

Analysis of Concept Construction and Scale Development of Employee Zhengchong Behaviour in Family Firms in Jiangsu Province of China

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Purpose: Some scholars have explored the connotation and structural elements of employee *zhengchong* behaviour based on Taiwan's local enterprises, providing results with reference significance. However, there is a lack of accurate measurement scales. How to treat employee *zhengchong* behaviour (striving for a favour) and effectively deconstruct it is very important to the sustainable development of family firms.

Methods: Semistructured interviews were conducted with 62 employees of private enterprises, and the structural dimension of employee *zhengchong* behaviour was explored with the help of grounded theory. The researchers designed two questionnaires, collected 278 and 331 valid questionnaires in the two surveys, compiled the corresponding measurement scale, and tested it.

Results: Employee *zhengchong* behaviour under differential leadership was a multidimensional structure with rich connotations consisting of four dimensions: showing abilities, collaborating and sharing, excluding outsiders, and ingratiating upwards. The scale includes 16 items.

Conclusion: This study enriches the relevant theories while providing a decision reference for family firm leaders to guide employee *zhengchong* behaviour to reasonably improve firm performance.

Keywords: family firms, differential leadership, grounded theory, scale development

Introduction

Whether in developed countries or developing countries, family firms are surviving and developing tenaciously. Due to the influence of traditional culture, Chinese family firms are more susceptible to the psychological influence of “insiders” and “outsiders” and adopt different treatment methods for different employees.¹ Leadership has long been considered a critical factor in achieving team and organizational goals.² Leadership style affects and guides the choice of employee behaviour and significantly impacts the survival and development of enterprises.³

Previous studies have shown that the particularism or rule by man in Chinese culture urges leaders to give more favouritism to their preferred subordinates and adopt different leadership behaviours.⁴ This unique leadership style is called differential leadership, which is particularly common in family firms.⁵ Many scholars believe that this leadership style is rooted in Confucian thought and Legalist thought in Chinese traditional culture. It has a unique role in management practice and a profound impact on the operation of Chinese family firms.⁶ Differential leadership divides employees into “insiders” and “outsiders”. “Insiders” refers to the employees seeking favour from their managers and becoming favoured subordinates, while “outsiders” do not do such things. Then, the former are seen as those with high performance and job satisfaction. As a result, the differential treatment by leaders results in uneven resource distribution, leading team members to compete to improve their status by seeking favour from their leaders.

Huang,⁷ a scholar from Taiwan Province, put forward the concept of *zhengchong* behaviour to explore such interactive behaviour among employees and defined *zhengchong* behaviour as the phenomenon in which employees

fawn on leaders and woo or crowd out colleagues to gain the favour of leaders. “Competing” is purposeful behaviour, while “favour” refers to the gifts and attention from leaders to employees. To compete for resources or rights, employees adopt different strategies in the process of *zhengchong*, which may not only promote the improvement of their own or team performance but also lead to the depletion of internal resources. Take the family firm “True Kung Fu” as an example (the leading enterprise in China’s fast-food industry); the struggle between “insiders” caused by “defamiliarization” has led to poor business management.^{8–10} In contrast, “Fangtai” (a well-known kitchenware brand in China), as a typical successful representative of a family firm, adheres to the management concept of meritocracy and continues to promote the enthusiasm of all employees.¹¹ For enterprises, the organizational phenomenon of *zhengchong* behaviour has a significant impact on their long-term development, especially in the atmosphere of differential leadership. The in-depth discussion of *zhengchong* behaviour is of great significance.

Some scholars in Taiwan Province have explored the connotation and structural elements based on Taiwan’s local enterprises with qualitative analysis, such as Huang⁷ and Huang,¹² providing results with reference significance. However, given the geographical differences and different research paradigms, the existing research on the dimensions of employee *zhengchong* behaviour has more powerful subjectivity and insufficient systematicity, and there is a lack of accurate measurement scales.⁷ In addition, the lack of research on employee *zhengchong* behavior throughout the Chinese mainland also limits the development of related fields of study. Thus, identifying the dimensions of employee *zhengchong* under differential leadership as well as developing a *zhengchong* scale based on empirical measurement can enrich the current research and contribute significantly to the Chinese study of management style, which plays an essential role in guiding the development of enterprises.

