The impact of customer empowerment behaviour on service workers' craftsman spirit: the role of professional identity enthusiasm and perceived organizational support

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Abstract: Customers' increasing demand for service quality has brought new challenges to the development of enterprises, and the cultivation of employees' craftsman spirit is conducive to the sustainable development of the service industry. Based on self-determination theory, this study examines the impact of customer empowerment behaviour on craftsman spirit by including professional identity and perceived organizational support in the research framework, taking the work of service workers as the object of study. A regression analysis of 399 questionnaires revealed that customer empowerment behaviour was significantly and positively related to service employees' craftsman spirit; the relationship between customer empowerment behaviour and craftsman spirit was partially mediated by occupational identity; and the relationship between occupational identity and craftsman spirit was mediated by perceived organizational support. In addition, perceived organizational support effectively moderates the mediating role of occupational identity, the intensity of the intermediary of occupational identity increases with the level of perceived organizational support. The results of this study have enriched the research on craftsman spirit in the service industry to a certain extent, and provide inspiration for the better development of the service industry.

Keywords: Customer empowerment behaviour; professional identity; perceived organizational support; craftsman spirit; service employees.

1 Introduction

All walks of life are developing rapidly, emphasis is being placed on craftsman spirit not only in manufacturing, but also began to pay attention to the spirit of the service field. Today, The service industry is increasingly promoting economic growth. China's fourth national economic population census shows: in 2018, the service industry contributed 53.3 % to China's GDP growth. From 2013 to 2018, the service sector contributed more than 59% to economic growth. Although the overall situation is optimistic, there are still some bad phenomena, such as forced shopping by tour guides, discrimination against customers by waiters and exaggerated propaganda by tour guides, leading to dissatisfaction and hindering the sustainable development of the service industry. Therefore how to effectively ensure that service industry employees have the spirit of craftsman spirit and effectively inspire them to work with an

attitude of excellence in their work has become a key issue that should be well thought out by the service industry.

Employees with an craftsman spirit spirit are able to deliver consistently high quality services in their work. Research on craftsman spirit in recent years has focused on the area of leadership. For example, (Deng and Xiao, 2020) point out that self-sacrificing leadership can stimulate craftsman spirit through employees' sense of psychological belonging and work mission; (Liu, 2022) argues that spiritual leadership has a facilitating effect on employees' craftsman spirit; by researching inclusive leadership, and (Li, 2021) finds that inclusive leadership is an antecedent variable influencing the practice of craftsman spirit among manufacturing employees. Current research on craftsman spirit has mainly focused on manufacturing employees, with few people focus on the service industry. However, the working environment and the nature of the work between the two are significant different, and this can lead to different habits of thought and behaviour. The service industry in China is being upgraded and customers are demanding higher quality of service. At the same time, customers allow service personnel to play their creativity to a certain extent during the service, showing trust in their employees' abilities. The degree of customer empowerment can influence staff behaviour and customer empowerment is an important work resource for service employees. Service employees desire a certain level of autonomy to better meet customer needs (Xiang and Zhang, 2021), and empowerment can inspire employees to be innovative and responsible (Lei, 2006). Therefore, customer empowerment can promote craftsman spirit among service employees. Currently, few scholars study customer authorization empowerment behavior. (Guo and Cheng, 2021) found the influence mechanism between customer empowerment behaviour and employees' career growth. (Dong,2015) discussed the mechanism between customer empowerment behaviour and service innovation. The relationship between customer empowerment behaviour and service employees' craftsman spirit is unclear.

This study investigates the mechanism of customer empowerment on service workers' craftsman spirit based on self-determination theory. Self-determination theory studies the motivation of employees' behavior, and divides the motivation of this behavior into internal, external and negative motivations. Extrinsic motivation is divided into external regulation, intake regulation, identity regulation and integration regulation. Among them, intrinsic motivation, identity regulation and integration regulation can be regarded as "autonomous work motivation", which can positively influence employees' work ethic and attitude (Tremblay, 2009). According to self-determination theory, job characteristics have a significant impact on responding to and maintaining employees' autonomous motivation. Research has found that job characteristics with higher autonomy positively predict employees' intrinsic motivation and positively influence employees' affective commitment and job expectations (Dec, 2017) (Meng and Ma, 2015) (Galletta, 2011). Customer empowerment creates a free working environment for employees. Employees can work as they see fit to serve their clients. Empowerment also stimulates employees' perceptions of entitlement and enables employees to have a greater sense of worth and efficacy (ThomasK and Velthouse,1990), thus promoting professional identity. This study builds on the above research and predicts that professional identity may have a mediating role between customer empowerment behaviour and service employee craftsman spirit.

