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The connection between work attitudes and Chinese correctional staff burnout*

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Abstract

Officers are a valuable resource for prisons across the globe. Working in corrections is a demanding job with a higher-than-average risk of job burnout. Most prison burnout studies have focused on staff working in Western prisons, particularly those in the U.S. These studies have generally found an association between work attitudes and burnout among prison officers. However, a key question is whether the associations are universal or contextual, varying by nation. The current study examined the link between the major work attitudes of job involvement, job satisfaction, and organizational commitment and the burnout dimensions of emotional exhaustion, depersonalization, and feeling ineffective at work among staff at two Chinese prisons. According to the results of ordinary least squares multivariate regression tests, job involvement, and job satisfaction had significant negative effects on emotional exhaustion, but commitment did not. Only job involvement had significant negative effects on depersonalization. Job involvement and organizational commitment had significant negative

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effects on feeling ineffective, while job satisfaction had nonsignificant effects. The results indicate that the major work attitudes are negatively linked to job burnout for the studied Chinese prison staff; efforts should be undertaken to build these work attitudes to reduce burnout since burnout is linked to negative consequences for officers, inmates, and the prison. Based on previous research and current findings, some of the effects of work attitudes appear to be universal, and others appear to be contextual.

Keywords
Correctional staff, job burnout, China, job satisfaction, job involvement, organizational commitment

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Armstrong and Griffin (2004) pointed out that "few other organizations are charged with the central task of supervising and securing an unwilling and potentially violent population" (p. 577). Working in such a unique work environment increases the chances of job burnout (Griffin et al., 2010; Neveu, 2007). Keinan and Malach-Pines (2007) found that the correctional workers in their study reported much higher levels of burnout than those experienced in the general population and that these levels of burnout were even higher than those reported by police officers. Job burnout has negative effects, such as depression, withdrawal from the job, decreased work performance, lower support for rehabilitation of offenders, higher support for the punishment of inmates, higher levels of substance abuse, greater absenteeism, and higher turnover/turnover intent (Belcastro et al., 1982; Carlson & Thomas, 2006; Jaegers et al., 2021; Lambert et al., 2015a; Neveu, 2007). The negative effects of job burnout can impact not only the burned-out officer, but also fellow officers, correctional supervisors and managers, family and friends, and inmates. In the end, there tends to be no positive results of burnout. In light of the harmful effects of burnout, additional research is warranted on this detrimental work outcome among officers in correctional facilities around the world.

It is theorized that job burnout has three dimensions: emotional exhaustion (feeling drained and worn out from the job), depersonalization (treating others in an impersonal manner), and feeling ineffective at work (having a sense of not being effective at work) (Maslach & Jackson, 1981). Research has explored the different ways in which the three work attitudes of job involvement, job satisfaction, and organizational commitment are associated with the three dimensions of job burnout among U.S. correctional staff but not correctional staff in other nations. Job involvement is an individual's cognitive (i.e. psychological) identification with a job (Kanungo, 1982). Job satisfaction is the affective (i.e. emotional) feeling that a person harbors toward a job (Spector, 1997). Organizational commitment refers to the bond between the person and the employing organization (Mowday et al., 1982).

Most prison burnout studies have focused on staff working in Western prisons, particularly those in the U.S. Research has generally found an association between work attitudes and burnout among prison officers. However, a key question is whether the associations are universal or contextual. To what extent are the associations universally stable across different sites, including different nations? To what extent does the association between different dimensions of work attitudes and dimensions of burnout vary across sites, including those involving different nations? Answers to these questions will greatly contribute to our knowledge and

confidence about these associations and to the design of burnout reduction programs with contextual knowledge taken into account.

China is a strategically important site for answering these questions, given that it presents perhaps the largest differences from the Western/U.S. context. It has been well documented that China is dominated by a collectivist culture, while most Western countries, particularly the U.S., are dominated by individualism. China also presents great differences from the West/U.S. in terms of political, economic, and social conditions (Liu, 2021).

The current study was conducted using staff from two Chinese prisons and examined the effects of job involvement, job satisfaction, and organizational commitment on the burnout dimensions of emotional exhaustion, depersonalization, and feeling ineffective at work. The current study builds upon the research reported by Griffin et al. (2010), who studied how the work attitudes of job involvement, job satisfaction, and organizational commitment are associated with the three burnout dimensions of emotional exhaustion, depersonalization, and feeling ineffective at work among U.S. prison staff. In fact, the study by Griffin et al. (2010) was the only study that explored how the three work attitudes related to job burnout; this study focused on staff at a private high-security Midwestern prison in the U.S. Prison staff in other nations have been largely ignored in past research concerning how work attitudes are linked to burnout. The replication of past research in different settings, such as the nation, is critical. As noted by Lindsay and Ehrenberg (1993), the replication of studies in different settings is important to determine whether previous findings are universal or contextual and vary across settings, including nations. Studies among staff at various prisons, including those located in different nations, can provide important information as to whether the effects of workplace variables are universal or situational, varying across prisons in different nations. It could be that the association of involvement, satisfaction, and commitment with burnout varies by prison staff and work culture, which can vary not only across different correctional institutions but across nations. In the end, additional research will aid both prison scholars and administrators in understanding how workplace attitudes are linked to staff burnout, so efforts can be undertaken to reduce job burnout with the knowledge of contextual differences taken into account.