The study is organized as follows. The researchers summarize the related literature in the Conceptual Analysis section. The researchers introduce the conceptual model construction of employee *zhengchong* behaviour in detail based on the qualitative research method of grounded theory in the Exploratory Research on the Structural Dimension of Employee *Zhengchong* Behaviour section. The researchers verify the dimensions developed by exploratory factor analysis and confirmatory factor analysis in the Conceptual Constructs of Employee *Zhengchong* Behaviour section. The researchers offer a discussion of their theoretical contributions and practical enlightenments and conclude the paper in the Discussion and Conclusion sections.

Conceptual Analysis

The Connotation of Employee Zhengchong Behaviour

When the word “zhengchong” is mentioned, a corresponding scene occurs to most of us, which indicates that *zhengchong* is not uncommon in real life. What is “zhengchong”? Before 2009, no scholar specifically mentioned the concept of “striving for a favour”, but related research has paved its way. Some studies have pointed out that leaders tend to rule by man, so managers are influenced by human feelings or relationships when making decisions. At the same time, subordinates try to cater to the wants and preferences of their leaders and are eager to obtain available resources from their managers and satisfy their personal needs. In the scope of organizational behaviour research, some scholars have pointed out the concepts of ingratiation and political skill behaviour,⁵ which is similar to the concept of rivalry. Ingratiation is a strategic behaviour to influence specific others and increase their attraction to the target. Political skill behaviour is a process of exerting social influence. Through political behaviour, short-term or long-term personal interests are maximized, sometimes consistent with others and sometimes in conflict.¹³ Huang first produced the concept of *zhengchong* behaviour in 2009 and defined it as an action taken by subordinates to improve their position in their supervisor’s mind. It is pointed out that “favour” is a resource that refers to the position of employees in the leader’s heart in enterprises.^{12,14,15} When employees flatter leaders, the primary purpose is to gain the leaders’ “pampering”. Therefore, “zhengchong behaviour” can be defined as subordinates’ “flattery”, “infighting”, or “collaboration” of horizontal relationships to gain the leaders’ favour. Compared with ingratiation and political skill behaviour, the goal of *zhengchong* behaviour is more clearly aimed at flattering leaders and uniting or marginalizing colleagues.

Dimension Division of Employee Zhengchong Behaviour

Considering the division of the dimension of *zhengchong* behaviour, Huang⁷ pointed out that the phenomenon of *zhengchong* behaviour can be divided into “flattery to supervisors” and “cocompetition with colleagues” and conducted an exploratory analysis with grounded theory. In the process of *zhengchong* behaviour, the leading interactive objects of *zhengchong* behaviour are their leaders, imaginary enemies, and outsiders, and the interaction with the competition for favour and leaders is manifested in close relationships, loyalty, and talent. The interaction between favoured employees and imaginary enemies is characterized by hostile exclusion, relational attacks, and competition over collaboration. The interaction between favoured employees and outsiders is characterized by attachment, strategic alliances, and collaboration between competitors. On this basis, Huang¹² further divided competition behaviour into four main dimensions: pleasing leaders and showing off, flattering and serving, suppressing competitors, and uniting others among enterprises in Taiwan Province.

Although there are some variations in the manifestation of employee *zhengchong* behaviour, the available research focuses primarily on two aspects: “flattering leaders” and “competing with colleagues.” Furthermore, in terms of the geographical breadth of the research, the extant literature is primarily focused on Taiwan Province. In addition, the majority of research on the components of employee *zhengchong* behaviour is qualitative, there is no consistent and authoritative scale for assessing employee *zhengchong* behaviour, and there is a dearth of relevant research on mainland China.

