A Mechanistic Study of Employee Emotions on Corporate Performance under the Aging Trend of Corporate Human Resources

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ABSTRACTS： This paper explores the influence mechanism of emotional labour on service performance of employees engaged in service work based on resource conservation theory. The paper uses sample data of 268 service employees from 32 organisations for empirical testing. The results show that employees' deep-seated behaviours positively affect job satisfaction, and work engagement plays a mediating role in both surface and deep-seated behaviours affecting service performance. In addition, the sense of organisational support enhanced the positive relationship between deep-seated behaviours and work engagement, and the indirect relationship between deep-seated behaviours and service performance process through work engagement. It is necessary for service-oriented organisations to improve employees' work engagement through emotional management training and improving employees' sense of organisational support to enhance service performance.

KEYWORDS: emotional labour, sense of organisational support, service performance, work engagement, resource conservation theory

1 INTRODUCTION

The rise of China's service sector has been particularly remarkable in recent years. The proportion of the service industry in the national economy has increased year by year, but it still faces many challenges and problems in its development. For example, there are still some urgent problems to be solved in China's service industry in terms of the management of employees' emotional labour and the improvement of service performance(1).

In the service industry, front-line service employees are the direct providers of services and are not only the executors of service performance, but also an important source of service performance(2). In the process of service contact between service employees and customers, organisations often require them to show the emotions expected by the organisation. Emotional labour refers to the employees in the work process, according to the requirements of the organisation to manage and regulate their own emotions, in order to show the emotional state in line with the needs of the work. It has become a basic requirement for employees to regulate and manage their emotions through emotional labour(3). However, the Chinese service industry lacks a systematic approach to the management of employees' emotional labour.Many service-oriented organisations do not fully understand the importance of emotional labour and lack scientific emotional management training and effective incentive mechanisms. This leads to employees having difficulties in effectively regulating their emotions when facing work pressure, which in turn affects service quality and customer satisfaction. China's service industry has bottlenecks in improving service performance(4). Service performance is an important indicator of the operational effectiveness of service organisations, and is directly related to the competitiveness and market position of enterprises. Poor management of employee emotional labour and generally low levels of employee job satisfaction and work engagement constrain the improvement of service performance(5). How to effectively manage employee emotional labour

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and improve employee engagement to enhance service performance has become an important issue in China's service industry(6).

Resource Conservation Theory suggests that individual employees adopt corresponding ways of acquiring or maintaining favourable resources in response to different work situations (Rappaport, 1981). In the work process of frontline service employees, the deep and shallow roles adopted by individual employees in the work environment have different effects on work engagement(7). It has been found that work engagement tends to increase organisational commitment, job satisfaction and job performance, leading to positive outcomes such as service-protective behaviours or enhancing positive organisational behaviours(8). At the same time, work engagement increases employees' resource investment in the workplace, thus contributing to factors that enhance service performance. However, there is a lack of research on the role of work engagement in the process of emotional labour affecting service performance, and whether there are differences in the mechanisms by which surface and deeper behaviours affect service performance through work engagement(9).

Sense of organisational support is a shared perception of whether an organisation values service quality, and whether it can provide support and rewards for high quality services. Organizational support has been found to play a positive role in improving service quality, increasing customer satisfaction, and improving employee attitudes and behaviours(10, 11). Therefore, perceptions of organisational support are also considered to be a source of compensatory resources that can help mitigate the negative effects of resource depletion. Given the importance of the sense of organisational support, it is necessary to combine emotional labour with the sense of organisational support in order to explore the mechanism of its impact on service performance(12).

According to resource conservation theory, employees have the motivation to acquire, protect and invest resources. In the service process, employees' emotional labour generates resource loss, and service performance also requires employees to invest resources such as time, cognition and emotion, as well as bear the resource loss of innovation failure(13). Therefore, emotional labour may affect service performance through work commitment, and a sense of organisational support may influence the process as a compensatory resource for employees.In summary, based on the resource conservation theory, this paper takes 294 frontline service workers in 32 organizations as the research object, and examines the mediating role of work input and the moderating role of the sense of organisational support in the process of employees' emotional labour affecting service performance(12). The innovations of this paper are as follows: firstly, based on the resource conservation theory, the mechanism of emotional labour affecting service performance is revealed; secondly, the sense of organisational support is taken as the Second, the use of organizational support as a source of compensatory resources not only expands the research framework of the role of organizational support, but also helps to enrich the boundary conditions of the impact of emotional labour on work engagement and service performance(14). Third, the comparison of the differences between surface and deep play in the process of affecting service performance can provide new empirical evidence for the controversy and disagreement of the results of the existing research on the role of emotional labour strategies(15).

2 THEORETICAL ANALYSIS AND HYPOTHESIS FORMULATION

2.1 Emotional labour and work engagement

Resource conservation theory suggests that individuals have a tendency to conserve existing resources as well as to acquire new resources to help them achieve their personal goals. The theory consists of two basic principles: one is the primacy of resource loss, i.e., the negative impact of resource loss on the individual far outweighs the benefits of acquiring new resources; and the other is the principle of resource investment, i.e., the individual will invest more resources in order to prevent the possible loss of resources in the future. In the emotional labour strategy, surface play and deep play are very different in terms of their consumption of individual resources(16). Employees adopting surface play tend to 'force a smile', and the discrepancy between internal emotional feelings and external emotional expressions leads to negative emotional experiences, and requires a large amount of resources to maintain the emotional camouflage. Compared with surface play, deep play, as an adjustment of employees' inner feelings, also requires resources,(17) but its emotional experience is basically the same as that required by the organisation, so the possibility of emotional dissonance is smaller, and the loss of resources by employees is relatively small(18).

