisons deal with humans, “processing and manipulating them” (Jayewardene & Jayasuriya, 1981, p.149). Line staff, those supervised by the administrators and managers of the organization, are also managers and supervisors of another group of human beings, inmates. This type of environment is not commonly found in private industry or in most government organizations that have been typically studied in the organizational sciences. Therefore, it is necessary to study prison staff in an organizational context to determine if findings from other organizations also readily apply to correctional organizations. Therefore, this study proposed using previous theoretical models to explore empirically potential antecedents of correctional staff absenteeism. Specifically, it is hypothesized that job satisfaction, organizational commitment, job stress, health factors, and salient personal characteristics will be significant predictors of correctional employee absenteeism.

Methods

Date Source

The data were obtained from the 1994 Prison Social Climate Survey collected by the Federal Bureau of Prisons. The 1994 version of the survey was the last year that asked staff about their use of sick leave. The Prison Social Climate Survey was developed by William Saylor, Office of Research and Evaluation in the Federal Bureau of Prisons. Every year since 1988, the Prison Social Climate Survey has been administered to a representative segment of staff at each federal correctional facility. Regional and central office staff are excluded. The employees are selected through a random stratified proportional probability sample design. The sample is selected based upon a set of stratifying characteristics consisting of supervisory status,

race, ethnicity, gender, and job category (Saylor, 1991) and is representative of an institution's workforce (Saylor, 1983). Therefore, this data set was not limited to correctional officers. A wide array of different staff were included in the survey, such as food service, inmate records, unit management, education, custody, medical, maintenance, and industry staff. Staff were assured that their responses were confidential and were given time at work to complete the survey (Camp, 1994).

Since 1989, the response rate has generally fallen within the 80th percentile range. The 1994 administration of the Prison Social Climate Survey had a response rate of 88%. Specifically, at the time the 1994 Prison Social Climate Survey was administered, there were 25,625 individuals employed with the Federal Bureau of Prisons (BOP) (Wright, Saylor, Gilman, & Camp, 1997). Of these 25,625 employees, 9,228 individuals were sampled and received the 1994 Prison Social Climate Survey (i.e., 36%). Of the 9,228 sampled, 8,115 respondents completed the 1994 Prison Social Climate Survey. A response rate of 88% is a high return rate considering the depth of the survey and the number of staff sampled. Generally, large samples with response rates of 50% or higher are viewed as acceptable, and higher than 75% is viewed as very good (Maxfield & Babbie, 1995; Neuman, 1994). Table 1 provides the personal characteristics of 1994 population of employees of the Federal Bureau of Prisons and those who completed the survey. Overall, the 1994 sample appears to be representative. Finally, the data from the Prison Social Climate Survey has been used in other studies looking at a wide array of organizational issues besides absenteeism (e.g., Britton, 1997; Camp, 1994; Camp & Steiger, 1995; Camp, Saylor, & Harer, 1997; Saylor & Wright, 1992; Wright & Saylor, 1991, 1992; Wright et al., 1997).

***** Insert Table 1 about here *****

In addition to asking demographic information, the 1994 survey was divided into four primary sections: work environment, personal well-being, quality of life, and personal safety and security. There are numerous items in each of the four primary sections; therefore, the complete survey instrument was too large to have all employees answer it in its entirety. Instead, employees were given one of four versions of the survey, with each version containing two of the four aforementioned primary areas. The version the Prison Social Climate Survey a staff member received depended on a combination of his or her birth month and day. According to Camp (1994, p. 282), “this method produces a fairly even split of staff into four categories, it is simple to administer, and there is no reason to suspect that it produces any biases.” Since all the measures needed for this study were contained in only one of the four versions of the Prison Social Climate Survey, a subsection of the total sample was utilized. Specifically, 4,122 respondents completed the version with all the necessary measures.

In summary, by using the data from the Prison Social Climate Survey, it was possible to study possible antecedents of correctional staff absenteeism across an entire correctional agency. Many other correctional studies have limited their data collection from one or only a few prisons. Rarely have entire correctional agencies been studied.

Measures

Absenteeism. While absenteeism can be operationalized in several different forms, the measurement of absenteeism can be broken into two categories, the area measured and the type of metric employed (Farrell & Stamm, 1988; Rhodes & Steers, 1990). The areas of absenteeism that can be measured include, all absences, use of sick leave versus unpaid absences, scheduled

versus unscheduled, long-term versus short-term, medically verified versus unverified, and so forth (Hendrix & Spencer, 1989; Rhodes & Steers, 1990).

