

ORIGINAL RESEARCH

Understanding the Link Between Work-Related and Non-Work-Related Supervisor—Subordinate Relationships and Affective Commitment: The Mediating and Moderating Roles of Psychological Safety

Yu Gao D, Haiyan Liu D, Yuechi Sun D

School of Economics and Management, China University of Geosciences (Beijing), Beijing, People's Republic of China

Correspondence: Haiyan Liu, Email liuhy@cugb.edu.cn

Purpose: Based on social information processing (SIP) model and conservation of resources (COR) theory, this paper is to examine the mediating and moderating roles of psychological safety (PS) in the relationship between work-related leader-member exchange (LMX)/non-work-related supervisor-subordinate guanxi (SSG) and employee affective commitment (AC).

Participants and Methods: Cross-sectional data came from 213 enterprise employees in China. The participants completed the LMX scale, SSG scale, PS scale, and AC scale. SPSS PROCESS macro and RWA-Web were used to test the research hypothesis. **Results:** Both LMX and SSG were positively related to employee AC. LMX was more strongly associated with AC than SSG. PS partially mediated the influence of LMX/SSG on AC. PS negatively moderated the influence of LMX on AC, whereas it did not moderate the influence of SSG on AC.

Conclusion: Different types of supervisor-subordinate relationships (SSR) were both beneficial to employee AC, and work-related LMX was more closely related to employee AC. Different types of SSR could both affect employee AC through PS. In addition, high PS also reduced the relationship between LMX and employee AC. Therefore, in the context of Chinese culture, enhancing employees' AC within an enterprise can not only pay attention to the work-related LMX and non-work-related SSG but also the appropriate cultivation of employees' PS.

Keywords: leader-member exchange, supervisor-subordinate guanxi, psychological safety, affective commitment

Introduction

In the era of digital economy with the increasingly fierce market competition and the deepening organizational reform, enterprises have deeply realized that talent competition is the core of enterprise competition. However, in the era of digital economy, the traditional management system and talent management model of enterprises have been impacted, and the work values of employees have also undergone great changes. For example, employees expect not only higher remuneration packages but also personal career development. They not only pursue personal freedom and work autonomy but also pay more attention to professional environment and atmosphere. At this time, in order to achieve better career prospects, employees do not hesitate to change jobs frequently, lack of loyalty and sense of responsibility to the organization, and reduce their commitment to the organization. Under lower organizational commitment, employees are reluctant to invest too much enthusiasm and energy, which will reduce employee work performance, and the reduction of employee work performance will affect the overall performance of the enterprise, which is not conducive to the stable operation and sustainable development of the enterprise. Faced with this situation, how to improve employees' commitment to the organization has become a major problem for enterprise managers.

1649

Organizational commitment is an employee's work attitude.⁴ The concept of organizational commitment first proposed by Becker,⁵ and extended by Meyer and Allen,⁶ believing that organizational commitment is "feelings and/ or beliefs concerning the employee's relationship with an organization", which includes three dimensions: affective commitment (AC), continuance commitment, and normative commitment.⁶ AC is the employee's emotional attachment to, identification with, and involvement in the organization, as well as their strong desire to stay in the organization,⁶ which is the core essence of organizational commitment.⁷ Moreover, due to China's "human sentiment culture", "human sentiment" has become a key factor in maintaining the relationship between individuals or between individuals and organizations.⁸ Therefore, in the context of Chinese culture, improving employees' AC to the organization will be of more practical significance.

In previous management practices, managers mostly enhanced employee AC via increasing compensation, providing promotion opportunities, enhancing employees' work autonomy, focusing on employees' personal development, and developing workplace spirituality, ⁹⁻¹¹ but the results were minimal. The reason may be that organizations in Chinese society have the characteristics of "relation-oriented", ¹² and employees do not exist in isolation but interact with leaders/team members in teams/organizations, which further affect their own commitment or reciprocal behavior. ¹³ Both leader-member exchange (LMX) and supervisor-subordinate guanxi (SSG) emphasizes the quality of supervisor-subordinate relationships (SSR). ¹⁴ However, LMX is a work-related task exchange relationship, while SSG is a non-work-related private exchange relationship, ¹⁵ and they also have significant differences in cultural origins, reciprocity rules, and focus priorities. ¹⁶ Therefore, only considering the impact of a single aspect of the interaction between employees and leaders on employee AC may not be comprehensive. Yang and Liang ¹⁷ also pointed out that the lack of organizational system and the influence of traditional concepts in China's transitional society make the communication between supervisors and subordinates depend on work and non-work interpersonal relationships at the same time. Therefore, it is necessary to comprehensively examine the influence of different types of SSR on employee AC.

Looking at the existing literature, it can be summarized as follows: (1) Few studies have explored the relationship between SSG and employee AC. Instead, most of them have examined the relationship between LMX and employee AC, and the current conclusions on the relationship between LMX and employee AC have not been unified. For example, most studies have found that LMX can cultivate employee AC. 18,19 However, Zhou and Shi²⁰ pointed out that in order to maintain or improve their LMX relationships, employees will form a competitive relationship with colleagues, causing team relationship conflicts, which is not conducive to employee AC. Lee et al²¹ found that employees with high psychological power do not have a strong sense of obligation to repay the preferential treatment given by leaders, thereby reducing their own affective organizational commitment levels. (2) Few studies have considered and compared the influence of work-related LMX/non-work-related SSG on employee AC at the same time. Instead, most studies on the influence of different types of SSR on employees' work behaviors (such as helping behavior, knowledge hiding behavior, voice behavior) and other work attitudes (such as turnover intention, job satisfaction, organizational commitment). For example, Zhang et al¹⁴ found that SSG was positively associated with employee helping behavior towards the leader by improving person – supervisor fit, while LMX was negatively associated with employee turnover intention by improving person – organization fit. Song et al²² argued that leader-member guanxi and LMX can positively affect employees' voice behavior via employees' psychological states (psychological meaningfulness and psychological safety (PS)). Miao et al¹⁶ found that the relative weight of SSG in predicting turnover intention, job satisfaction, and organizational commitment was lower than that of LMX. He et al¹⁵ found that both LMX and SSG were negatively correlated with employee knowledge hiding behavior. (3) In the research on the relationship between LMX and employee AC, some scholars have found that person - organization fit, 14,23 psychological contract breach, 24 PhDs' satisfaction with HR practices, 25 organizational social exchange and organizational economic exchange²⁶ plays an important process mechanism in the relationship between the two, while supervisor's organizational embodiment, 27 perceived organizational support, 28 different promoters²⁵ acts as an important boundary condition in the relationship between the two. However, few studies have explored the psychological mechanism between different types of SSR and employee AC from a cognitive perspective. As we all know, cognition can be used to predict employee AC.²⁹ Existing studies have also begun to examine the role of cognition in the relationship between different antecedents and employee AC. 30,31 Based on the

above limitations, we will compare how and under what conditions different types of SSR can affect employee AC from a cognitive perspective.

Social information processing(SIP) model believes that external information that employees obtain in the workplace not only directly affect employees' attitudes and behaviors but also indirectly affect employees' attitudes and behaviors through their cognitive construct.^{32,33} Therefore, this paper regards LMX and SSG as important external information/ resources obtained by employees, which will affect employees' cognition and then affect employees' AC. Since PS refers to employees' cognition of the consequences of interpersonal risks in the work environment, ^{15,34} the improvement of PS will enhance employees' trust in leaders and organizations, and they are willing to pour their personal emotions into the organization and enhance their AC.35 Therefore, this article will explore the mediating role of PS in the relationship between different types of SSR and AC. Furthermore, numerous studies have shown that a variable can play a mediating and moderating role at the same time. 36,37 Gao and Liu³⁸ also pointed out that PS is an important factor to evaluate the effect of leaders on employee work attitudes. Hence, based on conservation of resources(COR) theory, this paper regards PS as a kind of interpersonal resource, ³⁸ and believes that different resources will not exist independently, but will interact and influence each other.³⁹ In other words, different types of SSR should interact with PS to influence employee AC. Employees with high PS resources will not be distracted from dealing with interpersonal relationships, thus better protecting existing SSR resources and having the ability to continuously obtain more new resources, which will benefit employees' AC to the organization. Employees with low PS resources will spend more time on resource protection. Even if employees have high-quality SSR resources, their ability to obtain new resources is also weak, which should reduce employees' emotional attachment and identification with the organization. Therefore, this article will also explore the moderating role of PS in the relationship between different types of SSR and AC.