According to self-determination theory, an environment that encourages employees' freedom of choice and experience has a positive impact on individual motivation (Gagné and Deci, 2005). The behaviour of service employees must not only satisfy customers but also be regulated by managers who can create a supportive work environment for employees by upholding their interests, understanding them and delegating appropriate authority so that employees receive perceived organizational support. High perceived organizational support acts as a motivator for employee behaviour and performance (Deci and Ryan, 1987) and has a positive impact on personal responsibility, organizational citizenship behaviour and work attitudes (Shi and Gordon, 2019) (Gupta, 2016) (Zhen and Huang, 2021). Service employees with high perceived organizational support are more likely to exhibit craftsman spirit in the face of career recognition. Therefore, this study hypothesized that perceived organizational support as an important factor may have a contingent impact on service employees' craftsman spirit.

In summary, this paper presents research hypotheses based on theoretical research on service employees' customer empowerment behaviour, professional identity, perceived organizational support and craftsman spirit. The research design is then presented followed by an analysis of the results, and finally, in the discussion section, the theoretical and practical implications of the paper are elaborated, and the current limitations and future perspectives are pointed out. The paper thus enriches the research findings related to craftsman spirit. It also provides direction for the development of both companies and employees.2 Literature review and research hypothesis

2   Literature Review and Research Hypotheses

2.1   Self-determination theory

Self-determination theory was developed by psychologist Deci (Deci, 2000). At its core, it explores how social situations affect individuals' motivation to behave and summarize three basic human psychological needs: the need for autonomy, the need for competence and the need for relatedness. Autonomy needs refer to the individual's desire to have a degree of autonomy over his or her own behaviour when performing work; autonomy needs refer to the individual's ability to learn or behave in a way that meets the requirements of the job; and relatedness needs refer to the individual's ability to feel cared for by others and to connect with others (Haivas, 2013). The satisfaction of the three psychological needs allows individuals to sustain their focus on work and maintain a positive attitude towards work. Employees tend to internalize the values and rules of their environment, which will bring higher levels of work satisfaction and work happiness to employees, then, high-level work satisfaction and work happiness can actively affect their dedication to employees' respect for employees (Gagné, 2005). (Deng, 2021) further validates the applicability of self-determination theory when analyzing the impact of spiritual leadership on employee craftsman spirit. Thus, self-determination theory plays a fundamental role in explaining the mechanisms by which external change affects employee craftsman spirit.

Apart from job characteristics, organizational support is a key factor in an autonomy-supportive environment. Self-decision theory put forward such a point of view, there are two attributes of external events that influence the satisfaction of an individual's

psychological needs: informational and controlling. Informational events refer to how individuals can do their jobs better, and such events can increase employees' intrinsic motivation (Liu and Li, 2010). organizational support can be seen as the reassurance that organizations provide to employees (Wang and Chen, 2021) and a large number of studies have confirmed its relationship with positive employee motivation, (Gillet, 2013) using self-determination theory as a guiding framework, confirmed that perceived organizational support is positively related to self-determined motivation and that autonomous motivation positively predicts work engagement, thus demonstrating that perceived organizational support has a positive impact on employee organizational perceived organizational support has a positive impact on employees' organizational identification, job satisfaction and job performance. After the main content of self -determination theory is summarized, (Liu, 2010) states that managers' support for autonomy can positively impact on employees' job satisfaction, job performance and work enthusiasm. (Guo and Duan, 2008) examined the application of self-determination theory in the area of organizational behaviour and found that supportive information provided by superiors in a non-controlling way could positively influence employees' work enthusiasm, organizational commitment and persistence. These studies suggest that the process of employee self-determination may be moderated by the level of organizational support.

Based on self-determination theory, customer empowerment behaviour, occupational identity and perceived organizational support play an important role in the generation of craftsman spirit. Customer empowerment inspires craftsman spirit through employees' professional identity, while employees with different organizational support have different work ethics when faced with customer demands, which will influence the degree of self-determination.

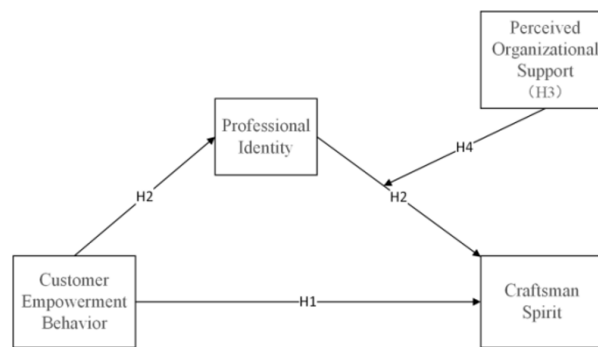The theoretical model is shown in Figure 1.

