Salud, Ciencia y Tecnología. 2025; 5:1804 doi: 10.56294/saludcyt20251804

### **ORIGINAL**



# The Role of Organizational Commitment as mediator between Emotional Intelligence, Job Satisfaction, Organizational Identity and Job Performance

El papel del compromiso organizacional como mediador entre la inteligencia emocional, la satisfacción laboral, la identidad organizacional y el desempeño laboral

Guo Ping¹ ⊠, Nurul Sharniza Husin¹ ⊠

<sup>1</sup>School of Business Management, Universiti Utara Malaysia. Sintok, Kedah Darul Aman, Malaysia.

Cite as: Ping G, Sharniza Husin N. The Role of Organizational Commitment as mediator between Emotional Intelligence, Job Satisfaction, Organizational Identity and Job Performance. Salud, Ciencia y Tecnología. 2025; 5:1804. https://doi.org/10.56294/saludcyt20251804

Submitted: 30-12-2024 Revised: 22-03-2025 Accepted: 19-07-2025 Published: 20-07-2025

Editor: Prof. Dr. William Castillo-González

Corresponding Author: Nurul Sharniza Husin 🖂

### **ABSTRACT**

**Introduction:** this study examines mediating role of organizational commitment between emotional intelligence, job satisfaction, organizational identity, and the job performance among people who are employed in state-owned enterprises (SOEs) in the high-tech industry of China. Drawing on social exchange theory and resource conservation theory, the study aims to understand how these variables interact to influence job performance.

**Method:** a quantitative questionnaire-based design using structural equation modeling (SEM) techniques was used to analyze the collected data obtained from 377 employees of Chinese state-owned enterprises (SOEs) in the Chinese high-tech industry.

Results: analysis of data assessed relationships developed in the research model. Results indicate that the mediating variable organizational commitment (OC) is significant in explaining most of the relationships. Based on current findings, several theoretical and practical implications have been discussed and some suggestions for future research have been made. These results suggest that job performance (JP) can be effectively improved by enhancing organizational commitment (OC). Organizational commitment (OC) plays an important mediating role between emotional intelligence (EI), the job satisfaction (JS), the organizational identity (OI) and the job performance (JP).

**Conclusions:** this study was applied to a developing country's high-tech sector with a moderate sample size and significant results. As a result, practical recommendations are provided for scholars and practitioners in high-tech state-owned enterprises.

**Keywords:** Organizational Identity; Emotional Intelligence; Job Satisfaction; Organizational Commitment; Job Performance; Chinese State-Owned Enterprises (SOEs); High-Tech Industry.

### **RESUMEN**

Introducción: este estudio examina el papel mediador del compromiso organizacional entre la inteligencia emocional, la satisfacción laboral, la identidad organizacional y el desempeño laboral de las personas empleadas en empresas estatales (EPE) del sector de alta tecnología de China. Basándose en la teoría del intercambio social y la teoría de la conservación de recursos, el estudio busca comprender cómo estas variables interactúan para influir en el desempeño laboral.

**Método:** se utilizó un diseño cuantitativo basado en un cuestionario que utiliza técnicas de modelado de ecuaciones estructurales (SEM) para analizar los datos recopilados de 377 empleados de empresas estatales chinas (SOE) en la industria de alta tecnología china.

© 2025; Los autores. Este es un artículo en acceso abierto, distribuido bajo los términos de una licencia Creative Commons (https://creativecommons.org/licenses/by/4.0) que permite el uso, distribución y reproducción en cualquier medio siempre que la obra original sea correctamente citada

Resultados: el análisis de los datos evaluó las relaciones desarrolladas en el modelo de investigación. Los resultados indican que la variable mediadora, el compromiso organizacional (CO), es significativa para explicar la mayoría de las relaciones. Con base en los hallazgos actuales, se han discutido diversas implicaciones teóricas y prácticas, y se han formulado sugerencias para futuras investigaciones. Estos resultados sugieren que el desempeño laboral (JL) puede mejorarse eficazmente mediante el aumento del compromiso organizacional (CO). El compromiso organizacional (CO) desempeña un importante papel mediador entre la inteligencia emocional (IE), la satisfacción laboral (SJ), la identidad organizacional (IO) y el desempeño laboral (JL).

Conclusiones: este estudio se aplicó al sector de alta tecnología de un país en desarrollo con un tamaño de muestra moderado y resultados significativos. Como resultado, se ofrecen recomendaciones prácticas para académicos y profesionales de empresas estatales de alta tecnología.

Palabras clave: Identidad Organizacional; Inteligencia Emocional; Satisfacción Laboral; Compromiso Organizacional; Desempeño Laboral; Empresas Estatales Chinas (EPE); Industria de Alta Tecnología.

### INTRODUCTION

Job Performance (JP) is a multidimensional concept that encompasses the quantity and the quality of work done by a person in a given period of time. (1) Organizations around the world are constantly looking for ways to improve JP in order to achieve their strategic goals. In this context, emotional intelligence acts a vital determinant of job related outcomes. (2) There is a distinct association between the concept of job satisfaction and various business outcomes including employee turnover and JP. (3) Employees possessing the strongest levels of organizational identity combine self-concept with the organizational membership and will maintain effort and commitment to perform in a better manner at work place. (4) Organizational commitment predicts employee turnover, absenteeism and performance. (5) However, despite the established importance of these variables, their interactions and the role of an OC as a mediating variable is still not fully explored, especially in the context of Chinese state-owned enterprises. (6)