Conceptual Constructs of Employee Zhengchong Behaviour

Research Methods

Grounded theory aims to probe the core concepts reflecting social phenomena and the relationships between concepts through coding and establishing theories based on primary data. It is a bottom-up inductive research method. By coding and analysing the data from multiple sources, the researchers can gradually sum up the explanation of the research phenomenon and develop the foundation of theoretical construction, which is especially suitable for exploratory research in newer fields.¹⁶ At present, there is little literature defining “employee *zhengchong* behaviour”, and the measurement of employee *zhengchong* behaviour has not yet formed a unified and mature scale. Therefore, this study, based on in-depth interviews, collects and summarizes a large number of interview materials and, on this basis, makes a systematic analysis of “employee *zhengchong* behaviour”. This research problem belongs to “exploratory research”, which is consistent with the function and essence of grounded theory. The application process of grounded theory mainly includes open coding, axial coding, selective coding and theory saturation testing.

Sample Selection

Employee *zhengchong* behaviour is manifested as a process interaction among employees or between leaders and employees. It is necessary to obtain research materials from the perspectives of multiple subjects when deconstructing the concept. Therefore, this study obtained interview data through in-depth interviews with multiple subjects, including employees and leaders, when selecting the sample. Meanwhile, considering that the human resource manager (HRM) is the core manager of staff management who has deeper insight into employee *zhengchong* behaviour, this study also took HRMs as the interview subjects to form an employee–leader–HRM triangle chain of evidence.

After identifying the interviewees, this study, based on sample accessibility and representativeness principles, selected 20 family firms in Jiangsu Province for interviews. The researchers selected these firms for two reasons: first, due to geographical restrictions and the epidemic, the researchers could select only surrounding cities for their research; second, Jiangsu, as one of the more developed provinces in China, has gathered a large number of small and medium-sized enterprises, so the region was able to meet our sample needs. The sample firms came from various industries, including manufacturing, service, and IT, and the size of the firms varied, further enhancing the study’s comprehensiveness. Twenty-two employees, 20 leaders, and 20 HRMs were interviewed. The 62 interviewees were coded in sequence. For example, the researchers interviewed one employee, his leader, and one HR manager of a company in Nanjing. Then, the researchers coded them as A1, A2, and A3 in turn.

Moreover, the researchers coded each of the 62 interviewees individually. Interviewees from the same company were coded. Respondents from the same firm were coded with the same letter and different numbers.

Before the interview, it was necessary to draw up an interview outline. The questions in the outline mainly included “What do you think employee zhengchong is?”, “What are the specific behaviours of employee zhengchong (self-expression to leaders, colleagues, etc.)?”, “How do you view employee zhengchong behaviour (positive/negative, right business impact, impact employees)?” and so on. During the interview process, the semistructured interviews were mainly conducted around the proposed outline. After asking for the interviewer’s consent, the researchers recorded the interviews during the whole process. Then, the recorded information was converted into text information in a word-for-word draft, which laid the foundation for the coding analysis, model building, and theoretical saturation testing.

Results of the Concept Construction

This study borrows Chen’s practice and carries out data analysis following the steps of open coding, spindle coding, and selective coding.¹⁷

Open Coding

In applying grounded theory, open coding means that researchers arrange interview records, analyse and summarize these records, and finally sum up the corresponding categories. When gathering and analysing the collected data, researchers must maintain a rational and scientific attitude, seek truths from facts, and reject the influence of subjective consciousness on the original data to the greatest extent, so the original words of interviewees should be used as much as possible. This study retrieved 1800 original sentences and associated concepts using frequency statistics and the encoded interview materials. It was determined that 1480 original sentences and their related concepts could be retrieved after discussing and revising coding errors among different staff members. On this basis, further classification and integration were made, and the initial concepts that appeared more than three times were selected. In this paper, 24 initial concepts and 12 initial categories were obtained. This paper presents 41 typical representative original sentences, as shown in [Table 1](#).