Literature review

Burnout

The concept of job burnout was proposed by Freudenberger in 1974, who defined it as psychological wearing out or exhaustion associated with excessive work demands. Maslach and Jackson (1981) built on the early definition of burnout by proposing that there are three burnout dimensions: emotional exhaustion, depersonalization, and feeling ineffective at work. Emotional exhaustion is the feeling of being drained, fatigued, and used up from the job (Griffin et al., 2010; Maslach & Jackson, 1981). Depersonalization refers to treating others impersonally, callously, and as objects, because the person has become detached and cynical (Maslach & Jackson, 1981; Neveu, 2007). Feeling ineffective at work refers to a sense that efforts at work do not have a positive effect on coworkers and clients (Maslach & Jackson, 1981).

While there are other definitions and measures of job burnout found in the literature, the current study tested the three dimensions of burnout proposed by Maslach and Jackson

(1981)—emotional exhaustion, depersonalization, and feeling ineffective at work—because they have been used frequently in prison staff burnout research, including in a study by Griffin et al. (2010). In a review of correctional staff burnout research, Lambert et al. (2015b) reported that the majority of past correctional staff research measured the three burnout dimensions of emotional exhaustion, depersonalization, and feeling ineffective at work proposed by Maslach and Jackson (1981).

Overview of past prison staff burnout research

Past research has explored how different workplace variables are related to correctional staff burnout, including variables other than the three work attitudes of involvement, satisfaction, and commitment. Negative job variables have been reported to increase correctional staff burnout (Rhineberger-Dunn & Mack, 2020). For example, work–family conflict (when the work and home domains spill over and cause problems with one another), role conflict (conflicting directions provided), role overload (asked to do too many tasks in a given time period), and role ambiguity (when job directions and expectations are unclear) were reported to be positively associated with burnout among U.S. correctional staff (Lambert & Hogan, 2010; Lambert et al., 2009; Lambert et al., 2022; Rhineberger-Dunn & Mack, 2020; Whitehead, 1989). Among South Korean officers, role overload has been observed to result in greater levels of burnout (Choi et al., 2020). Additionally, role clarity (the opposite of role ambiguity) was reported to lower burnout levels for South Korean officers (Choi et al., 2020). Finally, job stress has been reported to be related to greater U.S. correctional staff burnout (Griffin et al., 2010; Whitehead, 1989). The research indicates that negative job characteristics are related to greater correctional staff job burnout.

Positive job variables have also been studied to determine their connection with correctional staff burnout. For example, job autonomy (allowed input into how to do the job) has been reported to result in lower burnout among U.S. correctional staff (Griffin et al., 2012; Lambert et al., 2012b). Both job variety (degree of variation in the job) and job feedback (information provided by supervisors on job performance) also lower burnout for U.S. staff (Griffin et al., 2012; Lambert et al., 2012b). Quality supervision appears to reduce burnout among U.S. prison staff (Griffin et al., 2012). Trust in supervisors and management has been observed to reduce job burnout for staff at a U.S. prison (Lambert et al., 2012a). Furthermore, formalization (having written rules and policies) and instrumental communication (providing information about how the job is done) were both associated with lower burnout for U.S. correctional staff (Lambert et al., 2012a; Lambert et al., 2010). For both French and U.S. prison officers, input into decision making within the correctional organization was found to have a negative effect on burnout (Lambert et al., 2010; Neveu, 2007). In addition, social support (e.g. coworker, supervisor, management, etc.) has been found to be inversely associated with burnout among French (Neveu, 2007), Swiss (Isenhardt et al., 2019), and U.S. prison staff (Klinoff et al., 2018). The research to date indicates that job characteristics are associated with burnout, particularly among U.S. correctional staff. This research suggests that positive job characteristics are linked to lower burnout among prison staff.

Less research has been conducted on how the work attitudes of job involvement, job satisfaction, and organizational commitment are linked to correctional staff job burnout. Among South Korean correctional officers, improved job satisfaction decreases emotional exhaustion and depersonalization (Choi et al., 2020). Job satisfaction was observed to be negatively related

to burnout for Ukrainian (Tohochynskyi et al., 2020) and U.S. (Whitehead, 1989) correctional staff. Only one published study could be located that examined the associations among all three work attitudes (i.e. involvement, satisfaction, and commitment) and the three burnout dimensions. Among U.S. prison staff, Griffin et al. (2010) found that job involvement had a positive relationship with emotional exhaustion burnout and nonsignificant associations with the two other dimensions of burnout. They also observed that job satisfaction was a significant negative predictor of emotional burnout and feeling ineffective at work but not a significant predictor of depersonalization. Finally, they reported that organizational commitment had nonsignificant relationships with all three burnout dimensions. There is a need for additional research on how job involvement, job satisfaction, and organizational commitment affect the burnout dimensions of emotional exhaustion, depersonalization, and feeling ineffective at work among officers at prisons in different nations, including China.

