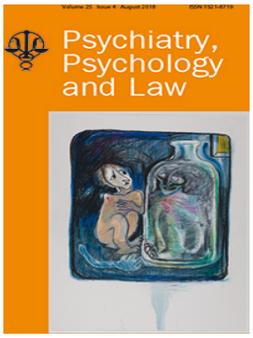

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A Happy Life: Exploring How Job Stress, Job Involvement, and Job Satisfaction Are Related to the Life Satisfaction of Chinese Prison Staff

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Working in prisons is a demanding career. While a growing number of studies have explored the predictors of job stress, job involvement, and job satisfaction, very few studies have examined how job stress, job involvement, and job satisfaction effect prison staff life satisfaction. Moreover, past studies on prison staff life satisfaction have all been conducted among those working in the United States. The current study examined how job stress, job involvement and job satisfaction were associated with satisfaction with life among surveyed staff at two Chinese prisons. Job involvement and job satisfaction had positive effects on life satisfaction, while job stress had a negative effect.

Key words: China; Chinese prison staff; life satisfaction; job stress; job involvement; job satisfaction.

Across the globe, staff are a valuable asset and often an expensive one for most prisons. Staff are responsible for a myriad of duties, responsibilities and tasks for the prison to operate. Archambeault and Archambeault (1982) noted that staff 'represent the single most important resource available to any correctional agency or institution in attempting to accomplish its mission, goals, and objectives' (p. XXII). Not only do staff affect prison operations, the work environment also affects the staff (Lambert, Hogan, & Griffin, 2007). Working in a prison is a unique occupation. 'Few other organizations are charged with the central task of supervising and securing an unwilling and potentially violent population' (Armstrong & Griffin, 2004, p. 577). There is a growing body of research on how the work environment affects prison staff. While these studies have added much to the literature, more areas needed to be researched. One overlooked area is how workplace variables are associated with the life satisfaction. Life satisfaction is the degree that an individual is satisfied with his/her overall life (Erdogan, Bauer, Truxillo, & Mansfield, 2012; Hart, 1999). Life satisfaction is an important social goal, and, as such, identifying the forces that help shape it is important. Work is a salient domain that affects life satisfaction (Erdogan et al., 2012). Studying the effects of workplace variables on life satisfaction is an important area that needs to be explored for both theoretical and practical reasons.

In occupations other than corrections, life satisfaction has been associated with mental health, physical health and longer life

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expectancy (Chida & Steptoe, 2008; Donovan & Halpern, 2002; Strine, Chapman, Balluz, Moriarity, & Mokdad, 2008). Life satisfaction has also been linked with better social interactions, open-mindedness, creativity and prosocial behavior (Duckworth, Quinn, & Seligman, 2009; Erdogan et al., 2012; Greguras & Diefendorff, 2010; Lyubomirsky, King, & Diener, 2005). Donovan and Halpern (2002) pointed out that 'when people are happier, they tend to be more open-minded and creative in their thinking. In contrast, people who are unhappy, stressed or dissatisfied tend to exhibit "tunnel vision" and rigid thinking' (p. 32). Satisfaction with life can reduce workplace absenteeism, desire to retire early, and turnover intent/turnover (Erdogan et al., 2012; Murphy, Duxbury, & Higgins, 2006; Von Bonsdorff, Huuhtanen, Tuomi, & Seitsamo, 2010). Furthermore, Jones (2006) reported that life satisfaction is a stronger predictor of job performance than job satisfaction. Even among United States prison staff, the limited research to date indicates that life satisfaction has positive benefits, including increased engagement in organizational citizenship behaviors (i.e. going up and beyond what is expected at work) and lower turnover intent (Lambert, 2010; Lambert, Hogan, & Altheimer, 2010; Lambert, Hogan, Paoline, & Baker, 2005).

The limited research on correctional staff life satisfaction has mainly been conducted among United States prisons. No published studies in Western journals could be found which focused on non-Western prison staff, including prison personnel in the People's Republic of China (henceforth, China). This exploratory study was undertaken to fill this void by examining how the workplace variables of job stress, job involvement and job satisfaction were associated with staff at two Chinese prisons in the province of Guangdong in southern China. China is the most populous nation in the world and a major nation on the world stage (World Factbook, 2017). There is a small but growing body of literature on life satisfaction and happiness among individuals in China, but there needs to be far more (Z. Chen & Davey, 2008). Unlike Western nations where individualism is prized, China is a collective culture (Cheung & Leung, 2004), and, as such, the results of research conducted among Western prison staff may or may not be similar to those found among Chinese prison staff. There is a need to explore how workplace variables are associated with Chinese correctional staff satisfaction with life. Furthermore, China is also modernizing, which could affect how workplace variables are related to life stratification (Cheung & Leung, 2004). Moreover, there has been little, if any research, on how workplace variables are associated with life satisfaction of Chinese prison personnel. Of the world's approximately 10.5 million prisoners, over one third are in either a United States or Chinese prison (World Prison Brief, 2016a, 2016b).

The current study has possible theoretical and practical benefits. In theory, this exploratory study examines whether the finding that workplace variables influence life satisfaction among United States correctional staff would also be observed among Chinese prison staff. Conducting international research allows scholars to determine whether the effects of variables are universal (i.e. similar across cultures) or contextual (or varying between cultures). Additionally, the current study, like other internationally focused studies, can also help narrow the gaps between nations and build bridges so that information flows more freely (Cao & Cullen, 2001). Jowell (1998) pointed out that 'the importance and utility to 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). In terms of practical significance, this study can provide prison administrators, in both China and the United States, with information concerning information about how workplace variables of job

stress, job involvement and job satisfaction are related to life satisfaction among staff.

Literature review

Life satisfaction

Tatarkiewicz (1976) contended that 'Satisfaction is only happiness when it is complete satisfaction. Next, even complete satisfaction does not necessarily add up to happiness. Satisfaction with particular things, however important – health or an untroubled conscience, success or position – falls short of happiness if it is not accompanied by other satisfactions. It is then only partial satisfaction; happiness requires total satisfaction, that is *satisfaction with life as a whole'* (p. 8). Most people desire satisfaction with life as a whole, and this is part of the larger concept of subjective well-being (Erdogan et al., 2012). Subjective well-being is a growing focus in positive psychology, and life satisfaction is a salient part of subjective well-being (Diener, Suh, Elucas, & Smith, 1999; Erdogan et al., 2012). As noted by Diener (1984), the three parts of subjective well-being are positive affect, negative affect and life satisfaction. Diener, Emmons, Larsen, and Griffin (1985) indicated that positive and negative affect 'refer to the affective, emotional aspects' of subjective well-being, and life satisfaction refers to the 'cognitive-judgmental aspects' of subjective well-being (p. 71). Simply, happiness is based on the positive and negative effects in life experienced by a person (Diener, 1984). Life satisfaction is an integral part of happiness. Basically, life satisfaction is an important part of overall quality of life (Diener et al., 1999). As pointed out by Pavot and Diener (2008), 'among the constituent components of subjective well-being, life satisfaction has been identified as a distinct construct representing a cognitive and global evaluation of the quality of one's life as a whole' (p. 137).

