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PREDICTORS OF JOB STRESS AMONG STAFF IN JUVENILE CORRECTIONAL FACILITIES

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There have been relatively few studies of job stress among staff of juvenile correctional facilities. The Job Stress subscale of the Prison Social Climate Survey, which has been used extensively in studies of adult facility staff, was completed by 443 staff (72.1% of those surveyed) working in residential placement facilities and group homes operated by the Kentucky Department of Juvenile Justice. Job stress scores were regressed on a wide range of potential predictors. The significant predictor variables were all related to the work environment; background variables had no predictive utility. Lower staff stress was predicted by organizational satisfaction and commitment, job satisfaction, and sense of personal efficacy. Staff who perceived less danger in the work environment and those who did not supervise other staff reported lower stress. Implications of the findings for policy and practice are discussed.

Keywords: job stress; juvenile correctional facilities; correctional staff; job satisfaction; organizational commitment; personal efficacy; correctional work environment

During the past two to three decades, job stress has received considerable attention in the adult corrections literature (e.g., Castle & Martin, 2006; Cheek & Miller, 1983; Cullen, Link, Wolf, & Frank, 1985; Dowden & Tellier, 2004; Keinan & Malach-Pines, 2007), and there are good reasons for this ongoing focus. Correctional officers are regarded as having one of the more stressful occupations because of, in no small part, the potential for assault and volatility in the work environment (Finn, 2001). Sustained exposure to high stress is associated with a variety of negative factors, including physical and mental health problems; substance abuse; job dissatisfaction, burnout, and turnover; and problems in relationships with family members and others (Byrd, Cochran, Silverman, & Blount, 2000; Cheek & Miller, 1983; Triplett, Mullings, & Scarborough, 1999). Furthermore, stress can hinder the ability of employees to perform their jobs effectively and might ultimately jeopardize institutional security (Finn, 1998, 2001).

Comparatively little attention has been devoted to job stress among staff working in juvenile correctional facilities. However, there is reason to believe these workers might also experience significant stress. In addition to potential dangers and volatility of the job, stress

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can result from such things as long work hours coinciding with staff shortages, perceived lack of support from supervisors, low pay, and limited prospects for job advancement (Howe, Clawson, & Larivee, 2007). Staff job stress can also have deleterious consequences in juvenile corrections. For instance, it can negatively affect the care and services that staff provide youth (Liou, 1995). As such, it is important to understand the factors associated with such stress. The extant knowledge base regarding stress among correctional employees comes largely from studies of staff in adult corrections. Because solid reviews of those studies are already available (e.g., Blevins, Cullen, Frank, Sundt, & Holmes, 2006; Castle & Martin, 2006; Dowden & Tellier, 2004), we do not extensively review the adult literature in this study. Suffice it to say that there are at least two problems with exclusively relying on this literature to understand stress among staff working at the juvenile level.

First, as is mentioned below, there are important inconsistencies in findings across studies of adult staff. These inconsistencies are no doubt in part attributable to differences in the way stress has been operationalized; even the limited research conducted in juvenile corrections displays much variance in measures of stress. Second, and more important, it cannot be assumed that what the adult corrections literature teaches us about predictors of staff stress applies equally to the context of juvenile corrections. The philosophical underpinnings of juvenile justice place greater emphasis on staff acting in the best interests of persons receiving correctional services (cf. Howe et al., 2007). The role relationship between staff and correctional clients is adult–juvenile as opposed to adult–adult. And although there obviously are exceptions, juvenile facilities are generally much smaller, less crowded, less violent, and less security oriented than adult institutions. Such factors could promote differences in both levels of perceived job stress and in predictors of stress.

The present study examines predictors of job stress among employees of correctional facilities administered by the Kentucky Department of Juvenile Justice (DJJ). More specifically, the study seeks to extend the literature on this topic by examining the relationship of job stress to an array of demographic and work environment variables among staff filling a variety of positions (i.e., youth worker, counselor, education, recreation, administration and supervision, and support services) in juvenile facilities.

PREVIOUS RESEARCH

Researchers have divided predictors of correctional employee stress into two categories: (a) those stemming from the work environment of the correctional facility or organization and (b) those pertaining to employees' demographic and background characteristics (cf. Castle & Martin, 2006). Paralleling the now classic distinction between the prisonization and importation models of the prisoner subculture (Irwin & Cressey, 1962; Sykes, 1958), some researchers (Blevins et al., 2006; Castle, 2008; Van Voorhis, Cullen, Link, & Wolfe, 1991) have classified staff work environment variables as indigenous to the institutional milieu, analogous to the way deprivations and pains of imprisonment are seen as promoting prisonization. On the other hand, demographic and background factors are sometimes conceptualized as the product of importation—as characteristics staff bring with them on beginning work in corrections.

