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Using the Job Demands-Resources Model to Examine Possible Correlates of Fear of Being Victimized at Work Among Chinese Prison Officers

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Abstract

This study surveyed 322 officers at two prisons in China to investigate the influence of job demands (i.e., role overload and routinization), job resources (i.e., training, job autonomy, instrumental communication, and supervision), and demographic characteristics on workplace fear of victimization. Ordinary least squares (OLS) regression analysis indicated role overload was related to higher levels of fear, while training and job autonomy were related to lower levels. Routinization, instrumental communication, and supervision had nonsignificant effects. Male officers were more likely to report higher fear of victimization, as did staff at one of the two prisons.

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Introduction

Working in a prison is a challenging job (Nixon, 2022). As Armstrong and Griffin (2004) asserted, "few other organizations are charged with the central task of supervising and securing an unwilling and potentially violent population" (p. 577). Research has shown that correctional occupations have the highest rates of nonfatal workplace violence among all occupations (Harrell et al., 2022). In fact, prison work has one of the highest rates of workplace violence (Konda et al., 2013). Interestingly, officers at the same prison have different levels of fear of victimization (Lambert, Minor, et al., 2018). As has been found in the fear of crime research, this suggests that there are factors that play into their level of fear which may include workplace variables (Haynes et al., 2020). Fear of victimization, whether the fear is based on real or perceived risks, results in psychological strain for prison officers (Lambert, Minor, et al., 2018). As such, it is important to explore variables associated with fear of victimization among prison officers.

Examining prison officers' fear of victimization is relevant for several reasons. First, fear of victimization tends to influence behavior. As Gordon and colleagues (2013) pointed out, "[c]oncerns about victimization and general job stress are dangerous distractions for officers who are charged with the formidable and indispensable task of securely and humanely guarding the nation's correctional populations" (p. 261). Second, workplace fear of victimization may contribute to stress and anxiety and worsen mental health conditions for prison officers (Fusco et al., 2021). Third, fear of victimization can negatively influence the relationship with those incarcerated. As prison officers are responsible for the safety and security of individuals in custody, fear of victimization may contribute to more punitive professional attitudes, potentially increasing the likelihood of harsher treatments and use of force (Griffin, 2002; Stinglhamber et al., 2022). Examining the factors that contribute to prison officers' fear may help remove the causes of danger and design policies and programs for safety (Ferdik, 2016).

The limited research to date suggests that workplace variables play a role in reducing or raising the level of officer fear of victimization (Ferdik, 2016; Gordon & Baker, 2017; Gordon et al., 2003, 2013; Haynes et al., 2020; Lambert, Gordon, et al., 2018; Stichman & Gordon, 2015). Past studies, however, have largely been conducted with U.S. correctional staff. Prisons

are found in nations across the world, and correctional staff are important regardless of their location. Workplace variables associated with fear of being victimized remain essentially unknown for officers in non-Western nations; therefore, replication with prison officers in different correctional settings across nations is needed to understand how workplace variables relate to fear of victimization. Lindsay and Ehrenberg (1993) pointed out that "replication is little discussed in the statistical literature nor practiced widely by statistically minded researchers. It is needed not merely to validate one's findings, but more importantly, to establish the increasing range of radically different conditions under which the findings hold, and the predictable exceptions" (p. 217). As Jowell (1998) noted, "the importance and utility to the social science of rigorous cross-national measures is incontestable. They help to reveal not only intriguing differences between countries and cultures but also aspects of one's own country and culture that would be difficult or impossible to detect from domestic data alone" (p. 168).

The current study applied the job demands-resources model to examine how job demands (i.e., role overload and routinization) and job resources (i.e., training, job autonomy, instrumental communication, and supervision) shape prison officers' fear of victimization. Data were obtained from 322 prison officers (custody staff) in two prisons in southeast China. To the best of our knowledge, this is the first study to employ the job demands-resources model to investigate the fear of victimization among prison officers in China.

Literature Review

Workplace Fear of Victimization

Workplace fear of being victimized is associated with feelings of danger in being harmed at work. Fear of victimization is also referred to in the literature as the perceived dangerousness of the job and fear of being injured on the job (Cullen et al., 1985; Lambert, Minor, et al., 2018). The current study focused on the fear of victimization. That is, correctional officers who fear being victimized suffer from greater psychological strain, which results in negative outcomes (Lambert, Minor, et al., 2018). For example, fear of being victimized at work has been found to result in lower job satisfaction for correctional officers (Cullen et al., 1985; Griffin, 2002; Hartley et al., 2013; Lambert & Hogan, 2010a; Lambert, Kim, et al., 2017). It has also been linked to lower organizational commitment (Jiang et al., 2018; Lambert & Hogan, 2010a; Lambert, Kelley, et al., 2013; Paoline et al., 2018). Fear of victimization has also been reported to be associated with reduced job involvement

(Lambert, Hogan, et al., 2013). In addition, fear of victimization was observed to be related to lower views of distributive justice among correctional staff (Lambert et al., 2024) and to result in greater job stress (Cheeseman et al., 2011; Elechi et al., 2020; Lambert et al., 2007; Paoline et al., 2018). Fear of victimization is similarly linked to job burnout (Lambert & Hogan, 2010b) and strain-based work effects on family conflict among correctional staff (Lambert & Hogan, 2006; Lambert et al., 2024).

In light of the harmful effects of workplace fear of victimization, research has been undertaken to explore its possible antecedents. One of the first studies was conducted by Gordon et al. (2003) among U.S. juvenile correctional officers, exploring the association of personal characteristics (i.e., age, gender, race, educational level, years of employment, and shift) with the fear of victimization. Gordon et al. (2003) established that gender was the only significant predictor, with female officers reporting a greater fear of being victimized. In a later study of U.S. prison staff, Taxman and Gordon (2009) examined how the variables of age, security level, gender, tenure, educational level, race, distributive justice, and procedural justice were associated with the fear of being victimized. Procedural justice was found to be associated with lower fear. Further, Nonwhite officers, female officers, and officers in higher security level prisons experience higher fear; college-educated officers reported lower fear levels. Among Taiwanese correctional staff, age, gender, educational level, tenure, and shift had nonsignificant associations with workplace fear of victimization. Working in a custody position, being a victim of a previous physical assault, and witnessing a physical attack on a fellow staff member were related to lower perceptions of safety. On the other hand, views of quality training and trust in supervisors were associated with less fear of victimization (Lai et al., 2012).