Absence metric refers to how absenteeism is specifically measured. In most studies, absenteeism is measured in terms of either duration or frequency. There are three types of absence metrics, magnitude, duration and frequency, with duration and frequency being the most frequently utilized (Rhodes & Steers, 1990). Magnitude is the aggregate amount of absenteeism per worker for a given time frame and is generally used to compare absenteeism rates across different organizations (Rhodes & Steers, 1990). Duration refers to the total amount of absenteeism expressed in a given unit of time, during a specific time period (Scott & Taylor, 1985, p. 603). Frequency measures “indicate the number of episodes of absence within a particular time period regardless of their duration” (Lee & Mitchell, 1994, p. 86). There is a difference between duration and frequency measures of absenteeism. For example, an employee who used 40 hours of sick leave across five separate occasions would be scored as 40 hours on the duration measure and 5 on the frequency measure.

Duration and frequency measures are frequently used in absenteeism research. In a meta-analytic study, using 23 published absenteeism studies, Scott and Taylor (1985) reported that 65% of studies used absence duration measures, while 35% used absence frequency measures. Similarly, in another meta-analysis, Farrell and Stamm (1988) reported that out of 72 studies they examined, 51 used duration measures and 35 utilized frequency measures². In this study, a duration measure was used.

There is also an issue of where to obtain the absenteeism data. The two main sources are official records and self-reported. Because the data are derived from a survey, self-reported

absenteeism was measured. It should be noted that self-reported absenteeism is frequently used in non-criminal justice absenteeism studies (Johns, 1994; Scott & Taylor, 1985). If self-reported method is used, there is an issue of how far back the respondent should be asked about absences. Too short of a time interval (e.g., past month or two) would fail to capture sufficient variance. Too long of an interval (e.g., last three years) would increase the chances of biased responses as recollections of the absence event fades from respondents' memories. According to Johns (1994), in a review of seven recent studies that used the self-report method, the average time span was seven and half months. In this study, the time frame was a six-month interval. This interval is consistent with past self-reported absence research, and should capture a sufficient range of variation, while at the same time avoiding memory decay problems associated with longer intervals. Finally, there is the question of whether to use a fixed or free format to measure self-reported absenteeism. Johns (1994) argued that researchers should opt for a free-response format, because it provides a greater range of variation than would a fixed format. The free format was utilized in the 1994 Prison Social Climate Survey.

To recap, a self-reported duration measure of absenteeism was utilized. Specifically, respondents of the Prison Social Climate Survey were asked "How many hours of sick leave have you used in the past six months?" Because most employees used sick leave in 8hour blocks, the measure was changed from hours to days of sick leave. In secondary data analysis, one is often at the mercy of others on how the data were measured. While this is the case here, the measure of absenteeism in this study is acceptable in light of the absenteeism literature.

Job Satisfaction. As previously indicated, job satisfaction is an affective response by an employee concerning his or her particular job (Cranny et al., 1992). There are two major

methods for measuring job satisfaction, facet (i.e., dimensional) and global. Faceted measures of job satisfaction focus on dimensions of the job, such, pay and benefits, coworkers, and type of work done, and measure the degree of satisfaction with each of the dimensions of the job (Smith, Kendall, & Hulin, 1969). In order to obtain an overall measure of job satisfaction, the dimensional items are summed together. Global or overall measures of job satisfaction are concerned with the broader domain of an individual's satisfaction with his or her overall job, rather than with specific facets, and ask the person how they feel about their job in general (Cook, Hepworth, Wall, & Warr, 1981; Cranny et al., 1992). Basically, a global measure allows "respondents to assess mentally what they feel are relevant dimensions in formulating a response to the issue of job satisfaction" (Camp, 1994, p. 286). A global measure was used. Specifically, job satisfaction was measured using the following 5 questions:

- I would be more satisfied with some other job at this facility than I am with my present job (reverse coded).
- My BOP [Bureau of Prisons] job is usually worthwhile.
- My BOP job is usually interesting to me.
- My BOP job suits me very well.
- If I have a chance, I will change to some other job at the same rate of pay at this facility (reverse coded).

The 5 job satisfaction items were measured on a 7-point Likert-type scale, ranging from strongly disagree (0), disagree (1), somewhat disagree (2), undecided (3), somewhat agree (4), agree (5), and strongly agree (6). The 5 questions were summed together and then divided by 5 to form an index of job satisfaction. The Cronbach's alpha coefficient for the job satisfaction index was

0.84.

Organizational Commitment. As previously indicated, organizational commitment is generally defined as having loyalty to the employing organization, identifying with the employing organization and its core values (i.e., pride in the organization and internalization of the goals of the organization), and having a cognitive desire for meaningful involvement in the organization (Cook & Wall, 1980; Mowday et al., 1979). Unlike many organizations studied, there are two levels of commitment that must be accounted for in the Federal Bureau of Prisons. One must take into account commitment to the particular institution, as well as commitment to the Bureau of Prisons as a whole. The Prison Social Climate Survey has measures for both institutional and agency-level commitment. The measure for commitment to the Federal Bureau of Prisons (i.e., agency-level) was measured by the following 5 questions items:

- The BOP is better than any of the other correctional agencies (e.g., state).
- I have a good opinion of the BOP most of the time.
- Most of the time the BOP is run very well.
- I am usually satisfied with the BOP.
- If I remain in corrections, I would prefer to remain with the BOP.