Job involvement, job satisfaction, and organizational commitment

Job involvement refers to the degree of importance that a job holds in a person's life (Kanungo, 1982). Higher job involvement means that a person identifies with the job and considers the job important in their life. Job involvement refers to the degree of psychological identification with the job (DeCarufel & Schaan, 1990; Kanungo, 1982). Individuals with low job involvement place emphasis on other areas of life, such as recreation or hobbies (DeCarufel & Schaan, 1990).

Cherniss (1980) indicated that high job involvement for people who feel their job is a calling are at risk of emotional exhaustion because they place too much effort and importance on the job and may become more upset when things do not work out as expected. Griffin et al. (2010) reported that high job involvement was associated with greater emotional exhaustion among U.S. prison staff but was not linked to either depersonalization or feeling ineffective at the job. In the current study, among Chinese prison staff, job involvement was predicted to have a negative relationship with the burnout dimension of emotional but not for depersonalization or feelings of ineffectiveness.

Job satisfaction is the psychological affective response of an individual to the job (Cranny et al., 1992). As Spector (1996) pointed out, job satisfaction is simply the degree to which a person likes a job. Job satisfaction results in positive psychological feelings that can buffer the demanding aspects of the job and reduce the level of burnout. On the other hand, low satisfaction likely results in psychological strain, which can result in higher emotional exhaustion from working at a disliked job and, in turn, can result in treating others in an impersonal and callous matter and a reduced sense of accomplishment at work (Cherniss, 1980; Griffin et al., 2010).

Job satisfaction has been associated with prison staff burnout in four previous studies. Among Ukrainian officers, job satisfaction had a negative correlation with an overall measure of job burnout but nonsignificant correlations with the three dimensions of burnout (Tohochynskyi et al., 2020). Among South Korean prison officers, satisfaction had a negative association with emotional exhaustion and depersonalization but had a positive effect on feeling ineffective at work (Choi et al., 2020). In a study of U.S. correctional staff, Whitehead (1989) reported that job dissatisfaction not only had a significant negative effect on an overall measure of burnout (i.e., a combined measure of three dimensions), but also was burnout's strongest predictor. In a later study of U.S. prison staff, Griffin et al. (2010)

reported that satisfaction had significant inverse associations with emotional exhaustion and feeling ineffective at the job but had a nonsignificant effect on depersonalization. In the current study, job satisfaction was hypothesized to be negatively associated with the three dimensions of burnout for Chinese prison staff.

Organizational commitment is the bond between the employee and the employer (Griffin et al., 2010; Mowday et al., 1982). There are different types of bonds, with continuance, normative, and affective being the main ones (Allen & Meyer, 1990). Continuance commitment represents being bonded to the organization to protect investments, such as time, pay, benefits, retirement, and nontransferable job skills (Lambert et al., 2021). The bond for normative commitment is formed from socialization prior to and subsequent to being hired. This socialization is to be loyal and to put forth effort for the organization (Griffin et al., 2010). The bond for affective commitment forms because of positive treatment by the organization (Mowday et al., 1982; Lambert et al., 2021). This bond reflects loyalty toward the organization, identification with the organization (i.e. is proud to be part of the organization), internalization of the organization's goals, and desire to remain involved with the organization (Griffin et al., 2010; Mowday et al., 1982). As most past studies, including Griffin et al.'s (2010) study, measured the affective form of commitment when testing organizational commitment, the current study measured the affective form of commitment (Lambert et al., 2021).

Affective organizational commitment should be inversely associated with the three forms of burnout. Having a strong psychological bond with the organization that results from positive workplace experiences and treatment should buffer officers from the demands of the job. Conversely, working for an organization with a weak attachment should raise the level of psychological strain and increase the level of emotional exhaustion and depersonalization. In addition, low affective commitment should result in feeling ineffective at work, as there has been little reward and positive treatment by the organization. Only one published study examined the relationship of affective commitment with the three burnout dimensions. This study, involving U.S. prison staff, reported that affective commitment had no significant effect on any of the three burnout dimensions (Griffin et al., 2010).