### Need for State-Owned Enterprises in China's High-Tech Industries' context

Chinese state-owned enterprises (SOEs) are enterprises instituted by the federal leadership or provincial governments or autonomous regional governments, which are under unified management and administration in the form of state ownership, referred to as state-owned enterprises (SOEs). (7) State-owned enterprises (SOEs), especially in high technology fields, crucially contribute in the technological progress and the country's economic growth. The report regarding the 19th National Congress of the Communist Party of China (CPC) puts emphasis on the high-tech industry in the sense that it presents this industry as the leading industry of China, and that it is not only an important industry for adjusting the structure and improving people's livelihoods, but also a key area for fostering new kinetic energies and acquiring technological advantages for the future. (8) High-tech industry is actually a derivative classification of Industrial Classification of the National Economy. High-tech industries are technology-intensive industries characterized by higher levels of R&D investment, good economic benefits and high value-added products. In statistical terms, high-tech industries are referring to manufacturing industries in the national economy with high R&D expenditure intensity. In order to reflect the current scenario of the development of China's high-tech industrial sector, there is a need to define the scope of high-tech industry statistics. According to the "High-tech Industry Manufacturing Classification 2017",(9) high-tech industrial sector includes six major categories: Electrical machinery, apparatus, and equipment manufacturing, pharmaceuticals, aircraft, spacecraft manufacturing, communication equipment manufacturing, electronic, computer, medical instrument, office equipment and chemical manufacturing. (8) It should be that since the revision of the High-Tech Industrial Classification in 2017, there has been little research on the link present between JS, EI, OI, OC, and JP. (10) Although these variables have been extensively researched and validated in other industries, their specific applications and interactions in the high-tech industry have not been fully explored. (11) Therefore, this research is filling this gap as well as provides a deeper understanding of organizational behavior and employee attitudes in China's high-tech industries through empirical research. Moreover, cultural differences can significantly affect organizational behavior and employee attitudes, making it necessary to explore these dynamics in different contexts. For example, Joo<sup>(12)</sup> has revealed that the leadermember exchange relationship had a significant impact on the job performance in a Chinese cultural context, which differs from the findings in Western countries. This suggests that research in a cultural context such as China can provide insights that are more culturally relevant and applicable.

### Theoretical Framework

Two major theories have been used to develop the conceptual framework of this study: Conservation of Resources (COR) theory and Social Exchange Theory (SET). COR theory proposed by Hobfoll is suggesting that people should strive for acquiring, retaining, and protecting resources that are critical to coping with stress and improving well-being. (13) In this research, EI is a key resource for employees to cope with work challenges, while OC is a resource for increasing motivation and resilience. In this study, EI and OC are seen as key resources to help employees cope with workplace challenges and improve productivity. Employees with higher EQ levels can easily cope with stress and maintain positive interactions with their colleagues, which in turn increases their degree of commitment to the organization and improves their overall performance at the workplace.

On the other hand, the social exchange theory (SET) is providing a useful framework for developing an understanding about the reciprocal nature of the link present between employees and their respective organizations. According to social exchange theory, social behavior is the consequence of an exchange process targeted at optimizing benefits and reducing costs. (14) When employees of an organization are perceiving that the organization values the way they have contributed and served and provides support, they are more likely to exhibit commitment and reward organization with greater effort and performance. (15) Thus, OC can possibly serve as a mediating mechanism for enhancing the positive effects of JS, EI, and OI on the JP.

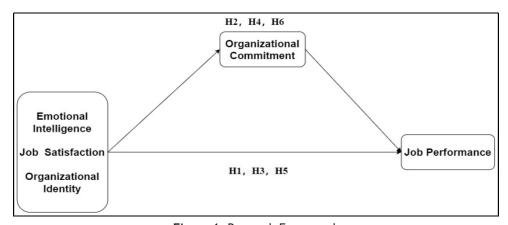


Figure 1. Research Framework

### Literature review and hypothesis development

Emotional intelligent and job performance

When Goleman studied the relationship between emotion and intelligence in 1995, he proposed that differences in learning, life and work environments would greatly impact performance, and later concluded that positive correlation exists between the concept of EI and the JP. A study empirically proved that employees with high EI have higher JP. Based on the analysis above, the first hypothesis (H1) is proposed as follows:

H1: emotional intelligent has a positive effect on Job performance.

### Job satisfaction and job performance

In 1997, the famous scholar Robbins suggested that if an employee's Job Satisfaction (JS) with his job is high, then the overall performance level of his organization will be high, and their relationship is positively correlated. Alessandri et al. (16) subsequently conducted several research on the link between the JS and the JP, and similarly explored that if employees' JS is high, their performance will be high. It can be seen through a large number of studies by scholars that the linkage between the JS and the JP is positively and significantly correlated and the results they arrived at are consistent. However, the strength of the relationship between the two will vary according to the external environment and industry. Based on the above discussion, hypothesis second (H2) is proposed:

H2: job satisfaction has a positive effect on job performance.

### Organizational indentity and job preformance

Meleady et al. (17) in their study found that increased levels of organizational identity (OI) promoted the emergence of positive work attitudes and behaviors among employees, which may help to increase employee dedication and professionalism, which leads to the demonstration of more organizational citizenship behaviors, constructive behaviors, etc. The study by He et al. (18) has shown that OI positively and significantly affects employees' organizational commitment (OC) behavior and the task performance. In accordance with the analysis provided above, Hypothesis third (H3) is posited as follows:

H3: organizational identity has a positive effect on Job performance.

The effect of organizational commitment as mediator between emotional intelligent and job performance

Organizational commitment (OC) clearly reflects employees' attitudes and behaviors towards the organization. Employees having a reasonable level of EI respond more positively to their employer and its dynamics, which makes them more loyal to the organization and generates higher OC. It has been noted that highly emotional intelligent people are quite capable of identifying and controlling their emotions, effectively dealing with problems and coordinate relationships better, enhance attachment, identification and loyalty, and thus show higher OC. (19,20,21,22) This is consistent with the COR theory, which suggests that high EI is a good resource because highly emotionally intelligent individuals can recognize and manage their emotions, and those with more resources are more likely to spend their money in order to grow their business. Therefore, individuals with high EI generate greater organizational commitment. Sungu et al. (20) found that the construct of OC acts as a positive predictor of JP to varying degrees and found that organizational commitment shown by employees is significantly related to JP. Based on the above analysis, Hypothesis fourth (H4) is proposed:

H4: organization commitment mediates the relationship between Organization identity and employees' Job performance, Emotional Intelligent has a positive effect on Job performance through Organizational Commitment.

The effect of organization commitment as mediator between job satisfaction and job performance

According to social exchange theory, as job satisfaction increases, as a reciprocal quid pro quo, employees will also be more willing to reward the organization by increasing their JC to achieve various performance improvements. (21,23,24,25) As employees' working time in the organization grows and their understanding of the organization deepens, employees' JS will be further consolidated as an OC, and in this process, if employees gradually converge with the organization's rculture and the organization's goals, the tendency of employees to leave the job will be weakened, and these factors will contribute to the development of more positive attitudes towards their jobs, and vice versa. work to develop a negative attitude towards their work, which in turn affects their job performance. (22,26,27,28) Based on the above analysis, it is proposed that Hypothesis fifth (H5):

H5: organizational commitment mediates the relationship between JS and employees' JP. JS has a positive effect on JP through OC.