Focusing on U.S. prison officers and using personal characteristics as predictors, Gordon et al. (2013) found that women were more likely to fear being victimized by an inmate. Additionally, Nonwhite officers experienced a higher fear of being victimized as did officers working at higher security institutions and those with a higher level of education. In their investigation of U.S. prison officers, Stichman and Gordon (2015) examined how personal characteristics (i.e., gender, age, race, tenure, educational level, and prison security level), job characteristics (i.e., job frustration, procedural justice) and base of power to gain inmate compliance (i.e., legitimate power, expert power, reward power, referent power, and coercive power) were connected to the fear of being victimized. Nonwhite officers and officers working at higher security prisons had higher levels of fear of being victimized. Job frustration had a positive association with fear, while procedural justice had a negative association. Among the different bases of powers, only referent power

(i.e., gaining the respect of inmates for compliance) had a significant negative association with fear of being victimized.

Gordon and Baker (2017) indicated that possible antecedents of U.S. prison officers' fear of victimization could either be placed in the category of fear facilitators (i.e., increase fear) or that of fear inhibitors (i.e., reduce fear). Using the personal characteristics of race, age, educational level, tenure, security level, inmate population size, and institution type (i.e., male or female facility), they further tested the variables of cynicism, inadequate staffing, job frustration, and facility disorganization as fear facilitators and the variables of institutional belongingness and transformational leadership as fear inhibitors. Their findings indicated that more educated officers, White officers, officers working with male inmates, officers working in high-security facilities, and female officers had higher levels of fear of victimization. Among the fear inhibitors and fear facilitators, only job frustration had a significant association. Notably, officers reporting greater job frustration had higher levels of fear.

Lambert, Minor, et al. (2018) examined the connection of the workplace variables of input into decision-making, formalization, integration, job feedback, instrumental communication, and supervision consideration with fear of victimization for U.S. prison staff. They controlled for the variables of supervisory status, gender, age, position, tenure, educational level, race, and hours of average daily contact with inmates. Of these, supervisory status, position, race, input, formalization, and average daily contact were significant predictors. Both supervisors and correctional officers noted greater fear, with average daily inmate contact and formalization linked to it. Conversely, input was associated with lower fear. Moving to another setting, Lambert, Hogan, et al. (2017) examined fear of victimization among U.S. private prison staff, discovering that males, custody staff, and Nonwhite staff had higher levels of fear. Increases in tenure and more daily contact with inmates were also associated with greater fear, but organizational trust was associated with lower fear. In other words, greater trust in the prison administration was linked to lower workplace fear of being victimized.

Using the job demands-resources model in their survey of U.S. jail staff, Lambert, Gordon, et al. (2018) found male staff reported higher levels of fear of being victimized. They also expressed that supervisor support, role strain, formalization, and instrumental communication were linked to less fear. Likewise, feeling that infectious disease was properly handled at the jail and views that inmate control was conducted properly were also associated with a lower fear of victimization. Race, educational level, age, tenure, coworker relations, and input into decision-making, however, were

nonsignificant predictors. Finally, Lambert, Gordon, et al. (2018) reported that workplace variables explained far more variance of fear than personal characteristics.

Several conclusions can be drawn from this body of research. First, there has been little inquiry into the antecedents of fear of victimization among correctional staff. Second, workplace variables are stronger predictors of fear than personal characteristics. Third, while some workplace variables have been assessed, many other workplace variables remain to be examined. Fourth, the vast majority of past studies utilized U.S. correctional staff, even though correctional facilities are located around the world. This reinforces the need to conduct research in a variety of national settings to test whether workplace variables are universally related to correctional staff fear of victimization. Such research could also explore how the effects of workplace variables are contextually related, varying across nations. Building on past research, particularly the work of Gordon and Baker (2017) and Lambert, Gordon, et al. (2018), the current study applied the job demands-resources model to examine whether job demands (i.e., role overload and routinization) and job resources (i.e., training, job autonomy, instrumental communication, and supervision) are related to fear of victimization among officers at two Chinese prisons.

Job Demands-Resources Model

The job demands-resources model was proposed by Demerouti et al. in 2001 to explain both positive and negative worker outcomes. This model divides workplace variables into two general categories of job demands and job resources. Demerouti et al. (2001) posited that job demands are "those physical, social, or organizational aspects of the job that require sustained effort and are therefore associated with physiological or psychological costs" (p. 501). Job demands often produce psychological strain in the individual. Psychological strain raises the chances of a negative outcome, such as fear of victimization (Demerouti & Bakker, 2011; Lambert, Gordon, et al., 2018). Demerouti et al. (2001) noted that job resources are "those physical, social, or organizational aspects of the job that may: (a) be functional in achieving work goals; (b) reduce demands and the associated physiological and psychological costs; or (c) stimulate personal growth and development" (p. 501). Job resources tend to result in positive psychological feelings which tend to increase beneficial work outcomes, such as job satisfaction. They also function to reduce negative work outcomes, such as fear of victimization (Demerouti & Bakker, 2011; Lambert, Gordon, et al., 2018). Job resources also can buffer the negative aspects of working in the demanding job of

correctional staff (Demerouti et al., 2001; Lambert, Gordon, et al., 2018). Further, missing or low job resources can become job demands in themselves, increasing negative outcomes (Demerouti & Bakker, 2011).

The job demands-resources model provides the theoretical framework for exploring why workplace demands and resources could be associated with fear of victimization among Chinese prison officers. The current study builds on the work of Gordon and Baker (2017) and Lambert, Gordon, et al., 2018. Gordon and Baker (2017) proposed that fear facilitators increased fear at work and fear inhibitors reduced that fear. Under the job demands-resource model, fear facilitators are conceptualized as job demands; fear inhibitors as job resources. Lambert, Gordon, et al. (2018) examined how the job demand of role strain and various job resources[1] were related to fear of victimization. For the current study, the job demand variables were role overload and routinization, and the job resource variables were views of training, job autonomy, instrumental communication, and quality supervision.