According to Zhao, Qu, and Ghiselli (2011), 'life satisfaction is a construct measuring overall well-being resulting from an evaluation of life in general' (p. 48). While it is shaped by different life domains, life satisfaction is a global judgment by a person on how satisfied he or she is with his or her overall life rather than specific facets of it (Diener et al., 1985; Diener, Inglehart, & Tay, 2013; Lambert, Kim, Kelley, & Hogan, 2013; Rice, Near, & Hunt, 1980; Shin & Johnson, 1978). As noted by Diener et al. (1985), judgements of satisfaction are dependent upon a comparison of one's circumstances with what is thought to be an appropriate standard, and 'it is important to point out that the judgment of how satisfied people are with their present state of affairs is based upon a comparison with a standard which each individual sets for him or herself; it is not externally imposed' (p. 71). Simply, life satisfaction is a cognitive appraisal of the overall degree of satisfaction one has with one's life (Diener, 1984; Erdogan et al., 2012).

While life satisfaction is part of the broader concept of subjective well-being, it is a distinct concept that is often studied on its own (Pavot & Diener, 2008). Life satisfaction is a broad construct that spans multiple domains. Life satisfaction is often viewed as a result of satisfaction with different aspects of life, such as health, social, leisure, family, and work (Diener et al., 2013; Dixon & Sagas, 2007; Erdogan et al., 2012; Rice, Frone, & McFarlin, 1992). Additionally, life satisfaction can be affected by a wide array of variables, including personal characteristics (e.g. gender, age, educational level, marital status, etc.), social relationships and conditions (e.g. social support, marriage, religion, crime, etc.) and workplace factors (Cheung & Leung, 2004; Judge & Watanabe, 1993; Lambert, Hogan, Paoline, & Baker, 2005). Work is a very important domain for most adults (Erdogan et al., 2012; Lambert, Hogan, Paoline, & Clarke, 2005; Rice et al., 1980). As much of one's adult life is spent at work, workplace factors likely influence one's life satisfaction (Erdogan et al., 2012; Rice, 1984).

There are three explanations on the type of relationship between work and life

satisfaction: the spillover model, the compensation model and the segmentation model. Under the spillover model, workplace experiences can spill over from the work domain and affect other domains, including overall life satisfaction (Erdogan et al., 2012; Rice et al., 1980; Zhao et al., 2011). The compensation model contends that job satisfaction and life satisfaction are negatively associated with one another because when one satisfaction domain is low, a person seeks to compensate by raising satisfaction in another domain (Heller, Judge, & Watson, 2002; Rice et al., 1980; Tait, Padgettm, & Baldwin, 1989). The segmentation model, however, holds that the work domain is separated from other life domains, and, as such, workplace variables have no association with overall satisfaction with life (Bamundo & Kopelman, 1980; Heller et al., 2002; Rice et al., 1980). Of the three models, most of the research supports the spillover model (Erdogan et al., 2012; Heller et al., 2002). Workplace experiences can spill over and affect life satisfaction in different nations, including China (Tu & Lu, 2016). Work can meet needs, such as meeting self-esteem, which in turn can raise life satisfaction. Work can also provide mental challenges and growth, resulting, in turn, in greater satisfaction with life (Erdogan et al., 2012). Job involvement and job satisfaction can make work pleasant and enjoyable and, in the end raise positive psychological feelings such as self-esteem. These are not the only workplace variables that can affect life satisfaction.

The spillover model has mainly in the past focused on the relationship between job satisfaction and life satisfaction, but it can be applied to other workplace variables. For example, there has been research on how workplace stressors, such as work–family conflict, affect life satisfaction using the spillover model (Demerouti, Bakker, & Schaufeli, 2005; Lambert, Hogan, Paoline, & Baker, 2005). It has been claimed that job satisfaction alone does not fully capture the importance of the work domain on helping to shape life satisfaction (Erdogan et al., 2012; Lambert, Hogan, Elechi et al., 2009; Lambert, Hogan, Paoline, & Baker, 2005). For example, Erdogan et al. (2012) contended that the 'broader construct of quality of work life, consisting of job satisfaction, career satisfaction, and perceived stress at work, may be a better indicator of attitudes regarding the work domain' (p. 1061). Moreover, Erdogan et al. (2012) noted that 'life satisfaction depends on the presence of positive conditions as well as the absence of negatives' (p. 1057). Job stress is a negative condition. Job stress in theory can reduce satisfaction with life. Based upon the work done to date, job stress, job involvement and job satisfaction should have significant relationships with life satisfaction among Chinese prison staff.

Job stress

Job stress is generally defined as feelings of work-related hardness, tension, anxiety, frustration, worry, emotional exhaustion and/or distress (Grossi, Keil, & Vito, 1996; Lambert, Hogan, Paoline, & Baker, 2005; Triplett, Mullings, & Scarborough, 1996). Job stress results from negative work stressors (Matteson & Ivancevich, 1987). Over time, job stress results in psychological strain, which has been linked to increased health problems, reduced mental health, elevated risk of suicide, poorer marital relationships, increased chance of divorce, reduced job engagement, increased substance use and heightened turnover intent among United States prison staff (Cheek, 1984; Cheek & Howard, 1984; Dowden & Tellier, 2004; Lambert, Edwards, Camp, & Saylor, 2005; Slate & Vogel, 1997; Stack & Tsoudis, 1997). United States correctional officers have a life expectancy of about 60 years, which is 15 years shorter than the United States average of 75, and prolonged job stress is viewed as one of the major reasons for this shortened life span (Tracy, 2004; Woodruff, 1993). Simply, job distress causes psychological strain

for people, increasing the likelihood of various negative outcomes.

The strain and discord caused by prolonged job stress is likely to result in decreased life satisfaction for correctional staff. There is support for this hypothesis among United States prison staff. In a study of United States maximum security staff, there was a significant negative association between job stress and life satisfaction (Lambert, 2008; Lambert, Hogan, Paoline, & Baker, 2005). On the other hand, among staff working at a private United States Midwestern prison, job stress had a nonsignificant association with life satisfaction (Lambert, Hogan, Elechi et al., 2009). While the limited United States correctional staff results are mixed, we hypothesized that job stress would be negatively related to life satisfaction for Chinese prison staff. Psychological strain from work is likely to detract from the overall quality of life for a person.

Job involvement

Lawler and Hall (1970) defined job involvement as the 'psychological identification with one's work' and 'the degree to which the job situation is central to the person and his identity' (pp. 310–311). Kanungo (1982a, 1982b) solidified the definition of job involvement as a cognitive identification with the job. Basically, job involvement is the degree of importance that a person gives the job in his/her life (Brown & Leigh, 1996; Kanungo, 1982a, 1982b; Paullay, Alliger, & Stone-Romero, 1994). As pointed out by DeCarufel and Schaann, (1990), 'An individual with a high degree of job involvement would place the job at the center of his/her life's interests. The well-known phrase "I live, eat, and breathe my job" would describe someone whose job involvement is very high' (p. 86). The opposite of job involvement is job alienation (i.e. feeling of being detached from the job that the job is unimportant in one's life; Kanungo, 1982a). Feeling a psychological connection with the job is likely to spill over and result in other positive outcomes.

Hackman and Lawler (1971) theorized that job involvement is a salient factor in shaping the motivation of individual workers. C.-C. Chen and Chiu (2009) postulated that employees with 'high job involvement are more independent and self-confident – they not only conduct their work in accordance with the job duties required by the company but are also more likely to do their work in accordance with the employees' perception of their own performance' (p. 478). In a study of United States Midwestern police officers, job involvement was significantly and negatively correlated with turnover intentions (McElroy, Morrow, & Wardlow, 1999). As compared to job stress, there has been far less research on the effects of job involvement among correctional staff. The limited research that exists, however, suggests that job involvement has some positive benefits. In a study on turnover intent among staff at a United States Southern jail, job involvement was observed to have a negative relationship with turnover intent (Lambert & Paoline, 2010). Among United States private prison staff, job involvement was reported to have a negative association with absenteeism and turnover intent (Lambert, Hogan, & Cheeseman Dial, 2011). Among United States public prison staff, job involvement was found to have a positive association with support for treatment of inmates (Lambert, Hogan, Barton, & Elechi, 2009). Despite the positive outcomes, job involvement was reported to have no significant association with life satisfaction among United States prison staff at a government facility and a small negative association among staff at a private facility (Lambert, 2008; Lambert, Hogan, Elechi et al., 2009). Based on the limited research among United States staff, we hypothesized that job involvement would have a nonsignificant effect on life satisfaction among Chinese prison staff.