The effect of organizational commitment as mediator between organizational intelligent and job performance According to SET, organizational identity is precisely a condition of dependence that the organization gives to the employee, (29,30,31,32) the employee in the enterprise not only to create performance more importantly to experience the feeling of acceptance, (33,34,35,36) and identification, the creation of this feeling will lead to consciously and voluntarily generate Organizational commitment (OC) to form a win-win sort of situation for an enterprise and an employee as well. (37,38,39) As mentioned earlier, in addition to exit behavior, OC also predicts employee performance. We can conclude that OC predicts better JP. (40,41) People with high OC are more likely to find self-worth at work and are more likely to show increased level of JP. Based on the above analysis, hypothesis sixth (H6) is proposed.

H6: organization commitment mediates the relationship between Organizational Integrity and employees' job performance. Organizational integrity has a positive effect on job performance through OC.

### **RESULTS**

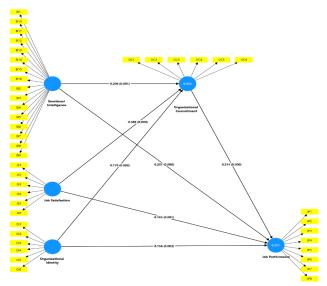


Figure 2. Mediating Structural Equation Model Diagram

### **Descriptive statistics**

Descriptive analysis was conducted to test the statistical characteristics of the study constructs. As shown in table 1, statistical analyses were conducted for each variable using SPSS 26.0 to calculate the mean, standard deviation, minimum and maximum values for the independent, mediated and dependent constructs. All constructs were assessed using a 5-point scale, and the mean values of emotional intelligence, JS, OI, OC, and JP were 3,408, 3,173, 3,271, 3,345, and 3,470, respectively. The standard deviations of these constructs were 0,679, 1,045, 0,953, 0,803, and 0,801, and for all constructs, the minimum value was 1,000 and the maximum value is 5,000.

| Table 1. Descriptive statistics                |     |   |   |       |       |  |  |  |  |  |  |
|--|-----|---|---|-------|-------|--|--|--|--|--|--|
| Variable N Minimum Maximum Mean Std. Deviation |     |   |   |       |       |  |  |  |  |  |  |
| Emotional intelligence                         | 377 | 1 | 5 | 3,408 | 0,679 |  |  |  |  |  |  |
| Job satisfaction                               | 377 | 1 | 5 | 3,173 | 1,045 |  |  |  |  |  |  |
| Organizational identity                        | 377 | 1 | 5 | 3,271 | 0,953 |  |  |  |  |  |  |
| Organizational commitment                      | 377 | 1 | 5 | 3,345 | 0,803 |  |  |  |  |  |  |
| Job Performance                                | 377 | 1 | 5 | 3,470 | 0,801 |  |  |  |  |  |  |

In this study, addressing the issue of bias, which is common in behavioral research, was necessary because it would determine the accuracy of the generalizability of the results. Therefore, a number of precautions were taken, including ensuring the confidentiality of responses and the development of a number of counterfactuals. This study supplemented the above procedural remedies by using Harman's one-way test Podsakoff et al. (24) in data analysis to assess the presence of common methodological bias in the survey data. As shown in table 2, principal component analysis was used to factor analyze the scale entries, through which five common factors with eigenvalues greater than 1 were obtained, accounting for a total of 63,278 % of the cumulative variance. The first unrotated factor explained 32,301 % of the variance, which is below the 50 % threshold. This result suggests that common method bias was not a major concern in this study.

| Table 2. Harman's Single Factor Test |        |                 |              |  |  |  |  |  |  |
|--------------------------------------|--------|-----------------|--------------|--|--|--|--|--|--|
| Component                            |        | Initial Eigenva | alues        |  |  |  |  |  |  |
| Component                            | Total  | % of Variance   | Cumulative % |  |  |  |  |  |  |
| 1                                    | 13,566 | 32,301          | 32,301       |  |  |  |  |  |  |
| 2                                    | 5,768  | 13,734          | 46,035       |  |  |  |  |  |  |
| 3                                    | 2,732  | 6,504           | 52,539       |  |  |  |  |  |  |
| 4                                    | 2,499  | 5,949           | 58,488       |  |  |  |  |  |  |
| 5                                    | 2,012  | 4,790           | 63,278       |  |  |  |  |  |  |

Testing for normality is an important step in multivariate analysis. Multivariate normality emphasizes the distribution not only of individual items but also of combinations of variables. Therefore, scholars have suggested the use of skewness and kurtosis to describe the form of data distribution. (25,26) According to the skewness and kurtosis threshold criteria proposed by Sarstedt et al. (27), as shown in table 3, the absolute skewness and kurtosis values of all the variables in this study are less than 1, and the data distribution can be considered normal.

| Table 3. Normality Test   |           |        |         |           |        |                 |          |          |  |  |  |  |
|---------------------------|-----------|--------|---------|-----------|--------|-----------------|----------|----------|--|--|--|--|
| Variable                  | Kolmogo   | rov-Sn | nirnovª | Shap      | iro-Wi | Vilk Skew-Kurto |          |          |  |  |  |  |
| variable                  | Statistic | df     | Sig.    | Statistic | df     | Sig.            | Skewness | Kurtosis |  |  |  |  |
| Emotional intelligence    | 0,054     | 377    | 0,009   | 0,990     | 377    | 0,009           | -0,299   | 0,288    |  |  |  |  |
| Job satisfaction          | 0,054     | 377    | 0,009   | 0,976     | 377    | 0,000           | -0,020   | -0,741   |  |  |  |  |
| Organizational identity   | 0,075     | 377    | 0,000   | 0,979     | 377    | 0,000           | -0,275   | -0,359   |  |  |  |  |
| Organizational commitment | 0,100     | 377    | 0,000   | 0,957     | 377    | 0,000           | -0,723   | 0,768    |  |  |  |  |
| Job performance           | 0,078     | 377    | 0,000   | 0,974     | 377    | 0,000           | -0,345   | 0,297    |  |  |  |  |

Also, VIF and tolerance analysis were conducted to determine multicollinearity. As shown in table 4: using SPSS software, a multiple linear regression model was constructed using job performance as the dependent

variable to test the covariance between the variables. According to the guidelines proposed by Sarstedt et al. (27), as shown in table 4: in this study, the VIF of the predictor variables EI, JS, OI, OC were 1,169, 1,376, 1,295, and 1,448 respectively, which did not exceed 5, and the tolerances were 0,855, 0,727, 0,772, and 0,691, which were not less than 0,2, which indicated that there was no multicollinearity. covariance.