To sum up, based on SIP model and COR theory, this paper brings PS into the conceptual model of LMX/SSG on employees' AC, the mediating and moderating model of the influence of LMX/SSG on employees' AC were constructed. The contributions of this article are as follows: (1) In previous studies on AC, many studies have paid attention to the role of work-related LMX, while few have examined the role of work-related LMX and non-work-related SSG at the same time, and few have compared the influence mechanism of different types of SSR on AC. This paper examines the influence of work-related LMX and non-work-related SSG on employee AC at the same time, supplements and expands the factors that enhance employee AC, helps to understand the differences between different types of SSR, and provides a theoretical basis for enterprise management practice. (2) Previous studies rarely explored the process mechanism and boundary conditions between different types of SSR and employee AC from a cognitive perspective. This paper provides a new perspective, introducing a cognitive variable (PS) to supplement previous studies, and using PS as both a mediator and moderator variable to examine the relationship between different types of SSR and employee AC. We demonstrate that PS can affect employee AC through a variety of different models, helping to deepen understanding of the role of PS. (3) In previous studies, the conclusions on the relationship between LMX and employee AC have not been unified. This paper introduces PS and clarifies the moderating effect of PS between LMX and employee AC. Specifically, the higher the PS, the weaker the relationship between LMX and AC. It helps to clarify the reasons for the inconsistent role of LMX to a certain extent.

Theoretical Background and Hypotheses

SIP model points out that the social environment will generate various types of information (such as observation of work, behavioral experience of work, interpersonal interaction among colleagues, or others' evaluation of work), which have the characteristics of sociality, wide sources, and multiple channels. It can be instant or reminiscence. After receiving all kinds of information, people will encode, store and interpret the information, which directly affect perceptions, attitudes and behaviors.³³ In addition, based on theories of cognition, social judgment and attribution, Zalesny and Ford³³ supplements the mediating process (such as the process of social learning, the process of attribution, and the cognitive process of coding and judgment) of the influence of social information on attitudes and behaviors. At present, SIP model has been applied to the research of leadership styles on employees' work attitudes and behaviors.

COR theory argues that people will strive to preserve, protect, invest and construct resources to avoid potential or actual loss of resources. 42 Resources include a series of things cherished by individuals, such as objects, materials,

knowledge, time, motivations, situations, and relations. 42–44 Therefore, people who have more resources are less vulnerable to the impact of resource loss and more able to gain new resources, while people with less resources are more vulnerable to the threat of resource loss and less able to gain new resources. At present, COR theory has also been applied to the research of leadership styles on employees' work attitudes and behaviors. 38,45

Different Types of SSR and AC

At present, different types of SSR can be divided into LMX and SSG. Both LMX and SSG are based on social exchange theory, emphasizing the quality of the relationship between supervisors and subordinates. ¹⁴ These two relationships have also been proved to be related to important work outcomes such as knowledge sharing, knowledge hiding, 15 job satisfaction, turnover intention. ¹⁶ However, these two relationships are also different. For example: (1) Different cultural origins. LMX derives from the Western cultural background, while SSG derives from the Oriental cultural background. Both of them have been proven to be applicable in cross-cultural studies. 46,47 (2) Different exchange situations. LMX mainly involves the work exchange between supervisors and subordinates in the workplace. Supervisors and subordinates interact with each other based on work goals and work contents in the exchange process. 16,48 SSG mainly involves the private exchange between supervisors and subordinates outside the workplace, such as home visits and give gifts. Supervisors and subordinates will establish and maintain a close personal relationship in the exchange process. 16,48 (3) Different reciprocity rules, LMX emphasizes rational factors, follows fair and equal exchange of interests, and aims to do a good job and build a good work order. 48 SSG emphasizes perceptual factors, follows different and unequal rights and obligations according to their respective roles. ⁴⁹ (4) Different focus priorities. LMX focuses on competence, contribution and employment relationship, puts work in the first place, and personal relationship is the result of work exchange. ^{14,50} SSG focuses on emotion, loyalty and family relationship, puts personal relationship in the first place. After cultivating the relationship, exchange will follow.^{14,50} In other words, LMX derived from the Western cultural background pays more attention to the short-term exchange of equal interests. Although leaders also develop personal relationships with employees, they are often warned to clearly distinguish between non-work issues and work activities, and personal relationships at this time are the result of delegation-performance interactions. ⁵⁰ Yang and Liang¹⁷ also mentioned that based on an affect theory of social exchange, although any interpersonal interactions will awaken emotion, there are also differences in intensity and valence of emotion. SSG derived from the Oriental cultural background pays more attention to the long-term and unequal exchange of interests. Supervisors have the right to hire subordinates they like and fire subordinates they do not like.⁵¹ Hence, subordinates generally attach importance to establishing and maintaining a good personal relationship with their supervisors to seek protection or career development. At the same time, maintaining a good personal relationship between supervisors and subordinates is also conducive to better organizational management. 48,50

SIP model believes that social environment contains important information clues, and employees will shape their own attitudes and behaviors through these information clues.⁵² Based on SIP model, both work-related LMX and non-workrelated SSG can be used as important information/resources for employees. 38,40 However, work-related LMX and nonwork-related SSG will affect employees' attitude (AC) in different ways. For example, LMX pays more attention to working relationship than personal or friendship relationship.⁵³ Therefore, employees with high-quality LMX relationship will receive instrumental support from leaders such as having more opportunities, work autonomy, and more participation in organizational activities, 54,55 and acquiring information, knowledge, and skills related to task completion.⁵⁰ Continuous delegation-performance interactions will lead to trust, respect and support between leaders and employees over time, 50 and this trust, respect and support refer specifically to individuals' evaluation of each other's professional capabilities and behaviors, rather than liking-based dimensions of interpersonal attraction and bonding.⁵³ At this time, under the influence of work-related LMX information, employees interact more closely with the organization, may show positive work attitudes and improve their sense of belonging and loyalty to the enterprise. ¹⁴ On the contrary, SSG pays more attention to personal relationship than working relationship. 14 Therefore, employees with high-quality SSG will receive emotional support from their leaders such as care, attention, special treatment, and support. 46 At this time, employees will enhance their self-esteem and self-confidence, 16 have more trust in leaders and improve their commitment to the supervisor. 56 Since supervisors are often regarded as agents of the organization, subordinates often

attribute favorable treatment obtained from supervisors to the entire organization,⁵⁷ and consider themselves as an important member of the organization.¹⁶ Frear et al⁵⁸ argue that subordinates who feel supported and cared by supervisors will be more committed to the well-being of the organization and more loyal to the organization. Moreover, the phenomenon of "love me, love my dog" is widespread in the context of Chinese culture, that is, "the love for somebody or something extends to everything related with it".⁵⁹ Therefore, when a subordinate has a close personal relationship with the supervisor, the subordinates' favorable impression of the supervisor will extend to the supervisor's organization, and the subordinates' AC to the supervisor will also extend to the organization. At this time, under the influence of non-work-related SSG information, employees may also show positive work attitudes, improve emotional attachment to the supervisor and even the organization, and enhance AC to the organization. Furthermore, based on social exchange theory,⁶⁰ employees with high-quality LMX/SSG also believes that they have the obligation to repay the preferential treatment given by the leader and enhance their AC. The existing empirical studies also support this inference. For example, Wong⁶¹ argue that LMX promotes employee loyalty to leaders, and employee loyalty to leaders promotes employee AC. Miao et al note that SSG can positively affect organizational commitment.¹⁶ This conclusion has also been verified in the study of Gao and Liu.³⁸ Robert and Vandenberghe¹⁹ suggest that LMX can positively affect AC. This conclusion has also been verified in the study of Gara et al.¹⁸