The measure for institution level commitment was measured using the following three questions:

- This facility is the best in the whole BOP.
- I would rather be stationed at this facility than any other I know about.
- I would like to continue to work at this facility.

Both agency level and institution level organizational commitment were measured on a 7-point

Likert-type scale, ranging from strongly disagree (0), disagree (1), somewhat agree (2), undecided (3), somewhat agree (4), agree (5), and strongly agree (5). The 5 agency commitment questions were summed together and divided by 5 to form an index of agency organizational commitment. The index had a Cronbach's alpha coefficient of .90. The 3 institutional questions were summed together and divided by 3 to form an index of institutional organizational commitment. The index had a Cronbach's alpha coefficient of .83.

Job stress. Brodsky (1982, p. 76) defined work stress as "the unpleasant awareness experienced at work, or when anticipating going to work, or when reflecting on work." Blau, Light, and Chamlin (1986) viewed job stress as the tension and anxiety that workers feel from work, and measures of job stress are concerned with employees' emotional and health well-being. Similarly, Cullen, Link, Wolfe, and Frank (1985, p. 507) saw job stress as "psychological discomfort or tension." Consistent with the definitions in the literature, job stress was measured as a correctional employee's feelings of job related hardness, tension, anxiety, worry, emotional exhaustion and/or distress and was measured by the following 6 questions:

During the past 6 months, how often have you experienced . . .

- A feeling that you have become harsh toward people since you took this job.
- A feeling of worry that this job is hardening you emotionally.
- A feeling of being emotionally drained at the end of the workday.
- A feeling that you treat some inmates as if they were impersonal objects.
- A feeling that working with people all day is really a strain for you.
- A feeling of being fatigued when you get up in the morning and have to face another day on the job.

The response options were never (0), very rarely (1), rarely (2), now and then (3), often (4), very often (5), and all the time (6). The 6 questions were summed together and divided by 6 to form an index of job stress. The index had a Cronbach's alpha coefficient of .82

Health Questions. Four health measures were adapted from the survey. There was a dichotomous measure if the respondent exercised on a regular basis. There was a dichotomous measure representing if the respondent consumed one or more drinks per day at least once a week. Another dichotomous variable measured whether the respondent was a tobacco user (i.e., either smoked or chewed). The final health variable asked if the respondent was overweight or not.

Personal characteristics and other control measures. The personal characteristics of gender, age, tenure, education, race, and ethnicity were included in the study. Gender was measured with females coded as 1 and males coded as 0. Age was measured in continuous years. Tenure with the Federal Bureau of Prisons was measured in continuous years. Education was measured in the respondent had a college degree or not. Race was measured using three dummy coded variables. The first variable represented whether the respondent was Black or not. The second variable measured whether the respondent was another race or not. The third variable measured if the respondent was Hispanic or not. The reference category for the dummy coded race measures was White. The personal characteristics should be viewed as either descriptive or control variables, rather than as causal variables.

In addition, other control measures for supervisory status, line staff status, shift, amount of unused annual leave, and region were included. Supervisory status was measured by a variable where supervisors of other staff were coded as 1 and non-supervisors were coded as 0.

Respondents who indicated that they were line staff (i.e., non-supervisory correctional officers who work directly with inmates) were coded as 1 and those who answered “no” were coded as 0. Shift was measured as a dichotomous variable representing if the staff member worked the day shift or not. Amount of unused annual leave was measured in days. The measure was included not only as a control variable but also because the idea that some staff may use sick leave as a substitute for vacation leave. Finally, the region the respondent worked in was included. In 1994, there were 6 regions in the Federal Bureau of Prisons. Five dummy coded variables were created to represent the regions of North Central, Northeast, South Central, Southeast, and Western, with the missing region of Mid-Atlantic as the reference group.

Results

Table 2 presents the descriptive statistics for the variables used in this analysis. The typical respondent indicated they had been absent 2.33 days during the six-month period preceding the administration of the survey. About three-fourths of the sample were male non-Hispanic Whites. About 44% of the respondents were line staff, and 17% were supervisors of other staff. The mean age and tenure were about 36 and 6 years, respectively. About 35% had earned a college degree. Sixty-seven percent of the respondents worked the day shift. About 70% indicated that they exercised on a regular basis, while 19% indicated that they were overweight. About 20% used alcohol on a regular basis and 31% were tobacco users. Finally, there is variation in the job satisfaction, agency commitment, institutional commitment, and job stress levels among the respondents.