Figure 1. Theoretical model

2.2 Customer empowerment behaviour and craftsman spirit

There is no authoritative consensus on the definition of craftsman spirit. Some scholars believe that craftsman spirit refers to the professional attitude of excellent employees in their work and the tendency to strive for excellence and active innovation (ye, 2020); Li (2021) believes that the spirit of craftsman is a more technical human capital capital that emphasizes technology. By referring to (Yang, 2021), craftsman spirit is defined as the artisan's excellence

in work and the pursuit of perfect spirit through innovative skills. After summing up a series of documents, (Gao, 2020) gives a relatively complete definition of the concept of craftsman spirit, they believe that craftsman spirit is a kind of work value held by employees in their current work, which embodies personal work goals. By analyzing the views of scholars and combining the work characteristics of service employees, the craftsman spirit of service employees is defined as: external performance refers to the pursuit of perfection in the service process and the continuous satisfaction of customers' needs through the improvement of service quality and methods. The internal manifestation refers to adhering to the values and service objectives of pursuing excellence and continuous innovation in the work process (Li, 2020).

Scholar defines customer empowerment behaviour as when providing a service (Dong, 2015), employees perceive the opportunity given by the customer to motivate themselves to work and thus feel able to make independent decisions about some key issues in the service process on how to achieve the desired service outcome. When a service employee provides a service to a customer, as the customer can decide whether or not to accept the employee's service, they also have the right to evaluate their own consumption experience and then recommend or discourage others from doing so. Therefore, customer empowerment is an opportunity to promote employees' career development, and positive customer evaluations of employees help to increase the likelihood of promotions and salary increases (Guo, 2021). In order to gain better career prospects and secure job resources, service employees show more organizational citizenship behaviour to meet the various needs of customers in the face of the uncertainty caused by customer empowerment (Stautenbiel, 2006), for example, by constantly providing quality service and avoiding loopholes. In addition, customer empowerment provides support for employee innovation (Dong, 2015), which facilitates employees' creative potential and employees have more opportunities to learn and grow at work, thus motivating them to perform. Service-oriented employees provide personalised services to gain personal value and tend to exhibit more innovative behaviour (FöRste, 2004). Thus, customer empowerment behaviour can inspire employees to be craftsmen.

Self-determination theory suggests that by satisfying an individual's basic needs, personal external motivation can become independent working motivation, thus promoting the persistence of behaviour and improving the quality of behaviour (Gagné, 2005). Firstly, by allowing employees to deliver services in their own way under customer empowerment, employees make decisions and take action without excessive customer intervention, satisfying their need for autonomy (Merve, 2021). Customer empowerment enables employees to use their own work experience or expertise and allows employees to participate in decision making (Tuan, 2019), employees will feel the trust of the customer in their abilities and increase their self-efficacy (Conger, Kanungo, 1988). At the same time, customer empowerment creates more opportunities for employees to learn and communicate with customers (Mao, 2021), which satisfies employees' competency needs. Finally, customer empowerment behaviour enhances the relationship between employees and customers, and even employees can gain recognition and respect from customers (Li and Hsu, 2018). Employees who are satisfied with basic psychological needs will be more effective in giving play to their personal potential, and continue to show an excellent and innovative work attitude. The study found that the satisfaction of basic needs can mediate between spiritual leadership and employee craftsman spirit. In summary, this article proposes hypothesis 1 :

H1: Customer empowerment behaviour has a significant positive impact on the craftsman spirit of service employees.

2.3   The mediating role of professional identity

Occupational identity is derived from social identity, employees perceive themselves as being aligned with or subordinate to their occupation (Gu, 2016), that is, the degree of congruence that can be obtained from occupational values in line with social expectations (Zhang, 2020). Individuals with high occupational identity have a higher sense of job mission and belonging, which leads to higher job satisfaction and job engagement (Andrianto, 2018) (Wang, 2020), higher enthusiasm and self-confidence in the face of uncertainty, and tend to actively explore external information to resolve difficulties (Mosley-Howard and Andersen, 1993).

Self-decision theory pointed out that internal motivation refers to the value of an employee's work and value arises because individuals have internal needs (Zhao, 2016). The new generation of service industry employees not only care about external needs, such as economic compensation and promotion work, but also want to give play to their personal social value. Firstly, service industry employees have a lower social status and are more likely to be neglected than other occupations; secondly, service industry employees work long and intense hours and have to deal with a large number of customers with different needs, and need to provide personalized services so that their work is recognized, so they are more likely to have a need for independence than employees in other industries. Finally, personalized service requires employees to have the ability to apply different approaches to problem solving in different situations, and therefore employees have a greater ability to cope with their work tasks (Schmitz and Ganesan, 2014). As customer empowerment responds to the intrinsic needs of service employees, employees tend to view their careers as an important channel for satisfying their needs and further enhance their recognition of the value and meaning of their work. Furthermore, Customer empowerment is a new form of structural authorization within the company, which in turn positively influences employees' sense of meaning and self-determination at work and enhances their perception of the firm's importance (Amor, 2021), thus generating higher levels of occupational identity.