With this distinction in mind, we were able to locate only five previous studies of stress among staff in juvenile corrections. In the earliest of these, Dembo and Dertke (1986) interviewed detention center staff using a protocol they developed to assess stress in terms of staff concerns with threats of aggression, escape, and racial tension. The investigators reported that sizable portions of staff experienced moderate to high levels of stress. Furthermore, staff stress was related most closely to components of the work environment, such as potential for detainee acting out and the need perceived by staff for additional youth services and programs.

Liou (1995) surveyed juvenile detention workers to assess role stress (i.e., role conflict and ambiguity) as well as job stress. The former was measured using a questionnaire devised by Rizzo, House, and Lirtzman (1970), whereas job stress was measured using an instrument developed by Parker and DeCotiis (1983). Liou's data confirmed the salience of work environment variables in predicting stress. The significant predictors of job stress were having less confidence in one's supervisor and having a treatment orientation toward youth. On the other hand, predictors of role stress included lower confidence in supervision, lower perceptions of job security, and a punitive orientation toward detained youth. Demographic variables were not associated with either type of stress.

Although the two studies above used staff from detention centers, Mitchell, MacKenzie, Gover, and Styve (2001) drew data from a national sample of staff working in juvenile facilities. These investigators hypothesized no relationship between stress and staff demographics, based on the proposition that the correctional work environment is uniformly stressful across demographic subgroups. Stress was measured using a previously unvalidated instrument that was included as a component of the National Evaluation of Juvenile Correctional Facilities. Mitchell et al. found that White female staff displayed significantly more stress than did their White male counterparts. Similarly, greater stress was reported among older staff and those with longer tenure. In terms of work environment variables, stress was greater among staff working in larger facilities and those employed in facilities having higher ratios of staff to residents.

More recently, Auerbach, Quick, and Pegg (2003) studied stress among staff working in eight correctional facilities administered by the Virginia Department of Juvenile Justice. These researchers examined general stress using Sandman's (1992) Job Stress Index (JSI) and job-specific stress using Anson, Johnson, and Anson's (1997) Specific Sources of Occupational Stress Questionnaire. Correctional staff evaluated their work environments as being more stressful than workers (from other occupations) who composed the sample on which the JSI was normed. General job stress was predicted by longer tenure and higher educational attainment. Significant predictors of job-specific stress included perceived lack of support from the agency, working long hours, perceived lack of adequate resources (i.e., training, equipment, and personnel), being non-Caucasian, having longer tenure, and being female.

In the most recently published article on stress among juvenile facility staff, Blevins et al. (2006) utilized secondary data to examine work stress among a sample of staff from detention and treatment facilities across Ohio. As part of a statewide staff survey administered by the Ohio Department of Youth Services, stress was measured using a four-item index employed previously by Cullen, Link, Cullen, and Wolfe (1990) in a study of general work stress. Blevins et al. reported moderate to high levels of stress among the sample. Furthermore, the strongest predictors of stress were perceived dangerousness and role conflict; demographic variables were not predictive.

In summary, the limited research available indicates that work environment variables represent the strongest and most consistent predictors of job stress among employees of juvenile correctional facilities. Such variables were significantly predictive of stress in each of the studies just reviewed. However, there is less consistency regarding the predictive utility of demographic and background variables. Such variables predicted job stress in some studies (Auerbach et al., 2003; Mitchell et al., 2001) but not in others (Blevins et al., 2006; Liou, 1995).

In general, research conducted on stress among staff working in adult corrections also points to the salience of work environment predictors over demographic ones. For example, in their meta analysis of 20 studies, Dowden and Tellier (2004) found that attitudes toward work (e.g., job satisfaction) and work-specific problems (e.g., perceived dangerousness) were the strongest predictors of job stress. The significance of work environment variables has been corroborated in other recent studies as well (Castle & Martin, 2006; Keinan & Malach-Pines, 2007; Lambert, Hogan, & Allen, 2006). At the same time, there is far less consistency in the adult literature regarding the predictive utility of such demographic and background variables as gender, race, education, age, and tenure (e.g., Britton, 1997; Carlson, Anson, & Thomas, 2003; Castle & Martin, 2006; Lambert et al., 2006; Patterson, 1992; Saylor & Wright, 1992; Triplett et al., 1999). Prior adult-level research using the measure of job stress employed in this study has found that both race and gender were related to stress; minorities and males reported lower stress (Wright & Saylor, 1991, 1992).