Past literature has demonstrated the importance of cultural variation affecting associations and processes in a wide range of areas of the social sciences (Hofstede, 1980; Liu, 2021; Nisbett, 2003). It is reasonable to conclude that major contributions can be made in correctional studies by bringing attention to the international context to discover the extent to which findings in the Western context are universal or vary by nation. A primary dimension of the variation between East and West is the contrast between collective culture and individualistic culture (Liu, 2016, 2021; Liu et al., 2013). This work has indicated that there are cultural differences in other areas of criminal justice. The present study is the first and only study to address this key question with data from China to examine how all dimensions of work attitudes are linked to all burnout dimensions and whether they differ from the findings reported for U.S. correctional staff.

Chinese prisons

To put the findings of the current study into perspective, a brief overview of Chinese prisons is presented. There were prisons before China became the People's Republic of China in 1949, and the use of prisons has continued in China. Until 1994, the major focus of Chinese prisons was on control, punishment, and labor. The Prison Law of the People's Republic of

China was enacted in 1994, which changed the focus to the integration of punishment, treatment, education, and vocational labor for inmates (Hill, 2006; Jiang et al., 2018). Like the U.S. and some other Western nations, prisons in China hold convicted individuals serving more than a year's sentence, and detention centers (jails) hold individuals awaiting trial, awaiting transfer to prison, and those sentenced to less than a year. Detention centers are overseen by the Ministry of Public Security, which also oversees the police, and prisons are operated by the Bureau of Prison Administration in the Ministry of Justice (Hill, 2006).

There are approximately 1.69 million inmates confined in 683 Chinese prisons, with an incarceration rate of 119 inmates per 100,000 citizens (Jiang et al., 2018; World Prison Brief, 2022). About 300,000 staff members work in Chinese prisons (Jiang et al., 2018). For comparison, the U.S. employs approximately 430,000 correctional staff in nearly 1700 correctional institutions that hold about 1.3 million inmates, with an incarceration rate of 629 inmates per 100,000 citizens (Jiang et al., 2018; World Prison Brief, 2022). One factor that may relate to correctional officers' burnout is the inmate-to-staff ratio. The ratios are 5.7 to 1 in China, 5.1 to 1 in the U.S., 3 to 1 in Germany, 3.3 to 1 in Japan, and 4 to 1 in England (Hu et al., 2015; Jiang et al., 2018; Wu, 2003). Interestingly, prison security outside the institution is not provided by prison staff, but by the Chinese People's Armed Police, which is a separate entity under the Central Military that coordinates its activities with prison wardens (Hill, 2006).

Unlike the U.S., which often classifies prisons based on security levels (e.g. minimum, medium, and maximum), Chinese prisons do not have a set security level; instead, they hold inmates with different custody levels and sentence lengths in the same prison (Hill, 2006). Furthermore, most Western correctional staff can be categorized by their general positions, such as custody (e.g. uniformed and in charge of security), educational/vocational, treatment (e.g. counselors, case managers, psychological services, etc.), support staff (e.g. food service, industry, business office, etc.), and management/administrative (e.g. division directors, associate wardens, wardens, etc.). There is no such clear division of labor in Chinese prisons; however, Chinese prison staff do have specifically assigned duties that are often decided on an individual level rather than by position (Hill, 2006; Jiang et al., 2018). Unlike some U.S. correctional agencies, Chinese prisons do not have unions or collective bargaining agreements.

Unlike most Western correctional systems, Chinese prisons do not have a clear division of labor (Hill, 2006; Wu, 2003). All Chinese correctional officers are considered part of the people's police force and wear uniforms (Jiang et al., 2018). Thus, they are called "prison police" in China. Chinese correctional officers are expected to interact regularly with inmates and engage in a wide array of job duties, including law enforcement, education, and factory management (Jin, 1997). Their multiple roles may reduce the feeling of boredom but may also increase work pressure and stress. Chinese prison staff are part of the civil service. Civil service occupations generally have job security and attractive benefits, which is the type of job that many Chinese people want to get. In this sense, the occupation of Chinese prison police has a good reputation. However, while their actual work hours are higher than those of many other civil service occupations, their pay is lower (Hu et al., 2015; Wang & Kong, 2006). Their jobs are more dangerous than most other civil service occupations since they interact with incarcerated criminals.

Most prisons are situated far from cities, and Chinese prison staff often live or have their families near the prisons in which they work. This situation constrains their life, including their children's precollege education, to the area of the prison where they are employed. In addition, proximity to the prison, along with the nature of corrections, Chinese prison staff can be

on call 24 h a day. This working environment may result in high levels of job burnout among Chinese prison staff.

China has a tradition of collective culture. Under this culture, job involvement may be more important in China than in the U.S. and other Western nations, which have individualistic cultures (Liu, 2021). Collective China emphasizes harmony among people. Within a prison, harmony means good relationships among prison staff, between correction officers and leaders, and between prison staff and inmates. Interactions and heart-to-heart dialogues are very important, as they help staff, officers, leadership, and inmates understand one another and build good relationships. A good interpersonal relationship or *guanxi* enhances collaboration within and between the above groups, increases job involvement, and mitigates job stress. Under collective culture, work groups are valued and used in Chinese prisons rather than individualized posts/positions. The various work groups within a prison put forth efforts for the betterment of the prison, with self-sacrifice, such as working extra hours for a prison's common good. They are happy and proud to make their prison a good place for inmate reform and for themselves. Their living proximity deepens their bonds to the prison in which they work.

