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Exploration on the Relationship between Occupational Stress and Well-being of the Junior Administrative Staff in Universities of China from the Perspective of Social Network

Wenhua LIU¹, Licheng REN², Ru ZHAO³

Abstract

The effect of occupational stress on occupational well-being has been validated in several previous studies. However, the analysis on the interaction mechanism between occupational stress and occupational well-being from the perspective of social network still requires empirical support. Thus, on the basis of the survey data from universities in Shanxi Province of China in 2015, the factor analysis and multiple linear regression methods were employed to empirically investigate the relationship between occupational stress and well-being of the junior administrative staff in universities from the perspective of social network. Results show that the occupational stress of the junior administrative staff in universities has a significant negative impact on their occupational well-being. Social network produces a certain negative effect on occupational stress but a positive effect on occupational well-being. The social network of the junior administrative staff in universities can counteract the adverse effect of occupational stress on occupational well-being through the compensation effect. Social network can also cushion the effect of occupational stress on occupational well-being through the moderating effect. The conclusions obtained in this study provide a reference for the junior administrative staff in universities to effectively relieve the occupational stress and enhance the occupational well-being.

Keywords: occupational stress, occupational well-being, social network, moderation strategy.

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Introduction

The occupations of individuals not only bring material rewards that allow individuals to meet their personal and professional needs but also grant them a sense of accomplishment. Occupational activities have gradually become an important means for people to obtain happiness, which is now equated to occupational well-being. Today, the lack of well-being has become an important social problem in the professional field. An increasing number of people experience unbearable stress in the workplace. As a positive and healthy psychological state, occupational well-being has received increasing attention from both the academic and industrial circles. Many empirical studies show that occupational stress exerts a certain negative predictive effect on occupational well-being (Salami, 2010; Terry, Nielsen, & Perchard, 1993). However, limited literature considers the social environment factor. As a new research paradigm of sociology, social network provides a very effective research perspective for a comprehensive and deep discussion on the impact of social environment on occupational stress and well-being (Ma, 2015). Social network is a theoretical perspective and method for studying social structure. It considers individuals or organizations as nodes and the link between them as lines. The nodes and lines form a net-like structure. The human society is made up of network structures, and even the whole society can be regarded as a large network (Scott, 2013). The traditional Chinese society is a typical acquaintance society, in which individuals' daily activities and social behaviors are embedded in various social relations to different extents (Lin & Bian, 1991). Social relations affect individuals' social behaviors. Therefore, exploration on the relationship between social network and the occupational stress and well-being of individuals in China offers an important theoretical value and practical significance.

Among the many factors affecting the development of universities, the junior administrative staff is receiving increasing attention from scholars. This factor is particularly important to the development of Chinese universities. Compared with that of other working groups, the development and success of the junior administrative staff in universities are more likely to be affected by social network because of the nature of their work. This working group is the specific implementer of the modern management of universities. Their orderly and efficient work guarantees the normal operation of universities. However, in reality, their working initiative, enthusiasm, and creativity are seriously restricted because of the multifarious work, uncertain working time, great stress but low position, poor payment scheme, and difficulty in promotion, which directly affect the promotion of their occupational well-being. The occupational well-being of the junior administrative staff in universities directly determines the level of management, coordination, and service. Therefore, clarifying the role of social network in the occupation stress and well-being of the junior administrative staff in universities and

correctly understanding, evaluating, and using the social network effect present an important theoretical value and practical significance in alleviating the occupational stress and enhancing the occupational well-being of this working group.

In view of these conditions, this study aims to discuss the interaction between the occupational stress and well-being of the junior administrative staff in universities of China, and at the same time, also investigate the role of social network in adjusting the occupational stress and well-being of the working group through a large-scale questionnaire survey, thus to further clarify the influential process and mechanism of occupational stress on occupational well-being. The results obtained are aimed at providing a decision-making reference for the junior administrative staff in universities and relieving occupational stress, enhancing occupational well-being, and increasing the quality of human resource management in universities.

The rest of this study is organized as follows: Section 2 presents the literature review and research hypotheses. Section 3 introduces the data source, the questionnaire design, and the reliability and validity tests. Section 4 describes the correlation and regression analyses of the data and presents the effect model test that verifies the research hypotheses in Section 2. Section 5 further discusses the new findings, the practical implication and significance of the results in Section 4. Section 6 draws the obtained conclusions and points out the limitations of this study and the future research directions.

Literature Review and Research Hypotheses

Social network and occupational stress

The junior administrative staff in universities often feels stress from sources that force or threaten them in working behaviors under the occupational environment. As a result of the limitations in their characteristics and coping behaviors, they may develop abnormal feelings and psychological, physiological, and behavioral reactions. The occupational stress shouldered by the junior administrative staff in universities is a result of their negative emotions, such as anxiety, tension, depression, or loss. This occupational stress is usually accompanied by potential physiological changes and is caused by the nature of their work. The stress is adjusted once individuals perceive a threat to their health and self-esteem, in which case their coping mechanism activates to reduce the threatening perceptions. A moderate amount of stress can be converted into a positive momentum. However, stress produces a negative effect if it becomes excessive and an appropriate channel for adjustment is unavailable (Brunetto, Teo, Shacklock & Farr-Wharton, 2012). For a long time, scholars have been studying the factors that relieve occupational stress. One such factor is social network, which has gradually