In addition, compared with surface play, deep play helps individuals to replenish emotional resources. On the one hand, surface play will make individuals feel detached and inauthentic, while deep play as an expression of real emotions can make individuals feel a sense of achievement and gain new emotional resources from it: on the other hand(19). Deep acting is more likely to be

recognised or appreciated by customers, and these positive evaluations become a new source of resources for employees, which helps to replenish resource depletion(20). On the contrary, customers give negative evaluations to employees who adopt superficial play, which not only makes it difficult for employees to obtain resource compensation through positive feedback from customers, but also leads to uncivil behaviours from customers, thus exacerbating the depletion of employees' individual resources, including emotional resources(21). It has also been confirmed that there is a negative relationship between surface play and work engagement, while deep play positively affects work engagement.As a result, the following hypotheses are formulated.

H1a:Surface play has a negative effect on work engagement.

H1b: Deep play has a positive effect on work engagement.

2.2 Inputs and service performance

Work engagement is one of the core elements driving service performance improvement. It encompasses employees' cognitive, emotional and physical commitment, and reflects their deep recognition and active practice of the value of their work. In an increasingly competitive market environment, service performance has become a yardstick to measure the success of enterprises, which is directly related to customer satisfaction, brand loyalty and the sustainable development of enterprises. Therefore, an in-depth exploration of the positive impact of work engagement on service performance is crucial to understanding the intrinsic link between employee behaviour and corporate performance, and provides valuable practical guidance for improving service quality and optimising customer experience(22). Work engagement promotes the full development of individual employee capabilities. Highly engaged employees tend to have stronger learning ability and adaptability. Employees are willing to take the initiative to learn new knowledge and skills to continuously improve their professionalism and service level(23). Continuous learning and growth enable employees to respond quickly to customer needs, provide accurate and efficient solutions, and significantly improve service quality. At the same time, work input also stimulates the creativity and innovation of employees, who dare to try new methods and approaches to continuously optimise the service process, improve service efficiency and create more value for the enterprise. Work engagement improves customer experience by enhancing the interaction between employees and customers. Highly engaged employees focus on communication and exchanges with customers, are good at listening to customers' opinions and needs, and are able to stand in the customer's point of view to think about problems and provide personalised and customised service solutions. This customer-centred service concept enhances customer satisfaction and loyalty, and earns the company a good reputation and brand image. Employees who are engaged in their work are also able to show positive emotional state and good professional attitude in the service process, creating a pleasant service atmosphere where customers can feel pleasure and respect in the process of enjoying the service(24). Work engagement promotes organisational collaboration and corporate culture. Highly engaged employees usually have a stronger sense of organisation and spirit of co-operation, and are willing to share their experiences with colleagues, support each other and solve problems together. This positive organisational atmosphere not only enhances the overall performance of the organisation, but also promotes the inheritance and development of the corporate culture. An organisation with highly work-involved employees is often able to form a unique corporate spirit and values, which become an important source of motivation for the sustainable development of the enterprise. In summary, the positive impact of work engagement on service performance enhances individual employees' service capability and creativity, and enhances customer experience and corporate culture. Therefore, this paper proposes the following hypotheses.

H2:Work input has a positive influence on service performance.

2.3 Mediating role of work inputs

The field of service industry is highly dependent on interpersonal interaction, and employees' emotional labour is one of the important factors determining service performance, and its inherent logical chain profoundly affects employees' work attitude, work commitment and final service quality. Emotional labour, as the process of employees regulating, displaying and managing their own emotions according to the requirements of their professional roles at work, is related to the personal emotional state of the employees, and is the bridge connecting the emotional bond between the employees and the service recipients. This process involves multiple levels of emotional expression, emotional judgement, and emotional management, and has a far-reaching impact on employees' work experience, psychological state, and work performance. The impact of emotional labour on employees' work input is mainly reflected in its consumption and replenishment mechanism of employees' psychological resources. When employees engage in

frequent and in-depth emotional labour, maintain a positive attitude at all times, and patiently respond to the various needs of customers, their emotional resources may be overexpended, leading to a significant increase in the risk of emotional exhaustion and burnout. Employees in this psychological state often lack sufficient motivation to devote themselves to their work and find it difficult to maintain a high degree of service enthusiasm and professionalism, thus directly affecting service quality and customer satisfaction(25). If employees are able to effectively manage their emotions, transform emotional labour into positive energy at work, enhance interaction with customers through positive emotional expression, or use emotional intelligence to skilfully resolve conflicts in the service process, employees may experience higher job satisfaction and a sense of self-actualisation. This positive psychological state can not only significantly enhance the work engagement of employees, but also prompt them to take more initiative to improve their service skills, optimise the service process, and provide customers with quality services with more enthusiasm and higher efficiency, thus forming a virtuous cycle(26).

The specific manifestations of emotional labour, i.e. surface play and deep play, have different outcomes in terms of their impact on employees' work engagement and service performance. Surface playing is the superficial adjustment and management of employees' emotions in accordance with their professional requirements at work to meet service standards or customer expectations. This form of emotional labour focuses more on outward emotional expression and behavioural performance and does not involve the employee's true inner feelings. Surface play can satisfy the basic needs of customers to a certain extent, but in the long run, employees may feel tired and weary due to the lack of true inner commitment, and even fall into the quagmire of burnout. Such exhaustion and boredom will reduce employees' work commitment, seriously weaken their service quality and efficiency, and adversely affect service performance. When employees lack work engagement, it is often difficult for them to maintain a high degree of service enthusiasm and professionalism, and it is difficult for them to keenly capture and satisfy the real needs of customers, leading to a decline in customer satisfaction, and the reputation and competitiveness of the enterprise is also damaged as a result. In contrast, deep play is when employees adjust their emotional expression at work and strive to align their inner emotions with their outer performance(27). This form of emotional labour not only focuses on external behaviour, but also emphasizes the employees' true inner commitment and sincere expression of emotions. Through deep play, employees are able to understand the emotional needs of service users more deeply and sincerely invest in them to provide more intimate and personalised services. Deep emotional engagement can help employees better understand and satisfy the emotional needs of customers, and also enable them to experience a higher sense of work achievement and self-realisation. This positive psychological state helps to enhance employees' work commitment, strengthen their professional identity and sense of belonging, and inspire higher service enthusiasm and motivation. Highly engaged employees often have a stronger sense of service and responsibility, they show a high degree of enthusiasm and concentration in their work, and are able to keenly capture customer needs and provide personalised services, which significantly improves customer satisfaction and loyalty, and lays a solid foundation for the improvement of service performance(28-30). Therefore, this paper proposes the following hypotheses.