Nevertheless, like U.S. and Western prisons, working in a Chinese prison can be demanding. It involves overseeing and controlling individuals who are held against their will. Similar to Western prison inmates, many Chinese inmates have a lower educational level, are generally more antisocial, and have a higher rate of mental health and drug problems compared to the general population (Hill, 2006). Job burnout is a possibility for Chinese prison staff. What is not known is how the work attitudes of job involvement, job satisfaction, and affective organizational commitment are associated with the three burnout dimensions.

Methods

Participants

Human subject approval was obtained. Data were collected by the Institute for Social Policy, a nonprofit research organization registered with the Chinese government to conduct policy-related research. Access to surveying staff in Chinese prisons is limited. The staff of the Institute for Social Policy worked at a Chinese university, had working relationships with the prison authority, and obtained permission to survey staff at two prisons in Guangdong Province. One prison was located in this province's south, and the other in the north. These prisons were not randomly selected but were rather purposefully selected to reflect this province's geographical diversity and because both prisons held similar inmate populations. The two prisons were considered typical in China. Both prisons had similar prisoner populations of highly intensive/maximum custody (严管), intensive/medium custody (普管), and general custody (宽管).

The first prison employed 280 staff and housed 1500 sentenced offenders, while the second employed 160 staff and housed 700 sentenced offenders at the time of the survey. Unlike Western prisons, particularly in the U.S., Chinese prisons allow inmates to be nearer to family and house different levels of offenders in the same institution, but with separate housing areas. This study was reviewed and approved by the ethics committee of the Institute for Social Policy. Ethics rules in the research community were followed. Informed consent was obtained from all participants. The staff at each prison were provided with a

survey packet. This packet included material that explained the study, that it was voluntary, and how to return the survey. Staff who had elected to be part of this study could skip any question on the provided paper questionnaire; responses were anonymous.

The questionnaire included many standard measurements of the topic's concepts from Western literature. These questions were translated into Chinese and then translated back to English by separate bilingual scholars. The back method of translation was used, wherein survey materials were translated from English to Standard Chinese, the national language of China and the language used in the prisons, and then a second scholar translated the survey back into English to determine whether there were any translation problems. No major issues were noted. A pilot test of the survey was conducted with a small number of prison staff to discover whether there were any issues of understanding and to obtain feedback about the survey, including its meaning, context, and wording. After pilot testing, the revised survey was administered to all available staff. Staff were informed of the purpose of the study, that participation was voluntary, and that all responses would be anonymous. Approximately 73% of the prison staff from the two prisons completed and returned the survey (i.e. 322 usable surveys were returned). For the first prison, which employed 280 staff, 205 completed surveys were returned, with a response rate of approximately 73%. For the second prison, which employed 160 staff, 117 completed surveys were returned, a response rate that was also 73%. The high return rate is typical in Chinese surveys, including prison surveys. This is perhaps due to Chinese culture, which encourages cooperation with authority and organizations (Liu et al., 2017).

In terms of gender, 54% of the participants were women, and 46% were men. The participants' ages ranged from 24 to 58 years, with a median age of 45. Tenure in the current position ranged from 0.5 to 36 years, with a median value of 6 years. About 37% of participants indicated that they had earned a bachelor's degree or higher. Approximately 38% of the responding officers indicated that they supervised other prison staff. In terms of facility, 64% of respondents were from the prison holding male inmates and 36% from the prison holding female inmates. Based on human resource information, the participants were similar to the overall prison staff in terms of gender, age, tenure, educational level, and supervisory status.

Variables

Dependent variables. The items used to measure the latent concepts in this study are available upon request. The three burnout dimensions were the dependent variables, and the items used to create the additive indexes were adapted from Griffin et al. (2010). Emotional exhaustion was measured using four items, with a Cronbach's alpha value of .85. Depersonalization was measured using two items, with a Cronbach's alpha of .82. Feeling ineffective at work was measured using four items, with a Cronbach's alpha of .80. Factor analysis using principal axis factoring with varimax rotation indicated that the items loaded as predicted. The burnout items and their response items are available upon request.

Independent variables. An additive index of job involvement was formed by summing three items from Kanungo (1982); this index had a Cronbach's alpha of .74. Using three items from Brayfield and Rothe (1951), a job satisfaction index was created that had a Cronbach's alpha of .92. The affective form of organizational commitment was measured with five items from Mowday et al. (1982) and had a Cronbach's alpha of .85. The items and their response options are available upon request. Factor analysis using principal axis

factoring with varimax rotation indicated that the items loaded as predicted. The work items used were also used by Griffin et al. (2010). Finally, measures for the personal characteristics of gender, age, tenure in the current position, educational level, supervisory status (of other officers), and Prison 1 or 2 were included more as controls rather than as explanatory variables. See Table 1 for how these variables were measured.