caught the attention of the academia. Social network is a theoretical construct that is used in social science to describe social relation characteristics, but no consensus exists on its definition and measurement (Lin & Peek, 1999). Social network is also considered as a type of social relation and the formation of the social relationship between individuals. This type of social relation is embedded in a coordination system and can manipulate the value of resources, reduce transaction costs, or increase transaction values by promoting the exchange of resources, information, and knowledge (Luo, 2003). Under the background of the Chinese culture, social network is often understood as an interpersonal relationship and relation network, among others. Social network can provide instrumental assistance, emotional support, and positive praise. It also offers help in negative life practices, thereby relieving occupational stress and improving life satisfaction. Two different trends presently exist in social network research. One is the overall network analysis, which attaches great importance to the description and discussion of the overall structural properties of the social network. The other is the individual center network analysis, which studies the individual network established by behaviors. Our work focuses on the career support network, which is helpful for the career development of the junior administrative staff in universities. The career support network refers to the network formed by the interaction among individuals in the workplace, and it exerts a significant effect on individuals' career development. This network belongs to the individual network category.

Adopting effective measures to guide the junior administrative staff in universities is very important for them to positively cope with the working stress when their psychological problems are prominent, convert the stress into a motivating force, and further improve their occupational well-being. At present, little research has been conducted on the occupational stress of the junior administrative staff in universities from the perspective of social network, whereas many studies have explored the relationship among occupational stress, social support, social relations, and interpersonal trust. With regard to the relationship between occupational stress and social support, most scholars adopt the occupational stress and social support scales in questionnaire survey research (Fang, 2013; Qin, 2014). They generally believe that social support serves as a cushion for occupational stress in different regions and industries (Leyden, Goldberg & Michelbach, 2011; Zhao, 2014). Social support refers to the help function provided by others who are important for individuals felt burdened by the stress. Specifically, social support in the form of social, emotional, practical, and information assistance is provided by family members, friends, colleagues, relatives, neighbors, and so on (Thoits, 1986). The social support network of individuals is the social network they can depend on to obtain support, such as money, affection, and friendship. Such network can help affected individuals solve their problems and crises as they seek to regain the normalcy of their lives. In the career aspect, support from family and

friends is favorable for the problems caused by the interference between family and the workplace. Support from colleagues and bosses is helpful for work-related problems (Rodríguez-Pose & Berlepsch, 2014).

Therefore, the survival and development of the junior administrative staff in universities, as an individual unit of social existence, are inseparable from social network support. On the basis of this notion, the present study argues that the social network of the junior administrative staff in universities is correlated with their occupational stress. Accordingly, the following hypothesis is put forward:

Hypothesis 1: The social network of the junior administrative staff in universities has a negative impact on their occupational stress.

Social network and occupational well-being

Occupational well-being is different from occupational health. Individuals can be considered to be occupationally healthy if they have no anxiety, depression, and other psychological symptoms. By contrast, occupational well-being not only refers to the absence of a psychological disease but also emphasizes a positive state of mind. Occupational well-being refers to individuals' positive evaluation of their performance at work and their continuously positive disposition because their needs are satisfied, their potentials are exploited, and their strength is increased. Occupational well-being is affected by many factors, including the external environment and individual cognitive and behavioral factors. The former includes working conditions, working time, working content, interpersonal relationship, organization, job change, and others related to work. The latter includes individual personality, cognition model, goal establishment and realization manner, and coping style, among others. Different individual cognitions form different well-being experiences under the same objective working condition. In addition, different coping styles produce an effect on the present and future well-being (Kidd, 2008). However, interpersonal relationships are the root and existing form of well-being (Kooij *et al.*, 2013). The social relationship network is a very important factor that affects the well-being index. The extent and depth of individuals' social contact can most effectively predict their well-being (Putnam, 2001).

In the research field of occupational well-being, researchers define social network as the social phenomenon formed by the entities connected by different relations. Those relations include friendship, kinship, discussion network, neighborhood interaction, and social participation, which reflect interpersonal interaction and connection. The academic research on social network and well-being focuses on the influence of social support on well-being (Weiss, 1974; Kahn & Antonucci, 1980). The results of domestic and foreign studies on the relationship between social support and well-being are mostly consistent. They all concluded that social support has a positive effect on well-being (Chu, Saucier & Hafner,

2010; Taylor, 2011; Litwin & Shiovitz-Ezra, 2011). Social support can adjust the status of individuals' emotions and increase their positive emotions, self-esteem, as well as self-confidence. The practical support they gain can help them overcome difficulties and achieve growth and self-realization to enhance their well-being. In the occupational field, individuals' social network can affect their occupational well-being through connected social resources. In an organization, obtaining important resources for development through the social network is the key for individuals to achieve success in the workplace and affects their willingness to leave. The success of individuals is not limited to their characteristics as it is also influenced by their position in the social network. This type of social relation can provide information and political interests. In addition to obtaining information from the social network, individuals can obtain various material and spiritual assistance and support from the members of the network.

Individuals can only achieve a high well-being when they receive good social support. This work discusses the impact of social network on the occupational well-being of the junior administrative staff in universities and puts forward the following hypothesis:

Hypothesis 2: The social network of the junior administrative staff in universities has a positive impact on their occupational well-being.