H3a:Surface play has an indirect negative effect on service performance through the mediating role of work input.

H3b:Deep play has an indirect positive effect on service performance through the mediation of work input.

3.4 The moderating role of a sense of organisational support

The inherently 'superficial' nature of surface acting is often accompanied by psychological stress and emotional depletion of the employee. Employees may feel that their true feelings are being suppressed by persistent surface acting, and in the long term, this stress may lead to reduced job satisfaction and enthusiasm, which in turn affects engagement. However, this negative impact can be effectively mitigated when organisations are able to provide a strong sense of support. A sense of organisational support, which includes recognising employees' contributions, providing the necessary resources and support, and fostering a positive work atmosphere, can enhance employees' psychological resilience and help them better cope with the challenges posed by surface play. Employees who feel the care and respect of the organisation will be more inclined to regard surface play as a professional requirement rather than a personal burden, and will be more inclined to change their internal views and feelings, thus reducing the negative impact on their work engagement. The sense of organisational support is an effective external resource, which attenuates the psychological fatigue and work alienation caused by surface play, and encourages employees to maintain a certain degree of work engagement even in situations where surface play is required, thus maintaining the stability of service quality to a certain

extent(31).

Deep play is when employees sincerely experience and express the emotions required for their jobs, which often leads to higher job satisfaction and career fulfilment. Employees are able to deeply understand and accept the emotions required for work and internalise them as part of their personal emotions, and they develop a strong identification with and commitment to their work. At this point, the sense of organisational support becomes more significant. A supportive organisational environment provides employees with the necessary training and guidance to help them perform their deeper roles better and reinforces positive emotional experiences through positive feedback and incentives(32). Employees feel that their growth and value are recognised by the organisation, which further motivates them to deepen their emotional labour, creating a virtuous cycle. The sense of organisational support not only facilitates the implementation of deep play, but also significantly enhances the work commitment of employees in the process and improves overall service performance. After feeling the support and recognition of the organisation, employees will take more initiative to improve their service skills, optimise the service process, and provide quality services to customers with more enthusiasm and higher efficiency, thus winning customers' trust and loyalty and laying a solid foundation for the sustainable development of the enterprise.

As a result, this paper proposes the following hypothesis.

H4a:Perceived organisational support weakens the relationship between surface play and work engagement, i.e. the higher the perceived organisational support, the weaker the negative impact of surface play on work engagement.

H4b: Perceived organisational support will strengthen the relationship between deep play and work engagement, i.e. the higher the perceived organisational support, the stronger the positive impact of deep play on work engagement.

Based on the above discussion, this paper argues that work engagement mediates the impact of emotional labour on service performance, and that the strength of this indirect relationship is moderated by the sense of organisational support, i.e. there is a moderated mediating role. Specifically, in a high level of organisational support, employees' adoption of a deep-playing strategy can effectively enhance work engagement, ensure resource investment in innovation performance and work engagement in the process of interacting with customers, and thus improve service performance; and

In the case of employees adopting the surface-playing strategy, a high level of organisational support can likewise supplement the employee's resource depletion in the service process and enhance the positive impact of work input on service performance. In contrast, in low levels of organisational support, employees find it difficult to supplement resources from the organisation, and thus the mediating role of work engagement in the process of influencing service performance is weakened in deep playing and diminished in the process of influencing service performance in surface playing. As a result, the following hypotheses are formulated.

H5a:Perceived organisational support weakens the indirect effect of surface-level roles on service performance through work input, i.e. the higher the perceived organisational support, the weaker the indirect effect of surface-level roles on service performance through work input.

H5b: Perceived organisational support enhances the indirect effect of deep-rooted roles on service performance through work input, i.e. the higher the perceived organisational support, the stronger the indirect effect of deep-rooted roles on service performance through work input.

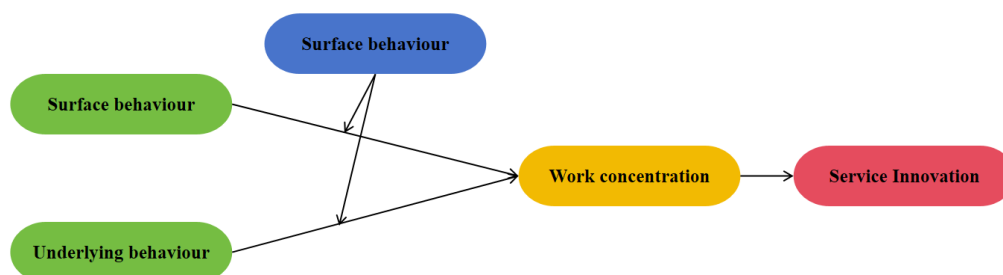In summary, the theoretical model of this paper is shown in Figure 1.

