Stress Levels of Correctional Personnel: Is There A Difference Between the Sexes?

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The research literature abounds with suggestions that work in corrections is highly stressful. However, differentiation between stress levels of the sexes in this area has not been as prolifically expounded upon. Correctional personnel from six public correctional institutions in one state and two private correctional facilities from another state were surveyed. By means of a self report survey, physical and occupational stress levels of respondents were assessed. Interestingly, female correctional personnel were found to have lower occupational stress levels and significantly higher physical stress levels than their male cohorts. Rationales for the findings are examined, delimitations are discussed, and implications for future research are posited.

Stress in the workplace can indeed prove costly and can manifest itself in a number of ways, "including reduced productivity, high turnover, inflated health care costs... disability payments, sick leave, and high rates of absenteeism" (DeCarlo and Gruenfeld, 1989: 121). Researchers have traced correctional officer disability leave to "heart problems, alcoholism and emotional disorders all stemming from stress" (Honnold and Stinchcomb, 1985: 47). According to Adwell and Miller (1985), correctional officers have been found to be more prone than the general public to heart attacks, high blood pressure and ulcers. The divorce rate for correctional officers has been found to be twice the national average, with high rates of alcoholism and suicide also found among line officers (Cheek, 1984). In fact, Cheek (1984), one of the pioneers of stress research in corrections, reported that the average life span of

correctional officers was 59 years old, while the national average was 75 years old.

While it has been generally accepted that prison work is stressful, little research exploration has been undertaken to distinguish between gender differences in adjustment to correctional employment (Fry and Glaser, 1987). Of course, it was not until the early twentieth century that legislation was enacted to create separate facilities for female prisoners. This resulted in requirements that females be hired as wardens and correctional officers. However, the 1972 amendment to Title VII of the Civil Rights Act of 1964 is attributed for vastly increasing the number of women employed in the correctional field. Specifically, the 1972 amendment resulted in more expansive prohibition of sex discrimination by state and local governments in their hiring practices (Fry and Glaser, 1987). While the work history of female correctional personnel and the research on women employed in corrections is limited, the following relationships between male and female correctional employees have been uncovered.

No differences between male and female correctional officers in terms of job satisfaction were found by Cullen et al. (1985), nor were gender differences in job turnover rates reported in a study by Jurik and Winn (1987). These findings are particularly interesting when it is considered that women have been identified as less stable workers than men, and "prison administrators have argued that female officers may be less able to withstand the

stress of work in men's prisons and, therefore, will exhibit higher turnover rates than male officers" (Jurik and Winn, 1987: 7). Even so, Wright and Saylor (1991: 508) concluded from their review of the literature that "[j]ob related stress is the only area in which surveys find a difference between men's and women's experiences of the prison work environment."

Wright and Saylor (1991), in a self-report survey, found that female correctional officers reflected significantly higher job-related stress levels than their male counterparts. Likewise, Cullen et al. (1985) were not surprised to find female correctional officers exhibiting higher levels of stress at work - particularly when the male dominated, regulated and administered correctional environment was considered. In fact, the sexist environment permeating prison work, laden with sexual harassment and resistance by male coworkers and superiors, has been identified as a gender-related stress evoking phenomenon which goes beyond the stress of the job (Wright and Saylor, 1991). While Fry and Glaser (1987) did not find much in the way of gender differences among corectional officers in terms of work adjustment, they did find evidence to support the notion that male correctional staff are negatively oriented toward female correctional personnel and that women staff receive low priority from male-dominated, state agencies. In conclusion though, Fry and Glaser (1987: 51) indicated that "women are at least as well adjusted and integrated as men in prison work."

Patterson (1989), based on his review of the literature, expected female correctional officers to exhibit higher stress levels than their male cohorts. However, he found male correctional officers scored higher on each of ten scales that were comprised to produce an overall stress scopre. Yet, the combined stress score did not reflect a significant difference between the stress levels of male and female correctional officers. In assessing the plausibility of his findings, Patterson surmized that males might indeed reflect higher stress levels than females [employed] in correctional institutions, if they were more prone to being exposed to more dangerous work assignments than females.