METHOD

PARTICIPANTS

The participants for this study ($N = 443$) consisted of staff employed at the 11 long-term residential placement facilities (referred to as youth development centers or YDCs in Kentucky) and 11 group homes administered by the Kentucky DJJ. The majority of respondents to the mail survey described below were male ($n = 373$ or 62.5%) and White ($n = 373$ or 84.2%). The average age was 41.8 years ($SD = 10.55$). Nearly all respondents had completed high school or earned a GED; 74.5% ($n = 330$) had completed at least some college hours. One third had attended the training academy operated by DJJ for new employees; the remainder was employed with DJJ before academy completion became mandatory. On average, respondents had been employed at their current facilities for 6.6 years ($SD = 6.66$) and employed with DJJ for an average of 7.7 years ($SD = 7.58$). The majority ($n = 315$ or 71.1%) were classified as nonsupervisory staff, whereas the remainder were responsible for supervising other staff. More than half of respondents were employed as youth workers ($n = 211$ or 47.6%), counselors ($n = 33$ or 7.4%), or education or recreation staff ($n = 17$ or 3.8%); the remainder worked in administration or supervision ($n = 103$ or 23.2%) or support services ($n = 79$ or 17.8%) such as health services and food services. Likewise, more than half ($n = 222$ or 50.6%) reported working first shift (early morning to afternoon), 140 (31.6%) worked second shift (afternoon to midevening), 55 (12.4%) worked third shift (midevening to early morning), and 22 (5%) indicated working no usual shift. Almost 80% ($n = 354$) of the respondents reported an annual salary of less than \$30,000.

SURVEY INSTRUMENT AND VARIABLES

In light of the salience of work environment variables as established in past research, the work environment section of the Prison Social Climate Survey (PSCS) was adapted for use with staff employed at juvenile facilities in this study. The PSCS was developed and standardized by researchers working with data collected from staff employed at adult institutions administered by the Federal Bureau of Prisons (Saylor & Wright, 1992; Wright & Saylor, 1991). The instrument's work environment section comprises 57 items. Saylor and Wright (1992) performed exploratory factor analysis on these items and found the underlying structure of the work environment to be composed of the seven dimensions or subscales discussed below. Saylor and Wright confirmed the reliability of the structure by conducting factor analyses on split-half samples and then observing whether the items loaded in similar fashion across the samples. They also analyzed both item-to-subscale correlations and subscale-to-subscale correlations to further confirm the factor pattern.

A key subscale of the work environment section of the PSCS measures job-related stress. This subscale consists of six items that ask employees to rate how often in the past 6 months (*never, very rarely, rarely, now and then, often, very often, all the time*) they have experienced various feelings indicative of job stress. These include feelings of (a) becoming more harsh toward people, (b) growing emotionally hardened, (c) being emotionally drained at the end of work, (d) treating youth as impersonal objects, (e) being strained as a result of working with people, and (f) being fatigued when facing another day on the job. This subscale displayed strong internal reliability in both Saylor and Wright's (1992) research and in the present study ($\alpha = .85$ for both studies).

The work environment section of the PSCS consists of six additional subscales. These measure an employee's (a) perception of the appropriateness of the management structure and lines of authority in the DJJ organization, (b) perception of the quality of supervision received, in terms of support and rewards, (c) level of satisfaction with and commitment to the organization as a whole, (d) level of satisfaction with and commitment to the particular institution at which the employee works, (e) level of satisfaction with and commitment to the specific job the employee performs, and (f) sense of personal efficacy in working with youth. The items composing the first five of these subscales have a 7-point Likert-type response format ranging from *strongly disagree* to *strongly agree*. As with the Job Stress subscale, the Personal Efficacy subscale asks employees to rate the frequency of particular feelings. Each subscale displayed good internal reliability, with alpha coefficients of .83 for Authority and Structure, .92 for Supervision, .90 for Organizational Satisfaction and Commitment, .85 for Institutional Satisfaction and Commitment, .68 for Job Satisfaction and Commitment, and .83 for Personal Efficacy. Saylor and Wright (1992) reported comparable alpha coefficients of .80, .94, .85, .85, .74, and .91, respectively.

In addition to the participant background and work environment variables mentioned above, the mail survey incorporated other variables conceivably related to job stress. These variables were as follows: Facility location referred to whether the facility at which an employee worked was in an urban area, a rural area, or a midsize city. The security rank of facilities included open, low, medium, and high categories. Facility layout was measured with four items asking staff to rate how layout affects communication among line staff, communication between line staff and supervisors, staff surveillance of youth, and staff safety; each item used a 5-point Likert-type format ranging from *greatly inhibits* to *greatly*

facilitates. Perception of communication with supervisors was measured with an item asking staff to rate their supervisor on balancing the needs of employees and those of the facility and an item asking the extent to which the staff were not afraid to inform the supervisor about things wrong at the facility; both items asked for ratings on a 7-point Likert-type scale ranging from *strongly disagree* to *strongly agree*. Employees rated the quality of life in their communities on two items asking them to describe the community where they live and the variety of social activities there; both items had a 5-point Likert-type format ranging from *very poor* to *very good*. Similarly, staff rated the cost of living in their community relative to salary on a 5-point Likert-type scale ranging from *very low* to *very high*.