| Table 4. Multicollinearity Test |       |       |  |  |  |  |  |  |
|---------------------------------|-------|-------|--|--|--|--|--|--|
| Variable Tolerance VIF          |       |       |  |  |  |  |  |  |
| Emotional intelligence          | 0,855 | 1,169 |  |  |  |  |  |  |
| Job satisfaction                | 0,727 | 1,376 |  |  |  |  |  |  |
| Organizational identity         | 0,772 | 1,295 |  |  |  |  |  |  |
| Organizational commitment       | 0,691 | 1,448 |  |  |  |  |  |  |

### Measurement model evaluation

In this study, the measurement model was evaluated using the PLS-SEM (Partial Least Squares-Structural Equation Modeling) analysis tool (SmartPLS4.1). The measurement model assessment included internal consistency reliability, convergent validity and discriminant validity tests.

### Internal consistency and composite reliability

As shown in table 7, the outer loadings of the measures of the variables in this study exceeded 0,7, meeting the criteria for subsequent analysis. The results shown in table 7 indicate that this study has strong internal consistency and reliability. The Cronbach's alpha coefficients for all the variables were greater than 0,7 with a minimum value of 0,896. Similarly, the composite reliability (CR) values for all the variables exceeded 0,7 with a minimum value of 0,920. These findings indicate that the measurement model exhibited excellent internal consistency and composite reliability in all the variables examined.

### Convergent validity

As shown in table 7, the test of convergent validity using Average Variance Extraction (AVE) showed that the AVE for all variables exceeded 0,5 (with a minimum value of 0,583) and the outer loadings of the indicators were higher than 0,7, which is in line with the criteria of (28). This indicates that the question items of the selected scale are effective in measuring the underlying traits represented by the constructs.

### Discriminant validity

Partial least squares-structural equation modeling (PLS-SEM) is a second-generation statistical method whose discriminant validity can be assessed by two methods: the single-trait ratio (HTMT) and the Fornell-

First, this study used the heterozygote single-trait ratio (HTMT) to assess discriminant validity. As shown in table 5, table 7, the html values between constructs were less than 0,85. In addition, the confidence intervals for the html statistics assessed by the bootstrap method did not contain 1. These findings further support the conclusion that the variables in this study had satisfactory discriminant validity.

|   | Table 5. Heterotrait-Monotrait Ratio (HTMT) |       |       |       |       |   |  |  |  |  |  |
|---|---|-------|-------|-------|-------|---|--|--|--|--|--|
|   |   | 1     | 2     | 3     | 4     | 5 |  |  |  |  |  |
| 1 | Emotional intelligence                      |       |       |       |       |   |  |  |  |  |  |
| 2 | Job satisfaction                            | 0,212 |       |       |       |   |  |  |  |  |  |
| 3 | Organizational identity                     | 0,328 | 0,424 |       |       |   |  |  |  |  |  |
| 4 | Organizational commitment                   | 0,355 | 0,528 | 0,421 |       |   |  |  |  |  |  |
| 5 | Job performance                             | 0,415 | 0,455 | 0,442 | 0,572 |   |  |  |  |  |  |

Second, the Fornell-Larcker criterion was used to assess the discriminant validity. As shown in table 6, table 7, the square root of Average Variance extraction (AVE) of each variable was compared with the correlation coefficient between the variables. The results of the analysis showed that the AVE square root values exceeded the correlation coefficient, indicating a strong discriminant validity between the study variables. Based on these findings, it can be concluded that the variables in this study have satisfactory discriminant validity.

|   | Table 6. Fornell-Lacer criterion |       |       |       |       |  |  |  |  |  |  |
|---|----------------------------------|-------|-------|-------|-------|--|--|--|--|--|--|
|   | 1 2 4 5                          |       |       |       |       |  |  |  |  |  |  |
| 1 | Emotional intelligence           | 0,764 |       |       |       |  |  |  |  |  |  |
| 2 | Job satisfaction                 | 0,198 | 0,816 |       |       |  |  |  |  |  |  |
| 3 | Organizational identity          | 0,308 | 0,383 |       |       |  |  |  |  |  |  |
| 4 | Organizational commitment        | 0,334 | 0,478 | 0,819 |       |  |  |  |  |  |  |
| 5 | Job performance                  | 0,393 | 0,416 | 0,522 | 0,797 |  |  |  |  |  |  |

**Table 7.** Outer Loading Internal Consistency (Cronbach's Alpha), Composite Reliability (CR), Convergent Validity (AVE)