As presented in an earlier paper (Slate, 1992), using the sample to be described, the structural model depicted in Figure 1 emerged. The aim of the previous paper was to identify those variables predictive of job turnover in correctional institutions. The most surprising finding exhibited in the model surrounded gender. Females were found to be significantly more physically stressed than males in the institutions surveyed at the $p < .001$ level ($r=.20$; direct effect = .18). Although a significant direct path coefficient emerged between females and occupational stress levels (-.15), in the final analysis, the correlation ($r=-.06$) proved negligible and insignificant. This paper is aimed at exploring and elaborating upon these findings regarding gender and physical and occupational stress levels.

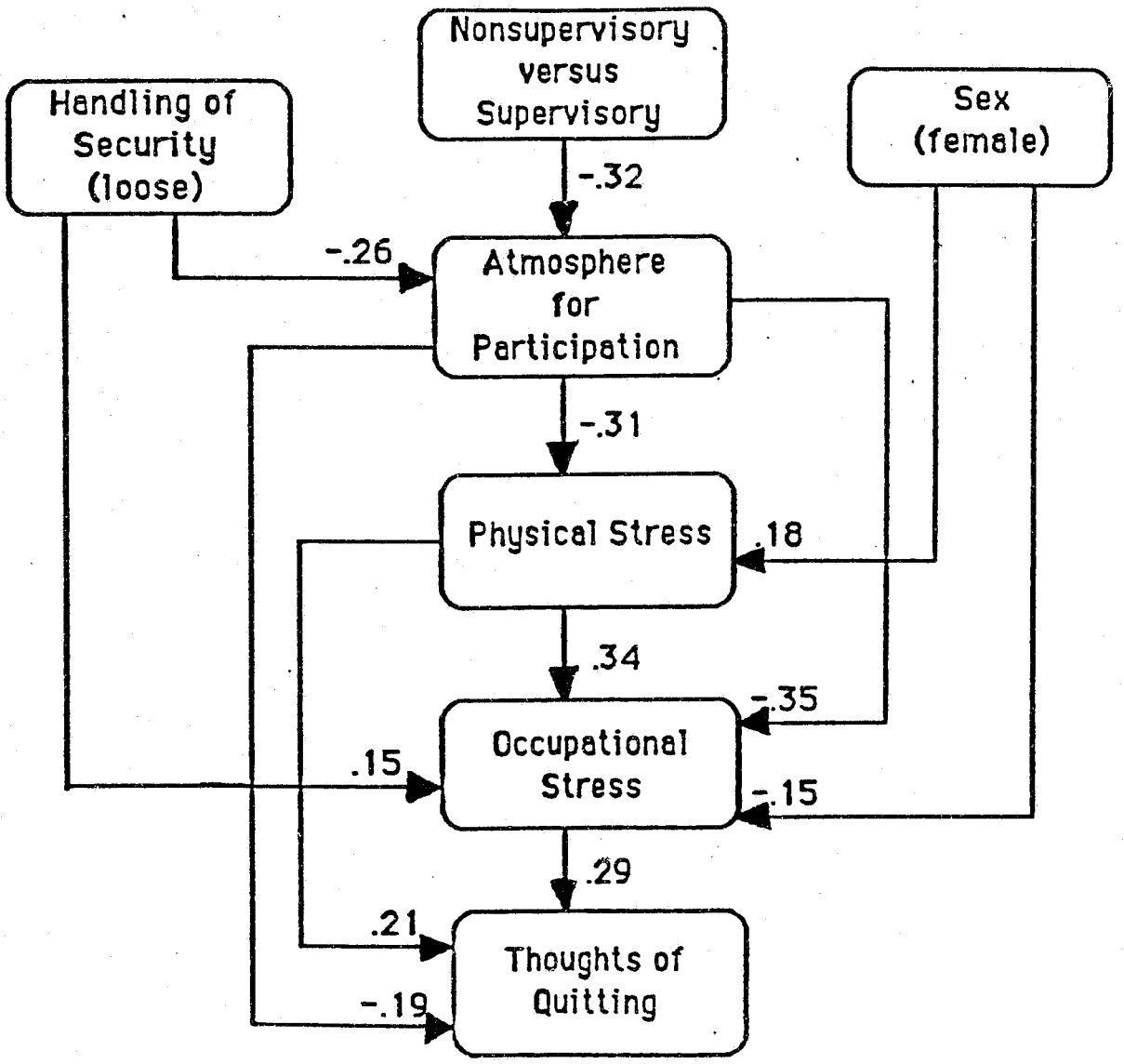

Figure 1. Structural Model of Thoughts About Quitting the Job

METHODOLOGY

Operational Definitions

For purposes of this study "physical stress" and "occupational stress" are defined as follows:

1. Physical Stress

   Each respondent's total score on the Selye Health Scale (see discussion) represents his/her physical stress level for purposes of this study.