Spindle Coding

Spindle coding is a further analysis of the initial concepts and categories. It tries to find the logical relationships between categories and then sums up the main categories. After many discussions and analyses produced by the research group, 24 original concepts and 12 initial categories of open coding were classified, and four main categories were obtained, namely, showing abilities, collaborating and sharing, excluding outsiders, and ingratiating upwards, as shown in [Table 2](#).

Selective Coding

Selective coding further analyses and abstracts the concept of the main category in the main axis coding to obtain the relationship between the core category and the main category and extract the related categories. The core category of this study is the competition behaviour of employees, and the main categories include showing abilities, collaborating and sharing, excluding outsiders, and ingratiating upwards. There is a causal relationship between the primary and core categories, thus forming the relationship structure between them.

Based on grounded theory analysis, these two categories are further summarized as positive and negative *zhengchong* behaviours. Among them, the positive competition behaviours include showing abilities and collaborating and sharing, while the negative competition behaviours include excluding outsiders and ingratiating upwards, as shown in [Figure 1](#).

Theoretical Saturation Test

Glaser thinks that theoretical saturation means that data are conceptualized and abstracted in categories continuously until new attributes cannot be obtained, so the concept density is produced.¹⁶

Therefore, this paper randomly picked two employees of XS Company and ST Company from the list, repeating the open coding stages and initially extracting 120 original sentences and related concepts. For the open coding’s dependability, other scholars were encouraged to examine further and compress the original sentences and associated concepts, resulting in forty original sentences and associated concepts. After further classification and integration, the initial concepts with a frequency of more than two were selected, and the researchers obtained six initial concepts and three

Table 1 Examples of Interview Records and Open Coding

Original Statement (Example)	Initial Concept	Category
<p>D4: For example, rivalry in front of the boss is a positive and serious work attitude of employees who want to win the favour of the boss through their achievements; D1: If I show some self-confidence, leaders can give me a chance to express myself or let me take on something; </p>	<p>Behaving positively; Showing confidence; Exerting merits</p>	<p>Showing merits</p>
<p>B1: When being promoted, leaders tend to choose employees with good performance and good relationships with colleagues and other leaders; E2: Some employees are outgoing and have a high EQ. They are very good at enlivening the atmosphere in the workplace, like cheering for everyone and sharing food during daily work. Leaders of these employees will also pay special attention to them. </p>	<p>Setting up good job relations</p>	<p>Establishing public praise</p>
<p>A1: Concerning position, suppose I improve the process and links of the production line on my own, and my work efficiency is increased from 20 to 25, my boss will pay attention to me, then one day, I will have a better chance of being promoted to a team leader or a monitor; A2: Employees need to do their work well, which is mainly reflected in their work performance; </p>	<p>Working actively; Improving efficiency</p>	<p>Pursuing lean work</p>
<p>B3: When the interests of employees are consistent, they will unite to win the favour of leaders. It is the case that foreign employees recruited by enterprises tend to be more closely linked; </p>	<p>Establishing close ties with people with common interests</p>	<p>Uniting others</p>
<p>E1: In our work, many people have been promoted thanks to their workability or ideas of pleasing leaders rapidly. Moreover, they show off themselves in various situations. Frequently, they recommend themselves, whether in team activities or daily work. They take the lead in projects and complete them with high efficiency; they are ready to do everything possible to help colleagues in need with the hope of attracting their leaders' attention. </p>	<p>Undertaking jobs autonomously; Helping others autonomously</p>	<p>Assisting actively</p>
<p>F1. Team leaders or some team members share knowledge or skills with other colleagues in the same team to improve the team performance. As a result, they get favour from their senior leaders. </p>	<p>Sharing knowledge and experience actively</p>	<p>Sharing knowledge and resources</p>
<p>G3: For the favour of their leaders, it is expected that the employees belittle others, praise themselves, suppress each other, or even seize others' achievements; H3: Now, some bosses of private enterprises like to listen to only one party. This makes some employees focus not on their performance but problems or shortcomings of others. In this way, some behaviours not conforming to the company culture are produced. Some employees snitch on the so-called problems or shortcomings of others to the bosses in private to win the boss's attention; some employees satirize and slander others to attack others and flaunt themselves; </p>	<p>Satirizing and slandering; Whistling; Flaunting oneself and attacking others</p>	<p>Slandering and suppressing</p>
<p>E3: Take a technician at a very high level in his professional field but very bad at communication. He is unpopular with his colleagues, leading some employees to complain to their leaders that he is uncollaborative and challenging to communicate with, etc. Moreover, other colleagues crowd him out, refuse to collaborate with him, and deliberately ignore his work arrangement or opinions. </p>	<p>Not collaborating; Ignoring the opinions of others deliberately; Setting up barriers</p>	<p>Excluding in jobs</p>