***** Insert Table 2 about here *****

Before discussing the multi-variate analysis, it is necessary to first discuss how missing

data were handled. Item non-response for the data was handled with the imputation methods described by Schafer (1997) and implemented in the experimental SAS procedure PROC MI. The PROC MI procedure produced three separate data sets of 4,122 individuals where missing data were filled in with different draws each time. Negative binomial regression results were produced for all three data sets. An average of the estimates was done. While the amount of data missing for most items was modest, the cumulative effect of listwise deletion of cases with any missing data was significant. If listwise deletion was used, the sample size would decline from 4,122 to 2,701 cases (i.e., 34.5 % of the cases had some type of missing data). The loss of data was largely caused by the variable for whether a respondent worked in a line staff position. This question was only answered by about 3,100 respondents. Excluding the line staff variable, the data loss was about 15.7% of the cases. The PROC MI procedure allowed for the retention of all respondents.

The model of reported sick days used in the past six months was first examined with multilevel models as described by Raudenbush and Bryk (2002) and implemented in the HLM software (Raudenbush, Bryk, Cheong, & Congdon, 2000). This procedure was used to see if absenteeism was more of an individual event or a group event. It was hypothesized that there could be a nested structure to absenteeism by prison facility. In other words, some prisons would have a climate that either stressed attendance or the use of sick leave. This climate effect has been observed with some attitudinal measures, such as organizational commitment, or institutional behaviors, such as inmate misconduct (Camp et al., 1997; Camp, Gaes, Langan & Saylor, forthcoming). Level-1 variables (see Table 1) were included in the models to test whether working at a particular institution affected the amount of sick leave used by staff after

controlling for individual-level variables (while not reported, the HLM results are available upon request). The results demonstrated that there was no significant variation across institutions (i.e., no effects upon sick leave caused by the nesting of workers within specific prisons), so the outcome variable, sick leave used, was modeled with ordinary Poisson regression techniques. In other words, the intercept and all regression coefficients were treated as fixed effects and modeled with the Stata POISSON and negative binomial regression (NBR) procedures (Stata, 2003).

When working with count data, such as the days of sick leave used, it is always prudent to test for over dispersion of the variance. The Poisson distribution assumes that the variance and mean are equal, but this is not often the case with count data where there are typically more counts of 0 occurrences than would be expected otherwise (Long 1997, p. 218-219). Therefore, a negative binomial model was used. The negative binomial model allowed for a test and control for over-dispersion. If the over-dispersion had not been statistically significant, it would have been appropriate to fall back to a Poisson model. For the model presented here, it was necessary to keep the over dispersion term and use the output from the negative binomial procedure.

The results of the negative binomial model are reported in Table 3. Any coefficient with a Z value equal to or greater than +/- 1.96 is statistically significant at $p \leq .05$. The column labeled % shows the effect of a unit increase in the independent variable on the dependent variable while holding all other independent variables constant. For example, the value of 50.7 for gender means that all other factors being held at 0, females reported 50.7% greater use of sick leave.

***** Insert Table 3 about here *****

Gender, age, tenure, supervisor, amount of unused annual leave, overweight, Hispanic, Black, college graduate, Northeast region, and South-Central region all had a statistically significant impact on self-reported use of sick leave. As previously mentioned, female prison staff were more likely than male staff to have used sick leave. In fact, female respondents on average reported almost 51% more use of sick leave. Age had a positive impact on sick leave use. As respondents aged, they reported greater use of sick leave. For each one year increase in age, there was an increase of 2.6% use of sick leave. When viewed in terms of 10 year intervals, the effect of age on the use of sick leave was close to 26% greater ($\exp(10 * .02574) - 1$). Like age, tenure had a positive association with sick leave use. For each one year increase working for the Federal Bureau of Prisons, absenteeism increased by 1.7%. There was a negative relationship between supervisors and absenteeism. Supervisors in general were absent about 17% less than were non-supervisory staff. The amount of unused annual leave was inversely related to absenteeism. Those who reported higher levels of unused annual leave were less likely to use sick leave. For each day of unused annual leave, absenteeism dropped by 1.3%. Being overweight was positively associated with sick leave use. Those who indicated that they were overweight in general were absent 22.5% more than those who were not overweight. As compared to white respondents, Black and Hispanic respondents reported greater use of sick leave. On the other hand, there was no statistically significant difference in level of absenteeism between White staff members and staff members who were another race than Black or White. The variable measuring college degree had a negative relationship with absenteeism. Staff who were college graduates reported on average approximately 22% less use of sick leave than staff who had not earned a college degree. Finally, respondents from the Northeast and South-Central

regions generally were absent more often than respondents from the Mid-Atlantic region. Respondents from these two regions reported lower use of sick leave than did staff from the Mid-Atlantic region. Additionally, there was no difference between Mid-Atlantic respondents and respondents from the North-Central, Southeast, and Western regions.