The existing literature defines occupational well-being from three dimensions, namely, job satisfaction, positive emotion, and negative emotion (Horn, Taris, Schaufeli & Schreurs, 2004; Diener, Suh, Lucas & Smith, 1999). The specific hypotheses are as follows:

Hypothesis 2a: The social network of the junior administrative staff in universities has a positive impact on their job satisfaction.

Hypothesis 2b: The social network of the junior administrative staff in universities has a positive impact on their positive emotions.

Hypothesis 2c: The social network of the junior administrative staff in universities has a negative impact on their negative emotions.

Occupational stress and well-being

Health problems caused by psychological factors are very common among the junior administrative staff in universities. These problems are important factors that threaten the healthy development of their careers. A fundamental reason for the existence of those psychological problems is the serious loss of the occupational well-being of the junior administrative staff in universities, which is essentially influenced by occupational stress. Occupational stress exerts an obvious negative predictive effect on well-being (Wang & Pang, 2011). The occupational stress experienced by the junior administrative staff in universities may put their occupational well-being at risk. The academic research on the

relationship between occupational stress and well-being mainly focuses on the impact of occupational stress on the psychological health or job satisfaction of individuals. The existing evidence shows that occupational stress for different groups in different regions can negatively predict life or job satisfaction related to well-being to different extents (Hahn, Binnewies, Sonnentag & Mojza, 2011).

The present work discusses the impact of the occupational stress experienced by the junior administrative staff in universities on the three dimensions of occupational well-being. The following hypotheses are put forward:

Hypothesis 3: The occupational stress experienced by the junior administrative staff in universities has a negative impact on their occupational well-being.

Hypothesis 3a: The occupational stress experienced by the junior administrative staff in universities has a negative impact on their job satisfaction.

Hypothesis 3b: The occupational stress experienced by the junior administrative staff in universities has a negative impact on their positive emotions.

Hypothesis 3c: The occupational stress experienced by the junior administrative staff in universities has a positive impact on their negative emotions.

As mentioned in the above literature, the occupational stress for different groups in different regions has a negative impact on occupational well-being. However, the role played by occupational stress is often inseparable from individuals' own characteristics. On the basis of the literature review, we argue that the social network of the junior administrative staff in universities may have a potentially important role between occupational stress and well-being.

The compensation effect model holds that independent variables adversely influence dependent variables and that compensation variables positively influence dependent variables after controlling for independent variables. The positive and negative roles are adversarial and compensatory (Kervyn, Yzerbyt & Judd, 2011). The compensation effect model is the most concise model under the co-action of occupational stress and social network. The model holds that social network has a significant role in enhancing occupational well-being in the case of controlling occupational stress. In other words, the social network of the junior administrative staff in universities can offset or confront the adverse impact of occupational stress on occupational well-being to some extent. The above-mentioned relevant theories and empirical studies can be regarded as the preliminary evidence that proves the reasonability of the compensation effect model. The present work puts forward the following hypotheses:

Hypothesis 4: Social network has a compensation effect between occupational stress and well-being.

Hypothesis 4a: Social network has a compensation effect between occupational stress and job satisfaction.

Hypothesis 4b: Social network has a compensation effect between occupational stress and positive emotions.

Hypothesis 4c: Social network has a compensation effect between occupational stress and negative emotions.

The moderating effect model argues that the positive and negative predictive effects of independent variables on dependent variables are stable but that the strength levels are different because of the moderator adjustment. In other words, the relationship between dependent and independent variables changes with the involvement of some indices (Wen, Liu & Hou, 2012). Although the relationship between occupational stress and well-being in the current work is deemed stable (Salami, 2010; Xiang, 2006), its strength varies in different studies. Hence, examining the moderators between occupational stress and well-being is necessary. The moderating effect model mainly discusses the direction of the relationship between occupational stress and well-being and the factor moderating the strength of the relationship. Other moderating factors exist, but our focus lies only on the moderating role of the social network of individuals. The model specifically holds that the junior administrative staff in universities under occupational stress does not perceive the same degree of occupational well-being. Furthermore, the impact of occupational stress on occupational well-being may be different because of the different levels of the social network of individuals. Nevertheless, the specific mode of the moderating effect is worth analyzing further. We put forward the following hypotheses:

Hypothesis 5: Social network has a moderating effect between occupational stress and well-being.

Hypothesis 5a: Social network has a moderating effect between occupational stress and job satisfaction.

Hypothesis 5b: Social network has a moderating effect between occupational stress and positive emotions.

Hypothesis 5c: Social network has a moderating effect between occupational stress and negative emotions.

Data Source

Data source and basic information of the samples

The junior administrative staff at the section-level and below from eight universities in the Shanxi Province of China (i.e. Shanxi University, Taiyuan University of Technology, North University of China, Taiyuan University of Science and Technology, Shanxi Normal University, Shanxi Medical University, Shanxi Agricultural University, and Shanxi University of Finance and Economics)

were taken as research subjects through convenient sampling. The junior administrative staff was randomly selected from each university for investigation. A total of 820 questionnaires were sent out. Out of the 783 questionnaires that were returned, 760 questionnaires were deemed effective. A statistical analysis was performed on the effective recovery data using the SPSS 22.0 software. The questionnaire was divided into four parts. The first part sought the basic information of the junior administrative staff in universities, including age, sex, education, and number of years employed, among others. The second, third, and fourth parts covered the scales of occupational stress, social network, and occupational well-being, respectively.