| Construct                 | Item | Outer<br>Loading | S.E   | t      | Р     | Cronbach's alpha | CR    | AVE   |
|---------------------------|------|------------------|-------|--------|-------|------------------|-------|-------|
| Emotional intelligence    | EI1  | 0,771            | 0,032 | 23,768 | 0,000 | 0,952            | 0,957 | 0,583 |
|                           | EI2  | 0,755            | 0,029 | 26,351 | 0,000 |                  |       |       |
|                           | EI3  | 0,740            | 0,026 | 28,856 | 0,000 |                  |       |       |
|                           | El4  | 0,755            | 0,029 | 26,425 | 0,000 |                  |       |       |
|                           | EI5  | 0,755            | 0,030 | 25,236 | 0,000 |                  |       |       |
|                           | El6  | 0,749            | 0,031 | 24,174 | 0,000 |                  |       |       |
|                           | EI7  | 0,749            | 0,031 | 23,917 | 0,000 |                  |       |       |
|                           | EI8  | 0,795            | 0,028 | 28,091 | 0,000 |                  |       |       |
|                           | EI9  | 0,786            | 0,024 | 33,101 | 0,000 |                  |       |       |
|                           | EI10 | 0,820            | 0,019 | 42,546 | 0,000 |                  |       |       |
|                           | El11 | 0,794            | 0,021 | 37,615 | 0,000 |                  |       |       |
|                           | El12 | 0,749            | 0,031 | 24,470 | 0,000 |                  |       |       |
|                           | EI13 | 0,753            | 0,026 | 28,480 | 0,000 |                  |       |       |
|                           | El14 | 0,774            | 0,024 | 32,267 | 0,000 |                  |       |       |
|                           | El15 | 0,748            | 0,030 | 25,062 | 0,000 |                  |       |       |
|                           | El16 | 0,719            | 0,035 | 20,812 | 0,000 |                  |       |       |
| Job satisfaction          | JS1  | 0,821            | 0,021 | 38,772 | 0,000 | 0,900            | 0,923 | 0,667 |
|                           | JS2  | 0,840            | 0,020 | 42,775 | 0,000 |                  |       |       |
|                           | JS3  | 0,832            | 0,020 | 41,049 | 0,000 |                  |       |       |
|                           | JS4  | 0,836            | 0,021 | 39,941 | 0,000 |                  |       |       |
|                           | JS5  | 0,782            | 0,025 | 31,555 | 0,000 |                  |       |       |
|                           | JS6  | 0,786            | 0,024 | 32,708 | 0,000 |                  |       |       |
| Organizational identity   | OI1  | 0,788            | 0,025 | 31,357 | 0,000 | 0,896            | 0,920 | 0,657 |
|                           | OI2  | 0,808            | 0,022 | 37,329 | 0,000 |                  |       |       |
|                           | OI3  | 0,823            | 0,021 | 38,298 | 0,000 |                  |       |       |
|                           | 014  | 0,846            | 0,016 | 51,777 | 0,000 |                  |       |       |
|                           | OI5  | 0,796            | 0,022 | 36,134 | 0,000 |                  |       |       |
|                           | 016  | 0,801            | 0,022 | 36,716 | 0,000 |                  |       |       |
| Organizational commitment | OC1  | 0,836            | 0,020 | 42,197 | 0,000 | 0,902            | 0,925 | 0,671 |
|                           | OC2  | 0,840            | 0,020 | 41,309 | 0,000 |                  |       |       |
|                           | OC3  | 0,810            | 0,024 | 34,443 | 0,000 |                  |       |       |
|                           | OC4  | 0,838            | 0,019 | 43,316 | 0,000 |                  |       |       |
|                           | OC5  | 0,796            | 0,025 | 31,674 | 0,000 |                  |       |       |
|                           | OC6  | 0,795            | 0,021 | 37,060 | 0,000 |                  |       |       |
| Job performance           | JP1  | 0,705            | 0,030 | 23,524 | 0,000 | 0,917            | 0,933 | 0,634 |

| JP2 | 0,816 | 0,023 | 36,195 | 0,000 |
|-----|-------|-------|--------|-------|
| JP3 | 0,786 | 0,033 | 24,048 | 0,000 |
| JP4 | 0,826 | 0,023 | 36,148 | 0,000 |
| JP5 | 0,821 | 0,023 | 36,379 | 0,000 |
| JP6 | 0,825 | 0,024 | 34,177 | 0,000 |
| JP7 | 0,787 | 0,025 | 31,321 | 0,000 |
| JP8 | 0,799 | 0,024 | 32,968 | 0,000 |

### Structural model evaluation and hypothesis testing

In developing the structural model, this study used Job Performance (JP) as the dependent variable, Organizational Commitment (OC) as the mediator variable, and included Emotional Intelligence (EI), Job Satisfaction (JS), and Organizational Identity (OI) as independent variables, these variables were included in the model. Bootstrap (5000 repeated sampling) was utilized to test the significance of the paths and the results were analyzed as follows:

Direct effects Bootstrap method used 5000 samples and the results of path significance test obtained are shown in table 8. The results show that emotional intelligence has a significant positive effect on job performance  $(\beta = 0,207, P < 0,001)$ , confirming hypothesis H1. in addition, job satisfaction has a significant positive effect on job performance (B = 0,165, P < 0,01), validating hypothesis H2. furthermore, organizational identity has a significant positive effect on job performance ( $\beta = 0.156$ , P < 0.01), confirming hypothesis (H<sub>2</sub>). These results suggest that both emotional intelligence (EI), job satisfaction (JS), and organizational identity (OI) can directly enhance job performance and have high explanatory power in high-tech state-owned enterprises.

| Table 8. Path Testing |                                       |             |       |         |        |          |       |       |       |           |  |  |
|-----------------------|---------------------------------------|-------------|-------|---------|--------|----------|-------|-------|-------|-----------|--|--|
| Hypothesis            | Road                                  | Bootstrap B | S.E   | t       | Р      | 95 %CI   |       |       | VIF   | Supported |  |  |
| пуропіезіз            | Noau                                  | воосынар в  | J, L  |         |        | Lower    | Upper | f2    | VII   | Supported |  |  |
|                       | JP: R2=0,377、Adjust R2=0,370、Q2=0,233 |             |       |         |        |          |       |       |       |           |  |  |
| H <sub>1</sub>        | El→JP                                 | 0,207       | 0,057 | 3,657   | 0,000  | 0,105    | 0,323 | 0,059 | 1,176 | Supported |  |  |
| H <sub>2</sub>        | $JS {\rightarrow} JP$                 | 0,165       | 0,050 | 3,287   | 0,001  | 0,063    | 0,262 | 0,032 | 1,380 | Supported |  |  |
| H <sub>3</sub>        | Ol→JP                                 | 0,156       | 0,053 | 2,965   | 0,003  | 0,052    | 0,261 | 0,030 | 1,301 | Supported |  |  |
|                       | $OC \rightarrow JP$                   | 0,314       | 0,065 | 4,795   | 0,000  | 0,177    | 0,435 | 0,109 | 1,458 | Supported |  |  |
|                       |                                       |             | OC: R | 2=0,314 | Adjust | R2=0,309 | Q2=0, | 207   |       |           |  |  |
|                       | El→OC                                 | 0,206       | 0,062 | 3,328   | 0,001  | 0,089    | 0,333 | 0,055 | 1,114 | Supported |  |  |
|                       | JS→OC                                 | 0,369       | 0,050 | 7,340   | 0,000  | 0,266    | 0,465 | 0,168 | 1,182 | Supported |  |  |
|                       | Ol→OC                                 | 0,179       | 0,057 | 3,128   | 0,002  | 0,068    | 0,293 | 0,037 | 1,254 | Supported |  |  |