Chinese culture pays more attention to human sentiment. However, LMX attaches importance to the spontaneity of intimacy after equal exchange and ignores personal relationship, while SSG puts personal relationship in the first place. Therefore, we believe that SSG should be more beneficial to employee AC than LMX. In addition, influenced by Chinese Confucian culture, enterprises like to create long-term family-like interpersonal interactions. However, LMX places more emphasis on short-term work exchange relationship and pays less attention to the construction of long-term relationship. SSG places more emphasis on relatively long-term exchange relationship and supervisors care about subordinates' personal emotions and lives. At this point, employees receive emotional support (such as trust, recognition, acceptance, and care) from leaders may generate more emotional exchange and enhance their emotional attachment and loyalty to the organization than receive instrumental support (such as task arrangement and work support) from leaders. Existing research on employee cognition and behavior can support this inference. For example, Zhang et al hows that SSG is more strongly associated with person–supervisor fit than LMX. Deng et al argue that SSG is more strongly associated with innovative behavior than LMX. To sum up, the following hypotheses are put forward.

Hypothesis 1a: LMX is positively associated with AC.

Hypothesis 1b: SSG is positively associated with AC.

Hypothesis 1c: SSG has a greater impact on AC than does LMX.

The Mediating and Moderating Role of PS

PS refers to employees' cognition of the consequences of taking interpersonal risks in the work environment. ^{15,34} It is the interpersonal belief that taking interpersonal risks in the work environment will not be criticized, rejected or punished. ⁶³

SIP model believes that "attitudes and needs are cognitive products that result from the processing of information about the attitude object and past behaviors in a social context".⁶⁴ Hence, employees who receive positive instrumental or emotional information from leaders will adjust their cognition accordingly, and then affect their attitudes and behaviors. In other words, we argue that the high-quality relationship between leaders and employees should improve employee PS. Specifically, employees with high-quality LMX relationship will receive instrumental support information from the leader, and this information can help employees eliminate concerns and uncertainties in the work process, reduce perceived risks in the work process, ¹⁵ and enhance employee self-confidence. At the same time, employees also believe that they express, make suggestions and challenge the current way of doing things will be understood by the leader, ⁶⁵ thus enhancing their PS. Kark and Carmeli also shows that high-quality interpersonal environment can enhance employees' self-confidence and enable employees to express themselves freely without fear of embarrassment or punishment, which is beneficial to promote employee PS. On the contrary, oppressive, marginalized and exploitative

work environment will bring uncertainty and fear to employees, which is not conducive to the cultivation of their PS.³⁰ Employees with high-quality SSG will receive emotional support information from the leader, and this information will make employees feel cared for, recognized and accepted. Long-term interpersonal interactions between leaders and employees can improve employee PS over time.²² This information may also send signals that employees do not have to worry about being rejected or punished for making mistakes or taking interpersonal risks, enhancing interpersonal trust in leaders.⁶⁷ Employees' trust in leaders can reduce employees' perception of threats and hostility in the environment, and thus enhancing PS. 15 On the contrary, employees with low-quality SSG will become distrustful of their leaders and feel the potential pressure in interpersonal interactions, which is bound to reduce employee PS. Based on SIP model, we believe that the improvement of employee PS will further shape employees' work attitude (AC). For example, employees with high PS will experience more freedom, support and respect, and will form emotional attachment and identification with the organization, ²⁹ which makes them more willing to stay in the organization and strengthen their AC. Employees with high PS are also more willing to establish positive interpersonal relationships with colleagues/organizations and promote interpersonal cooperation and reciprocal behavior, ³⁰ which is beneficial to further enhance employee AC. On the contrary, employees with low PS will experience uncertainty and interpersonal risks (such as neglect, ridicule and scolding), ⁶⁸ and become distrustful of others, which is bound to hinder employee emotional attachment to the organization.³¹ Previous empirical studies also verify this inference. For example, He et al¹⁵ note that both LMX and SSG can promote PS. Chen et al²⁹ proves that PS of prote'ge's can promote their AC. Although few empirical studies examined PS can mediate the effect of different types of SSR on employee AC, Huang et al³⁰ note that decent work (perceived working conditions such as freedom, inclusion, trust, and respect) can promote PS, and then promote employee AC. In addition, we also find that PS plays a mediating role in the relationship between different types of SSR and employee work behaviors. For example, Hu et al⁶⁹ note that high-quality LMX can promote employee voice behavior by improving employee PS. He et al¹⁵ argue that different types of SSR can improve employee PS, thereby reducing employee knowledge hiding behavior. Therefore, the following hypotheses are put forward.

Hypothesis 2a: PS will mediate the relationship between LMX and AC.

Hypothesis 2b: PS will mediate the relationship between SSG and AC.

Due to a variable can play a mediating and moderating role at the same time, and mediation and moderation models themselves do not conflict.³⁷ Therefore, this paper believes that PS is not only affected by different types of SSR but also constantly moderate the influence of different types of SSR on employee AC. Gao and Liu³⁸ also pointed out that PS is an important factor to evaluate the effect of leaders on employee work attitudes. Based on COR theory, high-quality LMX and SSG can be regarded as important information/resources obtained by employees while PS can be regarded as a kind of interpersonal resource.³⁸ Different resources do not exist independently, while interact with each other like a moving "caravan". Therefore, different types of SSR should interact with PS to affect employee AC. According to the COR theory, person with more resources is less susceptible to resource loss and more able to acquire new resources.³⁹ We speculate that employees with high PS resources will feel protected and valued by the organization. ⁷¹ They will relax, pleasant, speak freely,72 and do not worry about negative interpersonal consequences. At this time, PS resources will enable employees not to be distracted from dealing with interpersonal relationships, so as to better protect existing resources, avoid resource loss, and continuously obtain new resources, 38 which should enhance employees' sense of belonging and loyalty to their organization. On the contrary, person with fewer resources is more susceptible to resource loss and have lower ability to acquire new resources.³⁹ We speculate that employees with low PS resources worry about being criticized or punished for freely expressing opinions or making suggestions, ²⁹ becoming suspicious and distrustful of each other. 72 At this point, employees will spend more time protecting themselves and are more vulnerable to stress from resource loss. Even if employees have high-quality LMX or SSG resources, employees have less ability to acquire new resources, which should reduce employees' emotional attachment and identification with the organization. Therefore, the following hypotheses are put forward.

Hypothesis 3a: PS will moderate the positive relationship between LMX and AC, that is, the higher the PS, the stronger the relationship between them.

Hypothesis 3b: PS will moderate the positive relationship between SSG and AC, that is, the higher the PS, the stronger the relationship between them.

To summarize the above, the conceptual model of this article is as follows (Figure 1).

Materials and Methods

Participants

This article was supported by the ethics committee of all author's institution. Subsequently, the experimenters posted information on the Internet to recruit enterprise employees, and used snowball sampling. All employees must meet the following criteria before conducting the questionnaire survey: (1) One member of a private enterprise, or a state-owned enterprise. (2) Self-reported chronological age of participants is over 18 years old. (3) No mental deficiency or dyslexia. The employees recruited from scientific and technological enterprises, manufacturing, and service industries located in Shandong, Beijing, Guangdong, Hunan and other provinces and cities. Next, employees were informed of the purpose and requirements of this study and were guaranteed the right to withdraw from the questionnaire at any time. The experimenters provided employees with a questionnaire link from the "Wenjuanxing" platform. Employees' responsebias can be eliminated by setting guidelines (ensure the anonymity of employees' answers) and response-bias identification item (please select "disagree" for this question). Finally, a total of 254 questionnaires were recovered, invalid questionnaires were screened out (such as incorrect answer to identification item, choose the same option), and 213 valid questionnaires were obtained (the response rate was 83.9%). Demographically 53.1% were male, whereas the remaining 46.9% were female. About 13.1% were more than 35-year-old, 53.1% were between 26 and 35 years old, 33.8% were 25year-old and below. 25.4% were master and above, 52.1% were undergraduate, 22.5% were junior college and below. 30.5% were managers, 69.5% were ordinary employees. In addition, chi-square test was conducted on the gender variable of early employees (N=118) and late employees (N=95), as well as early employees (N=118) and all employees (N=213). ^{73,74} It was found that there was no significant difference between the variable in this study (P>0.05), indicating that the problem of non-response bias can be excluded.