Fig. 1 Theoretical model

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3 RESEARCH DESIGN

3.1 Research sample

In this paper, a questionnaire survey was conducted among frontline employees in the service industry in Henan Province. With the assistance of the human resource management department, 294 frontline service employees were collected and distributed through the Questionnaire Star App. After the questionnaires were returned, the questionnaires were considered invalid if they were incomplete or had multiple choices, or if they had a pattern of choosing only one option, or if they had a pattern of choosing only one option. After removing the invalid questionnaires, a total of 268 valid questionnaires were collected, and the validity rate of the questionnaires was 91.16%. In the overall sample, 64.30 per cent were female and 35.70 per cent were male, and the education level was mainly of college degree or below (85.6 per cent).

3.2 Measurement of variables

In this paper, on the basis of reviewing the relevant literature both at home and abroad, the variables were measured with the help of mature scales. All the scales are based on a 7-point Likert scale, and the scores indicate the degree of agreement of the respondents from the lowest to the highest, with '1' denoting 'strongly disagree' and '7' denoting 'strongly agree'. In terms of control variables, since studies have shown that employees' age, gender and education level affect employees' work commitment and creativity, this paper controls these three variables. The main variables were measured as follows:

(1) Surface play and deep play: The scale developed by Grth (2009) was used. Surface play consists of three items, such as 'I pretend to show an emotion to a customer that I don't actually have'; deep play consists of three items, such as 'I try to experience the emotion that I need to express to the customer in a real way'. In this paper, the internal consistency coefficients were 0.764 for the Surface Play Scale and 0.842 for the Deep Play Scale.

(2)Service performance: Based on the scale developed by Chen et al. (Chen et al., 2009), the scale was revised to include five items, such as 'I am able to think of new ways to serve customers'. In this paper, the internal consistency reliability coefficient of the scale is 0.766.

(3)Work engagement: The scale developed by Wu et al. (2012) was used, including five questions, such as 'My work makes me tired'. In this paper, the internal consistency reliability coefficient of the scale was 0.742.

(4)Sense of organisational support: The scale developed by Ray et al. (2004) was used, consisting of four items, such as 'open communication and organisational cooperation in customer service'. In this paper, the internal consistency reliability coefficient of the scale is 0.763.

4 DATA ANALYSIS AND RESULTS

4.1 Reliability and validity tests

In this paper, the software SPSS22.0 and Mplus7.4 were used for reliability and validity tests. The Cronbach's coefficients (Cronbach'sa) of surface play, deep play, work commitment, service performance and sense of organisational support ranged from 0.742 to 0.886, which met the acceptable standard of needing to be greater than 0.7, indicating that the scale used in this paper has good reliability. In terms of discriminant validity test, the baseline model of this paper is a 5-factor model, and the 5 factors are surface play, deep play, work commitment, service performance and sense of organisational support. As shown in Table 1, in the test results of each factor model using validated factor analysis, the fit of the benchmark model to the data is better than the other four alternative models, indicating that the benchmark model has good discriminant validity. In addition, as shown in Table 2, the average variance extracted (AVE) and composite reliability (CR) of each variable were analysed in this paper, and the results showed that the AVEs of surface play, deep play, work commitment, service performance and sense of organisational support met the acceptable criterion of needing to be greater than 0.5, and the CR met the acceptable criterion of needing to be greater than 0.5, and the AVE of sense of organisational support met the acceptable criterion of needing to be greater than 0.5, and the CR met the acceptable criterion of needing to be greater than 0.5. The results show that the AVE for surface play, deep play, work engagement, service performance and sense of organisational support meet the acceptability criterion of greater than 0.5, and the CR also meets the acceptability criterion of greater than 0.7.

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Table 1 Distinguished validity tests

Modelling	Variable combinations	x²	df	x²	RMSEA	CFI	TLI	SRMR
Five-factor model	SA,DA,SC,IN,EM	279.856	160	1.868	0.058	0.934	0.922	0.055
Four-factor model	SA+DA,SC,IN,EM	555.969	164	3.318	0.088	0.820	0.792	0.105
Three-factor model	SA+DA+EM,SC,IN	712.292	167	4.247	0.112	0.743	0.708	0.104
Two-factor model	SA+DA+EM,SC+IN	1048.368	169	6.203	0.142	0.584	0.532	0.132
One-way model	SA+DA+SC+IN+EM	1292.555	170	7.603	0.160	0.360	0.285	0.152

Note:SA stands for surface play; DA stands for deep play; SC sense of organisational support; IN stands for service performance; EM stands for work engagement; same as in the latter table. + denotes combining 2 factors into 1 factor.

Table 2 Mean Variance Extraction and Combined Reliability

Variant	Entry	Factor loading	AVE	CR
SC	SC1	0.674	0.543	0.825
	SC2	0.833		
	SC3	0.779		
	SC4	0.697		
IN	IN1	0.874	0.574	0.869
	IN2	0.857		
	IN3	0.697		
	IN4	0.751		
	IN5	0.614		
EM	EM1	0.810	0.549	0.858
	EM2	0.681		
	EM3	0.782		
	EM4	0.710		
	EM5	0.712		
SA	SA1	0.722	0.538	0.747
	SA2	0.851		
	SA3	0.607		
DA	DA1	0.614	0.543	0.776
	DA2	0.901		
	DA3	0.664		

4.2 Homologous method bias test

Although the authors of this paper emphasised the confidentiality of the data to the respondents during the data collection process in order to minimise their concerns and to obtain more realistic data, it is still necessary to conduct a homogeneity bias test because

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the questionnaires were filled out by the employees. In this paper, Harman's one-way analysis of variance (ANOVA) was used to test for homology bias. The results show that there are five factors with eigenroots greater than 1, and the first factor accounts for 22.356% of the total variance, which is lower than 40%. This means that there is no factor with too high explanatory power, which indicates that the problem of homology bias in this paper is not serious.