(Continued)

Table I (Continued).

Original Statement (Example)	Initial Concept	Category
C1: I crowd out others and see my colleagues around me as imaginary enemies; G2: Some employees possess small groups. It is not easy for the members outside the groups to integrate into the small groups. For example, it is rare for the groups to invite the members outside theirs to dinner or inform them of something important in a timely manner.	Setting up imaginary enemies; Forming personal-interest cliques	Excluding in relationships
J3: Some employees create an image that they keep the same pace with their leaders via social apps, making the leader think that they have some interests in common; I1: If leaders drink the night before, some employees will prepare stomach medicine for them the following day; if leaders like smoking, some employees will prepare many lighters for the desired times; C2: Deliberate flattery, untrue language;	Praising leaders with words; Flattering leaders with actions	Pleasing leaders continually
G1: Some employees like to flatter the leaders: they assent to all ideas of the leaders and think that what they say is right;	Catering to leaders; Agreeing with leaders	Complying with orders blindly
D4: Employees come early in the morning to do chores for leaders: cleaning, boiling water and making tea, etc., to get appreciation; E3: Employees have high executive power for the leaders they prefer to follow. Employees may fulfil the assigned jobs and even ask for their advice to pursue betterment, while they refuse to do their assignments for those they would not like to follow. J1: After work, these employees always ponder over the thoughts of leaders and do life service work;	Helping leaders do extra work; Submitting to the very leaders they follow	Offering assistance personally

initial categories. The former involves improving efficiency, actively working, snitching, maliciously slandering, actively expressing, and exerting special skills, and the latter includes lean work, slandering and suppressing, and showing merits. Therefore, the proposed theoretical framework of employee *zhengchong* behaviour was verified, and no new main category was formed, which showed that the proposed theoretical model had passed the theoretical saturation test and had good theoretical saturation.

Scale Development of Employee *Zhengchong* Behaviour

First, this study found four dimensions of employee *zhengchong* behaviour through grounded theory, including showing abilities, collaborating and sharing, excluding outsiders, and ingratiating upwards. Second, according to the connotation of each dimension, this study referred to the literature and developed and designed the measurement items that met the four dimensions of employee *zhengchong* behaviour.

Initial Scale Generation

In the measurement of the “showing abilities” dimension, the researchers learned from the ingratiating upwards behaviour scale developed by Kumar and Beyerlein,¹⁸ the job performance scale developed by Janssen and Van Yperen,¹⁹ and the job performance scale verified and used in the organizational situation of Taiwan Province by Gong et al.²⁰ In the measurement of the “collaborating and sharing” dimension, the researchers drew on the organizational citizenship behaviour scale developed by Farh et al,²¹ the organizational innovation climate scale developed by Wang and Chang,²² and the views on teamwork and team knowledge sharing proposed by Zhao et al²³ and Wang and Ji.²⁴ In the measurement of the “excluding outsiders” dimension, the researchers mainly profited from the employee competition behaviour scale developed by Huang,¹² the workplace bullying scale developed by Einarsen et al,²⁵ and the workplace