Measures

All questionnaires in this paper are in Chinese format. We translated and retranslated all questionnaires to ensure compliance with the original intent to the greatest extent and make it easier for participants to understand.⁷⁵ All questionnaires were measured on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

The 12-item scale given by Liden and Maslyn⁷⁶ was employed to determine LMX. Sample item is "It is very interesting to work with supervisors". In our study, Cronbach's alpha of LMX was 0.90. The 6-item scale given by Law et al⁷⁷ was used to measure SSG. Sample item is "During holidays or non-standard working hours, I would call my supervisor or visit him/her". In our study, Cronbach's alpha of SSG was 0.90. The 7-item scale given by Edmondson⁶³

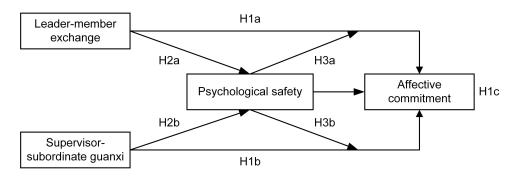


Figure I The conceptual model.

was adapted to measure PS. Sample items are "All members can ask questions and stick to their ideas in this team" and "In this team, it is difficult to ask other members for help (reverse scored)". In this work, Cronbach's alpha of PS was 0.60. The reliability is general, but 0.6 is also acceptable for the 5–9 item scale.⁷⁸ The 6-item scale given by Meyer and Allen⁶ was employed to determine AC. An example item is "Personally, this enterprise means a lot to me". In the study, Cronbach's alpha of AC was 0.90. Considering that gender, age, education level, and job category have been shown to affect AC in previous studies.^{18,79} We controlled for variables such as gender, age, education level and job category.

Analysis

Mplus 8.0, SPSS 24.0 and RWA-Web were used for data processing. First, Mplus 8.0 was used for confirmatory factor analysis. Second, SPSS 24.0 was used for common method bias test, descriptive statistics and Pearson product difference correlation analysis. Next, SPSS PROCESS macro was used to test the research hypothesis. ⁸⁰ At the same time, RWA-Web was used for relative weight analysis ⁸¹ to compare the relative contributions of independent variables to dependent variables. This method separates the contribution of each independent variable, which can avoid the disadvantages of misleading information caused by the difference comparison of traditional correlation coefficient and regression analysis coefficient. ⁴⁸

Results

Confirmatory Factor Analysis

The results are shown in Table 1. Since the fitting data of the initial four-factor model was not very ideal ($\chi^2/df=3.14$, p<0.001, RMSEA=0.10, CFI=0.80, TLI=0.78, SRMR=0.08), we revised the model according to the modification indices reported by the software.⁸² The revised data fitting effect was good ($\chi^2/df=2.05$, p<0.001, RMSEA=0.07, CFI=0.90, TLI=0.89, SRMR=0.07), and the four-factor model was significantly better than other models, indicating that the measurement scale has good discriminant validity.

Common Method Bias Test

Harman's single-factor test method was used to conduct principal component factor analysis on all items of the study variable, and the first principal component before rotation was 34.297%, which was lower than the critical standard of 40%, indicating that there was no common method bias.

Means, Standard Deviations, Variable Intercorrelations

The results are shown in Table 2. It can be seen from Table 2 that LMX, SSG, PS and AC were all positively correlated. It can lay a foundation for subsequent data analysis.

Hypothesis Testing

SPSS process macro was adopted for hypothesis testing. First, the control variables entering the equation were virtualized (0, 1). Second, the simple mediation model 4 and moderation model 1 were selected and the bootstrapping method was used to repeat sampling 5000 times. Finally, the standard error and 95% confidence interval of parameter estimation were obtained to determine the direct and indirect effects. In addition, the relative weight analysis was used to compare the

Table I Confirmatory Factor Analysis

Factors	χ²	df	RMSEA	CFI	TLI	SRMR
One factor model: LMX+SSG+PS+AC	2324.97	434	0.14	0.59	0.56	0.10
Two factor model: LMX+SSG+PS, AC	1789.15	433	0.12	0.70	0.68	0.09
Three factor model: LMX+SSG, PS, AC	1721.07	431	0.12	0.72	0.70	0.09
Four factor model: LMX, SSG, PS, AC	1344.53	428	0.10	0.80	0.78	0.08

Abbreviations: LMX, leader-member exchange; SSG, supervisor-subordinate guanxi; PS, psychological safety; AC, affective commitment; RMSEA, root mean square error of approximation; CFI, comparative fit index; TLI, Tucker-Lewis index; SRMR, standardized root mean square residual.

Table 2 Means, Standard Deviations and Correlations of Variables

Variables	М	SD	I	2	3	4
I LMX	3.92	0.69	_			
2 SSG	3.14	0.88	0.54***	_		
3 PS	3.10	0.53	0.53***	0.28***	_	
4 AC	3.83	0.79	0.64***	0.45***	0.57***	_

Note: N=213, ***p<0.001.

Abbreviations: LMX, leader-member exchange; SSG, supervisor-subordinate guanxi; PS, psychological safety; AC, affective commitment; M, mean; SD, standard deviation.

differences of independent variables, the bootstrapping method was used to repeat sampling 10,000 times, and the Alpha value was set to 0.05.

The results of the mediation effect and relative weight analysis are shown in Tables 3 and 4. As can be seen from the table below, LMX and SSG have significant positive effects on AC. This proves hypothesis 1a and 1b. The relative weight of LMX (RW=0.32, p<0.05) was greater than that of SSG (RW=0.11, p<0.05), and the percentage of predicted variance of LMX was 74.56%, which was much larger than that of SSG (25.44%). Therefore, LMX has a greater impact on AC than SSG. This does not support hypothesis 1c. LMX and SSG have significant positive effects on PS. PS has significant positive effect on AC. After adding PS, the influence of LMX and SSG on AC were weakened. In addition, the bootstrap 95% confidence interval of indirect effect does not include 0, and the bootstrap 95% confidence interval of

Table 3 Results of the Mediating Role of PS

Variables	Effect	SE	95% CI			
LMX						
LMX→AC	0.52	0.07	[0.38, 0.66]			
LMX→PS	0.40	0.05	[0.31, 0.50]			
PS→AC	0.45	0.09	[0.28, 0.62]			
LMX→PS→AC	0.18	0.04	[0.11, 0.27]			
SSG						
SSG→AC	0.27	0.05	[0.17, 0.38]			
SSG→PS	0.17	0.04	[0.08, 0.25]			
PS→AC	0.68	0.08	[0.52, 0.85]			
SSG→PS→AC	0.11	0.03	[0.06, 0.18]			

Note: N=213.

Abbreviations: LMX, leader-member exchange; SSG, supervisor-subordinate guanxi; PS, psychological safety; AC, affective commitment; SE, standard errors; 95% CI, the lower and upper limits of a confidence interval, respectively.

Table 4 Results of the Relative Weight Analysis

Predictor	b	β	RW	CI-L	CI-U	RS-RW (%)	
Criterion=AC (R ² =0.42; F [2, 210] =76.84, p<0.001)							
LMX	0.64***	0.56	0.32*	0.21	0.39	74.56	
SSG	0.13*	0.14	0.11*	0.04	0.15	25.44	

Note: N=213, *p<0.05, ***p<0.001.