Each scale was tested before the formal investigation to ensure the reliability, validity, and quality of the questionnaire. The preliminary investigation was then conducted. A total of 70 questionnaires were sent out; 68 questionnaires were returned. Accordingly, 65 effective questionnaires were retained after a thorough review. The questionnaires were analyzed, adjusted, and modified to form formal ones. The recovery rate of the formal questionnaires was 95.49 with the effective rate of 97.06. Table 1 shows the basic information of the samples herein.

Table 1. *Basic characteristics of the junior administrative staff from sample universities*

		Population	Proportion (%)
Sex	Male	308	40.5
	Female	452	59.5
Age	Below 30 years old	193	25.4
	30 to 40 years old	459	60.4
	Over 40 years old	108	14.2
Education	College degree and below	9	1.2
	Bachelor's degree	89	11.7
	Master's degree	617	81.2
	Doctorate degree	45	5.9
Number of years employed	5 and below	276	36.3
	6 to 10	347	45.7
	10 to 15	79	10.4
	Over 15	58	7.6
Total samples		760	

Reliability and validity analysis of the questionnaire

Reliability and validity analysis of the occupational stress questionnaire

The KMO (Kaiser-Meyer-Olkin) and Bartlett’s spherical tests on the occupational stress scale were then conducted using the SPSS 22.0 software to determine whether the factor analysis should be performed. Table 2 shows the results. The KMO test value was 0.669, which was acceptable. The Sig. value of the Bartlett’s spherical test was 0.000, which reached the significance level. Therefore, the null hypothesis that the relevant matrix is the unit matrix was denied. It is thus considered suitable for the factor analysis.

Table 2. *KMO and Bartlett’s tests on occupational stress scale*

KMO		.669
Bartlett's spherical test	Approx. Chi-square	719.048
	df	231
	Sig.	.000

This study explains occupational stress from six aspects: organizational environment, career development, job characteristic, interpersonal relationship, role stress, and conflict between work and family (Cooper, Sloan & Williams, 1988). The primary component analysis and orthogonal rotation method with Kaiser standardization were applied to obtain the composition matrix. The results of factor analysis contained six components, which explained 65.595% of the variation. *Table 3* shows the test results.

The overall Cronbach of the occupational stress scale reached 0.825. The Cronbach of the six factors were 0.727, 0.627, 0.721, 0.642, 0.828, and 0.528, which indicates the high internal consistency and good reliability of the occupational stress scale. *Table 4* shows the test results.

Overall, the occupational stress scale showed good reliability and validity and met the requirements of the occupational stress measurement.

Table 3. Factor load matrix of the occupational stress scale

Factor	Item	Component					
		1	2	3	4	5	6
Factor 1 Organizational environment	Y16	0.816					
	Y18	0.795					
	Y19	0.791					
	Y17	0.696					
	Y20	0.585					
Factor 2 Career development	Y15		0.798				
	Y14		0.793				
	Y13		0.779				
Factor 3 Job characteristic	Y2			0.785			
	Y4			0.751			
	Y1			0.750			
	Y3			0.522			
Factor 4 Interpersonal relationship	Y10				0.629		
	Y11				0.599		
	Y12				0.548		
	Y9				0.313		
Factor 5 Role stress	Y8					0.810	
	Y6					0.768	
	Y5					0.726	
	Y7					0.590	
Factor 6 Conflict between work and family	Y21						0.760
	Y22						0.643

Table 4. Reliability analysis of the occupational stress scale

Scale		Number of items	Cronbach	
Occupational stress	Job characteristic	4	.727	Total coefficient .825
	Role stress	4	.627	
	Interpersonal relationship	4	.721	
	Career development	3	.642	
	Organizational environment	5	.828	
	Conflict between work and family	2	.528	

Reliability and validity analysis of the social network questionnaire

Similarly, the KMO and Bartlett’s spherical tests were performed on the social network scale. Table 5 shows the results. The KMO test value was 0.717, which was acceptable. The Sig. value of Bartlett’s spherical test was 0.000, which reached the significance level. Therefore, the null hypothesis that the relevant matrix is the unit matrix was denied. It was found to be suitable for the factor analysis.

Table 5. *KMO and Bartlett’s tests on the social network scale*

KMO		.717
Bartlett's spherical test	Approx. Chi-square	635.049
	df	85
	Sig.	.000

On the basis of the results of the theoretical and literature analyses, network support and network capital were selected to explain social network (Luo, 2010). The primary component analysis and orthogonal rotation method with Kaiser standardization were applied to obtain the composition matrix. The results of the factor analysis contained two components, which explained 59.638% of the variation. Table 6 shows the test results.

Table 6. *Factor load matrix of the social network scale*

Factor	Item	Component	
		Factor 1	Factor 2
Factor 1 Network support	Y5	0.840	
	Y6	0.767	
	Y11	0.728	
	Y13	0.690	
	Y14	0.653	
Factor 2 Network capital	Y16	0.601	
	Y1		0.718
	Y2		0.689
	Y3		0.643
	Y7		0.616
	Y8		0.592
	Y9		0.571

The overall Cronbach of the social network scale reached 0.649. The Cronbach of the two factors were 0.655 and 0.602, which indicated the high internal consistency and good reliability of the social network scale. Table 7 shows the test results.