Role Overload. Role overload is a job demand that occurs when staff are required to handle too many duties or are not provided with needed resources (Triplett et al., 1996). Role overload is frustrating, raising psychological strain (Lambert et al., 2020). Feeling strain places a person in a heightened mental state. In turn, there is a raised fear of victimization. As such, we hypothesized that role overload would have an association with a higher fear of victimization among Chinese prison officers (*Hypothesis 1*).

Routinization. Routinization means there is little variation in job tasks and, generally, results in feelings of tedium. The feelings of tedium arise from a lack of mental stimulation that increases psychological strain (Hultell & Gustavsson, 2011). As such, routinization is viewed as a job demand. We hypothesized routinization would be related to a higher fear of victimization among Chinese prison officers (*Hypothesis 2*).

Training Views. Quality training is a job resource because it provides information and skills for officers, allowing them to do their jobs in a successful and safe manner. This should result in positive psychological feelings (Keena et al., 2020). Perceiving training as poor can result in a lack of confidence, thus increasing the chances of dangerous situations and resulting in psychological strain (Lambert et al., 2020) that can produce officers' feelings of being more on edge and in danger. We hypothesized that increased levels of training views would be linked to lower levels of fear of victimization for Chinese prison officers (*Hypothesis 3*).

Job Autonomy. Job autonomy is the perceived degree of control and latitude (job decision-making) an officer feels regarding their job (Keena et al., 2020). Job autonomy is a job resource because it provides officers with greater control over the job and work duties. Having greater control should increase the chances of job success, which often raises the level of positive psychological feelings (Lambert, 2004). A positive psychological mindset can place an officer more at ease and less concerned about their safety (Lambert, Gordon, et al., 2018). Further, job autonomy supports officers' making changes that reduce what they perceive as dangerous situations. In their study of building trust among correctional staff, Keena et al. (2022) pointed out "while it is essential to maintain control of inmates from the control room, officers can maintain that control through a variety of strategies that allow the officers a greater say in their posting" (p. 152). We hypothesized that job autonomy would be associated with a lower fear of victimization among Chinese prison officers (*Hypothesis 4*).

Instrumental Communication. Instrumental communication, which is seen as a job resource, deals with an officer's perception that the organization is providing needed information to do the job (Lambert et al., 2020). Instrumental communication aids officers in job success and also reinforces the perception that one is a valued employee. In one respect, instrumental communication can help buffer the demands of working in a prison. In another respect, it can raise the level of positive psychological feelings (Lambert, Hogan, et al., 2017). Conversely, the resulting psychological strain and the concern about making errors from poor instrumental communication can both wear on an officer and raise their fear of victimization at work (Lambert, Minor, et al., 2018). We, therefore, hypothesized that instrumental communication would be negatively related to fear of victimization among Chinese prison officers (*Hypothesis 5*).

Quality Supervision. Quality supervision deals with officers' perceptions that there is a quality of supervision that provides direction, guidance, and support. This allows the job to be more doable and more pleasant (Lambert et al., 2020). Quality supervision can also aid officers in dealing with conflicts in a manner that reduces their chances of being victimized. Similarly, quality supervision supports officer job effectiveness and the making of fewer errors, leading to a reduction in the workplace fear of victimization (Lambert, Gordon, et al., 2018). Poor supervision generally makes the job more difficult, raising the chances of making errors and increasing the level of psychological strain. This strain likely results in greater fear of being victimized. We

hypothesized that quality supervision would be associated with a lower fear of victimization for Chinese prison officers.

Method

Participants

Following all ethical guidelines of the Belmont Report and the Declaration of Helsinki, human subject approval was granted, and informed consent was obtained from all participants. While access to Chinese prison officers is limited, the research team was granted permission to survey staff at two prisons in southeast China. The two prisons, considered typical in China, had similar prisoner populations of highly intensive/maximum custody (严管), intensive/medium custody (普管), and general custody (宽管). Unlike U.S. prisons, Chinese prisons house different security levels of offenders in separate housing units within the same prison - a policy to insure incarcerated persons can be nearer to family. The first prison employed 280 staff and housed 1,500 sentenced offenders. The second prison employed 160 staff and housed 700 sentenced offenders. All available officers were provided with a survey packet, which included a cover letter and the questionnaire that had been pilot-tested to address any issues. The cover letter indicated the purpose of the study, the voluntary nature of the questionnaire, the assurance of response anonymity, and the process for returning the questionnaire. A total of 322 completed questionnaires were returned; this is an overall response rate of 73%, and very similar for both prisons.

In terms of gender, 54% of the participants were women. About 37% indicated that they had earned a bachelor's degree or higher. Tenure in the current position ranged from 0.5 to 36 years (median value of 6 years). The respondents' ages ranged from 24 to 58 years (median age of 45). Approximately 64% of the officers worked at the first prison; 36% at the second prison. Based on human resources information, the participants were similar to the overall prison staff in terms of gender, age, tenure, and educational level.

Variables

Dependent Variables. A summed index of workplace fear of victimization was created by adding the responses to three items from Cullen et al. (1985), yielding a Cronbach's internal reliability value of .93. The items and their response options are presented in the Appendix.

Independent Variables. The job demands of role overload and routinization and the job resources of training views, job autonomy, instrumental communication, and quality supervision were the independent variables of focus. Role overload was measured using three items from Triplett et al. (1996), with Cronbach's alpha for these items equaling .79. Three items from Curry et al. (1986) were used to measure routinization. These items had a Cronbach alpha of .85. The items for views of training were adapted from Lambert et al. (2009). These items had a Cronbach's alpha of .81. The three job autonomy items were from Curry et al. (1986), and these items had a Cronbach alpha value of .84. The four items measuring instrumental communication were adapted from Curry et al. (1986), yielding a Cronbach alpha of .88. Perception of supervision quality was measured by five items based on items from Teas (1981); these quality of supervisions items had a Cronbach alpha of .81. The specific items and their response items are presented in the Appendix. Additive indexes were formed by summing responses together. Finally, measures for the personal characteristics of gender, educational level (earning a bachelor's degree or higher), tenure in the position, age in years, and the prison of employment were included more as controls than explanatory variables. See Table 1 for how these variables were measured.