Respondents rated their perceptions of the likelihood of staff members being physically assaulted in the facility on a 4-point Likert-type scale ranging from *not likely at all* to *very likely*. They rated the likelihood of youth being assaulted (physically or sexually) by another youth in the facility on a 4-point Likert-type scale ranging from *not at all likely* to *very likely*. They estimated the number of instances of youth-on-youth assaults (physical and sexual) at the facility in the past 6 months and whether they were aware of any gang activity in the facility in the past 6 months (yes–no format). Also, staff rated the frequency of staff use of force with youth in the past 6 months on a 6-point Likert-type scale ranging from *zero* to *all the time*. They rated the adequacy of safety and security policies at the facility on a 7-point Likert-type scale ranging from *very inadequate* to *very adequate*. Finally, they estimated the percentage of youth in the facility they perceived as either *dangerous* or *extremely dangerous*.

PROCEDURE

In the present study, slight wording changes were made to the PSCS to adapt it for use in juvenile correctional facilities. In addition, at the request of the DJJ administration, an item was added to the Job Stress subscale to measure the frequency with which staff felt they had been working too hard on their job. The survey instrument was pilot tested at one group home and one YDC. Although some minor wording changes were made, no major changes were made to any of the items based on pilot test results. Subsequently, the survey was mailed to staff at the remaining DJJ facilities using Dillman's (2006) tailored design survey procedure. Of 507 YDC staff surveyed, 353 (69.6%) responded. For the 107 group home staff surveyed, the return rate was 84.1% ($n = 90$). Thus, the overall response rate was 72.1% ($n = 443$).

RESULTS

Because the Job Stress subscale of the PSCS was modified slightly for use in this study (see above), factor analysis using principle components analysis with varimax rotation was performed on the seven-item scale to determine the latent structure of the set of items. Two factors with initial eigenvalues greater than 1.0 were identified, accounting for 67.09% of the total initial cumulative variance. All of the seven items loaded highly on these two factors.

The results are presented in Table 1. The pattern of loadings revealed two distinct factors. Factor 1 is a measure of negative impact of the job on the employee in terms of such

TABLE 1: Principle Components Factor Analysis of Job Stress Subscale (Varimax Rotation)

Item	Factor 1 Loading	Factor 2 Loading
	(Eigenvalue = 3.67)	(Eigenvalue = 1.02)
1. Feeling of being emotionally drained at the end of the workday	.836	.275
2. Feeling that you are working too hard on your job	.842	-.020
3. Feeling that working with people all day is a strain for you	.638	.361
4. Feeling of being fatigued when you get up in the morning and have to face another day on the job	.691	.415
5. Feeling that you've become harsh toward people since you took this job	.392	.728
6. Worrying that this job is hardening you emotionally	.386	.751
7. Feeling that you treat some youths as if they were impersonal objects	-.005	.792

things as fatigue and strain. By contrast, Factor 2 measures the employee's appraisal of how the job is affecting his or her behavior toward others. The correlation between the factors was positive and sufficiently high ($r = .64$) to justify pooling them into a two dimensional scale for purposes of additional analyses.

Item means were calculated for the two-dimensional Job Stress subscale and the other work environment measures, with values ranging from 0 to 6. On the job stress measure, higher scores indicate greater stress (Wright, Saylor, Gilman, & Camp, 1997). The overall mean job stress score was 2.20 ($N = 428$, $SD = 1.12$), indicating a moderate level of stress among staff.

The significant ($p < .05$) bivariate correlations with the stress measure are presented in Table 2. Job stress was positively related to working in a facility located in an urban area but negatively correlated with working in facilities located in a midsize city. Stress was also positively correlated with working in a facility with a higher security ranking and working in a YDC (as opposed to a group home). Tenure with DJJ and the particular facility were positively related to stress, whereas completing the training academy was inversely related. Similarly, staff who supervised other staff and those with higher salaries reported greater stress. Each of the work environment measures were significantly correlated with stress in the direction one might expect. Specifically, higher stress levels were related to lower perceptions of authority and structure; lower perceptions of supervision; reduced organizational, institutional, and job satisfaction or commitment; and a lesser sense of personal efficacy in working with youth. The remaining variables listed in Table 2 (greater perceived likelihood of assaults against staff and youth; lower perceptions of supervisor communication, facility layout, and adequacy of policies; increased number of assaults; presence of gang activity; greater use of force incidents; and greater percentage of dangerous youth) were all related to increased job stress.

The next phase in data analysis was to regress job stress on possible predictor variables. As a prelude to this, various diagnostic analyses needed for the appropriate use of multiple regression were conducted. Specifically, we tested for multicollinearity and excluded two variables (security rank and percentage of extremely dangerous youth) that were highly correlated with other variables. When testing for normality, some variables (tenure with

TABLE 2: Significant ($p < .05$) Bivariate Relationships With Job Stress

<i>Variable</i>	<i>r</i>
Urban facility	.184
Midsized city facility	-.153
Security rank	.113
Youth development center facility	.123
Length of employment with Department of Juvenile Justice (DJJ)	.175
Length of employment at facility	.107
Attended DJJ academy	-.103
Supervise other DJJ staff	.134
Salary	.132
Perception of authority and structure	-.347
Perception of supervision ^a	.327
Organizational satisfaction and commitment ^a	.504
Institutional satisfaction and commitment ^a	.280
Job satisfaction and commitment	-.455
Personal efficacy ^a	.290
Likelihood of staff being physically assaulted in facility	.270
Communication with supervisor ^a	.203
Facility layout	-.105
Likelihood of youth being physically or sexually assaulted	.231
Number of physical and sexual assaults in past 6 months	.256
Gang activity in past 6 months	.285
Number of use of force incidents in past 6 months	.273
Adequacy of safety and security policies ^a	.285
Percentage of extremely dangerous youth	.165
Percentage of dangerous youth	.181

a. Reflexed variable.