4.3 Descriptive statistics and correlation analysis

Table 3 presents the means, standard deviations and correlation coefficients of the main study variables. Among them, surface play was significantly and negatively correlated with work input (r=-0.187,P<0.01), deep play was significantly and positively correlated with work input (r=0.214,P<0.01), work input was significantly and positively correlated with service performance (r=0.337P<0.001), and deep play was significantly and positively correlated with service performance (r=0.331,P<0.001), which provided preliminary support for the preliminary support for the hypotheses of this paper.

Table 3 Narrative statistics

variant	average value	standard deviation w	SD	correlation coefficient				
				1	2	3	4	5
1 Sense of organisational support	5.393	1.187	0.755	(0.823)	0.273***	0.006	0.304**	0.075
2 Service performance	5.300	1.085	0.641	0.237***	(0.866)	-0.567**	-0.092	0.486**
3 devote one's energies to work	2.829	1.245	0.774	0.002	-0.337***	(0.852)	0.331**	-0.233**
4 superficial appearance	2.087	1.205	0.722	0.136*	-0.027	-0.187**	(0.764)	-0.251**
5 deep version of a play	4.957	1.346	0.575	0.117	0.331***	0.214**	-0.083	(0.762)

Note: N(individual level)=268, N(organisational level)=32; * denotes P<0.05, ** denotes P<0.01, *** denotes P<0.001. The standard deviation, and standard deviation are the standard deviation of the variables at the individual level and organisational level, respectively. The values on the diagonal are the reliability coefficients of the corresponding variables, the correlation coefficients between the variables at the individual employee level are shown below the diagonal, and the correlation coefficients between the variables at the organisational level are shown above the diagonal.

4.4 aggregation validity test

In this paper, intra-group rater reliability (Rwg), intra-group consistency (ICC(1)) and inter-group consistency (ICC(2)) were used as test indicators. The results showed that the mean value of Rwg for intra-group consistency of service climate was 0.87, which was in line with the acceptable level of Rwg needing to be greater than 0.7 as suggested by James et al. (1984). In addition, ICC(1) and ICC(2) were 0.32 and 0.77 respectively, which met the criteria suggested by Bliese & Halverson (1998) that ICC(1) should be greater than 0.12 and ICC(2) should be greater than 0.60.

4.5 hypothesis testing

This paper uses the software Mplus 7.4 to test the proposed hypotheses. To test the research hypotheses in Figure 1, the paper first constructed a cross-level model. In order to improve the explanatory power of the model, group mean centering was applied to the individual level variables including control variables and overall mean centering was applied to the organisational level variables

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(sense of organisational support) in the data analysis. The results of the hypothesis analyses were as follows: after controlling for employees' age, gender and education level, surface play had a significant positive effect on work engagement (y=0.186, P<0.05), deep play had a significant negative effect on work engagement (y=-0.235, P<0.01), and work engagement had a significant negative effect on service performance (γ=-0.304, P< 0.001), hypothesis H1a, hypothesis H1b and hypothesis H2 were verified.

On the basis of the above analysis, the mediating role of work input was examined using the bootstrap sampling method, and the sampling number was set at 5000 times The analysis results showed that the mediating effect of affective exhaustion was significant in the process of surface play affecting service performance (y=-0.057,95% level confidence interval of [-0.148,-0.004], excluding 0); in the process of deep play affecting service performance, the mediating effect of work input was equally significant (y=0.07195% level confidence interval of [0.030,0.136], excluding 0); in the process of deep play affecting service performance, the mediating effect of work input was also significant (y=0.07195% level confidence interval of [0.030,0.136], excluding 0); in the process of deep play affects service performance, the mediating effect of work input is also significant (y=0.07195% level confidence interval of [0.030,0.136], excluding 0). Thus hypothesis H3a and hypothesis H3b were tested.

In the test of the moderating effect of the sense of organisational support, the results of data analysis showed that the regression coefficient of the interaction term of superficial play and the sense of organisational support was negative, but it did not pass the test of significance (y=-0.355, n.s.), so H4a was not verified; the regression coefficient of the interaction term of the sense of deep play and the sense of organisational support was significantly positive (y=0.430, P<0.01), and hypothesis H4b was verified, indicating that deep play can enhance the negative effect of the sense of organisational support on work engagement. The regression coefficient of the interaction term between deep play and organisational support is significantly positive (y=0.430, P<0.01), and the hypothesis H4b is verified, which indicates that the sense of organisational support can enhance the negative effect of deep play on work commitment. In order to present more intuitively the moderating effect of organisational service atmosphere on the relationship between deep play and work commitment, this paper adopts a simple slope test, which adds and subtracts one standard deviation from the mean value of the sense of organisational support to get the high and low groupings of the sense of organisational support, and then draws the moderating effect graphs.In the high organisational support feeling situation, the effect of deep playing on work engagement was significant (y=-0.323, P<0.01); in the low organisational support feeling situation, the effect of deep playing on work engagement was not significant (y=-0.040, n.s.), which indicated that there was a moderating effect of the sense of organisational support in the process of the negative effect of deep playing on work engagement, and the Hypothesis H4b was verified.

In this paper, based on the results of the data analysis by the software Mplus, parametricbased bootstrapping was used to test the mediation hypothesis of the moderated mediation using the software R. The results of the analysis are shown in Table 4. The number of Monte Carlo replicates was set to 20,000, and the results of the analyses are shown in Table 4. When surface play is used as the independent variable, the indirect effect of surface play affecting service performance through work input is 0.035 (95% level confidence interval [-0.100,0.262]) under high sense of organisational support; under low sense of organisational support, surface play affects [-0.342,0.071] through work input). The indirect effect of differential service performance between the two groups of high and low sense of organisational support is -0.073 (95% level confidence interval head of 0.108, 95% level confidence interval of [-0.014,0.308, packet word 0, which means that the level of significance has not been reached, i.e., Hypothesis H5a has not been tested.