Job satisfaction

Locke (1976) defined job satisfaction as 'a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences' (p. 1300). According to Brief (1998), job satisfaction is 'an internal state that is expressed by affectively and/or cognitively evaluating an experienced job with some degree of favor or disfavor' (p. 86). Simply, job satisfaction is the degree that a person likes or dislikes his/her job (Spector, 1996). As work is a salient domain for many adults, liking or disliking the job likely spills over, affecting overall satisfaction with life. There is a good deal of empirical support that job satisfaction has a positive association with life satisfaction (Erdogan et al., 2012; Judge & Watanabe, 1993; Rice et al., 1980).

In the majority of research on occupations other than corrections, job satisfaction is treated as a predictor of life satisfaction (Erdogan et al., 2012). In a meta-analyses, a significant positive association was found between job satisfaction and life satisfaction (Bowling, Eschleman, & Wang, 2010). Research has found a positive connection between job satisfaction and life satisfaction among both United States public and private prison staff (Lambert, Hogan, Paoline, & Baker, 2005; Lambert, Hogan, Elechi et al., 2009). Moreover, in both United States prison staff studies, job satisfaction had the largest sized effect of all the significant variables. We hypothesized that job satisfaction would have a significant effect on Chinese prison staff life satisfaction. Based on the spillover theory, feeling positive about work is likely to increase overall positive views on life in general.

Brief overview of Chinese prisons

Chinese prisons are under control of the Bureau of Prison Administration in the Ministry of Justice (Hill, 2006). In 2016, China had approximately 1.65 million inmates, of which approximately 107,000 were female, and 13,000 were juveniles, an incarceration rate of 118 per 100,000 citizens (World Prison Brief, 2016a). About 300,000 staff work in China's approximately 700 prisons, all of which are government run, with most being run by provincial governments (Shao, 2014). In the United States, approximately 430,000 staff work in almost 1,700 correctional institutions holding about 1.47 million inmates, of which approximately 137,000 were female, and 6,600 were juveniles, an incarceration rate of 666 per 100,000 citizens (University of Albany, 2016; World Prison Brief, 2016b). China's inmate to staff ratio of 5.7 to 1 is slightly higher than that found in the United States (5.1 to 1), England (4 to 1), Japan (3.3 to 1) and Germany (3 to 1) (Hu et al., 2015). There are no private prisons in China (Wu, 2003). Unlike the United States, which often classifies prisons based on security levels, Chinese prisons do not have a set security level but instead hold inmates with different custody levels and sentence length (Hill, 2006; Wu, 2003). Like United States prisons, contemporary Chinese prisons emphasize the integration of punishment, incapacitation, treatment, education and labor (Hill, 2006).

Chinese prison staff are government workers and earn a decent income when compared to the overall Chinese working population (Wang & Kong, 2006). As in the United States, working in a prison has lower social prestige than other occupations (Liu, Hu, Wang, Sui, & Ma, 2013; Wang & Kong, 2006; Xing, 2014). Also like their United States counterparts, Chinese prison staff have a more challenging job than many other occupations. Prison staff enforce rules and supervise inmates being held against their will. While most Chinese government employees work eight hours a day, prison staff work 12-hour shifts and may be required to work overtime or work on days off if the need arises, such as emergencies (Wang & Kong, 2006; Xing, 2014). As found in many United States prisons, Chinese inmates are generally less educated, are more antisocial, and have higher rates of mental health and drug problems than the general population (Jiang,

Lambert, Liu, & Zhang, 2017). Chinese prisons use a military-like hierarchical ranking system for staff; however, unlike United States prisons, there is not a clear division of labor by prison in Chinese prisons, such as custody, educational, vocational, treatment and support. Hill (2006) pointed out that 'in China, there is no distinction between custodial staff and other prison staff' (p. 24). All Chinese prison staff wear a uniform, regardless of job assignment; in United States prisons, many noncustody staff do not wear security uniforms (Hill, 2006; Jiang et al., 2017). The job duties of Chinese prison staff are typically decided and assigned at an individual level rather than by a general position and tend to be more multifaceted than those found in many United States prisons (Hill, 2006; Hu et al., 2015; Wu, 2003). Chinese staff are expected to be enforcers, educators/teachers and supervisors of inmate work crews (Jiang et al., 2017; Jin, 1997; Wu, 2003).

While there differences between Chinese and United States prisons, there are also many similarities. What is not known is whether job stress, job involvement and job satisfaction have similar spillover effects on Chinese prison staff life satisfaction as observed among United States correctional staff. This exploratory study was undertaken to examine this issue using survey data from staff at two Chinese prisons in the city of Guangzhou (population 14 million) in southern China (World Population Review, 2016).

Participants

After obtaining human subject approval, staff were surveyed at two prisons located in Guangdong providence in southern China. The first prison housed about 1,500 inmates and employed 280 staff. The second prison housed about 700 inmates and employed 160 staff. The two prisons had similar structure, including seven offices, one service center, and multiple districts. The seven offices are administration, prison management, parole and discipline, budget and accounting, personnel, audit, and labor and production. A district is a subunit of the prison that consists of a certain number of inmates (i.e. similar to housing units in United States prisons). Unlike United States prisons, which generally hold inmates with similar security classification, the two Chinese prisons held inmates classified at different security levels, including maximum, medium and minimum. The two prisons were considered typical in China, holding adult offenders convicted of various type of offenses, mostly violent and property offenses, such as robbery or fraud.

In order to compare findings from this current study with those found in the United States, this study adopted a United States survey instrument as its first questionnaire draft. The survey was translated from English to Chinese and retranslated back into English by bilingual scholars who earned doctoral degrees in the United States. Next, the survey was pilot tested with several prison staff to discover whether there were any issues of understanding and to obtain feedback. The final version of the questionnaire was administered to all available staff in the prisons, except for top administrators ($N = 440$). For both prisons, the staff worked in different sections of the prison as teams. Surveys were distributed during the team meetings. The staff were informed of the purpose of the study, that participation was voluntary, not to put their names or identifying marks on the survey, that they could stop at any time, that they could skip any question, and that all responses would be anonymous. The surveys were returned in unmarked envelopes. A total of 322 usable surveys were returned – a response rate of 70%. Both prisons had similar response rates. For the overall group of staff who submitted a completed survey, the mean age was 43.94 years, with a standard deviation of 6.82. The mean tenure in the current position was 6.56 years, with a standard deviation in 5.38. Approximately 54% of the participants were women. About 37%

indicated that they had earned a Bachelor's or higher college degree. About 38% indicated that they were a supervisor of other prison staff, and 87% indicated that they were currently married. Among the participants, 64% worked at the first prison, and 36% worked at the second. According to the human resource office, the participants appeared to be representative to the overall staff population of the two prisons based on personal characteristics.