DJJ and the facility, education, salary, likelihood of youth being assaulted, number of assaults, and percentage of dangerous youth) were positively skewed, and these were subjected to square root and logarithmic transformations. Others (supervision, organizational satisfaction and commitment, institutional satisfaction and commitment, personal efficacy, communication with supervisor, and adequacy of safety and security policies) were negatively skewed; these were reflexed prior to transformations (Tabachnik & Fidell, 2006), meaning that interpretations had to be reversed. In addition, five cases were dropped from the analysis because they represented multivariate outliers. We also verified that there was a sufficient ratio of cases to variables and that discrete variables had no dichotomous splits where one category had 10% or fewer cases. We performed post hoc inspection of the standard errors of the standardized regression coefficients to be sure none exceeded a value of 1 (Tabachnik & Fidell, 2006). Scatterplots were inspected to check for violations of assumptions appropriate for regression models. Histograms of standardized residuals and plots of observed versus expected residuals for each of the work environment dimensions revealed no significant departures from normality. In addition, plots of standardized residuals against standardized predicted values displayed no violations of the equality of variance assumption. Likewise, residual plots checking for outliers showed no unusual values that could have any substantial impact on results.

Following these diagnostics, we employed stepwise multiple regression procedures to identify the strongest predictors of stress with other potential predictors held constant. The

TABLE 3: Regression of Job Stress on Significant Predictor Variables

<i>Variable</i>	<i>B</i>	<i>SE B</i>	<i>β</i>
Organizational satisfaction and commitment ^a	.892	.535	.292
Percentage of dangerous youth	.069	.174	.147
Job satisfaction and commitment	-.261	.020	-.254
Supervise Department of Juvenile Justice staff	.449	.057	.181
Personal efficacy ^a	.439	.108	.123
Likelihood of staff being physically assaulted in facility	.141	.167	.117
<i>F</i>		36.665	
<i>df</i>		6,333	
<i>p</i>		< .05	

Note. *N* = 340.

a. Reflexed variable.

significant results ($p < .05$) are summarized in Table 3. As can be seen at the bottom of the table, the overall model was significant. Lower organizational satisfaction and commitment, lower job satisfaction and commitment, and a reduced sense of personal efficacy were predictive of higher job stress. Similarly, having a greater percentage of dangerous youth in the facility, supervising other staff, and perceiving a greater likelihood of staff being assaulted were predictive of greater job stress. This combination of six significant predictor variables accounted for 38.7% of the variability in the measure of job stress.

DISCUSSION

Consistent with prior research on job stress among staff of juvenile correctional facilities (Blevins et al., 2006; Dembo & Dertke, 1986), this study found the level of stress to be moderate. Furthermore, the stress level found in this study was comparable to levels reported in studies using the PSCS with the staff of adult federal facilities (Wright & Saylor, 1991, 1992). This implies that it is a mistake to presuppose that all work in correctional institutions is highly stressful. Indeed, our results suggest that the level of staff stress is likely a function of the work environment of a given facility and organization.

In the present study, all of the six significant predictors of staff stress were work environment factors, and three were derived from the work environment section of the PSCS. These findings are consistent with the importance of work environment variables established in much research (e.g., Blevins et al., 2006; Dembo & Dertke, 1986; Dowden & Tellier, 2004; Liou, 1995).

The two strongest predictors of job stress in this study were the organizational commitment or satisfaction and job satisfaction or commitment measures. Employees having lower satisfaction with and commitment to DJJ, as well as those having less satisfaction with their particular jobs, displayed higher stress levels. This mirrors findings that have been made with staff working in adult corrections (Lambert, 2004). As Hogan, Lambert, Jenkins, and Wambold (2006) observed, these variables are essential to the vitality of agencies because they represent a bond of employees to their employer. Committed and satisfied employees are likely to have internalized many of the values and norms of the agency, resulting in less dissonance and stress.

It is interesting, however, that in the present study the measure of satisfaction with and commitment to the specific institution at which an employee worked was not significantly predictive of job stress. That is, although satisfaction and commitment measured at the aggregate level of the organization, as well as that measured at the micro level of the particular job, were independently predictive of stress, the more intermediate, institutional level measure was not. This suggests that job stress, at least as measured here, might be more a function of employees' perceptions of organizational-level operations and individual job functions than facility-level dynamics. It is possible that employees attribute certain facility-level concerns to the organizational level.