When deep playing as the independent variable, under high sense of organisational support, the indirect effect of deep playing affecting service performance through work input is -0.057 under business atmosphere, the indirect (95% level confidence interval is [-0.200, 0.032]) of deep playing affecting service performance through work input; under low sense of organisational support, the indirect effect of deep playing affecting service performance through work input is 0.074 (95% level confidence interval is [0.01, 0.242]) the difference between the two groups of high and low sense of tissue support was -0.131 with 95% level confidence interval [-0.320,-0.001, excluding 0, i.e. hypothesis H5b was tested.

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Table 4 Results of the analysis of the mediated effects of the moderated

Moderating variable: sense of organisational support	Mediation effect pathway: surface play → work input → service performance		
	Indirect effect	Standard error	95% confidence interval for indirect effects
High sense of organisational support	0.035	0.048	[-0.100,0.278]
Low sense of organisational support	-0.063	0.081	[-0.342,0.071]
Differences in between-group effects between high and low conditions	0.109	0.099	[-0.014,0.328]
Moderating variable: sense of organisational support	Mediation effect pathway: deep play → work commitment → service performance		
	Indirect effect	Standard error	95% confidence interval for indirect effects
High sense of organisational support	-0.057	0.076	[-0.200,0.032]
Low sense of organisational support	0.074	0.047	[0.010,0.242]
Differences in between-group effects between high and low conditions	-0.131	0.075	[-0.320,-0.001]

5 CONCLUSIONS AND DISCUSSION OF THE STUDY

5.1 Research Conclusion Based on the resource conservation theory, this paper explores the influence mechanism of frontline service employees' emotional labour on service performance. The results of this study show that surface play has a significant positive effect on work engagement, and deep play has a significant negative effect on work engagement; work engagement reduces the level of employees' service performance, and work engagement has a mediating role in the process of affecting service performance in both surface play and deep play. In addition, the sense of organisational support significantly moderated the influence of deep-rooted role-playing on service performance, i.e., the sense of organisational support not only enhanced the negative influence of deep-rooted role-playing on work input, but also enhanced the indirect effect of deep-rooted role-playing on service performance through work input.

Two hypotheses related to surface play, that is, that perceived organisational support would weaken the positive effect of surface play on work engagement (Hypothesis H4a), and that perceived organisational support would weaken the indirect effect of surface play on service performance through work engagement (Hypothesis H5a), were not tested. This may be due to the fact that, compared with deep-rooted role-playing, surface-rooted role-playing shows a small or insignificant negative effect in the Chinese context. Moreover, it has been suggested that Chinese employees have a higher tolerance for emotional dysregulation in interpersonal interactions, which may reduce the perception of work engagement and the further negative effects. In addition, because perceptions of organisational support have both job resources! and job demands', for employees who engage in surface play, although the sense of organisational support as a job resource compensates for the depletion of their emotional resources, the sense of organisational support as a job demand may further enhance their work engagement, resulting in the moderating effect of the sense of organisational support being insignificant in the path of influence of surface play.

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5.2 theoretical contribution

The main theoretical contributions of this paper are as follows.

Firstly, this paper further reveals the influence mechanism of emotional labour on service performance based on resource conservation theory. Although the importance of service performance has received increasing attention, only a few studies have explored the relationship between emotional labour and service performance, and more attention has been paid to the direct impact of emotional labour on service performance. Except for the study by Geng et al. (2014), there is still a lack of in-depth analysis on the mechanism of emotional labour affecting service performance, especially ignoring the role of work input in it. Emotional labour is the process of emotional regulation carried out by service employees in order to comply with organisational requirements, while work engagement is considered to be an important mediating mechanism between work requirements and employee behaviour'. Therefore, the combination of emotional labour and work engagement in this paper not only helps to expand the research findings on work engagement as a mediating mechanism, but also supports the view that job demands affect employee innovation through work engagement.

Second, this paper reveals that sense of organisational support is a boundary condition in the process of emotional labour affecting service performance, which helps to enrich the research framework of sense of organisational support. Although sense of organisational support can serve as a functional resource, existing studies have focused more on antecedent and outcome variables of sense of organisational support, and fewer studies have explored the moderating role of sense of organisational support based on resource preservation theory. Moreover, some studies have argued that service climate, as an organisation's expectation of employees in terms of emotional expression, will have a role similar to that of the rules of emotional expression, and thus the sense of organisational support is used as an antecedent variable of emotional labour. Based on the resource conservation theory, this paper considers the sense of organizational support as a source of compensatory resources for employees in the process of emotional labour, rather than the job requirements that may cause burnout, and empirically finds that the sense of organizational support as a compensatory resource is able to supplement the loss of resources in the process of employees' emotional labour. This finding strengthens the application of resource preservation theory, expands the scope of application of the sense of organisational support, and contributes to the extension of the service climate research framework proposed by Hong et al. (2013).

Third, this paper also contributes to a deeper understanding of the differences in the outcomes of different emotional labour strategies. In the field of emotion management, the relationship between surface play, deep play and work engagement has long been controversial and divergent. Some studies have shown that there is no significant difference in the depletion of employees' resources or energy by deep playing compared with surface playing', or that the effect of deep playing on emotional depletion is not significant.com. This paper examines the relationship between surface play, deep play and work engagement, and the results show that deep play can reduce work engagement, which helps to further clarify the disagreement and controversy over the results of emotional labour strategies from the perspective of resource conservation theory.