Table 7. Reliability analysis of the social network scale

Scale		Number of items	Cronbach	
Social network	Network support	6	.655	Overall coefficient .649
	Network capital	6	.602	

Overall, the social network scale had good reliability and validity and basically met the requirements of the social network measurement.

The definition of occupational well-being mainly refers to Diener’s theory of general well-being, the occupational well-being is measured with the Minnesota Satisfaction Questionnaire and Watson’s scale which are also widely used by scholars at home and abroad because of its good reliability and validity (Watson, Clark & Tellegen, 1988). These questionnaires were not tested herein.

Result Analysis

Correlation analysis of occupational stress, occupational well-being and social network

Correlation analysis between occupational stress and social network

The study conducted the Pearson correlation analysis on the two variables to discuss the relationship between social network and the occupational stress of the junior administrative staff in universities. *Table 8* shows the results.

The analysis results in *Table 8* showed that the social network and occupational stress presented a significantly negative correlation at the 0.01 level with the Pearson correlation coefficient of -0.239**. However, it was mostly reflected on the negative correlation of network support rather than on network capital. Network capital was affected by parents’ position, individual’s education, and social position in the circle of friends. Therefore, the social network capital showed microstability. The social network showed a significantly negative correlation with all dimensions of occupational stress at the 0.01 level, except for the conflict between work and family, with which it had no correlation. Thus, the social network of the junior administrative staff in universities had no impact on the occupational stress from the conflict between work and family. However, the social network had a negative impact on occupational stress. Hypothesis 1 was thus verified.

Table 8. Correlation analysis between social network and occupational stress

		Job characteristic	Role stress	Interpersonal relationship	Career development	Organizational environment	Conflict between work and family	Occupational stress
Network support	Correlation coefficient	-.184**	-.198**	-.216**	-.103**	-.201**	-.119*	-.203**
Network capital	Correlation coefficient	-.132**	-.106*	-.289**	-.181**	-.139**	-.089	-.209*
Social network	Correlation coefficient	-.180**	-.167**	-.315**	-.290**	-.295**	-.247	-.239**

Note: *Significant at the 0.05 level, two-tailed test.

**Significant at the 0.01 level, two-tailed test.

Correlation between social network and occupational well-being

The Pearson correlation analysis was conducted to discuss the relationship between the social network and occupational well-being of the junior administrative staff in universities. Table 9 shows the results.

Table 9. Correlation analysis between social network and occupational well-being

		Job satisfaction	Positive emotions	Negative emotions	Occupational well-being
Network support	Correlation coefficient	.132**	.242**	-.089**	.266**
Network capital	Correlation coefficient	.098**	.429*	-.095*	.175**
Social network	Correlation coefficient	.185**	.255**	-.102**	.289**

Note: *Significant at the 0.05 level, two-tailed test.

**Significant at the 0.01 level, two-tailed test.

The analysis results in Table 9 demonstrated that overall, the social network and occupational well-being showed a significantly positive correlation with the Pearson correlation coefficient of 0.289**. Social network showed a significantly positive correlation with job satisfaction and positive emotions of occupational well-being at the 0.01 level with the Pearson correlation coefficients of 0.185** and 0.255**, respectively. Moreover, social network showed a significantly negative correlation with negative emotions of occupational well-being at the 0.01 level with the Pearson correlation coefficient of -0.102**. Therefore, the social network of the junior administrative staff in universities had a positive impact on their occupational well-being. In sum, H2, H2a, H2b, and H2c were valid.

Correlation analysis between occupational stress and well-being

The Pearson correlation analysis was conducted on the two variables to discuss the relationship between the occupational stress of the junior administrative staff in universities and their occupational well-being. *Table 10* shows the results.

Table 10. *Correlation analysis between occupational stress and well-being*

		Job satisfaction	Positive emotions	Negative emotions	Occupational well-being
Job characteristic	Correlation coefficient	0.173**	-0.150**	0.118**	0.292*
Role stress	Correlation coefficient	-0.192**	-0.229*	0.069**	-0.182**
Interpersonal relationship	Correlation coefficient	-0.327**	-0.333**	0.164**	-0.405**
Career development	Correlation coefficient	-0.290**	-0.104**	0.025**	-0.371**
Organizational environment	Correlation coefficient	-0.349**	-0.379**	0.482**	-0.154**
Conflict between work and family	Correlation coefficient	-0.128	-0.346*	0.064	-0.191
Occupational stress	Correlation coefficient	-0.212**	-0.315**	0.285**	-0.258**

Note: *Significant at the 0.05 level, two-tailed test.