Variables

Dependent variable

Life satisfaction, the dependent variable, was measured using three items adapted from Diener et al. (1985) and Quinn and Staines (1979). The items and the response options are presented in the Appendix. The items had a Cronbach's alpha value (a measure for internal reliability) of .93. Additionally, exploratory factor analysis was conducted, and the life satisfaction items loaded on a single factor, indicating unidimensionality and convergent validity (Kim & Mueller, 1978). The responses to these items were summed together to form an additive index measuring life satisfaction.

Independent variables

Job stress was measured using four items from Cullen, Link, Wolfe, and Frank (1985) and had a Cronbach's alpha of .86. An exploratory factor analysis was conducted, and all the job stress items loaded on a single factor. The responses to the job stress items were summed together to form an additive index. An additive index of job involvement was formed by summing three items based on Kanungo (1982b). The Cronbach's alpha, a measure for internal reliability, for this index was .74. In a factor analysis, all the job involvement items loaded onto a single factor. Job satisfaction was measured using three items adopted from Brayfield and Rothe (1951), and these items had a Cronbach's alpha value of .92. An exploratory factor analysis was conducted, and all the job satisfaction items loaded on a single factor. The responses were summed together to form an additive index measuring job satisfaction. The items and response options for job stress, job involvement and job satisfaction are included in the Appendix. As they have been included in past life satisfaction studies, the personal characteristics of age, tenure, gender, educational level, supervisory status and marital status were included. Age was measured in continuous years. Tenure in the current position was measured as continuous years. Gender was measured as a dichotomous variable, where women were coded as 0 and men as 1. Educational level, also a dichotomous variable, was coded as not having a college Bachelor's degree as 0 and having a Bachelor's degree or higher as 1. Supervisory status was a dichotomous variable, where being line staff (i.e. not supervising other staff) was coded as 0, and supervising other staff was coded as 1. Marital status was measured as 0 = not currently married and 1 = currently married. Finally, a dichotomous variable indicating which prison a participant worked at was included in the analyses.

Results

The descriptive statistics for the variables used in the study are reported in Table 1. There appeared to be significant variation in the dependent and independent variables (i.e. none were constants). Tests were conducted for normality, and no issues were observed. For the index variables, the Cronbach alpha values were .74 or higher, a level that is viewed as good. As previously indicated, factor analysis was conducted, and the items for each index loaded on a single factor as predicted.

A correlation matrix for the study variables is presented in Table 2. Gender, job stress, job involvement and job satisfaction all had statistically significant correlations

Table 1. Descriptive statistics for study variables.

Variable	Description	Min	Max	*Md*	*M*	*SD*
Personal characteristics						
Age	Age in continuous years	24	58	45	43.94	6.82
Tenure	Tenure in years in current position	0.5	36	6	6.56	5.38
Gender	54% female (coded 0) 46% male (coded 1)	0	1	0	0.46	0.50
Educational level	63% less than Bachelor (coded 0) 37% Bachelor or higher (coded 1)	0	1	0	0.37	0.48
Supervisor	62% nonsupervisor (coded 0) 38% supervisor (coded 1)	0	1	0	0.32	0.49
Marital status	13% not married (coded 0) 87% married (coded 1)	0	1	1	0.87	0.33
Prison	64% from Prison 1 (coded 1) 36% from Prison 2 (coded 0)	0	1	1	0.64	0.48
Workplace factors						
Job stress	4-item additive index $\alpha = .86$	4	24	14	14.39	4.50
Job involvement	3-item additive index, $\alpha = .74$	3	18	12	11.31	3.04
Job satisfaction	3-item additive index, $\alpha = .92$	3	18	11	10.75	3.59
Dependent variables						
Life satisfaction	3-item additive index, $\alpha = .93$	3	18	12	11.78	3.19

Note: The number of participants was 322. Min = minimum value; Max = maximum value; *Md* = median value; *M* = mean value; *SD* = standard deviation value; Supervisor = supervisory status; α = Cronbach's alpha value, a measure of internal reliability.

with the life satisfaction index. In general, male prison staff reported lower satisfaction with their lives than their female counterparts. Job stress had a negative correlation, which means increases in reported stress from work were associated with decreases in reported life satisfaction. Based on positive correlations, increases in the job involvement and job satisfaction measures tended to result in increases in life satisfaction. Age, tenure, educational level, supervisory status, marital status and prison all had

Table 2. Correlations of study variables.

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1. Age	1.00										
2. Tenure	.38**	1.00									
3. Gender	.12*	.10	1.00								
4. Educational level	−.35**	−.09	−.12*	1.00							
5. Supervisor	.07	.12*	.17**	.01	1.00						
6. Marital status	.24**	.01	.18**	−.12*	.09	1.00					
7. Prison	.18**	−.01	.57**	−.10	−.05	.05	1.00				
8. Job stress	−.05	−.01	.14*	−.05	.16**	.12*	.05	1.00			
9. Job involvement	.10	.01	−.07	.02	.10	−.03	−.12*	−.32**	1.00		
10. Job satisfaction	.11	.03	−.16**	−.01	−.04	−.06	−.05	−.49**	.51**	1.00	
11. Life satisfaction	.11	.05	−.14*	−.01	−.01	−.08	−.08	−.38**	.45**	.60**	1.00

Note: See Table 1 for a description of the variables, how they were coded, and their descriptive statistics. Supervisor = supervisory status.
*$p \leq .05$; **$p \leq .01$.

Table 3. Multivariate regression results with life satisfaction as the dependent variable.

Independent variables	*B*	*SE*	*β*	VIF
Personal characteristics				
Age	0.02	0.03	0.05	1.49
Tenure	0.01	0.03	0.02	1.23
Gender	−0.18	0.37	−0.03	1.71
Educational level	−0.003	0.31	0.00	1.16
Supervisory status	0.11	0.31	0.02	1.12
Marital status	−0.39	0.45	−0.04	1.12
Prison	−0.17	0.37	−0.03	1.65
Workplace factors				
Job stress	−0.07	0.04	−0.10*	1.38
Job involvement	0.19	0.06	0.18**	1.43
Job satisfaction	0.40	0.05	0.45**	1.38
F (*df*)		20.77 (10, 311)**		
R^2		.40		

Note: Ordinary least squares (OLS) regression was used for the analysis. Please see Table 1 for more information on the variables and their descriptive statistics. Listwise deletion was used for missing cases. *B* = unstandardized regression coefficient; *SE* = standard error; *β* = standardized regression coefficient; VIF = variance inflation factor score; *df* = degrees of freedom.
*$p \leq .05$; **$p \leq .01$.

nonsignificant correlations with the dependent variable.

An ordinary least squares (OLS) regression equation was estimated with life satisfaction as the dependent variable. The results are reported in Table 3. Multicollinearity was not a problem. Multicollinearity (i.e. when two or more variables share too large an overlap in variance) is seen as a problem when variance inflation factor (VIF) scores exceed 6 (Tabachnick & Fidell, 2013). Based on the VIF scores reported in Table 3, none were above 2. In addition, 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, 2013).

Based on the R^2 statistic, the independent variables explained about 40% of the observed variance in the life satisfaction index. None of the personal characteristics or the prison variable had a statistically significant effect on life satisfaction in the multivariate analysis. The workplace variables of job stress, job involvement and job satisfaction each had a significant effect on the dependent variable. Increases in job stress were associated with lower satisfaction with life. Conversely, increases in job involvement and/or job satisfaction were linked to higher life satisfaction among Chinese prison staff. Based on the standardized regression coefficients, the size of the effects can be ranked. Job satisfaction had the greatest sized effect, followed by job involvement, and then job stress.