2. Occupational Stress

   Individual totals for responses to the Occupational Environment Scale (see discussion to follow) comprise the occupational stress measure for the study at hand.

The Questionnaire

A four-part questionnaire was used which included the Occupational Environment Scale of the Occupational Stress Inventory, the Selye Health Scale, the Attitudes on Participation Survey (this scale was constructed and utilized for the initial project - see Slate, 1992) and a number of demographic questions.

The Occupational Environment Scale is a subscale of the Occupational Stress Inventory, a standardized questionnaire designed by Osipow and Spokane (1983). It is a 60-item Likert-scaled survey with a possible range in scores from 60 to

300. Over 160 occupations have been included in Osipow and Spokane's work in this area, with a mean score of 137.64 and a standard deviation of 26.59 recorded on the scale. Larger scores suggest more significant levels of occupational stress and psychological strain. Different kinds of stresses individuals encounter in their work across occupations are measured by this instrument. This instrument has previously been used in criminal justice research (Tabor, 1987).

The Selye Health Scale is a survey developed by Dr. Frances Cheek based on the research findings of the pioneer stress researcher, Dr. Hans Selye. On this 54-item Likert-scaled instrument subjects are asked to rank the severity of physical symptoms and illness in their lives. The severity of the symptoms and illnesses increases as one progresses through the survey, and the survey is weighted and scored accordingly. The range of possible scores on the survey is 54 to 324. Dr. Cheek used this instrument extensively in correctional officer stress research (Cheek, 1984).

The Demographic/Miscellaneous Data portion of the survey was devised to ascertain pertinent variables as delineated in the review of the literature for the initial project. Demographic variables of interest included: sex, race, age, marital status, educational level, years of correctional experience, military experience, and other characteristics of respondents. Other data requested included: security level worked, type of inmates supervised, custody or rehabilitation orientation, how often one

thinks about quitting his or her job, and other employment related questions.

Sampling

Purposive sampling was employed for the present study. Babbie (1992: 233) described such sampling as "a type of nonprobability sampling method in which the researcher uses his or her own judgement in the selection of sample members." As noted by Hagan (1993), willingness of organizations to participate in research is often a guiding factor in such research studies. Other factors considered in the sampling decision included the need to limit the cost of undertaking the study, a desire to vary the security level of the facilities to be surveyed, and whether the facilities were privately or publicly operated.

A pretest of the research instrument was performed on correctional personnel in a county jail. For the study at hand, employees from four medium/maximum security and two minimum security public correctional institutions in the State of South Carolina and two minimum security, privately operated correctional facilities in the state of Kentucky were surveyed for this project.

Kenneth D. McKellar, Deputy Regional Administrator for the Midlands Correctional Region of the South Carolina Department of Corrections (SCDC) assisted in making the selections of which institutions within the SCDC to include for representativeness.

Also, McKellar, upon being made aware of the characteristics of the two minimum security institutions being included in the study in Kentucky, assisted in matching them with two similar minimum custody facilities in South Carolina to be included in the study.

Representativeness

Although the sampling design was purposive or judgemental (Hagan, 1993) in nature, it is believed that those individuals that were selected for inclusion in the study did indeed approach representativeness of those security related personnel from the institutions in which they were employed.

In the dissemination of the questionnaire to the prospective respondents in South Carolina it was determined that shift roll calls at each institution would be addressed by the researcher and questionnaires with envelopes to be sealed (to ensure anonymity) would be distributed. Upon leaving work, employees were asked to place their sealed responses in drop boxes centrally located within each facility. Furthermore, careful scrutiny of the types of personnel to be found on the particular shifts on the days for study at each institution was given by the researcher and administrative officials with SCDC. It was determined that for the days and shifts in question at each of the six facilities that there was no known systematic exclusion of any particular type of security-related employee. Thus, although a nonprobability sample was used, representativeness was approached.