As predicted, job satisfaction, organizational commitment, and job stress were salient antecedents of absenteeism among federal correctional staff. Job satisfaction had a negative impact on correctional staff absenteeism. For each one unit increase in job satisfaction, use of sick leave dropped by almost 8%. Job stress had a positive impact on absenteeism. For each one unit increase in the job stress index, use of sick leave increased by 7%. Staff who reported higher levels of agency organizational commitment used less sick leave. For each one unit increase in the agency commitment index, there was 3% reduction in absenteeism. While agency commitment had a statistically significant effect, institutional commitment, the other dimension of organizational commitment measured, had an insignificant impact on correctional staff absenteeism.

The measure for line staff had no significant effect on the absenteeism measure, nor did the measure for alcohol consumption. Those who worked the day shift were no different in the level of absenteeism than staff who worked non-traditional shifts (i.e., evening and morning). Finally, tobacco use had only insignificant effects on use of sick leave. In addition, another measure for just tobacco smokers was used. It also had insignificant effects.

Discussion

Most of the predicted relationships were supported by the results. Job satisfaction had a significant negative impact on federal correctional staff absenteeism. It appears that there is a

hedonistic calculus at play (Scott & Taylor, 1985). Correctional staff who dislike their jobs are more likely to be absent. Similarly, organizational commitment to the agency had an inverse effect on correctional staff absenteeism. Those who were committed to the agency were less likely to be absent. The effects of both job satisfaction and agency commitment can best be explained by looking at the two major types of absenteeism, unavoidable and avoidable (also called voluntary and involuntary) (Steers & Rhodes, 1978). Unavoidable absences are due to triggering events that are uncontrollable by the employee, such as serious illness, injury, transportation problems, or the need to take care of a sick family member. Avoidable absenteeism occurs when the employee elects to be absent from work for reasons that most employers would judge to be illegitimate, such as to have a day off, to attend a social event, to sleep in, and so on. In a recent survey, 42% of wealthy households, 41% of college educated workers, and 43% of those less than 24 years of age admitted that they had pretended to be sick in order to avoid work (Lach, 1999). The major reason given in the survey was they just wanted a day off, followed closely by the need for a “mental health day.” Similarly, Klein (1986) estimated the average absenteeism rate in America for full-time, non-farm workers to be 4.7%, with 2.6% estimated due to illness, injury, accidents, etc. (i.e., unavoidable), and 2.1% due to other reasons, including avoidable, intentional absences. There is no reason to suggest that correctional staff are radically different from other workers when it comes to unavoidable and avoidable absenteeism. Therefore, it should be no surprise that correctional employees who dislike their jobs and have little loyalty would be absent more than workers who like their jobs and have bonded to the correctional agency. This was the case in this study. They have probably engaged in avoidable absenteeism.

While agency organizational commitment had a statistically significant impact, the other dimension of organizational commitment, institutional, had insignificant effects. In the Federal Bureau of Prisons, much greater emphasis is put on building commitment towards the agency rather than commitment for the institution. The goal is to build a sense of family among all the employees. In addition, there is concern about allowing top level administrators to stay too long at a particular correctional facility. In general, top field administrators are moved from correctional facility to correctional facility approximately every four years. Furthermore, many of the promotions in the agency require that the person move to another institution. All of this probably leads to a greater sense of commitment towards the agency than the institution. Finally, of the two dimensions, agency commitment is more global than is institutional commitment, and, as such, probably has a greater impact on absenteeism.

Job stress, as predicted, has a positive effect on absenteeism among federal correctional staff. As a correctional employee suffers from job stress, the more likely he or she is to use sick leave hours. The reasons for the observed relationship are probably due to two factors. Research has shown that prolonged exposure to job stress can lead to medical problems (Cheek & Miller, 1983; Ivancevich & Matteson, 1980), and many medical problems require the use of sick leave. In addition, many employees who suffer from job stress take time off from work to recoup (Matteson & Ivancevich, 1987; Rhodes & Steers, 1990). Frequently, these absences from work are called mental health days. As previously indicated, in a survey of general workers, when asked why they had taken off work for avoidable reasons, the major reason given in the survey was they just wanted a day off, followed closely by the need for a mental health day (Lach, 1999). It would appear that correctional staff are the same. By being absent, many correctional

employees maybe able to effectively deal with job stress, and, hence avoid burnout and long term medical problems. All the authors have worked in corrections and have discussed the effects of work with other correctional workers. It was not uncommon to hear from correctional employees that a person has to “bang in sick” (i.e., call in sick) every once in a while, even if you are not physically ill, or else you will “fry” yourself (i.e., burn yourself out). Job stress is probably linked to both unavoidable and avoidable correctional staff absenteeism.

Only one of the four health variables had a significant effect of correctional staff absenteeism. Those who reported to be overweight tended to use more sick leave than those who were not overweight. This finding is in accordance with the research that finds being overweight is associated with greater medical problems (Field et al., 2001; Lean, Hans, & Seidell, 1999). Correctional staff who are overweight are probably absent more often due to complications associated with obesity. Thus, it is postulated that being overweight is generally associated with unavoidable absenteeism because of health problems associated with being overweight.