Abbreviations: LMX, leader-member exchange; SSG, supervisor-subordinate guanxi; AC, affective commitment; b, unstandardized regression weight; β, standardized regression weight; RW, raw relative weight; CI-L, lower bound of confidence interval used to test the statistical significance of raw weight; CI-U, upper bound of confidence interval used to test the statistical significance in the criterion variable attributed to each predictor.

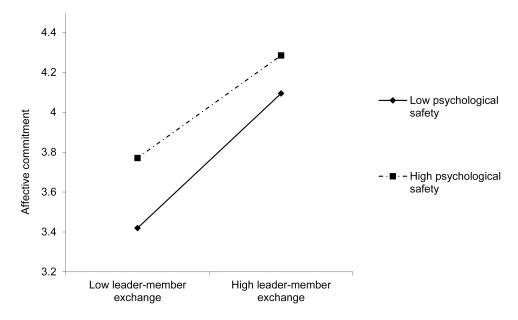


Figure 2 Interaction between leader-member exchange and psychological safety on affective commitment.

direct effect does not include 0, indicating that PS plays a partial mediating role in the total effect of different types of SSR on AC, thus proving hypothesis 2a, 2b.

The results of the moderating effect test shows that the interaction between SSG and PS has no significant effect on AC (β =- 0.08, SE = 0.04, t = -1.80, P > 0.05), 95% CI [- 0.16, 0.01], indicating that PS does not play a moderating role in the relationship between SSG and AC. The interaction between LMX and PS has a significant negative impact on AC (β =-0.08, SE=0.04, t=-2.03, p<0.05), 95% CI [-0.159, -0.002], indicating that PS moderate the relationship between LMX and AC. Figure 2 shows the moderating effect diagram of PS drawn with reference to Aiken et al.⁸³ With the increase of PS, the predictive effect of LMX on AC decreased from β =0.42, p<0.001 to β =0.26, p<0.001. This does not support hypothesis 3a, 3b.

Discussion

Based on SIP model and COR theory, this article examined the mediating and moderating roles of PS in the relationship between work-related LMX/non-work-related SSG and employee AC. The findings support most hypotheses. LMX has a greater impact on AC than SSG. LMX and SSG can not only directly affect employee AC but also indirectly affect employee AC through PS. PS negatively moderates the effect of LMX on AC, whereas it does not moderate the influence of SSG on AC.

Theoretical Implications

First, this article enriches the research on the antecedents of AC. Previous studies on AC have rarely examined the role of non-work-related SSG, and less explored the differences between work-related LMX and non-work-related SSG. This paper brings non-work-related SSG into research on AC, and compares the differential effects of work-related LMX and non-work-related SSG on AC. The findings of this paper echo the views of previous studies, that is, LMX and SSG are both interrelated and different from each other. The interrelation shows that both LMX and SSG can directly affect employee AC, which is consistent with the hypothesis in this paper. The difference is that LMX is more conducive to employee AC than SSG, which is inconsistent with the hypothesis in this paper, but the result is the same as that of Miao et al, that is, LMX is more conducive to employee work attitudes (such as turnover intention, organizational commitment, job satisfaction) than SSG. The reason may be that AC is one of the dimensions of organizational commitment. It is an employee's working attitude towards the organization, which is expressed as identification and loyalty to the organization. Hence, the outcome variable is work rather than personal/non-work

outcome. At this time, compared with SSG that pays more attention to non-working relationship, LMX that pays more attention to working relationship may be more beneficial to employee AC. Furthermore, employees with high-quality LMX will receive instrumental support from leaders, such as task-related knowledge, skill, and information. This is a key resource for employees to serve the organization and can help employees overcome uncertainty at work. Based on reciprocal norms, employees will also prefer to stay in the organization. However, SSG is a special personal relationship that occurs in random interactions outside of the workplace. In Chinese culture, people often need to develop and maintain some useful relationships for their own interests. However, when a person realizes that another person interacts with him/her because of his/her own use value, he/she will feel very uncomfortable from the bottom of his/her heart. Furthermore, using relationships to obtain work resources are often seen as corrupt, unethical, unfair, and such exchanges are often discouraged. Therefore, compared with SSG, LMX may be more beneficial to employee AC.

Second, this article deepens the understanding of the role of PS. Previous studies have rarely explored the process mechanism and boundary conditions of the impact of different types of SSR on AC from a cognitive perspective. This article confirms the complex process and action mechanism of PS between different types of SSR and AC. This is a rare study linking PS as a mediator and moderator variable with different types of SSR and AC at the same time. The results confirm that PS can partially mediate the relationship between different types of SSR and AC, and it also confirm that PS can moderate the relationship between LMX and AC, while it does not confirm that PS can moderate the relationship between SSG and AC. The reason may be that high-quality LMX emphasizes the task-related exchanges between supervisors and subordinates rather than interpersonal interactions. Therefore, it is more necessary to interact with PS that makes mistakes without punishment to stimulate employees' AC. However, high-quality SSG emphasizes non-work social and personal emotional exchanges. By strengthening interdependence, employees' safety needs and leaders' control needs can be met, and interpersonal risks are very small. Therefore, employees' AC can be directly promoted without interact with PS.

Third, this article explains the controversies over the relationship between LMX and AC. Previous studies on the relationship between LMX and AC have inconsistent views. In order to clarify this controversy, this paper explores the moderating effect of PS in the relationship between the two. It is found that the higher the PS, the weaker the relationship between LMX and AC. This is inconsistent with our hypothesis, but echoes the inferences made by Edmondson and Lei³⁴ that PS does not always have positive effects and may also have negative effects. For example, high PS can make people waste time on unimportant things or lose motivation to struggle, which will inevitably affect employees' desire to stay in the organization and reduce employee AC.

Practical Implications

First, pay attention to improving the relationship between supervisors and subordinates. Supervisors can give subordinates some instrumental support, such as salary reward, free development space, more decision-making scope, authorization. Pay attention to the needs of employees in a timely manner, provide them with appropriate work resources, and help employees solve work-related problems. At the same time, supervisors should also give subordinates appropriate emotional care, such as empathy, concern, encouragement, and develop trust and friendly relations with subordinates through communication and interaction outside the workplace. Through the integration of LMX and SSG to effectively enhance employee AC. Second, appropriately cultivate the PS of employees. Due to different types of SSR can affect employee AC through PS. Therefore, organizations should attach importance to the cultivation of employee PS. For example, supervisors can enhance subordinates' self-confidence by giving subordinates trust, support, communication, interaction and emotional care, make employees feel comfortable, can communicate openly and discuss mistakes at work, and be willing to share, 86 then enhance PS. Supervisors can also actively organize team building activities to enhance interpersonal interactions among team members, enhance mutual friendships, resolve conflicts in team relationships, and thus improve PS of employees. In addition, high PS negatively moderates the impact of LMX on AC. Therefore, organizations should not overdo it when cultivating employee PS, that is, to avoid employees' excessive PS. At this time, supervisors can clarify the division of labor in the organization, set performance objectives and reward and punishment measures, so as to stimulate the struggle of the spirit of employees and prevent employees from being content with the status quo.

Limitations and Future Research

This article also has certain limitations, and provides research directions for future research: First, the questionnaire in this paper adopts the method of participant self-report, and the survey results may have subjective tendency. Future research may use a combination of self-evaluation by participants and other evaluations by leaders and colleagues to improve the objectivity and reliability of research results. Second, limited by the research time and cost, the participants in this paper are enterprise employees under the background of Chinese collectivism culture. Therefore, whether the research results are applicable to enterprises under the background of foreign individualism culture remains to be verified. Studies have confirmed the applicability of LMX and SSG in cross-cultural research. 46,47 Future research can conduct cross-cultural research on different types of SSR and employee AC to further verify the conceptual model of this study. Third, this paper adopts a cross-sectional study design, which may fail to identify the causal relationship between variables. However, Spector⁸⁷ pointed out that cross-sectional study design can be used when the expected pattern of relationships between variables (exploratory research) is not known. Therefore, based on the exploratory nature of PS in this paper, it is reasonable to use cross-sectional study design. At the same time, this paper also calls for future research to further use longitudinal research or situational experiment to obtain causal inference between different types of SSR, PS and employee AC. Finally, this article only explores the relationship between different types of SSR and employees' AC to the organization. However, it has also found that SSG is related to employees' commitment to the supervisor (including instrumental commitment and AC).88 Therefore, future research can also explore the relationship between different types of SSR, PS and employees' commitment to the supervisor to obtain richer research conclusions on employee commitment.