Although the personal efficacy factor has not received adequate attention in previous research on correctional staff stress, this variable predicted lower stress in the current study. Staff members who believe they are accomplishing something beneficial to the youth in their charge, and helping these youth resolve problems, are less likely to experience job related stress. The perceived benefits of their work for youth could overshadow or cushion the impact of potential stressors. Consistent with this logic, previous research has shown autonomy and participation in decision making to be associated with less stress among correctional employees (Wright et al., 1997; also see Auerbach et al., 2003).

Two significant predictors of stress in this research pertained to danger as a feature of the work environment. This is consistent with previous work on the dangers of both adult and juvenile correctional work as related to stress (Blevins et al., 2006; Cullen et al., 1985; Dembo & Dertke, 1986; Finn, 1998). When staff perceive threats to their physical safety, job stress is likely to be exacerbated, and other job responsibilities (e.g., promoting skills needed by youth for successful reentry) might become secondary to preoccupations with control and security.

Although some past studies of juvenile correctional staff have identified agency support and supervisor trust issues as predictive of staff stress (e.g., Auerbach et al., 2003; Liou, 1995), insufficient research has been devoted to the stress associated with a staff member acting in a supervisory capacity. Although neither our measure of staff perceptions of agency authority and structure nor the measure of perceived supervisor support was predictive of job stress, having a supervisory role was a key predictor. Indeed, Finn (1998) identified the demands placed on supervisors as one of the primary stressors among correctional staff working in adult facilities. Finn focused on staff and time shortages as major factors in promoting supervisor stress, and such shortages certainly exist in juvenile corrections as well. At a broader level, it is not unusual in some facilities for supervisors to find themselves caught between the competing desires of line staff and the political demands of higher level administrators who are more removed from the daily operations of the facility. Similarly, supervisors might believe that they are being held accountable for things they lack authority to control. As such, it is unsurprising that correctional staff supervisors might experience elevated job stress.

Overall, our regression model accounted for almost 39% of the variation in job stress scores. Although this is quite respectable by the standards of the social and behavioral sciences, the majority of variability remained unexplained by the variables examined. In particular, demographic and background factors (e.g., gender, race, salary, and tenure) had no predictive utility. Although this finding is consistent with some past research on juvenile correctional staff (Blevins et al., 2006; Liou, 1995), it is inconsistent with other work

(Auerbach et al., 2003; Mitchell et al., 2001). As mentioned earlier, a similar pattern of inconsistency across studies exists in the literature on adult correctional staff stress.

Furthermore, previous research using the PSCS (Wright & Saylor, 1991, 1992) found that both race and gender were related to stress, with males and African American employees reporting less stress. However, recall that Wright and Saylor studied staff working in adult correctional facilities. This disparity in findings, using virtually the same instrument with samples employed in adult versus juvenile corrections, reinforces the earlier point that findings made when studying stress among adult correctional staff should not be presumed applicable to the juvenile context.

Most prior research on correctional staff stress suffers from methodological limitations. Our study is no exception. The first problem is missing data. The survey return rate was higher for group home staff than for YDC staff, and facility type was significantly related to the stress measure in the bivariate analysis. Although facility type failed to emerge as a significant predictor in the multivariate model, we cannot estimate the effect of differential survey attrition on the results of the study. Likewise, missing data on certain survey items produced case attrition for the regression analysis (i.e., from 443 cases to 340 cases). The effect of this attrition on findings is unknown, but it constrains the extent to which findings can generalize to the population of staff employed with DJJ.

Second, because this study employed cross-sectional data, we were in no position to examine changes in levels or predictors of staff stress across time. It is reasonable to suppose that job stress in juvenile facilities, and the predictors thereof, are dynamic rather than static constructs.

Third, the PSCS stress measure does not make distinctions such as that between role and job stress (Liou, 1995) or that between general stress and job-specific stress (Auerbach et al., 2003); in this regard, predictors of stress are at least somewhat a function of the type of stress measured. Moreover, the PSCS conflates the constructs of satisfaction and commitment on three subscales (i.e., Organizational Satisfaction and Commitment, Institutional Satisfaction and Commitment, and Job Satisfaction and Commitment). Yet Lambert, Barton, and Hogan (1999) contend that although satisfaction refers to the fulfillment of certain needs derived through one's job, commitment is broader and involves such things as identification, investment, and loyalty vis-à-vis the employer. Lambert et al. suggested, in particular, that commitment to the organization mediates the relationship between job satisfaction and various staff behaviors, such as turnover.