What was surprising was that none of the other health measures had statistically significant effects on absenteeism among federal correctional employees. Tobacco use has long been linked with health problems, including cancer (American Cancer Society, 2003; Emery, Choi, & Peirce, 1999; Goetzel et al., 1998). It would be expected that the increase in health problems associated with tobacco use would be tied with being absent more often among correctional staff. This was not the case. There was no significant relationship for tobacco use and self-reported use of sick leave, including when a measure for only smoking was used. It could be that the effects of tobacco use are not evident until later in life. The mean age of the respondents was about 36, and most of the staff in this study who used tobacco were between 31

and 40 years of age. Thus, it may not be until later in life that the health problems associated with tobacco use would occur. In addition, many institutional staff retire in their early fifties, and there is a mandatory retirement age of 57. Thus, the responding staff may be too young for the full effects of tobacco use to be felt, and, as such, there would be no difference in sick leave use. Finally, the tobacco use variable only measured whether the respondent was currently using tobacco. Moreover, the variable did not measure the length or frequency of use. It is very likely that staff who have used tobacco products longer and more frequently would be absent more often. This is clearly an area that needs further research.

Neither the measure of exercising regularly nor alcohol use was linked to increased use of sick leave. Exercise has been linked to better health (U.S. Department of Health and Human Services, 1996), and better health should translate into lower use of sick leave, at least in terms of unavoidable absenteeism. There is no reason to conclude that exercise has no benefits for correctional workers. Instead, the lack of a relationship can probably be best explained how the concept of exercise was measured. Measuring exercise is easier said than done (Shephard, 2003). The variable asked if the respondent exercised regularly or not. It did not ask what type of exercise was done or the frequency of exercise. Additionally, the concept of exercise was never defined for the respondents. It is quite possible that those who exercise at least moderately will be absent less than those who do not exercise or those who exercise only lightly. The measure of alcohol consumption had only insignificant positive effect on federal correctional staff absenteeism. As with exercise, it is probably the measure used that best explains the lack of a relationship, rather than concluding that there is no relationship between exercise and absenteeism among correctional staff. The measure asked if the respondent drank more than one

or more alcoholic drinks per day at least once a week. There is some indication that light to moderate alcohol consumption has positive health benefits. It is not until heavy consumption or alcoholism that there are serious medical problems (Alcohol Abuse, 2003). In addition, there was no measure available asking why the respondent drank. It is hypothesized that social drinkers should be less absent than those who drink to escape. Thus, alcohol use is probably not related to correctional staff absenteeism until the level becomes high and sustained and/or if the staff member is drinking to escape problems.

All of the personal characteristics had a significant effect on the absenteeism of federal correctional staff. As was predicted, female federal correctional staff have a higher usage of sick hours than do male staff. In fact, gender was the best predictor of self-reported sick leave use in this study. This finding is consistent with that observed across a wide array of organizations. However, it is unclear as to why females in the Federal Bureau of Prisons are higher in absenteeism than male staff. As discussed in literature review, in the absenteeism literature there is an ongoing debate on the causes for female workers to be higher in absenteeism as compared to their male counterparts. Some have theorized and found that family responsibilities, particularly young children, is the cause for the observed gender difference in employee absenteeism (Beatty & Beatty, 1975; Gupta & Beehr, 1979; Leigh, 1983, 1991). Others have argued and found that family responsibilities, even young children, do not explain the gender difference in employee absenteeism (Allen et al., 1982; Scott & McClellan, 1990; VandenHeuval & Wooden, 1995). However, it is not possible in this study to test to see if the reason that female staff in general are higher in absenteeism is due to family responsibility or for other factors. There are no measures for marital status, number of children, age of children, or kinship support

in the 1994 Prison Social Climate Survey. Furthermore, it is interesting to note that while female federal correctional staff are higher in terms of absenteeism, they are lower in terms of turnover intent (another question in the 1994 Prison Social Climate Survey). This finding suggests that female correctional staff are taking sick leave for unavoidable events, such as illness or to care for a sick family member rather than as a form of withdrawal from the job. More research is needed to order to understand why female staff are absent more often than their male counterparts.

Tenure was predicted to have an inverse effect on absenteeism. Instead, it has a positive effect among federal correctional staff. Tenure was found to be significantly correlated with job stress (Pearson's $r = .13$, $p \leq .001$). The positive correlation suggests that the staff with high tenure are suffering from the long term effects of working in a prison environment (e.g., physical ailments, emotional problems, burnout, boredom, etc.). This could explain the positive relationship between tenure and absenteeism observed in this study. It appears that tenure is probably linked with both avoidable and unavoidable absenteeism among correctional staff.