### **Mediating effects**

This research used the coefficient product method recommended by MacKinnon et al. (29) to assess the mediation effect. To address the asymmetric bias in the distribution of the coefficient product method, which can lead to inaccurate estimates of the mediation effect, this study follows the recommendations of (30). It utilizes a bias-corrected bootstrap method (percentile bootstrap method) to calculate 95 % confidence intervals for mediation effects derived from the coefficient product method. The mediation effect is considered significant if the 95 % confidence interval does not include zero. Table 9 gives the results of the analysis: the 95 % confidence interval obtained for the mediating effect of OC in the relationship between EI and JP is [0,028,0,102], the 95 % confidence interval for the mediating effect of OC in the relationship between JS and JP is [0,059, 0,182], and the 95 % confidence interval obtained for the mediating effect of OC in the relationship between OI and JP is [0,059,0,182], and the 95 % confidence interval obtained for the mediating effect of OC in the relationship between OI and JP is [0,028, 0,102]. confidence interval is [0,019,0,110], and since none of these intervals contains 0, these findings support hypotheses H4, H5, and H6. This implies that OC plays a significant mediating role in all three sets of relationships, i.e., EI, JS, and OI not only contribute directly to JP, but also, by enhancing the employee's sense of psychological attachment to and commitment to the organization, thereby indirectly enhancing JP.

| Table 9. Mediation Effect Testing |                                    |             |       |       |       |           |  |  |  |  |  |
|-----------------------------------|------------------------------------|-------------|-------|-------|-------|-----------|--|--|--|--|--|
| Llynothosis                       |                                    | Pootstrap 0 | S.E   | 95    | %CI   | Supported |  |  |  |  |  |
| Hypothesis                        |                                    | Bootstrap B | 3.6   | Lower | Upper | Supported |  |  |  |  |  |
|                                   | Total Effect                       | 0,272       | 0,055 | 0,168 | 0,38  |           |  |  |  |  |  |
|                                   | Direct Effect                      | 0,207       | 0,057 | 0,105 | 0,323 |           |  |  |  |  |  |
| H <sub>4</sub>                    | $EI \rightarrow OC \rightarrow JP$ | 0,065       | 0,019 | 0,028 | 0,102 | Supported |  |  |  |  |  |
|                                   |                                    |             |       |       |       |           |  |  |  |  |  |
|                                   | Total Effect                       | 0,281       | 0,053 | 0,172 | 0,382 |           |  |  |  |  |  |
|                                   | Direct Effect                      | 0,165       | 0,050 | 0,063 | 0,262 |           |  |  |  |  |  |
| H <sub>5</sub>                    | $JS \rightarrow OC \rightarrow JP$ | 0,116       | 0,031 | 0,059 | 0,182 | Supported |  |  |  |  |  |
|                                   |                                    |             |       |       |       |           |  |  |  |  |  |
|                                   | Total Effect                       | 0,213       | 0,054 | 0,106 | 0,316 |           |  |  |  |  |  |
|                                   | Direct Effect                      | 0,156       | 0,053 | 0,052 | 0,261 |           |  |  |  |  |  |
| H <sub>6</sub>                    | $OI \rightarrow OC \rightarrow JP$ | 0,056       | 0,021 | 0,019 | 0,101 | Supported |  |  |  |  |  |

### Pls-predict result

A widely accepted method of assessing structural models relies on the coefficient of determination ( $R^2$ ) of endogenous variables which ranges from 0 to 1. (31) As shown in figure 1, table 10, the  $R^2$  values for the OC and the JP in this study's model were 0,314 and 0,377, respectively. both exceeded 0,25, indicating moderately high explanatory power for the endogenous variables. Additionally, assessing the  $R^2$  values for all endogenous variables, the  $f^2$  effect size can also be used to measure the degree of strength of the relationships within structural model. In the  $f^2$  test, the  $f^2$  values for significant paths ranged from 0,030 to 0,168, all of which met the small to moderate effect size criterion. (32) In addition, Hair et al. (31) argued that assessing the predictive relevance of the model is critical to ensure that each construct is measured accurately. The Stone-Geisser  $Q^2$  values indicate predictive relevance and were calculated using a blind-folding technique that specifies the distance between the Stone-Geisser  $Q^2$  values of the model for organizational commitment and job performance were 0,207 and 0,233, respectively. These positive  $Q^2$  values indicate that the model has strong predictive relevance for endogenous constructs.

| Table 10. PLS-Predict Result |                                |             |              |             |             |              |               |  |  |  |
|------------------------------|--------------------------------|-------------|--------------|-------------|-------------|--------------|---------------|--|--|--|
| Variable                     | O <sup>2</sup> prodict         | PLS-        | SEM          | L           | M           | PLS-LM       |               |  |  |  |
| Variable                     | ariable Q <sup>2</sup> predict |             | RMSE MAE     |             | MAE         | ΔRMSE        | ΔΜΑΕ          |  |  |  |
| PLS Predict L                | V summary                      |             |              |             |             |              |               |  |  |  |
| OC                           | 0,166                          | 0,924       | 0,753        |             |             |              |               |  |  |  |
| JP                           | 0,236                          | 0,883       | 0,716        |             |             |              |               |  |  |  |
| PLS Predict N                | NV summary                     |             |              |             |             |              |               |  |  |  |
| OC1                          | 0,198                          | 0,903       | 0,689        | 0,933       | 0,716       | -0,03        | -0,027        |  |  |  |
| OC2                          | 0,230                          | 0,873       | 0,654        | 0,909       | 0,685       | -0,036       | -0,031        |  |  |  |
| OC3                          | 0,163                          | 0,911       | 0,703        | 0,946       | 0,737       | -0,035       | -0,034        |  |  |  |
| OC4                          | 0,194                          | 0,834       | 0,636        | 0,835       | 0,639       | -0,001       | -0,003        |  |  |  |
| OC5                          | 0,169                          | 0,886       | 0,676        | 0,917       | 0,705       | -0,031       | -0,029        |  |  |  |
| OC6                          | 0,219                          | 0,877       | 0,677        | 0,909       | 0,702       | -0,032       | -0,025        |  |  |  |
| JP1                          | 0,173                          | 1,107       | 0,908        | 1,161       | 0,944       | -0,054       | -0,036        |  |  |  |
| JP2                          | 0,225                          | 0,903       | 0,707        | 0,922       | 0,715       | -0,019       | -0,008        |  |  |  |
| JP3                          | 0,138                          | 0,910       | 0,698        | 0,940       | 0,727       | -0,03        | -0,029        |  |  |  |
| JP4                          | 0,185                          | 0,876       | 0,675        | 0,901       | 0,690       | -0,025       | -0,015        |  |  |  |
| JP5                          | 0,185                          | 0,885       | 0,694        | 0,908       | 0,705       | -0,023       | -0,011        |  |  |  |
| JP6                          | 0,186                          | 0,884       | 0,685        | 0,906       | 0,697       | -0,022       | -0,012        |  |  |  |
| JP7                          | 0,180                          | 0,897       | 0,705        | 0,933       | 0,733       | -0,036       | -0,028        |  |  |  |
| JP8                          | 0,178                          | 0,859       | 0,679        | 0,895       | 0,700       | -0,036       | -0,021        |  |  |  |
| Note: LM=line                | ear regression m               | nodel; RMSE | = The Root I | Mean Square | Error; MAE= | The Mean Abs | solute Error. |  |  |  |