**Significant at the 0.01 level, two-tailed test.

The analysis results in Table 10 showed that the occupational stress and well-being exhibited a significantly negative correlation at the 0.01 level with the Pearson correlation coefficient of -0.258**. The occupational stress showed a significantly negative correlation with job satisfaction and positive emotions of occupational well-being at the 0.01 level with the Pearson correlation coefficients of -0.212** and -0.315**, respectively. The occupational well-being showed a significantly positive correlation with job characteristic of occupational stress at the 0.05 level, had no correlation with conflict between work and family of occupational stress, and presented a significantly negative correlation with the other four dimensions of occupational stress at the 0.01 level. Thus, the occupational stress of the junior administrative staff in universities had a negative impact on their occupational well-being. The greater the occupational stress they perceived, the lower their job satisfaction was, as well as the fewer positive emotions and the more negative emotions they experienced. Therefore, H3, H3a, H3b, and H3c were valid.

Regression analysis of occupational stress and social network on occupational well-being

Regression of occupational stress on occupational well-being

The analysis results in *Table 10* showed that the occupational stress brought about by the conflict between work and family had no correlation with occupational well-being. Thus, the other dimensions of occupational stress were the independent variables, whereas the occupational well-being was the dependent variable. Stepwise multivariate regression was then conducted. *Tables 11 and 12* show the results.

Table 11. *Regression analysis between the dimensions of occupational stress on occupational well-being*

Model	Standardized Coefficients β	t	Sig.	Collinearity Statistics	
				Tolerance	VIF
Constant		-2.81	0.005		
Interpersonal relationship	-0.313	-9.37	0.000	0.854	1.171
Career development	-0.272	-4.15	0.000	0.703	1.422
Job characteristic	0.203	4.03	0.000	0.818	1.222
Role stress	-0.184	-3.14	0.002	0.742	1.348
Organizational environment	-0.179	-3.09	0.002	0.649	1.541

Table 12. *Regression model parameter test of the dimensions of occupational stress on occupational well-being*

Model	R	R -Square	Adjusted R -Square	Std Error of the Estimate	F	Durbin-Watson
	0.521e	.271	.258	2.904177	27.910**	1.812

Note: predictive variables: constant; job characteristic; role stress; interpersonal relationship; career development; organizational environment.

Dependent variable: occupational well-being.

The regression analysis results showed that the Tolerance and VIF of Collinearity Statistics were close to 1. Hence, no multicollinearity existed between the variables. The *F* statistics was 27.910**, which reached the significance level. The Adjusted *R*-Square in the table showed that the regression equation could explain the total variation of 25.8% of occupational well-being. According to the regression equation model, the stress from the job characteristic had a significantly positive predictive effect on occupational well-being, whereas that from role stress, interpersonal relationship, career development, and organizational environment had a significantly negative predictive effect on occupational well-being. Thus, the stress perceived by the junior administrative staff in universities from the job itself is helpful in enhancing their occupational well-being.

Regression of all dimensions of social network on occupational well-being

Two social network dimensions, namely, network support and network capital, served as the independent variables, and occupational well-being served as the dependent variable. Stepwise multiple regressions were then performed. *Tables 13 and 14* show the results.

Table 13. *Regression analysis of all dimensions of social network on occupational well-being*

Model	Standardized Coefficients β	t	Sig.	Collinearity Statistics	
				Tolerance	VIF
Constant		3.51	0.000		
Network support	0.171	3.01	0.003	0.835	1.198
Network capital	0.136	2.56	0.011	0.871	1.148

Table 14. *Regression model parameter test on all dimensions of social network on occupational well-being*

Model	R	R -Square	Adjusted R -Square	Std Error of the Estimate	F	Durbin-Watson
	0.368b	.135	.121	3.042328	29.826**	1.903

*Note: predictive variables: constant; network support; network capital.
Dependent variable: occupational well-being.*

The regression analysis results showed that the Tolerance and VIF of the Collinearity Statistics were close to 1, which indicated the absence of multi-collinearity between variables. The statistics was 29.826**, which reached the significance level. The Adjusted -Square in the table showed that the regression equation could explain the total variation of 12.1% of occupational well-being. The regression equation model demonstrated that both network support and network capital had a significantly positive predictive effect on occupational well-being with the regression coefficients of 0.171 and 0.136, respectively. Thus, the wider the social network of the junior administrative staff in universities, the higher their occupational well-being.

Tests for the compensation effect and moderating effect of social network

Test for the compensation effect of social network

Occupational stress and social network were taken as the predicative variables to test the compensation effect of the social network of the junior administrative staff in universities between occupational stress and well-being. Furthermore, three dimensions of the occupational well-being of the junior administrative staff in universities (job satisfaction, positive emotions, and negative emotions) were

taken as the outcome variables to perform the multiple regression analysis (Enter method). The compensation effect hypothesis of social network was supported if social network could significantly and positively predict the occupational well-being of the junior administrative staff in universities after considering the predictive effect of occupational stress.

Table 15. Analysis of compensation effect of social network on occupational stress and well-being

		Job satisfaction Y_1	Positive emotions Y_2	Negative emotions Y_3
Occupational stress X	Standardized Coefficients β	-0.218	-0.152	0.174
	Sig.	0.000	0.003	0.000
Social network M	Standardized Coefficients β	0.096	0.122	-0.188
	Sig.	0.048	0.010	0.004

Note: dependent variables: job satisfaction; positive emotions; negative emotions. Predictive variables: occupational stress; social network.