The craftsman spirit of service industry employees is divided into six dimensions: career commitment, service pursuit, continuous innovation, competence achievement, responsibility belief, and heritage care. Employees with high occupational identity experience career development prospects and happiness during the employment process, thus maintaining high occupational commitment and low job burnout at work (Jue and Ha, 201), which easily motivates employees' craftsman spirit. Existing literature suggests that occupational identity can positively influence employee engagement and promote innovative behaviour, as evidenced by employees' dedication and high concentration on their work (Zhang, 2020). Thus, occupational identity has a positive impact on employees' continuous innovation dimension and performance belief dimension; secondly, occupational identity can promote the internalization of personal work values, which positively affects employees' job enthusiasm and job satisfaction and lift their occupational commitment. The high level of career expectations generated by career identity makes employees more motivated to learn professional knowledge, expand professional skills, optimize their current service processes and accomplish more challenging tasks to promote their career development (Hu, 2020), therefore, career identity also has a positive effect on the career commitment dimension and

the competence quality dimension of employees; finally, career identity can enhance employees' sense of responsibility and mission (Jin and Zhou, 2021). Employees have higher aspirations for their work and higher expectations for service outcomes, and professional identity gives employees a sense of professional achievement and pride in their work (Butler and Constantine, 2005). Employees are more willing to promote their work and pass on their perceptions to new service employees in order to maintain their professional reputation. Therefore, professional identity still promotes employees' service pursuit and legacy care dimensions. In summary, this study concludes that occupational identity further positively influences service employees' craftsman spirit. According to the above, this article make hypothesis 2.

H2: Professional identity mediates between customer empowerment behaviour and craftsman spirit.

2.4 The moderating role of perceived organizational support

Perceived organization support (POS) refers to employees' overall perception of whether the organization values their contribution and well-being. (Xu, 2005) argues that there are two elements: firstly, whether employees can feel that the organizational care; and secondly, whether employees can feel that the organization cares about them. The impact of high perceived organizational support on employee behaviour focuses on two aspects: on the one hand, it promote the generation of organizational emotional commitments, a sense of obligation to the job and increased job autonomy. On the other hand, it enables employees to have more self -efficacy, increase the sense of innovation at work, and inspire innovative behaviors in work (Gu, 2014). When employees feel the support given by the organization (e.g. care, respect, recognition, etc.), they perceive it as the company's recognition of their working methods and ideas, which in turn creates a sense of obligation to help the organization achieve its goals. When employees recognize the career itself, they further demonstrate goal transcendence and work excellence to create greater benefits for the organization (Shi, 2007); furthermore, when employees feel that the organization cares and trusts them, they become more confident and show higher levels of engagement, which in turn inclines them to try to change and take on new challenges to achieve personal value (Ocampo, 2018). Employees' professional recognition inspires them to be more innovative. Thus, perceived organizational support positively moderating the relationship between employees' professional recognition and craftsman spirit.

According to self-determination theory, external rewards that provide competency-supporting information enhance internal motivation (Zhao, 2016). When employees experience difficulties at work, employees with high perceptions of organizational support are more confident that the organization will provide timely help and encouragement when work goes wrong, and employees with a sense of professional identity are more motivated and capable of meeting customer requirements through innovation and lean work; conversely, the lower the level of the organization support, the less trust in the superior (Rhoades and Eisenberger, 2002) and they perceive their superiors as having a low tolerance for work errors. They tend to adopt conservative work methods in order to avoid the personal losses caused by innovative work methods. In summary, making the following hypotheses.

H3: Perceived organizational support moderating the relationship between occupational identity and craftsman spirit. Career identity has a stronger effect on employees' craftsman spirit when perceived organizational support is high.

the above discussion can reason that the mediating role of professional identity between customer empowerment behaviour and employee craftsman spirit may be moderated by perceived organizational support. As mentioned above, customer empowerment can promote the professional identity of employees in the service industry, which in turn stimulates employees' craftsman spirit, manifested in improved service work, persistent innovation and the satisfaction of customers' individual and diverse needs through high-quality services. As a helping message, perceived organizational support not only alleviates the fear of uncertainty about outcomes at work, but also leads to a higher sense of responsibility and efficacy when employees have a high level of professional identification. Specifically, when the employees of the service industry have a higher level of organization support, the customer empowerment behaviors conveyed by professional identification have a stronger mediating effect on employees' craftsman spirit. Conversely, when service industry employees experience a weaker perceived organizational support, the mediating effect of occupational identity is also weaker. In summary, this study proposes the hypothesis.

H4: Perceived organizational support moderates the indirect impact of customer empowerment behaviour on employee craftsman spirit through occupational identity. The positive impact of customer empowerment behaviour on employee craftsman spirit through occupational identity is also stronger when perceived organizational support is higher.