Discussion and conclusion

Findings from this exploratory study support the spillover theory. The workplace variables of job stress, job involvement and job satisfaction were significant predictors of Chinese prison staff life satisfaction. Similar to United States correctional staff, job stress reduced the level of overall satisfaction with life among Chinese prison staff (Lambert, 2008; Lambert, Hogan, Paoline, & Baker, 2005). The current findings add to the contention that workplace variables spill over, affecting the quality of life across different nations.

Specifically, the workplace variables of job stress, job involvement and job satisfaction are associated with overall life satisfaction of prison staff, at least those in China and the United States. Job stress, job involvement and job satisfaction are major workplace variables. As previously indicated, they are associated with a wide array of salient outcomes for prisons staff, prison organizations and societies, as found in research among Western staff. The current study suggests that they play a role in shaping the life satisfaction of Chinese staff. What is not known is whether the current findings would be found in other nations. Far more research among prison staff in other nations is needed to determine whether these workplace variables have significant effects, before it can be declared that these variables have universal spillover effects among prison staff.

Job stress had a negative association with Chinese prison staff life satisfaction. Feeling psychologically strained from the job is not likely to end at the end of a work shift. This negative psychological state follows staff at home. For many adults, work and home life are intertwined. Negative experiences in one domain are likely to spill over into the other, detracting from the quality of life. Simply, job stress wears on staff, resulting in lower quality of life. Correctional administrators need to institute changes to help correctional staff deal more effectively with job stress and to reduce the level of stress experienced from the job. The literature suggests that improving the level of social support, particularly from supervisors and administrators, can help staff deal with stress and well as reducing its effects (Dollard & Winefield, 1998; Lambert, Minor, Wells, & Hogan, 2016). In addition, reducing role stress, such as role conflict, role ambiguity and role overload can reduce the occurrence of stress from the job among prison staff (Lambert, Hogan, Paoline, & Clarke, 2005; Triplett et al., 1996). Furthermore, increasing workplace resource variables, such as instrumental communication, input into decision-making and job variety, can help buffer staff from the effects of job stress or reduce its effects (Dowden & Tellier, 2004; Lambert & Hogan, 2010; Lambert & Paoline, 2008).

Contrary to our hypothesis, job involvement had a positive effect among Chinese prison staff. As noted previously, in the limited research to date, job involvement was observed to have a nonsignificant association with life satisfaction among United States prison staff at a state-run prison and a negative association among United States private prison staff (Lambert, 2008; Lambert, Hogan, Elechi et al., 2009). There are several explanations. One is that the current results were due to random chance. Another explanation is that the relationship between job involvement and life satisfaction is contextual and varies by culture and even by prison. China is a collectivist culture, and the United States is more of an individualistic culture (Schilpzand, Martins, Kirkman, Lowe, & Chen, 2013). In a collective culture, protecting the group is important (Earley, 1993; Jiang, Lambert, & Wang, 2007). Working in a prison provides security for the community. In a sense, it is working for the safety of others. Having a connection to the prison job may give Chinese staff a sense of pride, which spills over, resulting in greater satisfaction with life. In addition, beyond the positive effect derived from attributes of the job, levels of involvement in general may contribute to meaning of work for Chinese prison officers. Psychological studies on work and life satisfaction assumed that degrees of job involvement function as a moderator between job satisfaction and life satisfaction (Moser & Schuler, 2004; Rice et al., 1980; Steiner & Truxillo, 1989; Tait et al., 1989). While the moderating effect was found in testing the segmentation model, it resulted in elaboration of the spillover model (Moser & Schuler, 2004; Steiner & Truxillo, 1989). The more people value and devote time to their work, the stronger job satisfaction is related to life satisfaction. This provides the rationale for spillover effects of job involvement varied by

workplace, culture or nation. The positive association between job involvement and life satisfaction observed in this study may be because Chinese prison staff value their work more than United States prison staff. Finally, job involvement may affect life satisfaction via other factors such as organizational committee and job satisfaction. Jiang et al. (2018) suggested that job involvement is highly and positively correlated with organizational commitment and job satisfaction among Chinese community correctional staff, which may then lead to higher life satisfaction. These, of course, are untested explanations. The association between job involvement and life satisfaction among both Chinese and United States prison staff warrants further research. If the current results are replicated, correctional administrators need to increase job involvement to ultimately raise life satisfaction. Based on United States studies, the occurrence of role conflict should be reduced, supervisory and administrative support should be raised, and there should be greater input into decision-making and job variety (Lambert, Hogan, Cheeseman Dial, & Barton-Bellesa, 2013; Lambert et al., 2016; Lambert & Paoline, 2012).

As hypothesized, job satisfaction had a significant positive effect on life satisfaction, and was the strongest predictor, as was found among United States staff at two different prisons (Lambert, Hogan, Paoline, & Baker, 2005; Lambert, Hogan, Elechi et al., 2009). When Chinese prison staff are satisfied with their jobs, they are happier with their overall lives. The research to date, including this study, indicates that job satisfaction is a highly salient workplace variable in shaping life satisfaction of prison staff, which has been found in other occupational fields (Bowling et al., 2010; Erdogan et al., 2012; Judge & Watanabe, 1993). As work is a major domain for many people, it makes sense that being satisfied at work would result in greater overall satisfaction with life. Terkel (1974) noted that work for many individuals provides 'daily meaning as well as daily bread' (p. XI). As such, efforts are needed to improve the job satisfaction of staff. Research indicates that reducing role conflict, role ambiguity and role overload should raise job satisfaction (Hepburn & Knepper, 1993; Lambert, Hogan, Paoline, & Clarke, 2005; Triplett et al., 1996). Increasing job variety, job autonomy, quality of supervision, instrumental communication and input into decision-making should result in higher job satisfaction (Griffin, 2001; Jiang et al., 2017; Lambert & Hogan, 2010; Lambert & Paoline, 2008; Stohr, Lovrich, Monke, & Zupan, 1994).

None of the personal characteristics had a significant effect on life satisfaction in the multivariate analysis. This is good news for correctional administrators interested in raising the life satisfaction. Although previous studies suggested that administrators should consider the influence of the non-work-related factors on employees' work attitudes and outcomes (Cohen, 1993; Georgellis, Lange, & Tabvuma, 2012; Rain, Lane, & Steiner, 1991; Rice et al., 1980), individual variations in life trajectories such as age, marriage and work roles make managerial efforts for employees' life satisfaction complicated and challenging. The insignificant effects of personal characteristics, therefore, indicated that lowering the level of job stress and raising job involvement and job satisfaction is more within administrative control than changing the staff personal characteristics in Chinese prisons.

While there is support for job stress, job involvement and job satisfaction in helping to shape the life of prison staff, there is still much that is unknown. This was a single exploratory study, which had limitations. It was based on survey responses of staff at two Southern Chinese prisons. The findings need to be replicated at other Chinese prisons. It could that the results are situational and contextual and could vary in prisons in other providences in China. Like the United States, China is a large country with different regions that differ somewhat in their cultures and

values (Shao, 2014). Another limitation is the cross-sectional design used. The directions of the relationships that we proposed are grounded in the literature. Nevertheless, without longitudinal data, it was not empirically possible to show the causal direction of the associations observed. For example, job satisfaction and life satisfaction may be reciprocally related to one another over time (Judge & Watanabe, 1993). Furthermore, future research should use a more detailed measure of life satisfaction. A three-item measure was used in the current study. Likewise, future research may wish to measure job stress, job involvement and job satisfaction with additional items. In addition, the squared value was .40, which means that about 60% of the observed variance in the life satisfaction measure was accounted for by other variables.