Table 15 showed the compensation effect analysis, given the negatively predictive effects of occupational stress on job satisfaction and positive emotions, and the positively predictive effect on negative emotions (job satisfaction $\beta=-0.218$, Sig.<0.001; positive emotions $\beta=-0.152$, Sig.<0.05; and negative emotions $\beta=0.174$, Sig.<0.001), social network has positively predictive effects on job satisfaction and positive emotions, while it has negatively predictive effect on negative emotions (job satisfaction $\beta=0.096$, Sig.<0.05; positive emotions $\beta=0.122$, Sig.<0.05; and negative emotions $\beta=-0.188$, Sig.<0.05). These results indicated that the compensation effect model of social network between occupational stress and well-being was verified.

Test for the moderating effect of social network

The possible moderating effect of the social network of the junior administrative staff in universities between occupational stress and well-being was tested using the hierarchical regression analysis (Table 16).

Step 1: X (occupational stress) and M (social network) were substituted into the regression equation, then the regression of Y (occupational well-being) on X (occupational stress) and M (social network) was used to obtain the coefficient of determination R_1^2 .

Step 2: The regression equation of Y (occupational well-being) on X (occupational stress), M (social network), and $X \times M$ {(occupational stress) \times (social network)} was used to obtain R_2^2 .

Step 3: The moderating effect was significant if $R_1^2 > R_2^2$ and the regression coefficient of the moderating item reached the significance level.

Table 16. Analysis of moderating effect of social network on occupational stress and well-being

		Job satisfaction	Positive emotions	Negative emotions
Step1:	Coefficient of determination R_1^2	0.173	0.141	0.158
Occupational stress	Standardized Coefficients β	-0.218	-0.152	0.174
	Sig.	0.000	0.003	0.000
Social network	Standardized Coefficients β	0.096	0.122	-0.188
	Sig.	0.048	0.010	0.004
Step2:	Coefficient of determination R_2^2	0.174	0.164	0.193
Occupational stress	Standardized Coefficients β	-0.275	-0.197	0.203
	Sig.	0.000	0.002	0.000
Social network	Standardized Coefficients β	0.065	0.072	-0.095
	Sig.	0.050	0.010	0.003
(Occupational stress) \times (social network)	Standardized Coefficients β	-0.008	0.012	-0.012
	Sig.	0.169	0.011	0.019
Change of coefficient of determination R^2		0.001	0.023	0.035

Note: predictive variables: occupational stress; social network; (occupational stress) \times (social network).

Dependent variables: job satisfaction; positive emotions; negative emotions.

Table 16 showed that occupational stress and social network had significantly negative and positive predictive effects on job satisfaction, respectively. The coefficient of determination R_1^2 was 0.173. The occupational stress, social network, and (occupational stress) \times (social network) moderator in the second step were brought into the regression equation to obtain the coefficient of determination R_2^2 of 0.174, which indicated a change of 0.001. However, the prediction of the moderator on job satisfaction did not reach the significance level (Sig.= 0.169). In other words, social network had no moderating role between occupational stress and job satisfaction.

Occupational stress and social network had significantly negative and positive predictive effects on positive emotions, respectively. The coefficient of determination R_1^2 was 0.141. The occupational stress, social network, and (occupational

stress) \times (social network) moderating item in the second step were brought into the regression equation to obtain the coefficient of determination R_2^2 of 0.164, which indicated a change of 0.023. In addition, the prediction of the moderating item on positive emotions reached the significance level ($Sig.=0.011<0.05$). The extra contribution rate of the moderating item on positive emotions was 2.3%. Thus, the moderating effect of social network between occupational stress and positive emotions was verified.

Occupational stress and social network had significantly positive and negative predictive effects, respectively, on negative emotions. The coefficient of determination R_1^2 was 0.158. The occupational stress, social network, and (occupational stress) \times (social network) moderating item in the second step were brought into the regression equation to obtain the coefficient of determination R_2^2 of 0.193, which indicated a change of 0.035. In addition, the prediction of the moderating item on negative emotions reached the significance level ($Sig.<0.05$). The extra contribution rate of the moderating item on the negative emotions was 3.5%. Thus, the moderating effect of social network between occupational stress and negative emotions was verified.

Discussion

Effect of the social network of the junior administrative staff in universities on occupational stress

The data analysis in *Table 8* showed that the wider the social network of the junior administrative staff in universities, the lesser their occupational stress; the same conclusion was presented in the works of Lim and Putnam (2010) and Yi, Tan, Liu, & Zhang (2010). Social network is an important resource that satisfies the social, physiological, and psychological needs of individuals. Only when the junior administrative staff in universities was respected, supported, and understood in society could their enthusiasm for work be boosted. Thus, building a strong social support network and making full use of spiritual and material support from family, friends, colleagues, groups, organizations, and community are necessary in relieving psychosocial stress, reducing tension, improving social adaptation ability, and effectively alleviating occupational stress.

Effect of the social network of the junior administrative staff in universities on occupational well-being

Tables 9, 13, and 14 showed that the wider the social network of the junior administrative staff in universities, the stronger their sense of happiness; the same conclusion was presented in the works of Nahum-Shani, Bamberger, & Bacharach (2011) and Pinquart & Sörensen (2000). The occupational well-being of the junior

administrative staff in universities refers to the continuous positive disposition they obtain on the basis of the satisfaction of their needs, the full exploitation of their potentials, and the increase in their power in the workplace. They can cope well with the challenges from all aspects if they can be supported, understood, and respected by their relatives, friends, leaders, and colleagues. Furthermore, the well-being index also increases. A strong, positive, and healthy social network can effectively enhance occupational well-being. By contrast, the target group rejects work if they feel left out in the workplace and without the understanding and support of their relatives and friends. Their well-being index also declines accordingly.