Results

The descriptive statistics for the variables are reported in Table 1. The mean and median values for the nondichotomous variables were very close to one another, suggesting that they were normally distributed. In addition, statistical tests indicated that these variables were at or close to normal distribution. For the index variables, Cronbach's alpha values, a measure of internal reliability, were .79 or higher, which is viewed as acceptable (Tavakol & Dennick, 2011).

Correlations are reported in Table 2. Gender, educational level, tenure, routinization, instrumental communication, and quality supervision each had nonsignificant correlations. Age had a statistically significant negative correlation. In other words, increases in age were associated with a lower fear of victimization. The variable for prison assignment had a significant negative correlation. That is, officers assigned to the first prison expressed greater fear compared to officers at the second prison. Role overload had a significant positive association. This means that increases in role overload were associated with increases in fear. Both training views and job autonomy had significant negative correlations. That is, increases in either of these job resources were linked to a lower fear of victimization. Age and prison had small-sized correlations. Training and

Table 1. Descriptive Statistics for Study Variables.

Variable	Description	Min	Max	Md	Mn	SD
Personal chars						
Gender	54% female (coded 0) 46% ma*le (coded 1)	0	1	0	0.46	0.50
Educ level	63% less than Bachelor (coded 0) 37% Bachelor or higher (coded 1)	0	1	0	0.37	0.48
Tenure	Tenure in years in current position	.5	36	6	6.56	5.38
Age	Age in continuous years	24	58	45	43.94	6.82
Prison	64% from prison 1 (coded 1) 36% from prison 2 (coded 0)	0	1	1	0.64	0.48
Job demands						
Role overload	3-item additive index, $\alpha = .79$	3	18	10	10.21	3.05
Routinization	3-item additive index, $\alpha = .85$	3	18	9	9.16	3.17
Job resources						
Training	3-item additive index, $\alpha = .88$	3	18	11	10.46	3.21
Job autonomy	3-item additive index, $\alpha = .84$	3	18	10	10.17	3.14
Instr comm	4-item additive index, $\alpha = .88$	7	20	16	15.82	3.27
Supervision	5-item additive index, $\alpha = .81$	9	29	19	18.68	4.24
Dependent var						
Fear victim	3-item additive index, $\alpha = .93$	3	18	12	11.73	4.04

Note. Min stands for minimum value, Max for maximum value, Md for median value, Mn for mean value, SD for standard deviation value, Personal Chars for personal characteristics, Educ level for educational level, Instr comm for instrumental communication, Dependent var for dependent variable, Fear victim for fear of being victimized at work, and α for Cronbach's alpha value, a measure of internal reliability. The number of participants was 322.

job autonomy had moderate-sized correlations. Role overload had a large-sized correlation (Cohen, 1988).

An Ordinary Least Squares (OLS) regression equation was computed with fear of being victimized as the dependent variable. Personal characteristics, job demands, and job resources were the independent variables. The results are presented in Table 3. Multicollinearity is seen as a problem when variance inflation factor scores (VIF) exceed 5 (Tabachnick & Fidell, 2019). Based on the VIF scores reported in Table 3, multicollinearity was not a problem. The highest VIF score was 1.70. The issues of outliers, influential cases, normality, linearity and homoscedasticity of residuals, and independence of errors in the regression analysis were tested (Berry, 1993; Tabachnick & Fidell, 2019).

The R-squared value was .47. This means that the independent variables as a group explained approximately 47% of the observed variance in the

Table 2. Correlation Matrix of Study Variables.

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. Gender	1.00											
2. Educ Lev	−.12*	1.00										
3. Tenure	.10	−.09	1.00									
4. Age	.12*	−.35**	.38**	1.00								
5. Prison	.57**	−.10	−.01	.18**	1.00							
6. Overload	.13*	−.04	−.02	−.01	.04	1.00						
7. Routine	.09	−.03	.05	−.03	.19**	.05	1.00					
8. Training	−.10	−.02	.03	.06	−.14*	−.23**	−.55**	1.00				
9. Job Auto	−.05	.02	.08	.04	−.08	−.27**	−.38**	.44**	1.00			
10. Inst Com	−.15**	−.06	.14*	.06	−.27**	−.06	−.33**	.33**	.19**	1.00		
11. Super	−.10	.04	−.02	−.10	−.19**	−.22**	−.35**	.40**	.31**	.29**	1.00	
12. Victim	.08	.04	.00	−.15**	−.12*	.57**	.08	−.22**	−.32**	.05	−.07	1.00

Note. Educ Lev stands for educational level, Overload for role overload, Routine for routinization, Job Auto for job autonomy, Inst Com for instrumental communication, Super for supervision, and Victim for fear of victimization. See Table 1 for how the variables were coded and their descriptive statistics.

Table 3. Multivariate Ordinary Least Squares Regression Results with Workplace Fear of Victimization as the Dependent Variable.