Results

The univariate statistics for the variables are reported in Table 1. The skewness and kurtosis statistics indicated that the variables were normally distributed, and the mean and median values for the nondichotomous variables were very close to one another, suggesting that they were normally distributed. For the index variables, Cronbach's alpha values, a measure of internal reliability, were .74 or higher, which is viewed as good. The factor analysis results supported the index variables.

The correlations are reported in Table 2. Gender and supervisory status had positive correlations with emotional exhaustion, which meant that male officers and supervisors generally reported higher levels of this dimension of burnout. All three work attitudes had negative correlations, which meant that increases in involvement, satisfaction, and/or commitment were

Table 1. Descriptive statistics for study variables.

Variable	Description	Min	Max	Md	Mn	*SD*
Personal chars						
Gender	54% female (coded 0) 46% male (coded 1)	0	1	0	0.46	0.50
Age	Age in continuous years	24	58	45	43.94	6.82
Tenure	Tenure in years in current position	.5	36	6	6.56	5.38
Educ level	63% less than Bachelor (coded 0) 37% bachelor or higher (coded 1)	0	1	0	0.37	0.48
Supervisor	62% non-supervisor (coded 0) 38% supervisor (coded 1)	0	1	0	0.32	0.49
Prison	64% from prison 1 (coded 1) 36% from prison 2 (coded 0)	0	1	1	0.64	0.48
Work attitude variables						
Job nvol	3 item additive index, $\alpha = .74$	3	18	12	11.31	3.04
Job Sat	3 item additive index, $\alpha = .92$	3	18	11	10.75	3.59
Org Com	5 item additive index, $\alpha = .85$	5	30	18	18.10	5.07
Dependent variables						
Emotional	4 item additive index, $\alpha = .85$	4	24	13	13.11	4.28
Deperson	2 item additive index, $\alpha = .82$	2	12	4	4.91	2.26
Ineffect	4 item additive index, $\alpha = .80$	4	20	8	7.99	3.78

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, Supervisor for supervisory status, Job Invol for job involvement, Job Sat for job satisfaction, Org Com for organizational commitment, Emotional for emotional exhaustion dimension of job burnout, Deperson for depersonalization dimension of job burnout, Ineffect for feeling ineffective at work dimension of burnout, and α for Cronbach's alpha value, a measure of internal reliability. The number of participants was 322.

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. Age	.12*	1.00										
3. Tenure	.10	.38**	1.00									
4. Educ level	−.12*	−.35**	−.09	1.00								
5. Supervisor	.17**	.07	.12*	.01	1.00							
6. Prison	.57**	.18**	−.01	−.10	−.05	1.00						
7. Job Invol	−.07	.10	.01	.02	.10	−.12*	1.00					
8. Job Sat	−.16**	.11	.03	−.01	−.04	−.05	.51**	1.00				
9. Org Com	−.12*	.12*	.06	−.02	−.06	−.08	.48**	.82**	1.00			
10. Emotional	.15**	.01	.08	−.09	.11*	.03	−.34**	−.42**	−.39**	1.00		
11. Deperson	.16**	.09	.12*	−.03	−.04	.12*	−.38**	−.31**	−.29**	.46**	1.00	
12. Ineffect	.16**	−.04	.03	−.05	−.08	.20**	−.40**	−.41**	−.41**	.23**	.44**	1.00

Note. Educ Level stands for educational level, Supervisor for supervisory status, Job Invol for job involvement, Job Sat for job satisfaction, Org Com for organizational commitment, Emotional for emotional exhaustion dimension of job burnout, Deperson for depersonalization dimension of job burnout, and Ineffect for feeling ineffective at work dimension of burnout. See Table 1 for a description of the variables, how they were coded, and their descriptive statistics.
*$p \leq .05$; **$p \leq .01$.

associated with lower emotional exhaustion. Gender, tenure, and prison had positive correlations with depersonalization, which meant that men, those with higher tenure in the position, and officers at the first prison were higher on average for this burnout dimension. Involvement, satisfaction, and commitment had negative correlations, which meant that those more involved in their jobs, more satisfied with work, and more committed to the prison reported lower engagement in depersonalization. Gender and prison had positive correlations with feeling ineffective at work, which meant that men and those assigned to Prison 1 generally reported higher levels of this burnout dimension. All three work attitudes had significant negative correlations, which meant that being more involved, more satisfied, and/or committed, resulted in feeling more effective at the job.