Effect of the occupational stress of the junior administrative staff in universities on occupational well-being

The results of Tables 10-12 showed that the greater the occupational stress of the junior administrative staff in universities, the weaker their occupational well-being; the same conclusion was presented in the work of Matteson and Ivancevich (1987). Among the six dimensions of occupational stress, namely, job characteristic, role stress, interpersonal relationship, career development, organizational environment, and conflict between work and family, the job characteristic dimension had a positive impact on occupational well-being. This result can be explained by the fact that most of the junior administrative staff in universities are young people who only recently joined the workforce and are thus enthusiastic about their occupation. Therefore, moderate stress can stimulate them. As they say, "stress gives us an impetus." In addition, the conflict between work and family of occupational stress has no correlation with occupational well-being. The junior administrative staff in universities has abundant time to deal with the relationship between work and family. Both the occupational stress from the interpersonal relationship and the career development prospects has a significant negative impact on the occupational well-being. A good social relation network, room for promotion, and realization of personal values are beneficial for enhancing occupational well-being. In addition, trust, help, and support between higher and lower levels, management style of leaders, and culture and policies of the organization can all reduce occupational stress, enhance occupational well-being, and improve work efficiency. Organization can also achieve efficient and sustainable development.

Role of social network in the effect of occupational stress on occupational well-being

Tables 15 and 16 demonstrated that the occupational stress of the junior administrative staff in universities had a negative impact on their occupational well-being. However, this effect is often inseparable from the characteristics of

the junior administrative staff in universities. This research explored the joint effect of the occupational stress and social network of the junior administrative staff in universities on their occupational well-being. The compensation and moderating effect of the social network effect was also investigated, and meaningful findings were obtained.

First, the compensation effect of social network was supported. Social network can positively predict occupational well-being after controlling for the effect of occupational stress. Accordingly, the social network of the junior administrative staff in universities can offset or confront the adverse effect of occupational stress on occupational well-being to some extent.

Second, the moderating effect of social network was partially supported. Among the three dimensions of occupational well-being (i.e., job satisfaction, positive emotions, and negative emotions), the impact of occupational stress on job satisfaction did not change with the difference in the strength level of social network. However, its impact on the emotions of the junior administrative staff in universities changed. This result indicates that the junior administrative staff in universities uses their social network on the basis of their emotional needs rather than as a tool they need. For them, even though they love their job, they will reject it without hesitation because of their poor relationship with their leaders and colleagues. When the target group encounters difficulties in the workplace, the support they obtain from their social relationships can regulate their own emotions and help them release the stress to devote themselves to their work when encountering difficulties. Thus, social network has a moderating role in the occupational well-being of the junior administrative staff in universities. Such effect is mostly reflected in the emotional intervention (positive and negative emotions).

Conclusions and Future Research Directions

From the social network perspective, this study conducted a large-scale questionnaire survey on 760 the junior administrative staff in universities in Shanxi Province of China to determine how to relieve occupational stress and enhance occupational well-being. This study also discussed the relationship between occupational stress and well-being as perceived by the junior administrative staff in universities. The discussion included the compensation and moderating effect of social network between occupational stress and well-being. The following conclusions are drawn:

(1)The occupational stress of the junior administrative staff in universities had a significant negative impact on their occupational well-being. Social network had a negative impact on occupational stress and a positive impact on occupational well-being.

(2)The greater stress perceived by the junior administrative staff in universities from the role stress, interpersonal relationship, career development, and organizational environment, the weaker their occupational well-being. For the job characteristic, moderate stress was beneficial in enhancing occupational well-being. The two dimensions of the social network of the junior administrative staff in universities, namely, network support and network capital, had a significantly positive effect on their occupational well-being. A positive and healthy social network can effectively enhance occupational well-being.

(3)Social network showed a compensation and partial moderating effect between the occupational stress and the well-being of the junior administrative staff in universities. It can offset the adverse effect of occupational stress on their well-being to a certain extent through the compensation effect. It can also cushion the effect of occupational stress on their well-being through the moderating effect. However, its moderating effect was significant between occupational stress and positive and negative emotions and not between occupational stress and job satisfaction.

This study revealed the relationship among social network, occupational stress, and well-being to a certain extent. The results obtained in this study are practically significant because they provide a reference for the junior administrative staff in universities to effectively relieve occupational stress and enhance occupational well-being. However, although the discussion made up for the lack of empirical research on the junior administrative staff in universities in the theoretical context of university development, the research itself was restricted by the survey data because it only used the data obtained from some universities in Shanxi Province of China for analysis and provided strong hypotheses for analyzing the causal relations. Future research should enlarge the sample sources, conduct comparative research in many regions, and explore the degree of influence of social network on the relationship between occupational stress and well-being to further improve the conclusions of the current work. As this study only considered the role of social network, future research can discuss the effect of other factors between occupational stress and well-being.

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