Independent variables	*B*	SE	β	VIF
Personal characteristics				
Gender	1.17	.44	.14**	1.54
Educational level	0.21	.39	.02	1.16
Tenure	0.04	.04	.05	1.25
Age	−0.07	.03	−.12	1.39
Prison	−1.46	.47	−.18**	1.67
Job demands				
Role overload	0.68	.06	.51**	1.15
Routinization	0.01	.07	.01	1.60
Job resources				
Training	−0.09	.07	−.07	1.70
Job autonomy	−0.24	.07	−.19**	1.37
Instrumental communication	0.16	.06	−.13*	1.30
Supervision	0.06	.05	.06	1.35
F Value (*df*)		20.47 (313)		
R-Squared		.47		

Note. OLS regression was used for the analysis. *B* represents the unstandardized regression coefficient, SE for the standard error, β the standardized regression coefficient, VIF the variance inflation factor score, and (*df*) as degrees of freedom. Please see Table 1 for more information on the variables and their descriptive statistics.
* $p \leq .05$, ** $p \leq .01$.

dependent variable. Of the personal characteristics, gender and prison were significant predictors. Male officers in general reported greater fear of victimization. Officers at the first prison reported greater fear as compared to officers at the second prison. The other personal characteristics (i.e., educational level, tenure, and tenure) had nonsignificant associations. Routinization, views of training, and supervision had nonsignificant relationships with fear. Role overload had a significant positive relationship; that is, increases in this job demand were associated with greater fear. Both job autonomy and instrumental communication were significant negative predictors. That is, increases in these job resources were associated with lower fear. Based on the standardized coefficients, role overload had the largest sized effect, more than twice that of job autonomy. Job autonomy had the second largest sized effect. The prison assignment variable followed closely with the third largest-sized association. Gender had the fourth largest sized effect. Instrumental

communication had the smallest sized effect. While not reported in tabular format, each block of variables was entered alone into a regression equation with fear of victimization as the dependent variable. The R-Squared for the block of personal characteristics was .06. The R-Squared for the job demands was .33. The R-squared for job resources was .13. This indicates that the job demands and resources explained more variance in the dependent variable than did the personal characteristics. Further, the job demand variables accounted for more variance in fear of victimization than did the job resource variables.

Discussion

Overall, the job demands-resources model was supported in that job demands in general are linked to fear of victimization, and job resources are negatively related to fear among the officers in this study. The job demands accounted for more of the variance of the dependent variable than did the job resources. Job demands may be more strongly related to negative outcomes, such as fear of victimization. Job resources may play a stronger role in positive outcomes, such as job satisfaction or organizational commitment. This, of course, is only an untested postulation. What is known is that job demands and job resources, in general, are associated with workplace fear of victimization. It is important to note that the influence of individual job demand and resource variables varied. Three of the six hypotheses were supported. Specifically, *Hypotheses 1, 4*, and *5* were supported, but *Hypotheses 2, 3*, and *6* were not supported.

Role overload was not only a significant positive predictor, but it had the largest-sized effect. Role overload likely overwhelms officers so they make mistakes. In addition, role overload can result in being asked to do too much, so an officer is not fully aware of other things happening in their work environment. This can result in feelings of fear of victimization in the workplace. Prison administrators need to be aware of role overload and attempt to reduce it. This means conducting a work position analysis to determine whether the job tasks are equal across different prison posts. If not, a further assessment is recommended to determine how duties may be reassigned. This should bring different positions into greater balance. Further, officers need to be asked for their input on role overload as well as their ideas of how to reduce role overload.

Interestingly, routinization did not have a significant association in either the bivariate analysis or multivariate analysis. It appears that routinization is not related to fear of victimization. It may be having a job with routine activities allows an officer to learn what is to be done and how it is done, making

the officer feel safer. Yet, unexpected occurrences could be stressful, which, in turn, may result in greater fear. It is important to note that this workplace variable was not measured in the limited past research. There therefore needs to be more research involving the connection of routinization with feat of victimization.

Interestingly, views of training were significant in the bivariate but not the multivariate analysis. It was expected that training would provide officers with the skills and confidence to do their jobs and feel safe. It could be that training views are related but were not observed due to random chance. This points to the need for multiple replication studies. Alternatively, training views may not be an important predictor once the other job demand and resource variables are considered. It is also possible that training to allow officers to do their job tasks does not include training to ensure dangerous situations do not occur at work. The current findings among Chinese officers are in contrast to Lai et al. (2012), who reported that training views were related to feeling safer at work. Additional studies are needed to determine not only the relationship of training views with fear of victimization among prison officers but why the relationship, if any, exists.

As hypothesized, both job autonomy and instrumental communication had significant negative associations with fear of victimization in both the bivariate and multivariate analyses. Job autonomy likely provides officers with the flexibility to do their job tasks in a manner that allows them to feel safer. Lambert, Minor, et al. (2018) found that input into organizational decision-making was related to lower fear among U.S. correctional staff. This suggests that the negative association of input with fear may be universal for correctional staff. Prison administrations need to examine how job input can be instituted in a successful manner. Officers also need to be solicited for their input on how job autonomy can be enhanced. In addition, supervisors need to be made aware of job autonomy and encouraged to allow job autonomy among those they supervise.

Instrumental communication had a negative association. Instrumental communication likely provided studied officers with information to not only achieve more success in their jobs but also to accomplish tasks in a safer manner. An analysis of communication patterns and information should be undertaken by Chinese prison administrators. This will help ensure that there is instrumental communication across all prison functional units and all staff. As well, supervisors need to be trained to increase instrumental communication to enable the officers they supervise to receive salient information. Supervisors should be evaluated and rewarded for increasing job autonomy and instrumental communication. Lambert, Minor, et al. (2018) found no relationship between communication and fear of victimization in

their study of U.S. prison staff. Conversely, Lambert, Gordon, et al. (2018) reported a negative relationship in these variables in a study of U.S. jail staff. It appears that the effects of instrumental communication may be contextual, varying across correctional institutions.

Surprisingly and contrary to our hypothesis, quality supervision did not have a significant association with fear of victimization in either the bivariate or the multivariate analyses. It could be that the current finding is due to random chance and supervision has a negative association. It is also possible that supervision does not play a direct role once the other variables are taken into account. The current study used a broader measure of supervision compared to Lai et al. (2012), who used narrower measures of supervisor trust among Taiwanese correctional staff. Likewise, Lambert, Gordon, et al. (2018) measured supervisor trust in their study of U.S. jail staff. Both these studies found that supervisor trust was associated with a lower fear of victimization. Lambert, Minor, et al. (2018), however, observed that supervisor consideration was not a significant predictor. It could be specific aspects of supervision matter more than others in reducing workplace fear of victimization. The relationship between supervision and fear of victimization could also be contextual, varying across nations and correctional facilities.