Ordinary least squares (OLS) regression equations were computed with the three burnout dimensions as the dependent variables and personal characteristics and work attitudes as the independent variables. The results are reported in Table 3. Multicollinearity (i.e. when two or more variables share too large an overlap in variance) 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. In addition, the issues of outliers, influential cases, normality, linearity, and homoscedasticity of residuals, and independence of errors in the regression analysis were tested and were not a problem (Berry, 1993; Tabachnick & Fidell, 2019).

The R-squared value of emotional exhaustion was .24, which meant that the independent variables as a group explained approximately 24% of the observed variable of this dependent variable. None of the control variables had significant associations. Commitment also had nonsignificant effects. Involvement and satisfaction were associated with lower emotional

Table 3. Ordinary least squares multivariate regression results of job burnout dimensions as the dependent variables.

Variable	Emotional exhaustion			Depersonalization			Feeling ineffective		
Personal chars	B	β	VIF	B	β	VIF	B	β	VIF
Gender	.81	.09	1.67	.46	.10	1.67	.03	.01	1.67
Age	.01	.01	1.41	.03	.10	1.41	−.02	−.04	1.41
Tenure	.05	.06	1.21	.04	.09	1.21	.04	.07	1.21
Educ level	−.69	−.08	1.16	.12	.02	1.16	−.22	−.03	1.14
Supervisor	.75	.09	1.10	−.24	−.05	1.10	−.38	−.06	1.10
Prison	−.59	−.07	1.65	.01	.01	1.65	1.01	.15*	1.65
Work attitudes variables									
Job involvement	−.26	−.19**	1.43	−.21	−.29**	1.43	−.20	−.19**	1.57
Job satisfaction	−.26	−.22**	3.34	−.06	−.10	3.33	−.14	−.15	3.31
Org commitment	−.10	−.12	3.18	−.04	−.08	3.18	−.10	−.17*	3.16
F-value (df)	10.74 (9, 312)**			8.51 (9, 312) **			10.67 (9, 288)**		
R-squared	.24			.20			.25		

Note. B represents the unstandardized regression coefficient, β the standardized regression coefficient, and VIF for the variance inflation factor score, a measure of multicollinearity, and (df) as degrees of freedom. Chars stands for characteristics, Educ Level for educational level, Supervisor for supervisory status, Org Commitment for organizational commitment. See Table 1 for a description of the variables, how they were coded, and their descriptive statistics.
*$p \leq .05$; **$p \leq .01$.

exhaustion. The R-squared value for depersonalization was .20. None of the control variables was significant. Involvement was the only work attitude to have a significant relationship; it was negative, which meant that higher job involvement was associated with less engagement in treating others in an impersonal or callous manner. For feeling ineffective, about 25% of the variance was explained. Those in Prison 1 reported higher levels of this dimension of burnout (i.e. feeling less effective at work). Both involvement and commitment had significant relationships with feeling ineffective, which meant that these two work variables were inversely linked to feeling ineffective at work. Job satisfaction had a nonsignificant association.

Discussion and conclusion

The current study is the first to explore how the three work attitudes are related to the three burnout dimensions among Chinese prison staff, and only the second study to explore how the three work attitudes are connected to burnout among prison staff in any nation. Its major contribution is replicating the past study by Griffin et al. (2010), and it contributes to the literature by helping to answer the question of whether the associations of work attitudes with burnout among prison officers are universal or contextual, varying by the location of the prison. Based on the previous research and current findings, it appears that some of the effects of work attitudes may be universal, and others may be contextual, varying by the location of the prison.

Based on the limited past research and the current study, it appears that higher job satisfaction results in lower emotional exhaustion among prison officers, regardless of nation. Officers who are satisfied with their jobs are less likely to experience emotional burnout, including studies of Chinese correctional staff. This indicates that correctional administrators should make an effort to raise officers' level of job satisfaction. On the other hand, satisfaction was not a significant predictor of depersonalization or feeling ineffective at work among the Chinese officers in the current study. Based on past and current research, it appears that the lack of a direct effect on the burnout dimension of feeling ineffective may be universal, but the relationship between satisfaction and depersonalization may be contextual, as it is a significant predictor for officers in some nations (e.g. South Korea and Ukraine) but has no direct effect on this burnout dimension in other nations (e.g. China and the U.S.). The effects of satisfaction on depersonalization could vary by culture. Influenced by traditional Chinese culture and administration systems, offenders are viewed by society as an antisocial population. Chinese prison officers likely see their jobs as protecting their communities. In turn, holding such a job may provide Chinese correctional officers with satisfaction in protecting society. Furthermore, they may not engage in depersonalization since the goal of Chinese society is to reform offenders so that they become productive and law-abiding members of society.