Conclusion

Based on SIP model and COR theory, this paper proposed and tested the complex process and action mechanism of the influence of different types of SSR on AC. Results showed that both work-related LMX and non-work-related SSG were beneficial to employee AC, and work-related LMX was more closely related to employee AC. Both work-related LMX and non-work-related SSG could indirectly affect employee AC through PS. In addition, the higher the PS, the weaker the relationship between LMX and employee AC. Therefore, we suggest that in the context of Chinese culture, enhancing employees' AC within an enterprise should not only pay attention to the work-related LMX and non-work-related SSG but also the appropriate cultivation of employee PS.

Abbreviations

SSR, supervisor-subordinate relationships; LMX, leader-member exchange; SSG, supervisor-subordinate guanxi; PS, psychological safety; AC, affective commitment; SIP, social information processing; COR, conservation of resources.

Data Sharing Statement

The datasets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

Ethical Approval

The work was reviewed and approved by the ethical committee of School of Economics and Management, China University of Geosciences (Beijing). The work process was in accordance with the guidelines outlined in the Declaration of Helsinki. Informed consent was obtained from all study participants.

Acknowledgments

The authors thank the study participants. The authors also thank the editor and three anonymous reviewers of the Psychology Research and Behavior Management for their time and effort devoted to help us improve the quality of this research.

Author Contributions

All authors made a significant contribution to the work reported, whether that is in the conception, study design, execution, acquisition of data, analysis and interpretation, or in all these areas; took part in drafting, revising or critically

reviewing the article; gave final approval of the version to be published; have agreed on the journal to which the article has been submitted; and agree to be accountable for all aspects of the work.

Disclosure

The authors report no conflicts of interest in this work.

References

- 1. Zhang B, Cao J. Are employees' organizational commitment always consistent? An empirical analysis of enterprises in the new era of internet economy. *China Collect Econ.* 2017;2017(35):53–55.
- 2. Liang J, Farh CIC, Farh JL. Psychological antecedents of promotive and prohibitive voice: a two-wave examination. *Acad Manag J.* 2012;55 (1):71–92. doi:10.5465/amj.2010.0176
- 3. Wang Q, Weng Q, Jiang Y. When does affective organizational commitment lead to job performance? Integration of resource perspective. *J Career Dev.* 2020;47(4):380–393. doi:10.1177/0894845318807581
- 4. Lambert EG, Pasupuleti S, Cluse-Tolar T, Srinivasa SR, Jiang S. Research note: the effects of organizational trust on the work attitudes of U.S. social workers. *J Soc Serv Res.* 2022;48(1):120–133. doi:10.1080/01488376.2021.1976350
- 5. Becker HS. Notes on the concept of commitment. Am J Sociol. 1960;66:32-42. doi:10.1086/222820
- Meyer JP, Allen NJ. A three-component conceptualization of organizational commitment. Hum Resour Manag Rev. 1991;1(1):61–89. doi:10.1016/ 1053-4822(91)90011-Z
- 7. Mercurio ZA. Affective commitment as a core essence of organizational commitment: an integrative literature review. *Hum Resour Dev Rev.* 2015;14(4):389–414. doi:10.1177/1534484315603612
- 8. Fu JY, Zhang LX, Zhang YY. The influence mechanism of family supportive supervisor behavior on female knowledge worker's affective commitment. *Technol Econ.* 2020;39(10):165–172, 188. doi:10.3969/j.issn.1002-980X.2020.10.021
- Ahsan N, Fie DYG, Foong YP, Alam SS. Relationship between retention factors and affective organisational commitment among knowledge workers in Malaysia. J Bus Econ Manag. 2013;14(5):903–922. doi:10.3846/16111699.2012.701226
- Guang X, Charoensukmongkol P. The effects of cultural intelligence on leadership performance among Chinese expatriates working in Thailand. Asian Bus Manag. 2022;21(1):106–128. doi:10.1057/s41291-020-00112-4
- 11. Pattanawit P, Charoensukmongkol P. Benefits of workplace spirituality on real estate agents' work outcomes: the mediating role of person-job fit. Manag Res Rev. 2022. doi:10.1108/MRR-06-2021-0482
- 12. Yang WS, Yang SL, Yang X. Proactive-reactive innovation behavior of the employee: based on the mechanism of distributed leadership. *Chinese J Manag Sci.* 2020;28(6):182–192. doi:10.16381/j.cnki.issn1003-207x.2020.06.017
- 13. Meng H, Luo Y, Huang L, Wen J, Ma J, Xi J. On the relationships of resilience with organizational commitment and burnout: a social exchange perspective. *Int J Hum Resour Manag.* 2019;30(15):2231–2250. doi:10.1080/09585192.2017.1381136
- 14. Zhang L, Lam CF, Deng Y. Leader-member exchange and guanxi are not the same: differential impact of dyadic relationships on fit perceptions, helping behavior, and turnover intention. *Int J Hum Resour Manag.* 2017;28(7):1005–1030. doi:10.1080/09585192.2015.1128469
- 15. He P, Sun R, Zhao H, Zheng L, Shen C. Linking work-related and non-work-related supervisor-subordinate relationships to knowledge hiding: a psychological safety lens. *Asian Bus Manag.* 2020;1–22. doi:10.1057/s41291-020-00137-9
- 16. Miao C, Qian S, Banks GC, Seers A. Supervisor-subordinate guanxi: a meta-analytic review and future research agenda. *Hum Resour Manag Rev.* 2020;30(2):100702. doi:10.1016/j.hrmr.2019.100702
- 17. Yang LQ, Liang QZ. Research on the mechanism of supervisor-subordinate relationship to leadership effectiveness. *Soft Sci.* 2019;33(9):53–59. doi:10.13956/j.ss.1001-8409.2019.09.09
- Gara Bach Ouerdian E, Mansour N, Gaha K, Gattoussi M. Linking emotional intelligence to turnover intention: LMX and affective organizational commitment as serial mediators. *Leadersh Organ Dev J.* 2021;42(8):1206–1221. doi:10.1108/LODJ-01-2021-0016
- Robert V, Vandenberghe C. Laissez-faire leadership and affective commitment: the roles of leader-member exchange and subordinate relational self-concept. J Bus Psychol. 2021;36(4):533–551. doi:10.1007/s10869-020-09700-9
- 20. Zhou MJ, Shi SS. Leader-member exchange differentiation and team relationship conflict: the moderating role of ethical leadership. *Nankai Bus Rev.* 2013;16(2):26–35. doi:10.3969/j.issn.1008-3448.2013.02.004
- 21. Lee A, Gerbasi A, Schwarz G, Newman A. Leader-member exchange social comparisons and follower outcomes: the roles of felt obligation and psychological entitlement. *J Occup Organ Psychol.* 2019;92(3):593–617. doi:10.1111/joop.12245
- 22. Song X, Wu W, Hao S, Lu X, Zhang Y, Liu Y. On-work or off-work relationship? An engagement model of how and when leader-member exchange and leader-member guanxi promote voice behavior. *Chinese Manag Stud.* 2017;11(3):441-462. doi:10.1108/cms-03-2017-0058
- Tremblay M, Hill K, Aubé C. A time-lagged investigation of the mediating role of person-organization fit in the relationship between leader-member exchange and employee affective organizational commitment. Eur J Work Organ Psychol. 2017;26(1):53–65. doi:10.1080/1359432x.2016.1203306
- 24. Agarwal UA, Bhargava S. The role of social exchange on work outcomes: a study of Indian managers. Int J Hum Resour Manag. 2014;25 (10):1484–1504. doi:10.1080/09585192.2013.870316
- Yousaf A, Sanders K, Torka N, Ardts J. Having two bosses: considering the relationships between LMX, satisfaction with HR practices, and organizational commitment. Int J Hum Resour Manag. 2011;22(15):3109–3126. doi:10.1080/09585192.2011.606124
- 26. Loi R, Mao Y, Ngo H. Linking leader-member exchange and employee work outcomes: the mediating role of organizational social and economic exchange. *Manag Organ Rev.* 2009;5(3):401–422. doi:10.1111/j.1740-8784.2009.00149.x
- 27. Eisenberger R, Karagonlar G, Stinglhamber F, et al. Leader-member exchange and affective organizational commitment: the contribution of supervisor's organizational embodiment. *J Appl Psychol.* 2010;95(6):1085–1103. doi:10.1037/a0020858
- 28. Casimir G, Ngee Keith Ng Y, Yuan Wang K, Ooi G. The relationships amongst leader-member exchange, perceived organizational support, affective commitment, and in-role performance. *Leadersh Organ Dev J.* 2014;35(5):366–385. doi:10.1108/LODJ-04-2012-0054