Table 2 Spindle Coding

Main Category	Initial Category	Category Connotation
Showing abilities	Showing merits	Showing merits emphasizes that those who compete for favour show their strengths in front of the leaders in a targeted way while concealing their defects, clarifying the leaders' value proposition. Competitors can attract leaders' attention by showing their merits in front of them.
	Establishing public praise	Establishing public praise means establishing a good personal image in front of leaders and colleagues. Good workplace relations can help the favoured staff get leaders' attention, and they will have more job opportunities and promotion space.
	Pursuing lean work	Pursuing lean work emphasizes the excellent work performance of employees and increases the organization's actual performance. In a performance-oriented organization, whether employees have real talents and real learning fundamentally affects the competitiveness of an enterprise. If enterprises lack a competitive advantage, they will risk being eliminated by the market. Therefore, senior leaders responsible for improving organizational performance must appoint people on their merits. At this time, employees who are genuinely talented and fully demonstrated to the leaders will be entrusted with a major responsibility; that is, they win the "favour" of the leaders.
Collaborating and sharing	Uniting others	The social impact theory put forward by Latane pointed out that social impact depends on the pressure intensity, directness, and the number of sources of pressure on the target individual (Latane et al, 1981). According to this theory, employees' solidarity behaviour with others raises their influence within the team by increasing the number of sources of social shock, and thus they are more likely to be favoured by leaders.
	Assisting actively	Active assistance comprises actively sharing burdens for leaders and helping colleagues on the team finish their work to improve the work efficiency of the whole team to gain the appreciation and trust of superior leaders.
	Sharing knowledge and resources	Sharing knowledge and resources means that employees share knowledge and experience. Knowledge can be spread from the personal level to the organizational level, thereby enabling more employees to obtain methods and tools to solve problems, thus improving organizational performance. Enterprises are performance-oriented, and leaders desire to create an organizational culture of knowledge sharing so that competitors can gain the appreciation of leaders through knowledge sharing.
Excluding outsiders	Slandering and suppressing	Competitors can learn the difference between themselves and others through social comparison with other team members with the same ability, which leads to unfair perception or jealousy and further suppressing others by slandering others and setting up work obstacles. This helps them effectively alleviate their negative feelings with the hope of getting more attention from leaders.
	Excluding in jobs	The specific behaviour of excluding others in work includes setting up work obstacles, deliberately concealing important information, not collaborating with work, etc., which makes the imaginary enemies commit frequent mistakes at work, thus reducing their position in the leader's mind and further enhancing one's own position.
	Excluding in relationships	The specific actions of excluding others in a relationship include employees showing explicit, direct and one-to-one oppression or making imaginary enemies feel interpersonal pressure through indirect, obscure and exclusive behaviours. Moreover, specific actions include face-to-face verbal or emotional attacks, suggesting that other colleagues should not contact them, etc.
Ingratiating upwards	Pleasing leaders continually	Pleasing leaders continually includes two aspects: language and action. On the one hand, flatterers look for opportunities to praise leaders in words appropriately; on the other hand, they do what the leaders think and like.
	Complying with orders blindly	Complying with orders blindly means always respecting the leaders' attitude and agreeing with any ideas or suggestions put forward by the leaders, even if the employees do not agree.
	Offering assistance personally	Private assistance involves attention and help to specific leaders, such as helping the leaders' private affairs and actively collaborating with the leaders to accomplish extra tasks. In Chinese organizations, loyalty is more emotional. The focus of loyalty does not fall on the whole enterprise but the specific leaders. This is because the loyalty pattern in Chinese organizations reflects the essence of personal loyalty.