In terms of representativeness, selected background characteristics of the sample and of the population are presented by facility in Table 1. Overall, females were slightly overrepresented in the sample. Furthermore, blacks were underrepresented in the sample. This finding is consonant with other research conducted with correctional personnel (Wright and Saylor, 1991).

Table 1: Characteristics of the Sample Compared With the Total Population by Facility*

Characteristic	Facility	Sample	Population
Sex (Percent Female)	MYCC	19	22
	GCI	25	20
	BRCI	26	19
	CCI	23	22
	LCI	21	18
	KCI	24	20
Race (Percent Black)	MYCC	61	61
	GCI	50	57
	BRCI	64	75
	CCI	68	75
	LCI	51	57
	KCI	59	75

*Due to the high completion rate of the survey by respondents from the two private facilities, data pertaining to sex and race for these two facilities are not shown.

Procedures, due to expediency and administrative desires, were somewhat different in the dissemination of the questionnaires to personnel in the two privately operated, minimum security facilities in Kentucky. First, a meeting was held with the Director of one of the private facilities in Kentucky. The surveys with envelopes to be sealed (to ensure anonymity) and returned were left with the Director for

distribution to all pertinent employees. Responses from the second private facility are not reflected in this study due to the uniqueness of that institution at the time it was surveyed - the institution had just opened for business.

Overall, of the 1,647 security-related personnel in the sample population, it was estimated that 1,131 employees were addressed and/or had surveys distributed to them. Five hundred forty-two questionnaires were completed and returned. This resulted in an estimated 48% response rate to the survey. However, upon deciding to drop one of the private facilities from the study, 486 of the surveys received were usable - resulting in a 45% response rate for the study.

RESULTS

As suggested by the previously discussed structural model, female correctional personnel had significantly higher ($t=-4.01$; $p < .001$) physical stress levels as evinced by their Selye health scores ($x=266.48$) than their male cohorts ($x=231.39$). However, though not significant, females exhibited lower occupational stress scores on average ($x=150.71$) than male correctional personnel ($x=153.97$) in the study. The remainder of the data analysis is oriented at examining what variables might contribute to these differences in stress levels between male and female correctional employees. Of the demographic/miscellaneous variables mentioned earlier, the following factors proved of

interest in contributing to the explanation of gender differences in stress levels.

The majority of the respondents were male (n=366), while 104 of the respondents were female. The majority of the male correctional personnel responding to the survey were married (66%), while 34 percent of the females were married. Male correctional personnel included in the survey were on the average three years older (36 years old compared to 33 years old) and were more apt to posess longer tenures in the correctional field (62 months on average compared to 47 months) than their female counterparts. The majority of the males surveyed (62%) reported having served in the military, with 11 percent of the females reporting such service.

Females reported using twice as many sick days as males a year (14 to 7). While more males and females respectively reported feeling that security at their facility was handled properly, a larger percentage of females (32%) than males (23%) felt that security was too loosely handled. Males (36%) were more likely than females (20%) to feel that security was handled in a tight manner where they worked. Finally, men were more likely than women (84% to 70%) to report direct contact with inmates through their respective work assignments in penal institutions. Table 2 represents this significant difference among the sexes in terms of the type of contact with inmates on the job.

Table 2. Sex of Correctional Personnel by Contact with Inmates

	Inmate Contact		
	Direct	**Indirect**	**Row Total**
Sex:			
Male	302 (O) 291.3 (E)	58 (O) 68.7 (E)	360 78.9%
Female	67 (O) 77.7 (E)	29 (O) 18.3 (E)	96 21.1%
Column Total	369 80.9%	87 19.1%	456 100%

O = observed frequencies
E_2= expected frequencies
x^2 = 9.75, 1 df, p < .001

DISCUSSION

Of the above findings, it was not surprising to find that males in the study were more likely to have served in the military and to have had longer tenures in corrections than females. The phenomenon of females' recent entry into traditionally male dominated fields is documented by Fry and Glaser (1987). However, it would seem that males would more readily acclimate to the paramilitaristic surroundings of the penal environment than females not accustomed to such structure. Furthermore, while Cullen et al. (1985) have noted that

correctional experience may serve to mitigate stress, perhaps, as noted by Cheek (1984), the females encompassed in the present study had not been around long enough to experience the pains of burnout like the men (as females in the current study had shorter tenures, yet lower occupational stress levels than the males).