5.3 Management Insights

Service performance has become an important way for organisations to provide new or improved service solutions to customers in order to respond to their needs in a timely manner. Today, changes in customer buying behaviour under the influence of information technology and the rapidly evolving service environment pose significant challenges to service performance. Service organisations place greater emphasis on service performance to maintain existing customers or acquire new ones to reduce the negative impact of external shocks on the organisation. The findings of this paper suggest that the use of different emotional labour strategies by employees can have a differential impact on service performance. Employees' adoption of deep-playing strategies can help to ensure and even increase the resources that can be invested in the service performance process, thus improving the level of service performance. At the same time, the sense of organisational support can compensate for the loss of emotional resources in the service process. Accordingly, the following recommendations are made.

First of all, organisations need to carry out relevant training to improve the emotional management ability of employees. Emotional management ability refers to the ability of individuals to properly handle their own emotions, and employees with high emotional management ability can better adjust their own emotions to adapt to the external environment. In the training process, on the one hand, we need to introduce employees to the importance of emotion and emotion management, to help employees in the

cognitive level to understand the importance of appropriate emotional expression to improve their own psychological condition, improve service quality and achieve organisational goals; on the other hand, we need to teach employees to think differently and other emotion management skills, not only to make it easier for employees to use the deeper play strategy to meet the expectations of customers on the staff to show real positive emotions, but also to make it easier for employees to use the deep play strategy to meet the expectations of customers on the staff to show real positive emotions. On the other hand, employees need to be taught to think differently, which not only makes it easier for them to adopt deep-playing strategies to meet customers' expectations of their real positive emotions, but also helps to reduce a series of negative impacts on themselves and the organisation as a result of adopting surface-playing strategies.

Secondly, the organisation should create a good sense of organisational support. First, the organisation needs to care for, understand and meet the reasonable needs of frontline service employees as far as possible, create a good service environment for employees to motivate them to provide high-quality services, and then acquire knowledge of customer needs related to service performance in the process of interacting with customers; second, provide employees with work guidance and technical support to help employees understand the deep-rooted needs of customers in the service process, which can not only improve the customer service experience, but also help to improve service performance; third, set up diverse incentives for employees and compensation measures for loss of resources, which can help to improve service performance. This can not only improve the customer's service experience, but also help to improve the service performance: Third, set up diversified incentive policies and resource loss compensation measures for employees, such as the provision of leisure activities to help work recovery and emotional management as the basis for judging the incentive programme, etc., not only to reduce the negative impact of the employee's work inputs, but also to provide employees with a certain degree of resource support for the performance of the service.

Finally, organisations should minimise employee work commitment. Since the findings of this paper suggest that emotional labour affects service performance through the mediating role of work engagement, organisations need to provide appropriate solutions to the factors that may cause employees' work engagement. In addition to this paper's focus on employees' emotional labour and sense of organisational support, organisational factors and leadership factors may affect work engagement. Therefore, in addition to training employees in emotional management and creating a sense of organisational support, organisations need to take a variety of countermeasures. For example, at the organisational level, it is necessary to cultivate organisational emotional capability, because organisational emotional capability, as the organisation's ability to monitor, perceive and adjust the emotions of employees through the use of systems, management and rules, is able to channel negative emotions and stimulate positive emotions in a timely manner'; at the leadership level, as the negative emotions of leaders can be transmitted to employees, it is also necessary to take a variety of countermeasures to address these factors. At the leadership level, since the negative emotions of the leaders will be transmitted to the employees, it is necessary for the leaders to pay attention to the management of their own emotions in the organisation.

5.4 Research limitations and perspectives

The limitations of this paper include the following.

Firstly, the sample data of this paper comes from the same industry, although this helps to control the influence of industry factors on the analysed results and improve internal validity, it also affects the generalisability of the research results. For example, some studies have found that the influencing factors and mechanisms of employee service performance differ among different types of service industries, such as healthcare, hospitality, and telecommunications. Therefore, future research needs to expand the range of industries covered by the sample data to improve the external validity of the findings.

Second, in terms of research design, since this paper uses cross-sectional data, it is difficult to fully determine the causal relationship between variables. Future research can collect data at different time points through a longitudinal research design, so as to more accurately reveal the mechanism of the impact of emotional labour on service performance. Moreover, the data in this paper come from employees' self-report, and although the homoscedasticity test shows that it does not affect the results of the study, it is necessary for future research to further test the findings of this paper through multiple sources of data. In addition, in the process of collecting data through questionnaires, the method of self-assessment by the subjects may cause the problem of social approbation. Therefore, subsequent studies also need to adopt objective data for the measurement of relevant variables. For example, while

emotional labour, work engagement and sense of organisational support are more suitable for using self-assessment data as employees' own perceptions, the measurement of service performance can be based on Qi Lei et al.'s (2019) study, whereby organisational leaders evaluated their employees' service performance situation to measure service performance, thus avoiding the issue of social approbability as much as possible.

Third, future research could explore the dual role of organisational support as a job resource and a job requirement in an integrated manner. Based on the resource preservation theory, this paper considers the sense of organisational support as a source of compensatory resources, but the sense of organisational support, as an organisation's expectation of employees to provide high quality of service, may also be a kind of job requirement that can cause employees to feel pressure. Therefore, in what contexts is the sense of organisational support more biased towards job resources and in what contexts is it more biased towards job resources? How does organisational support affect service performance when it is a job requirement? Future research could expand the study of organisational support by examining these questions in depth.

REFERENCES

1) Kadir SLSA, Abdullah M, Agus A. On service improvement capacity index: a case study of the public service sector in Malaysia. Total Quality Management. 2000;11(4-6):837-43.

2) Katsikeas CS, Paparoidamis NG, Katsikea E. Supply source selection criteria: The impact of supplier performance on distributor performance. Industrial marketing management. 2004;33(8):755-64.