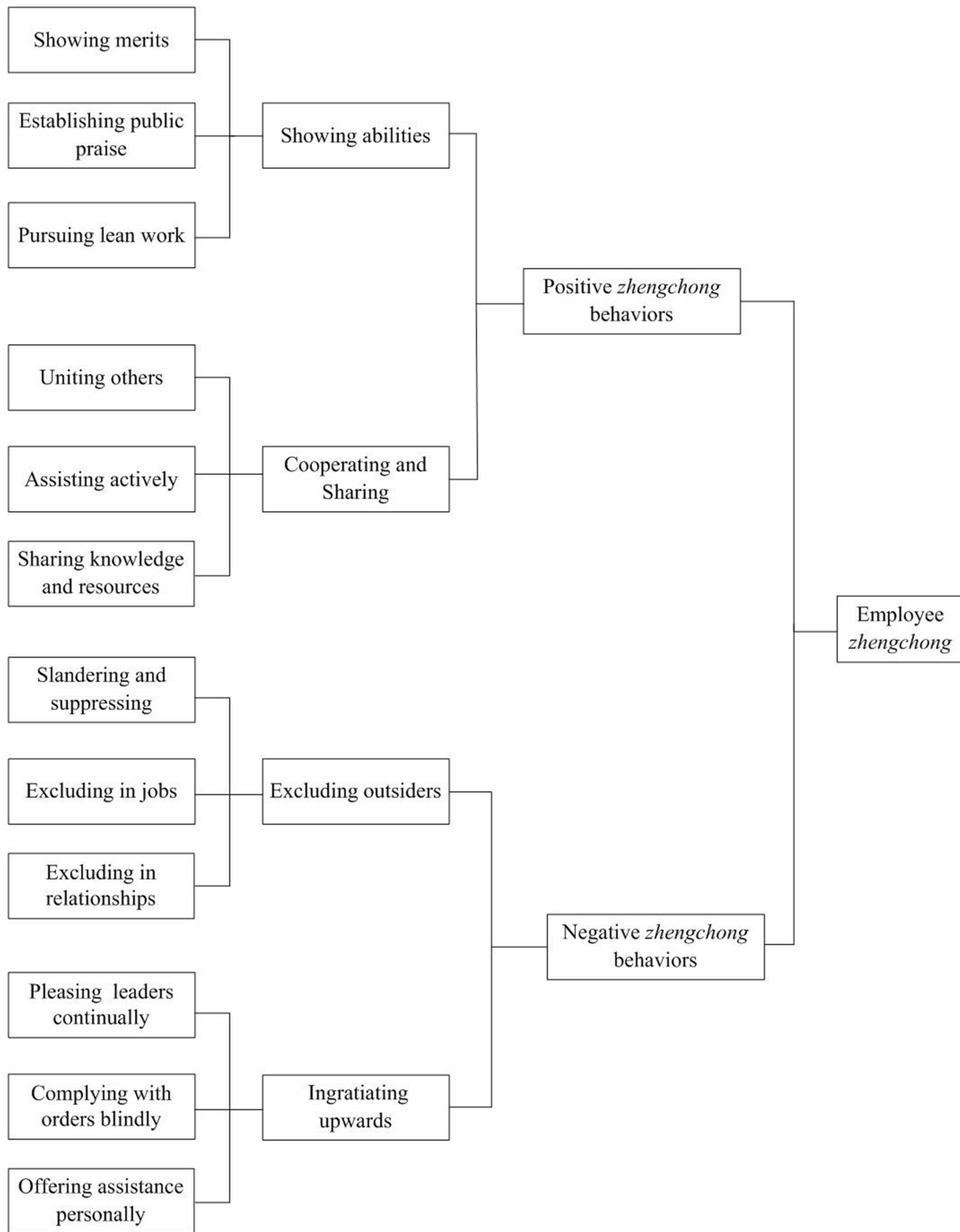


Figure 1 Dimensions of employee Zhengchong behaviour.

exclusion scale developed by Ferris.²⁶ In the measurement of the “ingratiating upwards” dimension, the researchers borrowed the dimensions of flattery service and echo performance in the employee competition behaviour scale developed by Huang,¹² the ingratiating upwards behaviour scale developed by Kumar and Beyerlein,¹⁸ and the impression management scale developed by Bolino and Turnley.²⁷

Based on the interview corpus and mature scale items in China and abroad, this paper preliminarily designs the measurement items of the employee *zhengchong* behaviour scale, invites experts to evaluate whether the initial measurement items conform to the theoretical construction of the scale, adjusts the items with conflicting or overlapping contents following the experts’ suggestions, and rewrites and expands the items. Finally, a small number of 28 employees were invited to have a trial reading and a trial filling, and the opinions and ideas of the candidates were collected. After several rounds of repeated exchanges with experts in related fields, the initial scale of employee *zhengchong* behaviour was finally formed, as shown in Table 3. The items of showing abilities, collaborating and sharing, excluding outsiders, and ingratiating upwards are labelled as S1-S5, S6-S9, S10-S15, and S16-S20, respectively.