The findings of this study have important implications for programs to help staff better manage stress and for modifications of the work environment. Policy makers and administrators should weigh the value of initiatives meant to build organizational commitment, job satisfaction, and a sense of personal efficacy among staff. Recall that greater correctional staff autonomy and decision making participation have been shown to be associated with reduced stress (Auerbach et al., 2003; Dowden & Tellier, 2004; Wright et al., 1997). Greater staff commitment, satisfaction, and efficacy might be fostered by giving staff greater input and discretion into decisions that directly affect them and by demonstrating that considerable value is placed on their insights concerning problems and issues confronted at a facility. Staff participation and autonomy can be promoted through a more decentralized approach to facility management that relies heavily on line staff advisory committees and, where feasible, staff decision-making bodies to guide policy and practice at the facility. Initiatives to steer an appropriate degree of decision making away from the

organization's central administration, and also away from the higher administrative levels of a given facility, could promote improved satisfaction, commitment, and perceived efficacy among lower level managers and line staff.

Like the results of prior research, the findings of this study imply that staff stress could be reduced by taking measures to help ensure that staff members feel safe at work, especially in facilities that house a greater proportion of youth prone to violent behavior and staff assaults. It bears repeating that staff members are unlikely to prioritize the treatment-related objectives of an organization or facility if they do not feel safe at work and are experiencing job stress as a result. Instead, they are likely to emphasize (and sometimes overemphasize) their security and control functions. Efforts to improve staff safety and perceptions thereof need to be ongoing and informed by periodic surveys of staff to determine views toward safety at a facility and identify areas in need of improvement. For example, such a survey might lead to reviewing and altering security policies and procedures related to the transportation, movement, or restraint of volatile youth. As another possibility, the survey might lead to identification of specific situations or areas of the facility where the staff does not feel comfortable working alone with youth who have a history of violence. Such efforts can help optimize staff safety without compromising programming objectives while also giving staff greater input into matters directly affecting them.

Initiatives to build rapport and communication among coworkers (including between supervisors and line staff) should also be considered when seeking ways to promote commitment, satisfaction, efficacy, and a sense of safety among employees. These initiatives can be accomplished in a way that complements efforts to promote autonomy. As a foundation for greater autonomy and input into decisions, staff members working in a given area of the organizational structure need to be familiar with the functions and concerns of staff working in other areas so that there is less potential for mutual suspicion based on misunderstandings, and concomitantly, more potential for collaboration. One excellent mechanism for accomplishing this is to incorporate a cross-training component within the larger program of training being offered to staff. Cross-training is meant to help staff better understand and appreciate the issues faced by those responsible for different areas of the bureaucracy, and it would seem to hold promise for improving rapport and communication.

Finally, this study implies a need to direct stress management and reduction initiatives toward supervisory staff. Top-level agency administrators (e.g., commissioners, deputy directors, etc.) need to remain sensitive to the importance of middle- and lower-level supervisors maintaining good relations with and promoting job satisfaction among line staff. These supervisors need to be given the support and flexibility from higher levels to maintain relations with line staff grounded in mutual respect and trust. They need to be granted decision-making authority in areas where they will be held accountable.

Job stress among staff of juvenile correctional facilities remains an understudied topic. By way of future research, the present study implies the need for increased attention to the personal efficacy variable as an aspect of the work environment and also to the supervisory role as a significant source of stress. In addition, there would be benefit to examining job stress with longitudinal research designs. Finally, future researchers in this area need to remain attuned to possible differences in job stress between juvenile and adult facilities, and they need to continue examining how predictors of job stress can vary with the measure of stress used.