Additional research is needed to explore what other variables influence the life satisfaction of Chinese prison staff. In addition to other workplace variables, future research should examine how other aspects of life, such as health, social relationships and financial resources, contribute to the overall level of satisfaction with life. It is important to note that in order to gain a broader understanding of the factors that shape the prison staff life satisfaction, a wide array of variables need to be explored. Further, there is a need to explore the consequences of life satisfaction with work outcomes, such as work performance, organizational citizenship behaviors (i.e. going beyond what is expected at work), burnout, absenteeism, turnover intent, voluntary turnover, and relations with coworkers and inmates. It is only with this additional research that a more complete understanding of correctional staff life satisfaction will be gained. Future studies will provide a more complete understanding of the mechanisms and benefits of enhancing life satisfaction among prison staff. In addition to exploring the link between job stress, job involvement and job satisfaction with Chinese prison staff life satisfaction, another of our goals is to spark future studies. There is also a need to research life satisfaction among prison staff in other nations. Finally, the current study took the bottom-up approach to life satisfaction, where it is theorized that different life domains, such as work, help shape global life satisfaction (Erdogan et al., 2012; Pavot & Diener, 2008). There is also the top-down approach to life satisfaction, which contends that stable traits, such as personality, shape life satisfaction (Erdogan et al., 2012). As such, future studies on Chinese prison staff should explore whether and how personality is linked to life satisfaction (Heller et al., 2002). Heller, Watson, and Illies (2004) in their meta-analysis reported that job satisfaction mediated the effects of personality on life satisfaction. Clearly, there is a need for far more research on prison staff life satisfaction.

In closing, there has been a movement in the past several decades to make workplaces more human oriented, which includes being concerned about workers' life satisfaction (Erdogan et al., 2012). Staff are an important resource for prisons, including those in China. In a sense, staff are the 'heart and soul' of any correctional facility across the globe. The life satisfaction of staff is vital not only to the individual employees, but to the prison. Exploring how workplace factors affect life satisfaction is important. Donovan and Halpern (2002) pointed out that 'a greater knowledge of the causes of life satisfaction holds up a mirror in which we can see ourselves better' (p. 41). Erdogan et al. (2012) contend that 'life satisfaction is an important outcome to consider alongside other key management variables such as job attitudes and behaviors. In addition, given that life satisfaction is related to important outcomes, comprehensive research should consider life satisfaction as an essential factor in organizational research' (p. 1070). The results of the current study support the spillover theory among Chinese prison staff. Specifically, job stress had a negative effect on satisfaction with life, and job involvement and job satisfaction had positive effects. Furthermore, as

found among United States staff, job satisfaction had the largest sized effect on Chinese prison personnel life satisfaction. Prison administrators need to be aware of life satisfaction and how to increase it. Staff matter, including the quality of their overall lives. At the very least, we hope this current study will spark interest in researching the life satisfaction of prison staff in a wide array of nations.

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Ethical standards

Declaration of conflicts of interest
Eric Lambert has declared no conflicts of interest
Shanhe Jiang has declared no conflicts of interest
Jianhong Liu has declared no conflicts of interest
Jinwu Zhang has declared no conflicts of interest
Eunsuhk Choi has declared no conflicts of interest

Ethical approval

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent

Informed consent was obtained from all individual participants included in the study

References

Archambeault, W., & Archambeault, B. (1982). *Correctional supervisory management: Principles of organization, policy, and law*. Englewood Cliffs, NJ: Prentice-Hall.

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*, 577–592.

Bamundo, P., & Kopelman, R. (1980). The moderating effects of occupation, age, and urbanization on the relationship between job satisfaction and life satisfaction. *Journal of Vocational Behavior, 17*, 106–123.

Berry, W. (1993). *Understanding regression assumptions*. Beverly Hills, CA: Sage Publications.

Bowling, N., Eschleman, K., & Wang, Q. (2010). A meta-analytic examination of the relationship between job satisfaction and subjective well-being. *Journal of Occupational and Organizational Psychology, 83*, 915–934.

Brayfield, A., & Rothe, H. (1951). An index of job satisfaction. *Journal of Applied Psychology*, *35*, 307–311.

Brief, A. (1998). *Attitudes in and around organizations*. Thousand Oaks, CA: Sage.

Brown, S., & Leigh, T. (1996). A new look at psychological climate and its relationship to job involvement, effort, and performance. *Journal of Applied Psychology, 81*, 358–368.

Cao, L., & Cullen, F. (2001). Thinking about crime and control: A comparative study of Chinese and American ideology. *International Criminal Justice Review, 11*, 58–81.

Cheek, F. (1984). *Stress management for correctional officers and their families*. College Park, MD: American Correctional Association.

Cheek, F., & Howard, R. (1984). *Stress management for correctional officers and their families* (Vol. 106). College Park, MD: American Correctional Association.

Chen, C-C., & Chiu, S-F. (2009). The mediating role of job involvement in the relationship between job characteristics and organizational citizenship behavior. *The Journal of Social Psychology, 149*, 474–494.

Chen, Z., & Davey, G. (2008). Happiness and subjective wellbeing in mainland China. *Journal of Happiness Studies, 9*, 589–600.

Cheung, C-K., & Leung, K-K. (2004). Forming life satisfaction among different social groups during the modernization of China. *Journal of Happiness, 5*, 23–56.

Chida, Y., & Steptoe, A. (2008). Positive psychological well-being and mortality: A quantitative review of prospective observational studies. *Psychosomatic Medicine, 70*, 741–756.

Cohen, A. (1993). Age and tenure in relation to organizational commitment: A meta-analysis. *Basic and Applied Social Psychology, 14*(2), 143–159.

Cullen, F., Link, B., Wolfe, N., & Frank, J. (1985). The social dimensions of correctional officer stress. *Justice Quarterly, 2*, 505–533.

DeCarufel, A., & Schaan, J-L. (1990). The impact of compressed work weeks on police job

involvement. *Canadian Police College, 14*, 81–97.

Demerouti, E., Bakker, A., & Schaufeli, W. (2005). Spillover and crossover of exhaustion and life satisfaction among dual-earner parents. *Journal of Vocational Behavior, 67*, 166–289.

Diener, E. (1984). Subjective well-being. *Psychological Bulletin, 95*, 542–575.

Diener, E., Emmons, R., Larsen, R., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49*, 71–75.

Diener, E., Inglehart, R., & Tay, L. (2013). Theory and validity of life satisfaction scales. *Social Indicators Research, 112*, 497–527.

Diener, E., Suh, E., Elucas, R., & Smith, H. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin, 125*, 276–302.

Dixon, M., & Sagas, M. (2007). The relationship between organizational support, work-family conflict, and the job-life satisfaction of university coaches. *Research Quarterly for Exercise and Sport, 78*, 236–247.

Dollard, M., & Winefield, A. (1998). A test of the demand-control/support model of work stress in correctional officers. *Journal of Occupational Health Psychology, 3*, 243–264.

Donovan, N., & Halpern, D. (2002). *Life satisfaction: The state of knowledge and implications for government*. London: United Kingdom Government Strategy Unit. Retrieved from http://www.number-10.gov.uk/su/ls/paper.pdf.

Dowden, C., & Tellier, C. (2004). Predicting work-related stress in correctional officers: A meta-analysis. *Journal of Criminal Justice, 32*, 31–47.

Duckworth, A., Quinn, P., & Seligman, M. (2009). Positive predictors of teacher effectiveness. *Journal of Positive Psychology, 4*, 540–547.

Earley, P. (1993). East meets West meets Mideast: Further explorations of collectivistic and individualistic work groups. *Academy of Management Journal, 36*, 319–348.