As with tenure, age had a significant positive effect on absenteeism. Older federal correctional employees reported greater use of sick leave than did younger workers. This is contrary to what has been found in other organizations. As previously indicated, the literature suggests that younger workers are more likely to be absent. It appears that corrections is different. While age and tenure were highly correlated (Pearson's $r = .67$, $p \leq .001$), age was not significantly correlated with job stress (Pearson's $r = .02$, $p = .37$). This suggests that other factors than experiencing job stress is responsible for the increased use of sick leave. It is possible that the demanding nature of corrections, more so than typical office jobs, takes a

physical toll on staff as they age, which in return leads to higher rates of absenteeism. It is also possible that as the person ages, they accumulate more sick leave. Federal correctional workers hired after 1987 are not paid for unused sick leave when they retire as is true for workers under the older retirement system. For these federal correctional workers, sick leave becomes a “use it or lose it” proposition. The typical respondent indicated that they had more than 400 hours of unused sick leave. Moreover, age and the number of hours of unused sick leave were positively correlated (Pearson’s $r = .34$, $p \leq .001$). As with tenure, there is a need for future research to determine why age is positively associated with sick leave among correctional staff.

While no direction was predicted, it is interesting to note that education level has a negative relationship with absenteeism among federal correctional staff. It was first thought that the negative relationship was due to job category. Many educated correctional employees are in positions that are vacated when they call in sick (e.g., case managers, counselors, business office personnel, etc.), and, as such, the work they are assigned remains for them to complete once they return to work. It is possible that individuals in such positions are less likely to use sick leave, either for legitimate sickness or otherwise (e.g., leisure time), than would employees in positions in which there is no work to be made-up upon return to work (e.g., correctional officers). They may have a greater fear of getting too far behind in their work. In order to test this hypothesis, a means test was done for absenteeism controlling for position and education level. For all job categories, the mean of the absenteeism measure was either lower for those with college degrees than those without a college degree or the same. Even among custody services, the mean of the absenteeism measure was lower among college degree staff as compared to staff without a college degree. Thus, it appears there are other factors than position that account for the negative

relationship between education and absenteeism among correctional employees. It could be that completing college instills in a person a sense of responsibility and/or encourages the development of a more healthy lifestyle. Whatever the reasons, it would appear that among federal correctional staff, education has a negative effect on absenteeism. This is an area that needs a much more in depth analysis before the reasons for education having an inverse relationship with correctional staff absenteeism can be completely understood.

While no prediction was made for the direction of the relationship, it is interesting to observe that Black and Hispanic federal correctional staff are on average higher in absenteeism than are white federal correctional staff. There were significant correlations between Nonwhite respondents and White respondents and job satisfaction and agency commitment. Moreover, Nonwhite respondents expressed less job stress than did White respondents (Pearson's $r = -.19$, $p \leq .001$). It is unclear why Black and Hispanic correctional staff have higher rates of absenteeism compared to White correctional workers, and, as such, no explanation can be provided at this time without further empirical investigation. It is clear that this is an interesting phenomenon that needs to be investigated further in future research on the subject area.

Among the control variables, some had a significant effect, while others did not. Supervisors in general took less sick leave than did their non-supervisory counterparts. This is probably due to the fact that there is a greater expectation for supervisors to attend work than is the case for non-supervisory staff. In addition, there is some indication that supervisors are more satisfied with their jobs and committed to the agency than are non-supervisory staff (Pearson's $r = .20$, $p \leq .001$, and $r = .17$, $p \leq .001$, respectively). Furthermore, there was no significant correlation between supervisory status and job stress (Pearson's $r = -.01$, $p = .56$). Thus, the

mostly likely for supervisors being absent less than non-supervisory staff is because they are expected to be at work if at all possible and because they like their jobs and are committed to the Federal Bureau of Prisons.

On the other hand, those who work the day shift are not different in their self-reported use of sick leave than those staff who work the evening and morning shifts. It appears that the shift assignment is not directly linked to absenteeism among correctional staff. Likewise, line staff (non-supervisory staff who interact with inmates on a regular basis) were no more likely to be absent than were non-line staff. This suggests that working directly and regularly with inmates is not related to being absent from work. The variable measuring days of unused annual leave was negatively related to sick use. This suggests that staff who use up their annual leave are also more likely to use sick leave. This makes intuitive sense. Those who wish to avoid work will use either type of leave to escape from work. Those who like their jobs and work would in general use less of either type of leave. Finally, there were some variations between the regions and absenteeism. There was no reason to suspect that regions would differ in sick leave use other than for regional climate differences and outbreaks of illnesses.