In terms of physical stress, while females generally tend to have lower mortality rates than males, it has been predicted that as females continue to enter the work force their overall health will decline. While females seem less susceptible to serious illness than males, they have been found to be more prone to suffer from mild psychological distress and to exhibit more acute symptoms (DeCarlo and Gruenfeld, 1989). Being more sensitive to the early signs of stress, women are more likely than men to take steps to try to alleviate it (such signs are much of what comprises the Selye health score; this might serve to explain why female correctional personnel in the present study exhibited higher physical stress levels than males). These symptoms purportedly often manisfest themselves in sickness in women, as it has been found that females are more likely than males to get sick and collapse as a coping strategy (DeCarlo and Gruenfeld, 1989). This finding might explain why female correctional personnel in the present study averaged over twice as many reported sick days (14.3 to 6.71) a year as their male cohorts.

Family support has been touted as a means of lessening stress (Newman and Beehr, 1979). Treating marriage as a measure indicative of family support, the males in the present study were

aided more by this factor than the females - as the majority of males were married while the majority of females were not married. Finally, it has been found that females are catching up with males in terms of physical stress symptoms, as exhibited by increased manifestations of coronary heart disease among women less than age forty five and peptic ulcers for all females (Decarlo and Gruenfeld, 1989). Thus, higher physical stress levels for women in the present study is, in retrospect, not surprising.

In view of the literature review, the finding that females had lower occupational stress levels than males (though not significant) was somewhat surprising. However, as suggested by Patterson (1989), an assessment of the dangerousness of work assignments between males and females provided a focal point for exploration.

In terms of occupational stress, perceived danger has been linked to correctional officer stress. Perceptions of danger have been found to have less to do with actually being victimized within a correctional facility and more to do with the possibility of being victimized (Cullen et al., 1985). Certainly, some job assignments would increase the possibility of one being victimized as compared to other work areas within a correctional institution. Even so, Wener et al. (1989) reported that direct contact by correctional personnel with inmates has generally been associated with lower use of sick leave and higher levels of job satisfaction.

In the current study, 84 percent of the male respondents and only 70 percent of the female respondents reported having direct contact with inmates (see Table 2 for significant differences among the sexes in terms of inmate contact). Perhaps this difference in job assignments between the sexes can be attributed for the discrepancy between them in their perceptions of how security was being handled at their respective institutions. In other words, if one is far removed from the innerworkings of security, as the females were more likely to be, then they might be more apt to view security differently from those males who were more likely to report having direct contact with inmates.

SUMMARY

In conclusion, it is understandable that females, having less direct contact with inmates, might perceive a lower level of danger than males and exhibit lower occupational stress levels as a result. It appears that while females seem to be handling the stress of the occupational environment satisfactorily, perhaps something is happening outside the workplace to exacerbate their physical stress levels. As one researcher has lamented, juggling work with the administration of a household and possibly children has proved to be a far greater stressor for women than men (DeCarlo and Gruenfeld, 1989).

While control of an employee's environment outside of work may be outside the purview of administrators, strategies within

the workplace to reduce stress should be considered. Obviously, females as correctional employees are here to stay. Unlike Yingling (1990) who observed that correctional officers with military backgrounds in a southern state seemed to acclimate well to correctional settings and therefore encouraged stronger recruitment of military types for work in corrections, this researcher recommends that instead of relying totally on matching the people to the environment that modifications should be made in the environment as well. Employers cannot tamper with the sex of their employees to enhance stress levels. As Maslach (1982: 10) has indicated, it is senseless to identify "bad people" in terms of interpersonal stress. Instead, we should be attempting to identify and examine the "'bad' situations in which many good people function. [She laments], [i]magine investigating the personality of cucumbers to discover why they had turned into sour pickles without analyzing the vinegar barrels in which they had been submerged!"

Future analysis in this area should strive for uniformity in operationally defining stress. Currently, the meaningfulness of comparing studies is lessened when different instruments for measuring stress are utilized from study to study. In addition to survey instruments, blood pressure readings might also be used to calibrate stress levels. Of course, this might inhibit anonymity. At any rate, further exploration in this heretofore underdeveloped area of gender differences in job assignments and stress levels in the correctional arena is needed.

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