3   Methods

3.1   Study sample

This study used a questionnaire to conduct relevant research on multiple types of service industry employees. To minimize homologous variance, this study conducted a preliminary experiment and further improved the questionnaire based on the feedback from the subjects. The volunteers came from various regions such as Jiangxi and Shanghai, covering a wide geographical range as well as a wide range of occupations, which is highly representative. To increase subjects' motivation and willingness to participate in the survey, subjects were offered small prizes after reviewing their answers. In addition, members of the field research team informed the subjects in advance that the confidential questionnaire would only be used for academic research and was fully explained. Questionnaires containing statistical variables, customer empowerment behaviour, professional identity, perceived organizational support and craftsman spirit were administered to 450 subjects. After removing invalid answers and lost samples, 399 valid questionnaires were finally obtained, as shown in Table 1.

Table 1 Distribution of demographic characteristics of the sample

Statistical variables	Category	Frequency	Percentage (%)
Gender	Male	138	34.59
	Women	261	65.41

Age	Less than 18	5	1.25
	18-25 years	33	8.27
	26-33 years	160	40.10
	34-41 years	110	27.57
	Over 41	91	22.81
Education	Junior High School	3	0.75
	High School	147	36.84
	Vocational and Technical College	178	44.61
	Tertiary and undergraduate	71	17.79
Business	Business Services	77	19.30
	Communication Services	45	11.28
	Sales Services	77	19.30
	Education Services	48	12.03
	Financial Services	53	13.28
	Recreational, cultural and sporting services	60	15.04
	Other service industries	39	9.77
	Total	399	100.0

3.2 Measurement tools

This paper uses well-established scales from the literature that have been previously studied. In addition, the translation and back-translation procedures for these well-established scales were carried out carefully, with only the English scales being translated into Chinese. The relevant scale uses a 5-point Likert scale, where 1 represents "very inconsistent" and 5 represents "very consistent".

(1) Customer empowerment behaviour was measured using an eight-question scale developed by (Dong, 2015) containing for example "The customer helps me to recognize the importance of my work to him/her" with a Cronbachs α of 0.950.

(2) The measure of occupational identity draws on (Dong, 2015), using a six-question scale developed by Mael and Ashforth (Eisenberger and Huntington, 1986), with example questions such as "When someone criticizes my career, it feels like they are criticizing themselves", with a Cronbachs α of 0.926.

(3) craftsman spirit was measured using (Li,2020) 24 questions such as "I believe I have an obligation to pass on my love of my career to new people in the industry around me" with a Cronbachs α of 0.983.

(4) Perceived organizational support is based on an eight-question scale developed by (Eisenberger, 1997), it includes six positive and two negative questions. For example: "My

organization values my opinion" and "My organization cares little about me" with a Cronbachs alpha of 0.935.

Based on previous studies, age, gender, educational background and service industry were selected as control variables to reduce the impact on the findings.

4　Results

4.1　Common methodological deviations

Using SPSS 26.0 and AMOS 23.0 to process the data of this study. The data of this study are obtained by employees' self-evaluation, which are prone to common method bias. To control for this problem, the questionnaires were all completed anonymously and quality control questions were included in the questionnaires to more accurately exclude a proportion of invalid questionnaires.

4.2　Descriptive statistical analysis

Table 2 shown the means, standard deviations and correlation coefficients of the main variables. customer empowerment behaviour was positively related to professional identity (r=0.488, p<0.01) and craftsman spirit (r=0.437, p<0.01). Professional identity was positively related to craftsman spirit (r=0.493, p<0.01). These results provide foundational support for the next step of hypothesis testing.

Table 2 Descriptive statistics and correlation coefficient matrix

	Average	Standard deviation	Gender	Age	Academic qualifications	Industry	Customer empowerment	Professional Identity	craftsman spirit	Perceived organizational support
Gender	1.654	0.476	1							
Age	3.624	0.966	-0.054	1						
Academic qualifications	3.787	0.755	-0.017	0.097	1					
Industry	3.729	1.983	-0.041	0.044	0.030	1				
Customer empowerment	3.235	1.134	-0.036	0.054	-0.029	0.005	1			
Professional Identity	3.241	1.145	-0.063	0.003	0.012	-0.098	0.488**	1		
craftsman spirit	3.067	1.139	-0.104*	-0.010	-0.017	-0.124*	0.437**	0.493**	1	
Perceived organizational support	3.398	0.989	-0.001	-0.016	-0.003	-0.028	0.232**	0.263**	0.434**	1

Note: *p<0.05, **p<0.01 (same below)