Table 10 shows the PLS prediction results of this study: initially, the predictive relevance of the latent variables was assessed using the  $Q^2$  predictive values. For OC and JP, these values were 0,166 and 0,236, respectively, both exceeding 0, confirming the predictive power of the model. In addition, the Q<sup>2</sup> predictive values for each measure in PLS-SEM ranged from 0,138 ~ 0,230, both exceeding 0, indicating the predictive relevance of each indicator. In addition, the RMSE and MAE values of PLS- sem (PLS path model) and linear regression model (LM) were comparatively analyzed. According to the criteria of Sarstedt et al. (27), the RMSE and MAE values of all measures in the PLS-SEM model were lower than those of the LM model, indicating that the model of this study has a strong predictive ability.

### **Practical implications**

These findings hold valuable managerial implications for high-tech SOEs. First, firms should cultivate EI through training programs on emotion management, stress coping, and communication. Second, because JS substantially influences performance, managers should optimize career pathways, compensation mechanisms, and work environments to strengthen overall satisfaction. Third, bolstering OI calls for clarifying mission and values, ensuring employees align their personal goals with the enterprise's strategic objectives. In an SOE setting, OC-enhanced by transparent communication, fair promotions, and a culture of belonging-becomes even more pivotal, especially amid national initiatives to drive innovation and industrial upgrading.

### Limitations and future research directions

Despite the valuable contributions, this work has several limitations. First, its cross-sectional design precludes definitive causal inferences. Future investigations might employ longitudinal or experimental approaches to better clarify causality. Second, because data were drawn from Chinese high-tech SOEs, caution is warranted in generalizing findings to other cultural or organizational contexts; replications elsewhere would help evaluate broader applicability. Third, while OC was tested as a mediator, additional mediators (e.g., leadership style) or moderators (e.g., team climate) remain unexplored. Future work might incorporate such factors to enrich the theoretical framework. Finally, though initiative was taken to minimize method bias, the study primarily relied on self-report surveys. Including more than one data sources (supervisor ratings, peer assessments, objective indicators) and qualitative techniques (in-depth interviews, case studies) could bolster the robustness and interpretive depth of results. By refining methodologies, expanding research contexts, and integrating new variables, future research can more precisely elucidate commitment mechanisms and performance pathways, contributing to both theory and managerial practice.

### **CONCLUSIONS**

Drawing on data from Chinese high-tech SOEs, this study confirms that EI, OI and JS each exert a significantly positive impact on JP, with OC serving as a critical mediator. Findings of this study align with the presently existing literature (which has long shown positive effects of EI, JS, and identity on performance) while also extending Social Exchange Theory (SET) and Conservation of Resources (COR) to emerging economy and SOE contexts. Specifically, the "resource-accumulation-enhanced-performance" logic in COR theory is upheld higher El and stronger satisfaction and identification, seen as psychological and social resources, collectively foster commitment and boost performance. Meanwhile, the "reciprocal exchange" principle of SET is evident: when employees experience elevated satisfaction and recognition, they reciprocate with greater organizational dedication and higher performance.

Notably, the collectivist culture and national strategy focus of Chinese SOEs intensify the roles of OI and OC. In comparison to Western-based studies, this environment enables employees to more readily internalize organizational missions, thereby reinforcing commitment's mediating effect. Theoretically, these outcomes enrich both COR and SET by showing how they operate in high-tech SOEs, suggesting broader relevance for research on HR and organizational behavior within other cultural and institutional milieus.

### **ACKNOWLEDGEMENTS**

The authors extend their appreciation to Universiti Utara Malaysia Sintok Kedha.

### **BIBLIOGRAPHIC REFERENCES**

- 1. Suleman Q, Syed MA, Mahmood Z, Hussain I. Correlating emotional intelligence with job satisfaction: Evidence from a cross-sectional study among Secondary School Heads in Khyber Pakhtunkhwa, Pakistan. Frontiers in Psychology. 2020;11:240.
- 2. Abebe DW, Singh DP. The relationship between emotional intelligence, job satisfaction, and job performance: empirical evidence from public higher education institutions. European Journal of Business and Management Research. 2023;8(3):45-52.