Commitment, while not often studied in terms of prison burnout, does not appear to be directly associated with either emotional or depersonalization burnout for either Chinese officers (current study) or U.S. officers (Griffin et al., 2010). It could be that being committed to the organization does not buffer the demanding and negative aspects of working in a prison. While more research is needed, the current and past studies indicate that the lack of a direct connection between organizational commitment and emotional exhaustion and depersonalization may be universal, cutting across nations. Conversely, it appears that commitment may not have a direct association with feeling ineffective at work for U.S. officers (Griffin et al., 2010) but does for Chinese officers. Committed Chinese officers reported feeling more effective at

work. As noted earlier, China is a collective culture, and members are expected to put forth effort so that the group (here, the prison) is more successful. Since commitment involves being loyal to the organization and adopting its core values, it is likely this results in committed Chinese officers putting forth greater effort to meet the goals of the prison, and greater effort probably results in greater effectiveness at work. The Chinese prison officers' commitment to work makes them feel more effective because they view such work as protecting society as a whole. On the other hand, the U.S. is an individualistic culture, and commitment for U.S. officers may not result in actual additional work effort to aid the organization unless there are benefits for the individual staff. Regardless of the explanation, there is a difference between the effects of commitment on the burnout dimension of feeling ineffective among the U.S. and Chinese officers. Additional studies in various collective and individualistic cultures are needed to see if similar findings are observed, and if the provided explanation is supported.

The effects of job involvement on the three dimensions of burnout may be contextual, varying by nation. Griffin et al. (2010) reported that involvement was positively associated with emotional exhaustion and had nonsignificant effects on the two other burnout dimensions among U.S. staff. Griffin attributed this finding to work–home imbalance, which resulted in emotional exhaustion for the studied U.S. officers. Among Chinese officers, involvement had negative effects on all three burnout dimensions. Job involvement could be more important in China than in the U.S. China is a collective culture where work to protect the group is valued, such as working in a prison to protect the community. The U.S. is an individualistic culture, where the individual is important and working in a prison is not as prestigious occupation as it is in China. As such, even if high job involvement may result in an imbalance between work and home, it may not result in as many problems from family and friends in China as it may in the U.S., because Chinese family and friends understand the sacrifice needed to protect the community (i.e. the group). The current findings indicate that increasing involvement should reduce all three burnout dimensions for Chinese officers. It is important to note that the link between this work attitude and burnout has only been studied in two published studies, and additional research is needed to gain a clearer picture of how involvement and burnout dimensions are linked among correctional staff across nations.

None of the personal characteristics that were used as control variables had a significant association with either emotional exhaustion or depersonalization in the regression analysis. The prison was the only personal characteristic that had a significant effect on feeling ineffective. Those at the first prison reported a greater sense of being ineffective. Prison 1 is an older and larger prison holding more repeat male offenders than the other prison, which held more first-time offenders. Officers at the first prison might feel that changing repeat offenders is less likely than changing first-time offenders. It is important to note that personal characteristics were not strong predictors and explained little of the variance in any of the three burnout variables. This finding is consistent with past research in other nations and is good news for correctional administrators (Griffin et al., 2010, 2012; Lambert et al., 2009, 2015b; Rhineberger-Dunn & Mack, 2020). Changing personal characteristics is neither possible nor ethical. Improving the work attitudes of officers is within the control of prison administrators and is ethical.

As with many studies, the current study has limitations. This was a single study of staff at two prisons located in southern China. Additional studies at other prisons are necessary to determine whether these findings can be replicated. This additional research will aid in

helping answer the question of which effects are universal and which are contextual. The current study used a cross-sectional design. Longitudinal studies are needed to demonstrate the causal effects of work attitudes. About three-quarters of the variance of the three burnout variables were not accounted for, which means that other variables accounted for the variance. These variables need to be identified. Job involvement, job satisfaction, and depersonalization need to be measured using more items. The survey could have only a limited number of items to meet the time needs of the prisons. Future research should examine the most effective means to improve the work attitudes of prison officers. Finally, there is a need to examine the potential effects or outcomes of job burnout for Chinese prison staff, such as increased absenteeism, health problems, reduced job performance, prosocial behaviors, and life satisfaction.

In closing, officers are an important resource for prisons around the world, including those in China. In a sense, they are the "heart and soul" of prison. Working in the unique occupation of prison, a demanding job, burnout can and does occur for officers. The current study explored the association of the work attitudes of job involvement, job satisfaction, and affective organizational commitment with the burnout dimensions of emotional exhaustion, depersonalization, and feeling ineffective at work. Based on the multivariate regression results, involvement and satisfaction had significant negative effects on emotional exhaustion, but commitment did not. Only involvement had significant negative effects on depersonalization. Involvement and commitment had significant negative effects on feeling ineffective, while job satisfaction had nonsignificant effects. The results indicate that the major work attitudes are negatively linked to job burnout for the studied Chinese officers, and efforts should be undertaken to improve these work attitudes to reduce burnout. Furthermore, based on the previous research and current findings, it appears that some of the effects of work attitudes may be universal, and others may be contextual, varying by prison location. Clearly, additional research must be undertaken with staff in other prisons in other nations to see how work attitudes are linked to burnout dimensions. It is hoped that this current study will spark new research in this area.

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