4.3 Validity and homoscedasticity tests

Although measures were taken to try to avoid common method bias there was still the possibility of poor discriminant validity, so this study tested the discriminant validity by conducting validated factor analysis with four variables: craftsman spirit, professional identity, perceived organizational support and customer empowerment behaviour (Table 3). From the table 3, among the factor models, the four-factor model had the best fit: $\chi2/df$ was between 1-3, RMSEA was below 0.05, IFI, and both TLI and CFI were above 0.9, indicating that the variables had good discriminant validity. To enhance the persuasiveness of the study, the mean variance extracted for each latent variable, AVE, was calculated in this study by SPSS 26.0 (see Table 4). Their mean variance extracted values were 0.838, 0.822, 0.840 and 0.711 respectively, all of which were greater than 0.6 and all of which exceeded the criteria for convergent validity. Secondly, when the square root values of AVE were compared with the correlation coefficients between other variables, research found that the square root values of AVE were all greater than the correlation coefficients between factors in the same column, and therefore had good discriminant validity. In view of this, the scale used in this study has good validity.

Table 3 Results of the validation factor analysis

Models	χ^2	df	χ^2/df	IFI	RMSEA	TLI	CFI
Four Element Model (A,B,C,D)	1539.877	983	1.567	0.967	0.038	0.965	0.967
Three-factor model (A,B+C,D)	2872.874	986	2.914	0.888	0.069	0.882	0.887
Two-factor model (A+B,C+D)	3856.444	988	3.903	0.829	0.085	0.820	0.828
Single factor model (A+B+C+D)	6133.489	989	6.202	0.693	0.114	0.678	0.692

Note: A for customer empowerment behaviour, B for professional identity, C for craftsman spirit, D for perceived organizational support, + for merger

Table 4 Comparison of correlation coefficients between variables with AVE square root values

	Customer authorization behaviour	Professional Identity	craftsman spirit	Perceived organizational support
Customer empowerment behaviour	(0.838)			
Professional status	0.488	(0.822)		
craftsman spirit	0.437	0.493	(0.840)	
Perceived organizational support	0.232	0.263	0.434	(0.711)

Note: Figures in brackets are square root values of AVE. Note: *p<0.05, **p<0.01 (below).

4.4   Empirical results

So as to deeply study the relationship between variables, this study used the craftsman spirit factor as the dependent variable and the customer empowerment behaviour factor as the independent variable, and introduced control variables into the model. Using SPSS26.0 to test the research hypotheses. The results are shown in Table 5.

Main effects test. As shown in Model 5 of Table 5, after introducing control variables into the regression equation and adding predictor variables, customer empowerment behaviour can significantly and positively influence craftsman spirit (β=0.436, p<0.01) and H1 was verified.

The method of Baron and Kenny was used to conduct a test of mediating effects. Tested the mediating effect of career identity. Model 2 in Table 5 shows that customer empowerment significantly and positively influences occupational identity (β=0.489, p<0.01). Model 4 showed that occupational identity significantly and positively influenced employee craftsman spirit (β=0.481, p<0.01). After adding both customer empowerment behaviour and professional identity to the regression equation, Model 6 tested that professional identity positively effect craftsman spirit (β=0.350, p<0.01) and customer empowerment behaviour had a weaker effect on employee craftsman spirit (β=0.265, p<0.01). In order to further test the mediating effect of occupational identity, using the Bootstrap method and borrowed the process program to test the mediating effect, and obtained a 95% confidence interval of [0.113,0.241], which does not contain zero, by repeating the sample 5000 times, as shown in Table 6, indicating that the mediating effect of customer empowerment behaviour on employees' craftsman spirit through occupational identity was significant and partially mediated, and H2 was verified.

The moderating effect of the perceived organizational support was tested. Model 7 in Table 5 shows that occupational identity has a significant effect on craftsman spirit (β=0.394, p<0.01), and according to model 8, the interaction term between occupational identity and Perceived organizational support is significant (β=0.873, p<0.01), indicating that perceived organizational support positively moderate the relationship between occupational identity and craftsman spirit, and H3 is verified. To illustrate the moderating effect of the Perceived organizational support more visually, the simple slope diagram method was therefore used for analysis. Figure 2 shows that with higher levels of   perceived organizations support, career identity shows a more sensitive positive influence on employees' craftsman spirit, and vice versa the weaker the influence. At high levels, the indirect effect of customer empowerment behaviour on craftsman spirit through career identity was 0.213 with a 95% confidence interval of [0.142,0.297]. Therefore, the mediating effect of organizational support on the professional identity between customer empowerment behaviour and craftsman spirit among service workers moderates and H4 holds.

Table 5. Results of the hierarchical regression analysis.