29. Chen C, Liao J, Wen P. Why does formal mentoring matter? The mediating role of psychological safety and the moderating role of power distance orientation in the Chinese context. *Int J Hum Resour Manag.* 2014;25(8):1112–1130. doi:10.1080/09585192.2013.816861

- 30. Huang W, Shen J, Yuan C. How decent work affects affective commitment among Chinese employees: the roles of psychological safety and labor relations climate. *J Career Assess*. 2022;30(1):157–180. doi:10.1177/10690727211029673
- 31. Wang W, Jian L, Guo Q, Zhang H, Liu W. Narcissistic supervision and employees' change-oriented OCB. *Manag Decis*. 2021;59(9):2164–2182. doi:10.1108/MD-01-2020-0048
- 32. Salancik GR, Pfeffer J. A social information processing approach to job attitudes and task design. *Adm Sci Q.* 1978;23(2):224–253. doi:10.2307/2392563
- 33. Zalesny MD, Ford JK. Extending the social information processing perspective: new links to attitudes, behaviors, and perceptions. *Organ Behav Hum Decis Process*. 1990;47(2):205–246. doi:10.1016/0749-5978(90)90037-A
- 34. Edmondson AC, Lei Z. Psychological safety: the history, renaissance, and future of an interpersonal construct. *Annu Rev Organ Psychol Organ Behav.* 2014;1(1):23–43. doi:10.1146/annurev-orgpsych-031413-091305
- 35. Xu XF, Gao RG. The influence of leader integrity on employees' affective commitment: a moderated-mediation model. *Forecasting*. 2019;38 (3):1–8. doi:10.11847/fj.38.3.1
- 36. Attar-Schwartz S. Emotional closeness to parents and grandparents: a moderated mediation model predicting adolescent adjustment. *Am J Orthopsychiatry*, 2015;85(5):495–503. doi:10.1037/ort0000082
- 37. Peng S, Niu GF, Wang X, Zhang HP, Hu XE. Parental autonomy support and adolescents' positive emotional adjustment: mediating and moderating roles of basic need satisfaction. *Psychol Dev Educ*. 2021;37(2):240–248. doi:10.16187/j.cnki.issn1001-4918.2021.02.11
- 38. Gao Y, Liu HY. How supervisor-subordinate guanxi influence employee innovative behavior: a moderated mediation model. *Psychol Res Behav Manag.* 2021;14:2001–2014. doi:10.2147/PRBM.S342875
- 39. Hobfoll SE, Halbesleben J, Neveu J-P, Westman M. Conservation of resources in the organizational context: the reality of resources and their consequences. *Annu Rev Organ Psychol Organ Behav.* 2018;5(1):103–128. doi:10.1146/annurev-orgpsych-032117-104640
- 40. Duan J, Lapointe É, Xu Y, Brooks S. Why do employees speak up? Examining the roles of LMX, perceived risk and perceived leader power in predicting voice behavior. *J Manag Psychol.* 2019;34(8):560–572. doi:10.1108/JMP-11-2018-0534
- 41. Shi Y, Xie J, Zhou ZE, Tang H, Ma H. Family supportive supervisor behaviors and work engagement: a social information processing perspective. *Curr Psychol.* 2022;41(1):347–359. doi:10.1007/s12144-019-00574-6
- 42. Hobfoll SE. Conservation of resources: a new attempt at conceptualizing stress. Am Psychol. 1989;44(3):513-524. doi:10.1037/0003-066X 44 3 513
- 43. Du J, Ma E, Cabrera V, Jiao M. Keep your mood up: a multilevel investigation of hospitality employees' positive affect and individual creativity. *J Hosp Tour Manag.* 2021;48:451–459. doi:10.1016/j.jhtm.2021.07.004
- 44. Hill NS, Zhang H, Zhang X, Ziwei Y. The impact of surface and deep acting on employee creativity. Creat Res J. 2020;32(3):287–298. doi:10.1080/10400419.2020.1821564
- 45. Guan X, Frenkel SJ. Explaining supervisor–subordinate guanxi and subordinate performance through a conservation of resources lens. *Hum Relations*. 2019;72(11):1752–1775. doi:10.1177/0018726718813718
- 46. Charoensukmongkol P. Supervisor-subordinate guanxi and emotional exhaustion: the moderating effect of supervisor job autonomy and workload levels in organizations. *Asia Pacific Manag Rev.* 2022;27(1):40–49. doi:10.1016/j.apmrv.2021.05.001
- 47. Wang HJ, Jiang L, Xu X, Zhou K, Bauer TN. Dynamic relationships between leader–member exchange and employee role-making behaviours: the moderating role of employee emotional ambivalence. *Hum Relations*. 2022;001872672210752. doi:10.1177/00187267221075253
- 48. Deng YL, Wu J, Da QL. The influencing mechanisms of different forms of superior-subordinate relationship on employees innovation behaviors: a perspective of multiple institutional logics. *Chinese J Manag Sci.* 2021;29(9):236–248. doi:10.16381/j.cnki.issn1003-207x.2020.1317
- Zhang L, Deng Y, Wang Q. An exploratory study of Chinese motives for building supervisor–subordinate guanxi. J Bus Ethics. 2014;124:659–675. doi:10.1007/s10551-013-1899-4
- 50. Zhang XA, Li N, Brad Harris T. Putting non-work ties to work: the case of guanxi in supervisor-subordinate relationships. *Leadersh Q*. 2015;26 (1):37–54. doi:10.1016/j.leaqua.2014.04.008
- 51. Pearce JL, Branyiczki I, Bigley GA. Insufficient bureaucracy: trust and commitment in particularistic organizations. *Organ Sci.* 2000;11 (2):148–162. doi:10.1287/orsc.11.2.148.12508
- 52. Ali H, Mahmood A, Ahmad A, Ikram A. Humor of the leader: a source of creativity of employees through psychological empowerment or unethical behavior through perceived power? The role of self-deprecating behavior. *Front Psychol.* 2021;12:635300. doi:10.3389/fpsyg.2021.635300
- 53. Graen GB, Uhl-Bien M. Relationship-based approach to leadership: development of leader-member exchange (LMX) theory of leadership over 25 years: applying a multi-level multi-domain perspective. *Leadersh Q.* 1995;6(2):219–247. doi:10.1016/1048-9843(95)90036-5
- 54. Cicekli E, Kabasakal H. The opportunity model of organizational commitment. Int J Manpow. 2017;38(2):259-273. doi:10.1108/IJM-06-2015-0086
- 55. Labrague LJ, McEnroe-Petitte DM, Tsaras K. Predictors and outcomes of nurse professional autonomy: a cross-sectional study. *Int J Nurs Pract*. 2019;25(1):e12711. doi:10.1111/ijn.12711
- 56. Charoensukmongkol P. How Chinese expatriates' cultural intelligence promotes supervisor-subordinate guanxi with Thai employees: the mediating effect of expatriates' benevolence. *Int J Cross Cult Manag.* 2021;21(1):9–30. doi:10.1177/1470595821996735
- 57. Levinson H. Reciprocation: the relationship between man and organization. Adm Sci Q. 1965;9(4):370-390. doi:10.2307/2391032
- 58. Frear KA, Donsbach J, Theilgard N, Shanock LR. Supported supervisors are more supportive, but why? A multilevel study of mechanisms and outcomes. *J Bus Psychol*. 2018;33(1):55–69. doi:10.1007/s10869-016-9485-2
- 59. Zhong XP. Chinese Allusions. Jilin: Jilin Literature and History Press; 2019.
- 60. Blau PM. Exchange and Power in Social Life. New York: John Wiley & Sons; 1964.
- 61. Wong Y. Affective commitment, loyalty to supervisor and guanxi: Chinese employees in joint ventures and reformed state-owned enterprises. *J Chinese Hum Resour Manag.* 2017;8(2):77–93. doi:10.1108/JCHRM-04-2017-0007
- 62. Ren Z, Yang A, Wang D, Lin Y. Structure models of leader-member relationship (LMR) from the perspectives of cultural differences between China and the West. *Acta Psychol Sin.* 2014;(9):1355–1377. doi:10.3724/SP.J.1041.2014.01355
- 63. Edmondson A. Psychological safety and learning behavior in work teams. Adm Sci Q. 1999;44(2):350-383. doi:10.2307/2666999