There is need for much more research in the area correctional staff absenteeism. Besides the areas already mentioned, such as determining why the personal characteristics are associated with sick leave use, there is a need to determine whether the same antecedents of absenteeism will be observed among staff at other correctional agencies. Furthermore, different types of absenteeism measures should be used. Non-correctional research indicates that the relationship between absenteeism and other factors may be influenced in part on how absenteeism is measured. Absenteeism can be measured by several different methods, with the two most

common being absence duration and absence frequency. (Rhodes & Steers, 1990). In this study, a duration measure was used. It is predicted that stronger relationships will be found between job satisfaction and organizational commitment and absenteeism when a frequency rather than a duration measure of absenteeism is utilized.

Frequency measures are influenced to a greater degree by short-term absences, while duration measures are influenced to a greater extent by long term leave from an organization (Brooke, 1986). According to Blau and Boal (1987, p. 289), "Frequent absences of short duration may reflect attitudinal problems." Thus, short term absences are more likely to be used for other than legitimate reasons than are long term absences (e.g., an unscheduled three day weekend versus a two-week leave for a medical procedure). In addition, the longer the duration of the absence, the more likely the organization will demand medical verification for the absence. Therefore, it is likely that the absence metric may influence the strength of the relationship (Atkin & Goodman, 1984).

In addition, Brooke and Price (1989) recommend using a measure of why the respondent was absent. Specifically, they recommended asking the respondents how many times during the past three months have they taken a half day or more off for family responsibilities, community activities, personal illness, family illness, medical appointment, personal business, or just taken a day off. At the very least, future research on correctional employee absenteeism should ask if the respondent has taken a day off just to relax. This approach would capture both avoidable and unavoidable absences. This way, it could be seen the frequency of both types of absenteeism and would allow for the identification of what antecedents apply for each type of absenteeism. Finally, the effects of other antecedents than those tested here should be explored, such as the

degree of kinship support (i.e., who can help take care of sick family members so the person can attend work) or transportation issues. It is only with further research will the causes of correctional staff absenteeism be fully understood.

The findings from this study have administrative implications as well. If correctional administrators are truly interested in reducing absenteeism among their staff, it is recommended that they invest resources in improving employee job satisfaction and organizational commitment, and reducing job stress. These are three areas that can be readily changed by correctional administrators, unlike personal characteristics or family structures. In order to build job satisfaction and organizational commitment and to reduce job stress, effort should be placed in improving the work environment. There is a growing body of correctional literature that suggests that organizational fairness, instrumental communication, participation in decision-making, supervision, integration, role conflict, role ambiguity, and are important in shaping the level of job satisfaction, organizational commitment, and job stress experienced by correctional employees (Cullen et al., 1985; Grossi, Keil, & Vito, 1996; Hepburn & Knepper, 1993; Jurik & Winn, 1987; Lindquist & Whitehead, 1986; Van Voorhis, Cullen, Link, & Wolfe, 1991; Wright et al., 1997). Implementation of such broad recommendations may be easier said than done, particularly in the government bureaucracy setting of most correctional agencies. Nevertheless, it is still recommended that serious consideration be given to the above recommendations. Doing nothing will never address the problem of correctional staff absenteeism. Furthermore, it is our contention that positive outcomes in other areas may be realized as well, such as improved home life for workers, improved staff-inmate interactions, and improved employee performance if job satisfaction, organizational commitment, and job stress are improved for correctional staff.

Conclusion

Correctional staff need to report to scheduled work. The absent respondents in this study alone had direct costs of wages in the millions, not to mention the expenses of overtime and indirect costs. Therefore, reducing employee absenteeism is paramount for correctional agencies. While the impact of absenteeism is critical for most correctional organizations, very little research has been conducted. It would appear that this area has largely been ignored by correctional researchers.

Based upon a review of the absenteeism literature, job satisfaction, organizational commitment, job stress, employee health, and personal characteristics were identified as possible antecedents of correctional staff absenteeism. Using a negative binomial model with data from the 1994 Prison Social Climate Survey of institutional Federal Bureau of Prisons staff, several salient antecedents of correctional staff absenteeism were identified. Specifically, job satisfaction, agency commitment, a form of organizational commitment, job stress, being overweight, and several personal characteristics had significant effects on correctional staff absenteeism. These results have both theoretical and practical implications.

It is hoped that the results will provide useful information for correctional executives to improve the work environment for many of their workers. By doing so, the job satisfaction and organizational commitment of workers should be raised, which should ultimately improve the efficacy of the organization by reducing employee absenteeism. In an era of increasing costs, shrinking budgets, and growing inmate populations, this information is critical for prison administrators. Finally, much more research is required on what causes correctional staff absenteeism. It is an important area that should not be ignored by either researchers or

administrators.

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Endnotes

1. A large proportion of the following material is derived from a published earlier theoretical article on correctional absenteeism written by the first author.
2. Farrell and Stamm (1988) reported the reason the duration and frequency measures do not add to 72 is that 14 studies included both duration and frequency measures.
3. The specific job categories were correctional services, unit management, mechanical services, prison industry, health services, food service, financial/human resources/records/legal services, education/recreation/religious/psychology services, and other.