Variables	Professional Identity				craftsman spirit			
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Gender	-0.067	-0.050	-0.110*	-0.077	-0.095*	-0.077	-0.082	-0.063

Age	0.003	-0.024	-0.009	-0.010	-0.033	-0.024	-0.005	0.002
Academic qualifications	0.014	0.031	-0.014	-0.021	0.001	-0.010	-0.020	-0.034
Industry	-0.101	-0.103	-0.128*	-0.079	-0.129**	-0.093*	-0.079	-0.071
Customer empowerment		0.489**			0.436**	0.265**		
Professional Identity				0.481**		0.350**	0.394**	-0.192
Perceived organizational support							0.328**	-0.159
Perceived organizational support* Professional identity								0.873**
R²	0.014	0.252	0.028	0.255	0.217	0.308	0.355	0.383
Adjustment of R²	0.004	0.243**	0.018*	0.246**	0.207**	0.298**	0.346**	0.372**
F-value	1.436	26.505	2.790	26.927	21.743	29.104	36.018	34.675

Table 6 Summary of results of the intermediary role test

Paths	c Total effect	a	b	a*b Intermediary effect value	a*b (Boot SE)	a*b (z-value)	a*b (p-value)	Boot ULCI	Boot LLCI	c'Direct effects	Test conclusion
X→M→Y	0.438**	0.494**	0.348**	0.172	0.002	104.733	0.000	0.241	0.113	0.266**	Some agents

Table 7. Results for moderating mediating effects

Intermediate variables	Level	Horizontal values	Effect	BootSE	BootLLCI	BootULCI
Professional Identity	Low level (-1SD)	2.408	0.067	0.039	-0.002	0.150
	Average	3.398	0.140	0.030	0.088	0.204
	High level (+1SD)	4.387	0.213	0.039	0.142	0.297

Note: Boot LLCI is the lower limit of the 95% interval for Bootstrap sampling and Boot ULCI is the upper limit of the 95% interval for Bootstrap sampling.
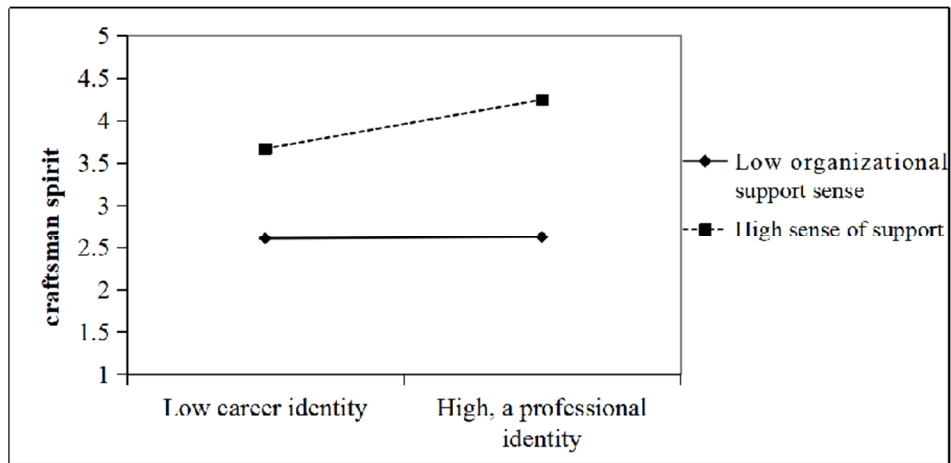
Figure 2 Moderating role of perceived tissue support

5 Discussion

5.1 Theoretical contributions

First of all, this research explores the influence mechanism of customer empowerment behaviour on the craftsman spirit spirit, which not only further expands the research field of customer empowerment behaviour, but also reveals the influence mechanism of service employees' craftsman spirit. As a relatively new concept, customer empowerment behaviour is still in its infancy (Guo and Cheng, 2021). Service employees need to communicate directly with customers and satisfying their needs is the purpose of their work. Therefore, different with leadership empowerment, customer empowerment behaviour has a greater impact on employees' perceptions and work attitudes. However, current research on empowerment behaviour has focused more on leadership (or organizational) empowerment of employees. For Chinese background, this study demonstrates the motivational process of customer empowerment behaviour on the craftsman spirit of service industry employees, which not only enriches the subsequent impact of customer empowerment behaviour, but also analyses the conditions for the generation of craftsman spirit according to the characteristics of service industry employees, expanding the research on the generation mechanism of craftsman spirit and laying a certain foundation for future scholars to further study the craftsman spirit of service industry employees.

Second, this study reveals the mediating role of professional identity in the relationship between customer empowerment behaviour and craftsman spirit. Academic research on occupational identity has mainly focused on teachers, lawyers, auditors, and medical personnel (Gu, 2019), with less attention paid to the occupational identity of service employees. In China, due to the basic requirements of high labour intensity, high emotional involvement and adaptability and the characteristics of low social status, little room for promotion and low job income, the professional identity of service workers is relatively weak, so stimulating employees' professional identity has been an important topic in the field of

management. This study introduces self-determination theory and focuses on service employees' work attitudes in the context of customer empowerment. Employees who are empowered to work autonomously will see their work as an avenue to satisfy their basic needs and have a greater sense of identification with their work, thus prompting them to show higher levels of enthusiasm and willingness to innovate (Gu, 2016) and stimulating their craftsman spirit. This finding further enriches the research related to the occupational identity of different groups of people and broadens scholars' thinking on the study of craftsman spirit.