- 3. Kwabena FA, Asare KO, Ackah RN. Does Emotional Intelligence Influence an Employee's Job Satisfaction? An Empirical Assessment. Asian Journal of Social Sciences and Management Studies. 2022;9(4):75-84.
- 4. Pham M. The effect of professional identification and organizational identification on career satisfaction, job satisfaction and organizational commitment. Management Science Letters. 2020;10(11):2683-94.
- 5. Rawashdeh AM, Tamimi SA. The impact of employee perceptions of training on organizational commitment and turnover intention: An empirical study of nurses in Jordanian hospitals. European Journal of Training and Development. 2020;44(2/3):191-207.
- 6. Renyut BC, Modding HB, Bima J. The effect of organizational commitment, competence on Job satisfaction and employees performance in Maluku Governor's Office. 2017.
- 7. Khan FU, Zhang J, Usman M, Badulescu A, Sial MS. Ownership reduction in state-owned enterprises and corporate social responsibility: perspective from secondary privatization in China. Sustainability. 2019;11(4):1008.
- 8. National Bureau of Statistics of China. How to define and measure high-tech industries. https://www.stats.gov.cn/zs/tjws/tjbz/202301/t20230101\_1903766.html
- 9. National Bureau of Statistics of China. High-tech industry (manufacturing) classification. 2017. https://www.stats.gov.cn/xxgk/tjbz/gjtjbz/202008/t20200811\_1782329.html
- 10. Samadi R, Emamgholizadeh S. The relationship between emotional intelligence, organizational commitment, and job satisfaction on Job Performance of employees (Case Study: Oil Pipeline and Telecommunication Company of Iran). Asian Journal of Research in Business Economics and Management. 2016;6(2):100-9.
- 11. Amjad S. Emotional intelligence, organizational commitment and job performance in Pakistan. Market Forces. 2018;13(1).
- 12. Joo BK. Leader-member exchange quality and in-role job performance: The moderating role of learning organization culture. Journal of Leadership & Organizational Studies. 2012;19(1):25-34.
- 13. Hobfoll SE, Lilly RS. Resource conservation as a strategy for community psychology. Journal of Community Psychology. 1993;21(2):128-48.
- 14. Schilke O, Reimann M, Cook KS. Power decreases trust in social exchange. Proceedings of the National Academy of Sciences. 2015;112(42):12950-5.
- 15. Ahmad A. The relationship among job characteristics organizational commitment and employee turnover intentions: A reciprocation perspective. Journal of Work-Applied Management. 2018;10(1):74-92.
- 16. Alessandri G, Borgogni L, Latham GP. A dynamic model of the longitudinal relationship between job satisfaction and supervisor-rated job performance. Applied Psychology. 2017;66(2):207-32.
- 17. Meleady R, Crisp RJ. Take it to the top: Imagined interactions with leaders elevates organizational identification. The Leadership Quarterly. 2017;28(5):621-38.
- 18. He J, Zhang H, Morrison AM. The impacts of corporate social responsibility on organization citizenship behavior and task performance in hospitality: A sequential mediation model. International Journal of Contemporary Hospitality Management. 2019;31(6):2582-98.
- 19. Shanker M, Sayeed OB. Organizational commitment: Some linkages with emotional intelligence. Indian Journal of Industrial Relations. 2015:312-26.
- 20. Sungu LJ, Weng Q, Hu E, Kitule JA, Fang Q. How does organizational commitment relate to job performance? A conservation of resource perspective. Human Performance. 2020;33(1):52-69.

- 21. Jung Y, Takeuchi N. Testing mediation effects of social and economic exchange in linking organizational training investment to employee outcomes. Personnel Review. 2019;48(2):306-23.
- 22. Mathieu C, Fabi B, Lacoursiere R, Raymond L. The role of supervisory behavior, job satisfaction and organizational commitment on employee turnover. Journal of Management & Organization. 2016;22(1):113-29.
- 23. Azim MT. Corporate Social Responsibility and employee behavior: mediating role of organizational commitment. Revista Brasileira de Gestao de Negocios. 2016;18:207-25.
- 24. Podsakoff PM, MacKenzie SB, Lee JY, Podsakoff NP. Common method biases in behavioral research: a critical review of the literature and recommended remedies. Journal of Applied Psychology. 2003;88(5):879.
- 25. Hair JF, Black WC, Babin BJ, Anderson RE. Multivariate data analysis. 8th ed. Cengage Learning EMEA. 2019.
  - 26. Kline RB. Principles and practice of structural equation modeling. Guilford Publications. 2023.
- 27. Sarstedt M, Ringle CM, Hair JF. Partial least squares structural equation modeling. In: Handbook of Market Research. Springer. 2021:587-632.
- 28. Hair JF, Risher JJ, Sarstedt M, Ringle CM. When to use and how to report the results of PLS-SEM. European Business Review. 2019;31(1):2-24.
- 29. MacKinnon DP, Lockwood CM, Hoffman JM, West SG, Sheets V. A comparison of methods to test mediation and other intervening variable effects. Psychological Methods. 2002;7(1):83.
- 30. Fang J, Zhang MQ. Assessing point and interval estimation for the mediating effect: distribution of the product, nonparametric Bootstrap and markov chain monte carlo methods. Acta Psychologica Sinica. 2012.
- 31. Hair Jr JF, Howard MC, Nitzl C. Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. Journal of Business Research. 2020;109:101-10.
  - 32. Cohen J. Statistical power analysis for the behavioral sciences. Routledge. 2013.
- 33. Rahman MS, Ferdausy S, Karan R. Determining the relationships between the components of organizational commitment and job performance: an empirical study. ABAC Journal. 2015;35(1):30-45.
- 34. Tsui AS, Pearce JL, Porter LW, Tripoli AM. Alternative approaches to the employee-organization relationship: does investment in employees pay off? Academy of Management Journal. 1997;40(5):1089-121.
- 35. Wang X. Development and validation of the organizational commitment scale for Chinese enterprises. Journal of Business Research. 2020;115:90-102.
  - 36. Wong CS, Law KS. Wong and law emotional intelligence scale. The Leadership Quarterly. 2002.
- 37. Mael F, Ashforth BE. Alumni and their alma mater: A partial test of the reformulated model of organizational identification. Journal of Organizational Behavior. 1992;13(2):103-23.
- 38. Govender L, Migiro S, Kyule A. Flexible work arrangements, job satisfaction and performance. Journal of Economics and Behavioral Studies. 2018;10(3):268-77.
- 39. Al-Hamami NM, Hashim MT, Songip AR, Al-Saeed AH. The effects of emotional intelligence on job satisfaction. Information and Knowledge Management. 2015.
- 40. Di M, Deng X, Zhao J, Kong F. Psychometric properties and measurement invariance across sex of the Wong and Law Emotional Intelligence Scale in Chinese adolescents. Psychological Reports. 2022;125(1):599-619.
- 41. Allen NJ, Meyer JP. The measurement and antecedents of affective, continuance and normative commitment to the organization. Journal of Occupational Psychology. 1990;63(1):1-18.

### **FINANCING**

The authors did not receive financing for the development of this research.

### **CONFLICT OF INTEREST**

The authors declare that there is no conflict of interest.

### **AUTHORSHIP CONTRIBUTION**

Conceptualization: Guo Ping, Nurul Sharniza Husin.

Data curation: Guo Ping. Formal analysis: Guo Ping.

Research: Guo Ping, Nurul Sharniza Husin. Methodology: Nurul Sharniza Husin.

Project management: Guo Ping, Nurul Sharniza Husin.

Resources: Guo Ping, Nurul Sharniza Husin. Software: Guo Ping, Nurul Sharniza Husin.

Supervision: Nurul Sharniza Husin. Validation: Nurul Sharniza Husin.

Display: Guo Ping.

Drafting - original draft: Guo Ping, Nurul Sharniza Husin.

Writing - proofreading and editing: Guo Ping, Nurul Sharniza Husin.