Gender was a significant predictor. Male officers expressed greater fear of victimization. This is consistent with the findings of Lambert, Hogan, et al. (2017) and Lambert, Gordon, et al. (2018), but inconsistent with the findings of Taxman and Gordon (2009), Gordon et al. (2013), and Gordon and Baker (2017). The latter studies reported female correctional staff experience a higher fear of victimization. Further, no association between gender and fear was observed among Taiwanese officers (Lai et al., 2012) and U.S. officers (Stichman & Gordon, 2015). The role of gender as a predictor appears to vary by prison setting. For the current study, male officers may have greater fear because they may be more likely to be called upon for physical control of offenders.

The variable for prison location was significant. Officers at the first prison expressed a higher fear of victimization compared to officers at the second prison. The first prison was older, housed more offenders, and had a lower staff-to-inmate ratio than the second prison. Specifically, the first prison housed 1,500 convicted offenders and employed 280 staff members, which is a staff-to-inmate ratio of 1 to 5.36. The second prison housed 700 convicted offenders and employed 160 staff, which is a staff-to-inmate ratio of 4.38. While both prisons housed different security levels, prison one had a higher level of high-security offenders convicted of violent offenses compared to the second prison. It is likely that the first prison's age, size, greater violent offender population, and higher inmate-to-staff ratio contributed to greater

fear. It needs to be noted that personal characteristics as a group accounted for 6% of the variance in the dependent variable. Job demands and resources accounted for far more variance of fear. This finding is consistent with the study results of Lambert, Minor, et al. (2018) and Lambert, Gordon, et al. (2018). This is good news for correctional administrators, as job demands and resources are more under the control of management than are officers' personal characteristics.

Limitations

As with many studies, the current exploratory investigation had limitations. Because it was a single study of staff at two prisons located in southeast China and there are almost 700 prisons across China (Jiang et al., 2018), the current findings cannot be generalized to all Chinese prisons or to prisons in other nations. This again calls for future additional research at prisons both in China and in other nations. Such research can contribute to determining which prison workplace job demands and resources are universal, or contextual, in their effects. Further, this current study suggests that there are many other job demand and resource workplace variables that need to be studied.

Another limitation is this study's cross-sectional design. Longitudinal studies are desirable in order to demonstrate empirically the causal effects of job demands and resources on fear of victimization. Noting that the R-squared was .47, about half of the observed variance in the dependent variable is accounted for by other variables. Future studies should explore what other variables may be associated with fear of victimization. As well, there is a need to evaluate workplace interventions and changes to reduce prison officers' fear of victimization. Drawing on this study, should the job demands-resources model be used to explore other outcomes, such as productivity, life satisfaction, workplace deviance, and turnover intent/turnover? In sum, far more research focusing on workplace fear of victimization, not only among Chinese correctional officers but officers in other nations, is needed.

Conclusion

The job of a correctional officer is unique, with unusual features not found in many other occupations. One is the fear of being victimized at work. As noted earlier, fear of victimization is related to negative work outcomes for prison officers. In light of this relationship, research is needed on the predictors of such fear among prison staff. As noted, there have been few studies that examine the antecedents of officer fear of victimization, and these have

been primarily focused on U.S. correctional settings and staff, ignoring the issue across global correctional settings. The current study of fear among Chinese prison officers offers a research design to address the question of whether the association of a particular workplace variable is universal or contextual in its effects. That is, applying the job demands-resources model, this exploratory investigation examined how the job demands of role overload and routinization and the job resources of training, job autonomy, instrumental communication, and supervision were related to the fear of victimization among officers at two prisons in southeast China. The findings indicate: (1) role overload was positively associated with fear; (2) training and job autonomy were negatively associated; (3) routinization, instrumental communication, and quality supervision were nonsignificant predictors.

Cross-national research can bring about greater investments in correctional staff, a valuable resource responsible for the complex duties and tasks in the operation of a prison in every nation across the globe. While the current study adds to the literature, it is hoped that it will also ignite continued research on correctional staff in general and on the antecedents of fear of victimization in particular.

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Note

1. The job demands used were of instrumental communication, correct handling of inmate infectious disease, coworker relations, input into decision making, formalization, inmate control, views of proper security, quality training, administration support, professionalism, and supervisor support.

References

Armstrong, G., & Griffin, M. (2004). Does the job matter? Comparing correlates of stress among treatment and correctional staff in prisons. *Journal of Criminal Justice*, *32*(6), 577–592. https://doi.org/10.1016/j.jcrimjus.2004.08.007

Berry, W. D. (1993). *Understanding regression assumptions*. Sage.

Cheeseman, K. A., Kim, B., Lambert, E. G., & Hogan, N. L. (2011). Correctional officer perceptions of inmates and overall job satisfaction. *Journal of*

Crime and Justice, *34*(2), 81–102. https://doi.org/10.1080/0735648X.2011.580515

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Academic Press.

Cullen, F., Link, B., Wolfe, N., & Frank, J. (1985). The social dimensions of correctional officer stress. *Justice Quarterly*, *2*(4), 505–533. https://doi.org/10.1080/07418828500088711

Curry, J., Wakefield, D., Price, J., & Mueller, C. (1986). On the causal ordering of job satisfaction and organizational commitment. *Academy of Management Journal*, *29*(4), 847–858. https://doi.org/10.2307/255951

Demerouti, E., & Bakker, A. (2011). The job demands-resources model: Challenges for future research. *SA Journal of Industrial Psychology*, *37*(2), 1–9. https://doi.org/10.4102/sajip.v37i2.974

Demerouti, E., Bakker, A., Nachreiner, F., & Schaufeli, W. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, *86*(3), 499–512. https://doi.org/10.1037/0021-9010.86.3.499

Elechi, O. O., Lambert, E. G., & Otu, S. (2020). Exploring the association between organizational justice and job stress among Nigerian correctional staff. *Journal of Ethnicity in Criminal Justice*, *18*(4), 265–281. https://doi.org/10.1080/15377938.2020.1786485

Ferdik, F. V. (2016). An investigation into the risk perceptions held by maximum security correctional officers. *Psychology, Crime and Law*, *22*(9), 832–857. https://doi.org/10.1080/1068316X.2016.1194985