Third, this study discusses the moderating role of perceived organizational support in motivating service employees' craftsman spirit. Among the existing studies on the influence of customer empowerment behaviour, some scholars have confirmed the moderating effect of leadership empowerment behaviour and career centrality (Guo and Cheng, 2021) (Dong,2015), but the influence of leadership behaviour on employees' behavioural tendencies has not been fully considered from the perspective of employees' perceptions. In reality, there are differences in the behaviour of leaders with different management styles towards their employees. Employees' perceptions of leadership behaviour can affect their attitudes towards work. This study confirms that perceived organizational support can lead to employees having a greater sense of responsibility at work, a greater tendency to show a high level of commitment to their work under their professional identity, and to strive for perfection in the performance of their duties. In addition, employees are more confident in their ability to do their jobs and dare to realise their personal value through innovation, thus inspiring craftsman spirit in service employees. This research expands the understanding of the boundary conditions of employee crafts.

5.2 Inspiration from practice

This research puts forward the following inspiration for corporate management. As customer empowerment behaviour can increase the craftsman spirit of service industry employees, organizations should place more emphasis on advocating customer empowerment to employees. And through effective guidance encourage employees to take the initiative to request authorization from customers, which will not only bring a better consumer experience to customers, but also inspire service industry employees to be innovative and work for excellence.

Secondly, in the era of involution, many employees who are forced into the service industry have relatively low job satisfaction and job well-being, difficultly motivating them to work and innovate (Erdogan, 2018). A higher sense of professional identity helps to increase employees' job engagement and job satisfaction, and alleviates job burnout and turnover intentions. (Wen, 2018) (Zhang, 2021) Therefore, organizations should focus on improving the professional identity of employees in the service industry. By means such as emphasizing the importance of their work to employees, their understanding of their work is enhanced, thus improving the quality of their service.

Thirdly, If organization want employees to work hard, boldly innovate, and promote the craftsman spirit spirit, the organization should appropriately accept the mistakes of employees in their work and encourage them to pursue high quality services. In view of this, the organization needs to create an inclusive and open organizational climate and working

environment that encourages innovation and fosters a sense of excellence among its staff, thereby promoting the spirit of craftsman spirit and ultimately improving service quality.

5.3 Limitations and prospects of the study

Firstly, this study uses cross-sectional data to measure the variables involved in this study, without dividing them into time periods and using a questionnaire. As a result, the problem of homogeneous variance inevitably arises. Therefore, , we may consider measuring each variable at different time periods to further reduce the impact of homoscedasticity bias in future studies.

Secondly, the choice of control variables is still in the exploratory stage as there is less research on the factors influencing craftsman spirit. As there may be many antecedent variables for the work attitudes pursued in various industries, the selection of control variables for this study may not be adequate. In future studies, we can continue to analyse and effectively control other variables that affect employees' craftsman spirit to ensure the scientific nature of the study.

Finally, as the behaviour of employees may also be influenced by the behaviour of their superiors, in a time when flat management is prevalent, leaders tend to delegate authority to make employees feel personally important in the company and stimulate their perception of their insider status. In return for their leaders' trust, employees tend to show persistence in innovation and excellence in their work, fulfilling the duties assigned to their positions and thus maximizing their personal value. Thus, leadership empowerment can also stimulate craftsman spirit. Therefore, we can consider the impact of leadership empowerment on employee craftsman spirit based on social exchange theory.

6   Conclusion

In previous studies on craftsman spirit, the various influencing factors of craftsman spirit have been studied by most scholars, but there is a lack of in-depth exploration of the relationship between customer empowerment behaviour and the craftsman spirit of service employees. In this paper, based on self-determination theory, the relationship between customer empowerment behaviour and service employees' craftsman spirit was investigated through a questionnaire survey. The experiment proves that assuming it is established. The results are as follows (1) Customer empowerment behaviour is positively correlated with the craftsman spirit of service personnel, indicating that customer empowerment behaviour can stimulate the craftsman spirit of service personnel and promote   higher quality services. (2) Professional identity mediate the relationship between customer empowerment behaviour and service staff craftsman spirit, suggesting that customer empowerment behaviour that gives employees independent decision-making power can better motivate service staff's professional identity, which leads to a high level of craftsman spirit. (3) Perceived organizational support positively moderates the relationship between professional identity and craftsman spirit and mediates professional identity between customer empowerment behaviour and service employees' craftsman spirit, indicating that perceived organizational support has a positive role in the workplace.

Author's contribution

Shi Ping: A Guide

Wang, Junhong. Data analysis and writing.

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