REFERENCES

- Anson, R. H., Johnson, B., & Anson, N. W. (1997). Magnitude and source of general and occupation-specific stress among police and correctional officers. *Journal of Offender Rehabilitation, 25*, 103-113.
- Auerbach, S. M., Quick, B. G., & Pegg, P. O. (2003). General job stress and job-specific stress in juvenile correctional officers. *Journal of Criminal Justice, 31*, 25-36.
- Blevins, K., Cullen, F. T., Frank, J., Sundt, J. L., & Holmes, S. T. (2006). Stress and satisfaction among juvenile correctional workers: A test of competing models. *Journal of Offender Rehabilitation, 44*, 55-79.
- Britton, D. M. (1997). Perceptions of the work environment among correctional officers: Do race and sex matter? *Criminology, 35*, 85-105.
- Byrd, T. G., Cochran, J. K., Silverman, I. J., & Blount, W. R. (2000). Behind bars: An assessment of the effects of job satisfaction, job-related stress, and anxiety on jail employees' inclinations to quit. *Journal of Crime and Justice, 23*, 69-89.
- Carlson, J. R., Anson, R. H., & Thomas, G. (2003). Correctional officer burnout and stress: Does gender matter? *Prison Journal, 83*, 277-288.
- Castle, T. L. (2008). Satisfied in the jail? Exploring the predictors of job satisfaction among jail officers. *Criminal Justice Review, 33*, 48-63.
- Castle, T. L., & Martin, J. S. (2006). Occupational hazard: Predictors of stress among jail correctional officers. *American Journal of Criminal Justice, 31*, 65-81.
- Cheek, F. E., & Miller, M. D. (1983). The experience of stress for correction officers: A double-bind theory of correctional stress. *Journal of Criminal Justice, 11*, 105-120.
- Cullen, F. T., Link, B. G., Cullen, J. B., & Wolfe, N. T. (1990). How satisfying is prison work? A comparative occupational approach. *Journal of Offender Counseling, Services, and Rehabilitation, 14*, 89-108.
- Cullen, F. T., Link, B. G., Wolf, N. T., & Frank, J. (1985). The social dimensions of correctional officer stress. *Justice Quarterly, 2*, 505-533.
- Dembo, R., & Dertke, M. (1986). Work environment correlates of staff stress in a youth detention facility. *Criminal Justice and Behavior, 13*, 328-344.
- Dillman, D. A. (2006). *Mail and Internet surveys: The tailored design method*. New York: John Wiley.
- Dowden, C., & Tellier, C. (2004). Predicting work-related stress in correctional officers: A meta-analysis. *Journal of Criminal Justice, 32*, 31-47.
- Finn, P. (1998). Correctional officer stress: A cause for concern and additional help. *Federal Probation, 62*(2), 65-80.
- Finn, P. (2001). Addressing correctional officer stress: Programs and strategies. *Corrections Forum, 10*(5), 14-22.
- Hogan, N. L., Lambert, E. G., Jenkins, M., & Wambold, S. (2006). The impact of occupational stressors on correctional staff organizational commitment: A preliminary study. *Journal of Contemporary Criminal Justice, 22*, 44-62.
- Howe, M., Clawson, E., & Larivee, J. (2007). The 21st century: Juvenile justice work force. *Corrections Today, 69*(1), 34-39.
- Irwin, J., & Cressey, D. (1962). Thieves, convicts and the inmate culture. *Social Problems, 10*, 142-155.
- Keinan, G., & Malach-Pines, A. (2007). Stress and burnout among prison personnel: Sources, outcomes, and intervention strategies. *Criminal Justice and Behavior, 34*, 380-398.
- Lambert, E. G. (2004). The impact of job characteristics on correctional staff members. *Prison Journal, 84*, 208-227.
- Lambert, E. G., Barton, S. M., & Hogan, N. L. (1999). The missing link between job satisfaction and correctional staff behavior: The issue of organizational commitment. *American Journal of Criminal Justice, 24*, 95-116.
- Lambert, E. G., Hogan, N. L., & Allen, R. I. (2006). Correlates of correctional officer job stress: The impact of organizational structure. *Journal of Criminal Justice, 30*, 227-248.
- Liou, K. T. (1995). Role stress and job stress among detention care workers. *Criminal Justice and Behavior, 22*, 425-436.
- Mitchell, O., MacKenzie, D. L., Gover, A. R., & Styve, G. J. (2001). The influences of personal background on perceptions of juvenile correctional environments. *Journal of Criminal Justice, 29*, 67-76.
- Parker, D. F., & DeCotiis, T. A. (1983). Organizational determinants of job stress. *Organizational Behavior and Human Performance, 32*, 160-177.
- Patterson, B. L. (1992). Job experience and perceived job stress among police, correctional, and probation/parole officers. *Criminal Justice and Behavior, 19*, 260-285.
- Rizzo, J. H., House, R. J., & Lirtzman, S. I. (1970). Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly, 15*, 150-163.
- Sandman, B. (1992). The measurement of job stress: Development of the Job Stress Index. In C. Cranny, P. Smith, & E. Stone (Eds.), *Job satisfaction: How people feel about their jobs and how it affects their performance* (pp. 241-254). New York: Lexington Books.
- Saylor, W. G., & Wright, K. N. (1992). Status, longevity, and perceptions of the work environment among federal prison employees. *Journal of Offender Rehabilitation, 17*, 133-160.
- Sykes, G. M. (1958). *The society of captives*. Princeton, NJ: Princeton University Press.
- Tabachnik, B. G., & Fidell, L. S. (2006). *Using multivariate statistics* (5th ed.). New York: HarperCollins.

- Triplett, R., Mullings, J. L., & Scarborough, K. E. (1999). Examining the effect of work-home conflict on work-related stress among correctional officers. *Journal of Criminal Justice, 27*, 371-385.
- Van Voorhis, P., Cullen, F. T., Link, B. G., & Wolfe, N. T. (1991). The impact of race and gender on correctional officers' orientation to the integrated environment. *Journal of Research in Crime and Delinquency, 28*, 472-500.
- Wright, K. N., & Saylor, W. G. (1991). Male and female employees' perceptions of prison work: Is there a difference? *Justice Quarterly, 8*, 505-524.
- Wright, K. N., & Saylor, W. G. (1992). A comparison of perceptions of the work environment between minority and non-minority employees of the federal prison system. *Journal of Criminal Justice, 20*, 63-71.
- Wright, K. N., Saylor, W. G., Gilman, E., & Camp, C. (1997). Job control and occupational outcomes among prison workers. *Justice Quarterly, 14*, 525-546.

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