Fusco, N., Ricciardelli, R., Jamshidi, L., Carleton, R. N., Barnim, N., Hilton, Z., & Groll, D. (2021). When our work hits home: Trauma and mental disorders in correctional officers and other correctional workers. *Frontiers in Psychiatry*, *11*, 493391. https://doi.org/10.3389/fpsyt.2020.493391

Gordon, J., & Baker, T. (2017). Examining correctional officers' fear of victimization by inmates: The influence of fear facilitators and fear inhibitors. *Criminal Justice Policy Review*, *28*(5), 462–487. https://doi.org/10.1177/0887403415589630

Gordon, J., Moriarty, L., & Grant, P. (2003). Juvenile correctional officers' perceived fear and rick of victimization: Examining individual and collective levels of victimization in two juvenile correctional centers in Virginia. *Criminal Justice and Behavior*, *30*(1), 62–84. https://doi.org/10.1177/0093854802239163

Gordon, J. A., Proulx, B., & Grant, P. H. (2013). Trepidation among the "keepers": Gendered perceptions of fear and risk victimization among corrections officers. *American Journal of Criminal Justice*, *38*(2), 245–265. https://doi.org/10.1007/s12103-012-9167-1

Griffin, M. (2002). The influence of professional orientation on detention officers' attitudes toward the use of force. *Criminal Justice and Behavior*, *29*(3), 250–277. https://doi.org/10.1177/0093854802029003002

Harrell, E., Langton, L., Petosa, J., Pegula, S., Zak, M., Derk, S., Hartley, D., & Reichard, A. (2022). *Indicators of workplace violence,* 2019. Retrieved from https://www.cdc.gov/niosh/docs/2022-124/.

Hartley, D., Davila, M., Marquart, J., & Mullings, J. (2013). Fear is a disease: The impact of fear and exposure to infectious disease on correctional officer job stress and job satisfaction. *American Journal of Criminal Justice*, *38*(3), 323–340. https://doi.org/10.1007/s12103-012-9175-1

Haynes, S. H., May, D. C., Lambert, E. G., & Keena, L. D. (2020). An examination of the effects of personal and workplace variables on correctional staff perceptions of safety. *American Journal of Criminal Justice*, *45*(1), 145–165. https://doi.org/10.1007/s12103-019-09497-1

Hultell, D., & Gustavsson, J. P. (2011). Factors affecting burnout and work engagement in teachers when entering employment. *Work*, *40*(1), 85–98. https://doi.org/10.3233/WOR-2011-1209

Jiang, S., Lambert, E. G., Liu, J., Kelley, T. M., & Zhang, J. (2018). Effects of work environment variables on Chinese prison staff organizational commitment. *Australian and New Zealand Journal of Criminology*, *51*(2), 275–292. https://doi.org/10.1177/0004865817720628

Jowell, R. (1998). How comparative is comparative research? *American Behavioral Scientist*, *42*(2), 168–177. https://doi.org/10.1177/0002764298042002004

Keena, L. D., Lambert, E. G., Haynes, S. H., May, D., & Buckner, Z. (2020). Examining the relationship between job characteristics and job satisfaction among Southern prison staff. *Corrections*, *5*(2), 109–129. https://doi.org/10.1080/23774657.2017.1421053

Keena, L. D., Lambert, E. G., Haynes, S. H., May, D., & Doty, P. A. (2022). Testing the job demands-resources model with organizational trust among prison staff. *Criminal Justice Review*, *47*(2), 148–166. https://doi.org/10.1177/07340168221076789

Konda, S., Tiesman, H., Reichard, A., & Hartley, D. (2013). US Correctional officers killed or injured on the job. *Corrections Today*, *75*(5), 122–123. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4699466/

Lai, Y.-L., Wang, H.-M., & Kellar, M. (2012). Workplace violence in correctional institutions in Taiwan: A study of correctional officers' perceptions. *International Journal of Comparative and Applied Criminal Justice*, *36*(1), 1–23. https://doi.org/10.1080/01924036.2011.644083

Lambert, E. (2004). The impact of job characteristics on correctional staff members. *Prison Journal*, *84*(2), 208–227. https://doi.org/10.1177/0032885504265078

Lambert, E. G., Cluse-Tolar, T., & Hogan, N. L. (2007). This job is killing me: The impact of job characteristics on correctional staff job stress. *Applied Psychology in Criminal Justice*, *3*(2), 117–142. https://dev.cjcenter.org/_files/apcj/3_2_correctionalstaff.pdf

Lambert, E. G., Elechi, O. O., Otu, S., & Jenkins, M. (2023). The association of job demands and resources with strain-based conflict among Nigerian prison officers. *Journal of Criminology and Criminal Justice Studies*, *1*(2), 145–165.

Lambert, E. G., Gordon, J., Paoline, E. A. III, & Hogan, N. L. (2018). Workplace demands and resources as antecedents of jail officer perceived danger at work. *Journal of Crime and Justice*, *41*(1), 98–118. https://doi.org/10.1080/0735648X.2016.1218355

Lambert, E., & Hogan, N. (2006). Possible antecedents of correctional staff work on family conflict. *Professional Issues in Criminal Justice*, *1*(2), 17–34. https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=d11bc27e7b7cb18af2f436eda80f2da896fbd19b#page=28

Lambert, E., & Hogan, N. (2010a). Wanting change: The relationship of perceptions of organizational innovation with correctional staff job stress, job satisfaction, and organizational commitment. *Criminal Justice Police Review*, *21*(2), 160–184. https://doi.org/10.1177/0887403409353166

Lambert, E., & Hogan, N. (2010b). Work-family conflict and job burnout among correctional staff. *Psychological Reports*, *106*(1), 19–26. https://doi.org/10.2466/PR0.106.1.19-26

Lambert, E., Hogan, N., Cheeseman, K., & Barton-Bellessa, S. (2013). The relationship between job stressors and job involvement among correctional staff: A test of the job strain model. *The Howard Journal of Criminal Justice*, *52*(1), 19–38. https://doi.org/10.1111/hojo.12002