Erdogan, B., Bauer, T., Truxillo, D., & Mansfield, L. (2012). Whistle while you work: A review of the life satisfaction literature. *Journal of Management, 38*, 1038–1083.

Georgellis, Y., Lange, T., & Tabvuma, V. (2012). The impact of life events on job satisfaction. *Journal of Vocational Behavior, 80*, 464–473.

Greguras, G., & Diefendorff, J. (2010). Why does proactive personality predict employee satisfaction and work behaviors? A field investigation of the mediating role of the self-concordance model. *Personnel Psychology, 63*, 539–560.

Griffin, M. (2001). Job satisfaction among detention officers: Assessing the relative contribution of organizational climate variables. *Journal of Criminal Justice, 29*, 219–232.

Grossi, E., Keil, T., & Vito, G. (1996). Surviving 'the joint': Mitigating factors of correctional officer stress. *Journal of Crime and Justice, 19*, 103–120.

Hackman, J., & Lawler, E. (1971). Employee reactions to job characteristics. *Journal of Applied Psychology, 55*, 259–286.

Hart, P. (1999). Predicting employee life satisfaction: A coherent model of personality, work and nonwork experiences, and domain satisfactions. *Journal of Applied Psychology, 84*, 564–584.

Heller, D., Judge, T., & Watson, D. (2002). The confounding role of personality and trait affectivity in the relationship between job and life satisfaction. *Journal of Organizational Behavior, 23, 7*, 815–835.

Heller, D., Watson, D., & Illies, R. (2004). The role of person versus situation in life satisfaction: A critical examination. *Psychological Bulletin, 130*, 574–600.

Hepburn, J., & Knepper, P. (1993). Correctional officers as human services workers: The effect on job satisfaction. *Justice Quarterly, 20*, 315–337.

Hill, G. (2006). Chinese and Western prisons: Similarities and differences. *Corrections Compendium, 31*(6), 24–26.

Hu, S., Wang, J. N., Liu, L., Wu, H., Yang, X., Wang, Y., & Wang, L. (2015). The association between work-related characteristic and job burnout among Chinese correctional officers: A cross-sectional survey. *Public Health, 129*, 1172–1178.

Jiang, S., Lambert, E., Liu, J., & Zhang, J. (2017). An exploratory study of the effects of work environment variables on job satisfaction among Chinese prison staff. *International Journal of Offender Therapy and Comparative Criminology, 62*, 1694–1719.

Jiang, S., Lambert, E., & Wang, J. (2007). Correlates of formal and informal social/crime control in China: An exploratory study. *Journal of Criminal Justice, 35*, 261–271.

Jiang, S., Lambert, E., Zhang, D., Jin, X., Xiang, D., & Shi, M. (2018). Correlates of organizational commitment among community correctional officers in China. *The Prison Journal, 98*, 60–82.

Jin, J. (1997). *On prisons*. Beijing, China: Law Press.

Jones, M. (2006). Which is a better predictor of job performance: Job satisfaction or life satisfaction. *Journal of Behavioral and Applied Management, 8*, 20–42.

Jowell, R. (1998). How comparative is comparative research? *American Behavioral Scientist, 42*, 168–177.

Judge, T., & Watanabe, S. (1993). Another look at the job satisfaction-life satisfaction relationship. *Journal of Applied Psychology, 78*, 939–948.

Kanungo, R. (1982a). Measurement of job and work involvement. *Journal of Applied Psychology*, *67*, 341–349.

Kanungo, R. (1982b). *Work alienation: An integrative approach*. New York: Praeger.

Kim, J., & Mueller, C. (1978). *Factor analysis statistical methods and practical issues*. Newbury Park, CA: Sage.

Lambert, E. (2008). The impact of job involvement on correctional staff. *Professional Issues in Criminal Justice, 3*(1), 57–76.

Lambert, E. (2010). The relationship of organizational citizenship behavior with job satisfaction, turnover intent, life satisfaction, and burnout among correctional staff. *Criminal Justice Studies: A Critical Journal of Crime, Law, and Society, 23*, 361–380.

Lambert, E., Edwards, C., Camp, S., & Saylor, W. (2005). Here today, gone tomorrow, back again the next day: Absenteeism and its antecedents among federal correctional staff. *Journal of Criminal Justice, 33*, 165–175.

Lambert, E., & Hogan, N. (2010). Wanting change: The relationship of perceptions of organizational innovation with correctional staff job stress, job satisfaction, and organizational commitment. *Criminal Justice Policy Review, 21*, 160–184.

Lambert, E., Hogan, N., & Altheimer, I. (2010). An exploratory examination of the consequences of burnout in terms of life satisfaction, turnover intent, and absenteeism among private correctional staff. *The Prison Journal, 90*, 94–114.

Lambert, E., Hogan, N., Barton, S., & Elechi, O. (2009). Research note: The impact of job stress, job involvement, job satisfaction, and organizational commitment on correctional staff support for rehabilitation and punishment. *Criminal Justice Studies, 22*, 109–122.

Lambert, E., Hogan, N., & Cheeseman Dial, K. (2011). The effects of job involvement on private correctional staff: A preliminary study. *Journal of Applied Security Research, 6*, 158–183.

Lambert, E., Hogan, N., Cheeseman Dial, K., & Barton-Bellesa, 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*, 19–38.

Lambert, E., Hogan, N., Elechi, O., Jiang, S., Laux, J., Dupuy, P., & Morris, A. (2009). A further examination of antecedents of correctional staff life satisfaction. *The Social Science Journal, 26*, 689–706.

Lambert, E., Hogan, N., & Griffin, M. (2007). The impact of distributive and procedural justice on correctional staff job stress, job satisfaction, and organizational commitment. *Journal of Criminal Justice, 35*, 644–656.

Lambert, E., Hogan, H., Paoline, E., & Baker, D. (2005). The good life: The impact of job satisfaction and occupational stressors on correctional staff life satisfaction - An exploratory study. *Journal of Crime and Justice, 18*, 1–26.

Lambert, E., Hogan, N., Paoline, E., & Clarke, A. (2005). The impact of role stressors on job stress, job satisfaction, and organizational commitment among private prison staff. *Security Journal, 18*(4), 33–50.

Lambert, E., Kim, B., Kelley, T., & Hogan, N. (2013). The association of affective and continuance commitment with correctional staff life satisfaction. *The Social Science Journal, 50*, 195–203.

Lambert, E., Minor, K., Wells, J., & Hogan, N. (2016). Social support's relationship to correctional staff job stress, job involvement, job satisfaction, and organizational commitment. *The Social Science Journal, 53*, 22–32.

Lambert, E., & Paoline, E. (2008). The influence of individual, job, and organizational characteristics on correctional stress, job satisfaction, and organizational commitment. *Criminal Justice Review, 33*, 160–184.

Lambert, E., & Paoline, E. (2010). Take this job and shove it: Turnover intent among jail staff. *Journal of Criminal Justice, 38*, 139–148.

Lambert, E., & Paoline, E. (2012). Exploring potential antecedents of job involvement: An exploratory study among jail staff. *Criminal Justice and Behavior, 39*, 264–286.

Lawler, E., & Hall, D. (1970). Relationship of job characteristics to job involvement, satisfaction, and intrinsic motivation. *Journal of Applied Psychology, 54*, 305–312.

Liu, L., Hu, S., Wang, L., Sui, G., & Ma, L. (2013). Positive resources for combating depressive symptoms among Chinese male correctional officers: Perceived organizational support and psychological capital. *BMC Psychiatry, 13*, 89–97.