3) Ray G, Muhanna WA, Barney JB. Information technology and the performance of the customer service process: A resource-based analysis. MIS quarterly. 2005:625-52.

4) Ali U, Li Y, Wang J-J, Yue X. Dynamics of outward FDI and productivity spillovers in logistics services industry: Evidence from China. Transportation Research Part E: Logistics and Transportation Review. 2021;148:102258.

5) Salanova M, Agut S, Peiró JM. Linking organizational resources and work engagement to employee performance and customer loyalty: the mediation of service climate. Journal of applied Psychology. 2005;90(6):1217.

6) Christian MS, Garza AS, Slaughter JE. Work engagement: A quantitative review and test of its relations with task and contextual performance. Personnel psychology. 2011;64(1):89-136.

7) Demerouti E, Derks D, Ten Brummelhuis LL, Bakker AB. New ways of working: Impact on working conditions, work–family balance, and well-being. The impact of ICT on quality of working life. 2014:123-41.

8) Kammeyer-Mueller JD, Rubenstein AL, Long DM, Odio MA, Buckman BR, Zhang Y, et al. A meta-analytic structural model of dispositonal affectivity and emotional labor. Personnel psychology. 2013;66(1):47-90.

9) Prentice C, Chen P-J, King B. Employee performance outcomes and burnout following the presentation-of-self in customer-service contexts. International Journal of Hospitality Management. 2013;35:225-36.

10) Nishii LH, Lepak DP, Schneider B. Employee attributions of the "why" of HR practices: Their effects on employee attitudes and behaviors, and customer satisfaction. Personnel psychology. 2008;61(3):503-45.

11) Adsit DJ, London M, Crom S, Jones D. Relationships between employee attitudes, customer satisfaction and departmental performance. Journal of Management Development. 1996;15(1):62-75.

12) Rust RT, Stewart GL, Miller H, Pielack D. The satisfaction and retention of frontline employees: A customer satisfaction measurement approach. International Journal of Service Industry Management. 1996;7(5):62-80.

13) Saari LM, Judge TA. Employee attitudes and job satisfaction. Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in alliance with the Society of Human Resources Management. 2004;43(4):395-407.

14) Koys DJ. The effects of employee satisfaction, organizational citizenship behavior, and turnover on organizational effectiveness: A unit-level, longitudinal study. Personnel psychology. 2001;54(1):101-14.

15) Yin H. The effect of teachers' emotional labour on teaching satisfaction: Moderation of emotional intelligence. Teachers and Teaching. 2015;21(7):789-810.

16) Smith PK. Children and play: Understanding children's worlds: John Wiley & Sons; 2009.

17) Geertz C. Deep play: Notes on the Balinese cockfight.   New Critical Writings in Political Sociology: Routledge; 2024. p. 383-413.

18) Mainemelis C, Ronson S. Ideas are born in fields of play: Towards a theory of play and creativity in organizational settings. Research in organizational behavior. 2006;27:81-131.

19) Groth M, Hennig-Thurau T, Walsh G. Customer reactions to emotional labor: The roles of employee acting strategies and customer detection accuracy. Academy of management Journal. 2009;52(5):958-74.

20) Ashforth BE, Tomiuk MA. 10 Emotional labour and authenticity: views from service agents. Emotion in organizations. 2000:184-99.

21) Trougakos JP, Beal DJ, Cheng BH, Hideg I, Zweig D. Too drained to help: a resource depletion perspective on daily interpersonal citizenship behaviors. Journal of Applied Psychology. 2015;100(1):227.

22) De Keyser A, Verleye K, Lemon KN, Keiningham TL, Klaus P. Moving the customer experience field forward: introducing the touchpoints, context, qualities (TCQ) nomenclature. Journal of Service Research. 2020;23(4):433-55.

23) Evans L. Professionalism, professionality and the development of education professionals. British journal of educational studies. 2008;56(1):20-38.

24) Sheeri G, Madhurkar V. A Study on Customer Satisfaction with respect to After Sales Service at Revankar Motors. Srusti Management Review. 2023;16(2).

25) De Clercq D, Suhail A, Azeem MU, Haq IU. Citizenship pressure and job performance: roles of citizenship fatigue and continuance commitment. Asia Pacific Journal of Human Resources. 2021;59(3):482-505.

26) Pan N, Luo YY, Duan QX. [Retracted] The Influence of PDCA Cycle Management Mode on the Enthusiasm, Efficiency, and Teamwork Ability of Nurses. BioMed research international. 2022;2022(1):9352735.

27) Diener E, Thapa S, Tay L. Positive emotions at work. Annual review of organizational psychology and organizational behavior. 2020;7(1):451-77.

28) Boyd N, Nowell B. Sense of community, sense of community responsibility, organizational commitment and identification, and public service motivation: A simultaneous test of affective states on employee well-being and engagement in a public service work context.   Public Service Motivation: Routledge; 2023. p. 76-102.

29) Nazir O, Islam JU. Effect of CSR activities on meaningfulness, compassion, and employee engagement: A sense-making theoretical approach. International Journal of Hospitality Management. 2020;90:102630.

30) Raza A, Farrukh M, Iqbal MK, Farhan M, Wu Y. Corporate social responsibility and employees' voluntary pro-environmental behavior: The role of organizational pride and employee engagement. Corporate Social Responsibility and Environmental Management. 2021;28(3):1104-16.

31) Do H, Budhwar P, Shipton H, Nguyen H-D, Nguyen B. Building organizational resilience, innovation through resource-based management initiatives, organizational learning and environmental dynamism. Journal of business research. 2022;141:808-21.

32) Rasool SF, Wang M, Tang M, Saeed A, Iqbal J. How toxic workplace environment effects the employee engagement: The mediating role of organizational support and employee wellbeing. International journal of environmental research and public health. 2021;18(5):2294.