Lambert, E. G., Hogan, N. L., Moore, B., Tucker, K., Jenkins, M., Stevenson, M., & Jiang, S. (2009). The impact of the work environment on prison staff: The issue of consideration, structure, job variety, and training. *American Journal of Criminal Justice*, *34*(1), 166–180. https://doi.org/10.1007/s12103-009-9062-6

Lambert, E. G., Hogan, N. L., Wells, J. B., & Minor, K. I. (2017). Organizational trust and fear of injury and the correlates of organizational trust among private correctional staff. *Journal of Applied Security Research*, *12*(3), 337–355. https://doi.org/10.1080/19361610.2017.1315695

Lambert, E. G., Keena, L. D., Haynes, S. H., May, D., & Leone, M. C. (2020). Predictors of job stress among Southern correctional staff. *Criminal Justice Policy Review*, *31*(2), 309–331. https://doi.org/10.1177/0887403419829211

Lambert, E. G., Kelley, T., & Hogan, N. L. (2013). The association of occupational stressors with different forms of organizational commitment among correctional staff. *American Journal of Criminal Justice*, *38*(4), 480–501. https://doi.org/10.1007/s12103-012-9183-1

Lambert, E. G., Kim, B., Keena, L. D., & Cheeseman, K. (2017). Testing a gendered models of job satisfaction and work stress among correctional officers. *Journal of Crime and Justice*, *40*(2), 188–203. https://doi.org/10.1080/0735648X.2015.1074092

Lambert, E. G., Minor, K. I., Gordon, J., Wells, J. B., & Hogan, N. L. (2018). Exploring the correlates of perceived job dangerousness among correctional staff at a maximum security prison. *Criminal Justice Policy Review*, *29*(3), 215–239. https://doi.org/10.1177/0887403415623618

Lambert, E. G., Solinas-Saunders, M., & Hogan, N. L. (2024). Exploring the influence of job demands and resources on organisational justice views in a sample of correctional staff. *The Howard Journal of Crime and Justice*, 63(1), 22–42.

Lindsay, R. M., & Ehrenberg, A. A. (1993). The design of replicated studies. *The American Statistician*, *47*(3), 217–228. https://doi.org/10.1080/00031305.1993.10475983

Nixon, S. (2022). You can't un-see what you've seen: An ex-prison officer's autoethnographic account of suicide and self-harm in a UK male adult prison. *Incarceration*, *3*(2), 1–18. Retrieved from https://journals.sagepub.com/doi/10.1177/26326663221104994 https://doi.org/10.1177/26326663221104994

Paoline, E. A., Lambert, E. G., Hogan, N. L., & Keena, L. D. (2018). The effects of the workplace on jail staff: The issue of perceptions of pay fairness. *Corrections*, *3*(3), 203–224. https://doi.org/10.1080/23774657.2017.1370400

Stichman, A., & Gordon, J. (2015). A preliminary investigation of the effect of correctional officers bases of power on their fear and risk of victimization. *Journal of Crime and Justice*, *38*(4), 543–558. https://doi.org/10.1080/0735648X.2014.929975

Stinglhamber, F., Nguyen, N., Josse, M., & Demoulin, S. (2022). The development of prison officers' job satisfaction and its impact on depersonalization of incarcerated persons: The role of organizational dehumanization. *Criminal Justice and Behavior*, *49*(11), 1600–1617. https://doi.org/10.1177/00938548221087182

Tabachnick, B., & Fidell, L. (2019). *Using multivariate statistics* (7th ed.). Pearson.

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, *2*(1), 53–55. https://doi.org/10.5116/ijme.4dfb.8dfd

Taxman, F., & Gordon, J. (2009). Do fairness and equity matter? An examination of organizational justice among correctional officers in adult prisons. *Criminal Justice and Behavior*, *36*(7), 695–711. https://doi.org/10.1177/0093854809335039

Teas, R. (1981). A test of a model of department store salespeople's job satisfaction. *Journal of Retailing*, *57*(1), 3–35.

Triplett, R., Mullings, J., & Scarborough, K. (1996). Work-related stress and coping among correctional officers: Implications from organizational literature. *Journal of Criminal Justice*, *24*(4), 291–308. https://doi.org/10.1016/0047-2352(96)00018-9

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Appendix

Except for Instrumental Communication, the index items below were answered using a 6-point Likert scale of strongly disagree (coded 1), disagree (coded 2), somewhat disagree (coded 3), somewhat agree (coded 4), agree (coded 5), and strongly agree (coded 6). The instrumental communication items were answered using the following scale: not informed at all (coded 1), informed very little (coded 2), informed somewhat (coded 3), informed (coded 4), and very well informed (coded 5).

Workplace fear of victimization: Cronbach's alpha = .93): (1) I work at a dangerous job; (2) My job is a lot more dangerous than most jobs in the community; and (3) At my job, there is a real risk of being hurt or injured.

Role overload: (1) I often receive an assignment without adequate resources and materials to get it done; (2) I am responsible for almost an unmanageable number of assignments and job duties; and (3) I consider myself overworked on my job.

Routinization: (Cronbach's alpha = .85): (1) My job requires that I must constantly learn new things (reverse coded); (2) My job requires that I be very creative (reverse coded); and (3) My job does not have a lot of variety in it.

Training views: (1) My organization offers meaningful, practical training; (2) I have been provided with enough training to do my job well; (3) The training I have received has helped me.

Job autonomy: (1) I have flexibility in how and when to do my job duties; (2) I have a great deal of say in how my job is done; and (3) My job does not allow me much opportunity to make my own decisions.

Instrumental communication (Cronbach's alpha = .88): How informed are you about the following aspects of your job: (1) What you need to know to do

the job correctly; (2) What is most important about the job; (3) How the equipment is used; and (4) Rules and regulations.

Quality supervision (Cronbach's alpha = .81): (1) My supervisor tends to talk down to employees; (2) My supervisor gives me advance notice of changes; (3) My supervisor looks out for my personal welfare; (4) My supervisor is considerate of those supervised by asking for their ideas; and (5) My supervisor is friendly and approachable.