Locke, E. (1976). The nature and causes of job satisfaction. In M. Dunnette (Ed.), *Handbook of*

industrial and organizational psychology (pp. 1297–1349). Chicago: Rand-McNally.

Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin, 6*, 803–855.

Matteson, M., & Ivancevich, J. (1987). *Controlling work stress: Effective human resource and management strategies*. San Francisco: Jossey-Bass.

McElroy, J., Morrow, P., & Wardlow, T. (1999). A career stage analysis of police officer work commitment. *Journal of Criminal Justice, 27*, 507–516.

Moser, K., & Schuler, H. (2004). Is involvement a suppressor of the job satisfaction-life satisfaction relationship? *Journal of Applied Social Psychology, 34*, 2377–2388.

Murphy, S., Duxbury, L., & Higgins, C. (2006). The individual and organizational consequences of stress, anxiety, and depression in the workplace: A case study. *Canadian Journal of Community Mental Health, 25*, 143–157.

Paullay, I. M., Alliger, G., & Stone-Romero, E. (1994). Construct validation of two instruments designed to measure job involvement and work centrality. *Journal of Applied Psychology, 79*, 224–228.

Pavot, W., & Diener, E. (2008). The satisfaction with life scale and the emerging construct of life satisfaction. *The Journal of Positive Psychology, 3*, 137–152.

Quinn, R., & Staines, G. (1979). *The 1977 quality of employment survey*. Ann Arbor, MI: Institute for Social Research, University of Michigan.

Rain, J., Lane, I., & Steiner, D. (1991). A current look at the job satisfaction/life satisfaction relationship: Review and future considerations. *Human Relations, 44*(3), 287–307.

Rice, R. (1984). Organizational work and the overall quality of life. *Applied Social Psychology Annual, 5*, 155–178.

Rice, R., Frone, M., & McFarlin, D. (1992). Work-nonwork conflict and the perceived quality of life. *Journal of Organizational Behavior, 13*, 155–168.

Rice, R., Near, J., & Hunt, R. (1980). The job-satisfaction/life satisfaction relationship: A review of empirical research. *Basic and Applied Social Psychology, 1*, 37–64.

Schilpzand, M. C., Martins, L. L., Kirkman, B. L., Lowe, K. B., & Chen, Z. X. (2013). The relationship between organizational justice and organizational citizenship behavior: The role of cultural value orientations. *Management and Organization Review, 9*, 345–374.

Shao, L. (2014). Education and reform among Chinese inmates. Retrieved from http://www.moj.gov.cn/jyglj/content/2014-03/25/content_5393650.htm?node=253.

Shin, D., & Johnson, D. (1978). Avowed happiness as an overall assessment of the quality of life. *Social Indicators Research, 5*, 475–492.

Slate, R. N., & Vogel, R. E. (1997). Participative management and correctional personnel: A study of perceived atmosphere for participation in correctional decision-making and its impact on employee stress and thoughts about quitting. *Journal of Criminal Justice, 25*, 397–408.

Spector, P. (1996). *Industrial and organizational psychology: Research and practice*. New York: John Wiley.

Stack, S., & Tsoudis, O. (1997). Suicide risk among correctional officers: A logistic regression analysis. *Archives of Suicide Research, 3*, 183–186.

Steiner, D., & Truxillo, D. (1989). An improved test of the disaggregation of job and life satisfaction. *Journal of Occupational Psychology, 62*, 33–39.

Stohr, M., Lovrich, N., Monke, B., & Zupan, L. (1994). Staff management in correctional institutions: Comparing DiIulio's "control model" and "employee investment model" out-comes in five jails. *Justice Quarterly, 11*, 471–497.

Strine, T., Chapman, D., Balluz, L., Moriarity, D., & Mokdad, A. (2008). The associations between life satisfaction and health-related quality of life, chronic illness, and health behaviors among UNITED STATES community-dwelling adults. *Journal of Community Health, 33*, 40–50.

Tabachnick, B., & Fidell, L. (2013). *Using multivariate statistics* (6th ed.). Boston: Pearson.

Tait, M., Padgettm, M., & Baldwin, T. (1989). Job and life satisfaction: A reevaluation of the strength of the relationship and gender effects as a function of the date of the study. *Journal of Applied Psychology, 74*, 502–507.

Tatarkiewicz, W. (1976). *Analysis of happiness*. The Hague, Netherlands: Martinus Nijhoff.

Terkel, S. (1974). *Working*. New York: Pantheon Books.

Tracy, S. J. (2004). The construction of correctional officers: Layers of emotionality behind bars. *Qualitative Inquiry, 10*, 509–533.

Triplett, R., Mullings, J., & Scarborough, K. (1996). Work-related stress and coping among correctional officers: Implications from organizational literature. *Journal of Criminal Justice, 24*, 291–308.

Tu, Y., & Lu, X. (2016). Work-to-life spillover effect of leader-member exchange groups: The moderating role of group power distance and employee political skill. *Journal of Happiness, 17*, 1873–1889.
University of Albany. (2016). *Sourcebook of Criminal Justice Statistics*. Albany, NY: University at Albany, Hindelang Criminal Justice Research Center. Retrieved from http://www.albany.edu/sourcebook/.
Von Bonsdorff, M., Huuhtanen, P., Tuomi, K., & Seitsamo, J. (2010). Predictors of employees' early retirement intentions: An 11-year longitudinal study. *Occupational Medicine, 60*, 90–100.
Wang, B., & Kong, Y. (2006). Psychological health among Chinese correctional officers. *Justice of China, 25*(5), 38–41.
Woodruff, L. (1993). Occupational stress for correctional personnel. *American Jails, 7*(4), 15–20.
World Factbook. (2017). *China*. Washington, DC: US Government Printing Office. Retrieved from https://www.cia.gov/library/publications/the-world-factbook/geos/ch.html.
World Population Review. (2016). *Guangzhou Population 2015*. Retrieved fromhttp://worldpopulationreview.com/world-cities/guangzhou-population/.
World Prison Brief. (2016a). *China*. London: Institute for Criminal Policy Research. Retrieved from http://www.prisonstudies.org/country/china.
World Prison Brief. (2016b). *United States of America*. London: Institute for Criminal Policy Research. Retrieved from http://www.prisonstudies.org/country/united-states-america.
Wu, Z. (2003). Western prisons and Chinese prisons: Focusing on differences. *European Journal of Crime, Criminal Law and Criminal Justice, 11*(1), 93–113.
Xing, W. (2014). *Current status of Chinese correctional officers*. Beijing: Sina System. Retrieved from http://weibo.com/p/1001603783059722893985?pids=Pl_Official_CardMixFeed__5&feed_filter=1.
Zhao, X., Qu, H., & Ghiselli, R. (2011). Examining the relationship of work-family conflict to job and life satisfaction: A case of hotel sales managers. *International Journal of Hospitality Management, 30*, 46–54.

Appendix

The following items measuring latent concepts 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).

Life satisfaction

(1) I am satisfied with my life;
(2) Taking all things together, I am very happy with my life;
(3) If asked, I would say I am satisfied with the quality of my overall life.

Job stress

(1) A lot of time my job makes me very frustrated or angry;
(2) I am usually under a lot of pressure when I am at work;
(3) When I'm at work I often feel tense or uptight;
(4) Most of the time when I'm at work I feel that I have much to worry about.

Job involvement

(1) I live, eat, and breathe my job (i.e. my job is very important to me);
(2) The major satisfaction in my life comes from my job;
(3) The most important things that happen to me in my life usually occur at my job.

Job satisfaction

(1) Most days I am happy about my job;
(2) I find real satisfaction in my job;
(3) I feel satisfied with my job.