64. Goldman BM. Toward an understanding of employment discrimination claiming: an integration of organizational justice and social information processing theories. *Pers Psychol.* 2001;54(2):361–386. doi:10.1111/j.1744-6570.2001.tb00096.x

- 65. Walumbwa FO, Schaubroeck J. Leader personality traits and employee voice behavior: mediating roles of ethical leadership and work group psychological safety. *J Appl Psychol.* 2009;94(5):1275–1286. doi:10.1037/a0015848
- 66. Kark R, Carmeli A. Alive and creating: the mediating role of vitality and aliveness in the relationship between psychological safety and creative work involvement. *J Organ Behav.* 2009;30(6):785–804. doi:10.1002/job.571
- 67. Farh JL, Tsui AS, Xin K, Cheng BS. The influence of relational demography and guanxi: the Chinese case. *Organ Sci.* 1998;9:471–488. doi:10.2307/2640274
- 68. Xu J, Xie B, Tang B. Guanxi HRM practice and employees' occupational well-being in China: a multi-level psychological process. *Int J Environ Res Public Health*. 2020;17(7):2403. doi:10.3390/ijerph17072403
- 69. Hu Y, Zhu L, Zhou M, et al. Exploring the influence of ethical leadership on voice behavior: how leader-member exchange, psychological safety and psychological empowerment influence employees' willingness to speak out. *Front Psychol.* 2018;9:1718. doi:10.3389/fpsyg.2018.01718
- 70. Hobfoll SE. Conservation of resource caravans and engaged settings. J Occup Organ Psychol. 2011;84(1):116–122. doi:10.1111/j.2044-8325.2010.02016.x
- 71. Kim M-J, Kim B-J. Analysis of the importance of job insecurity, psychological safety and job satisfaction in the CSR-performance link. Sustainability. 2020;12(9):3514. doi:10.3390/su12093514
- 72. Yang X, Li W. Ethical leadership, organizational trust and knowledge sharing behavior: the moderation role of psychological safety. *Sci Technol Prog Policy*. 2017;34(17):143–147. doi:10.6049/kjjbydc.2017050540
- 73. Armstrong JS, Overton TS. Estimating nonresponse bias in mail surveys. J Mark Res. 1977;14(3):396-402. doi:10.2307/3150783
- 74. Shiau WL, Yuan Y, Pu X, Ray S, Chen CC. Understanding fintech continuance: perspectives from self-efficacy and ECT-IS theories. *Ind Manag Data Syst.* 2020;120(9):1659–1689. doi:10.1108/IMDS-02-2020-0069
- 75. Brislin RW. Back-translation for cross-cultural research. J Cross Cult Psychol. 1970;1(3):185-216. doi:10.1177/135910457000100301
- 76. Liden RC, Maslyn JM. Multidimensionality of leader-member exchange: an empirical assessment through scale development. *J Manage*. 1998;24 (1):43–72. doi:10.1177/014920639802400105
- 77. Law KS, Wong CS, Wang D, Wang L. Effect of supervisor-subordinate guanxi on supervisory decisions in China: an empirical investigation. *Int J Hum Resour Manag.* 2000;11(4):751–765. doi:10.1080/09585190050075105
- 78. Kennedy P, Rooney RM, Kane RT, Hassan S, Nesa M. The enhanced Aussie optimism positive thinking skills program: the relationship between internalizing symptoms and family functioning in children aged 9–11 years old. *Front Psychol.* 2015;6:504. doi:10.3389/fpsyg.2015.00504
- 79. Tremblay M. Understanding the dynamic relationship between career plateauing, organizational affective commitment and citizenship behavior. *J Vocat Behav.* 2021;129:103611. doi:10.1016/j.jvb.2021.103611
- 80. Hayes AF. Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach. New York: Guilford Press; 2013
- 81. Tonidandel S, LeBreton JM. RWA web: a free, comprehensive, web-based, and user-friendly tool for relative weight analyses. *J Bus Psychol*. 2015;30(2):207–216. doi:10.1007/s10869-014-9351-z
- 82. Feng D, Ji L, Yin Z. Personality, perceived occupational stressor, and health-related quality of life among Chinese judges. *Appl Res Qual Life*. 2014;9(4):911–921. doi:10.1007/s11482-013-9277-z
- 83. Aiken LS, West SG. Multiple Regression: Testing and Interpreting Interactions. Newbury Park, CA: Sage Publications; 1991.
- 84. Zhuang GJ, Xi YM. China's cultural basis of relationship marketing. Manage World. 2003;(10):98-109. doi:10.19744/j.cnki.11-1235/f.2003.10.012
- 85. Fan Y. Guanxi's consequences: personal gains at social cost. J Bus Ethics. 2002;38(4):371-380. doi:10.1023/A:1016021706308
- 86. Van Den Broeck A, Sulea C, Vander ET, Fischmann G, Iliescu D, De Witte H. The mediating role of psychological needs in the relation between qualitative job insecurity and counterproductive work behavior. *Career Dev Int.* 2014;19(5):526–547. doi:10.1108/CDI-05-2013-0063
- 87. Spector PE. Do not cross me: optimizing the use of cross-sectional designs. J Bus Psychol. 2019;34:125-137. doi:10.1007/s10869-018-09613-8
- 88. Fu B, Peng J, Chen Z. The formation and prevention of unethical pro-supervisor behavior from the perspective of Chinese bao culture. *Chinese J Manag.* 2021;18(11):1629–1639.

Psychology Research and Behavior Management

Dovepress

Publish your work in this journal

Psychology Research and Behavior Management is an international, peer-reviewed, open access journal focusing on the science of psychology and its application in behavior management to develop improved outcomes in the clinical, educational, sports and business arenas. Specific topics covered in the journal include: Neuroscience, memory and decision making; Behavior modification and management; Clinical applications; Business and sports performance management; Social and developmental studies; Animal studies. The manuscript management system is completely online and includes a very quick and fair peer-review system, which is all easy to use. Visit http://www.dovepress.com/testimonials.php to read real quotes from published authors.

Submit your manuscript here: https://www.dovepress.com/psychology-research-and-behavior-management-journal