Results of the Scale Development

Exploratory Factor Analysis

Questionnaire Recovery and Sample Collection

To apply exploratory factor analysis to confirm the items and conceptual structure of the employee *zhengchong* behaviour scale, a questionnaire was designed, and the first questionnaire survey was conducted. The Likert 5-point scale was adopted. The survey chose a professional platform for the data collection questionnaire survey, and the sample selection was mainly based on two standards. The samples were located in Jiangsu Province, and the samples were all family firms.

From September to October 2020, 320 questionnaires were randomly distributed and recovered. After eliminating invalid questionnaires, 278 valid questionnaires were obtained, and the effective questionnaire recovery rate was 86.88%.

Table 3 Initial Items of Employee *Zhengchong* Behaviour

Dimension	Secondary Index	Number	Item	References	
Showing abilities	Showing merits	S1	I will look for opportunities to let leaders know my strengths and merits.	Kumar (1991), ¹⁸ Janssen and Van Yperen (2004), ¹⁹ Gong and others (2009). ²⁰	
		S2	I will actively demonstrate my talents and qualities to make leaders believe in my ability.		
	Establishing public praise	S3	I will try to let leaders know about my good reputation among colleagues.		
		Pursuing lean work	S4		I will fully accomplish my duty to gain the appreciation of the leaders.
			S5		I will actively strive to contribute to the department's overall performance to gain the leaders' appreciation.
Collaborating and sharing	Uniting others	S6	To be appreciated by the leaders, I will care about my team colleagues and strengthen communication with them.	Farh et al (2004), ²¹ Wang Hui and Chang Yang (2017), ²² Zhao Xiping et al (2007), ²³ Wang Xingyuan and Ji Zhiheng (2013). ²⁴	
		Assisting actively	S7		To be appreciated by the leaders, I will actively assist my team colleagues in completing the work.
	S8		To be appreciated by the leaders, I will try my best to improve my teamwork efficiency.		
	Sharing knowledge and resources	S9	To be appreciated by the leaders, I will share my knowledge and experience with the team.		

(Continued)

Table 3 (Continued).

Dimension	Secondary Index	Number	Item	References
Excluding outsiders	Slandering and suppressing	S10	I will speak ill of colleagues on the team who are appreciated or close to the leaders and those who are equivalent to my ability.	Huang Guozhan (2014), ¹² Einarsen and others (2009), ²⁵ Ferris and others (2008). ²⁶
		S11	If possible, I will put obstacles in the work of colleagues who are appreciated or close to the team's leaders and have the same ability as I.	
	Excluding in jobs	S12	I will deliberately ignore the work opinions of colleagues who are appreciated or close to the leaders of the team and are equal to my ability.	
		S13	I will not seek to interact or collaborate with colleagues who are appreciated or are close to the team's leaders and have the same ability as I.	
	Excluding in relationships	S14	I will show neglect or even hostility to colleagues on the team who are appreciated or close to the leaders and are equivalent to my ability.	
Ingratiating upwards	Pleasing leaders continually	S16	I will always look for opportunities to praise leaders.	Huang Guozhan (2014), ¹² Kumar and Beyerlein (1991), ¹⁸ Bolino and Turnley (1999). ²⁷
		S17	I always cater to the interests of leaders, even if they are not related to my work.	
	Complying with orders blindly	S18	When the leader shares his new ideas, I will show the same enthusiasm as he does, even though I do not agree with these ideas.	
	Offering assistance personally	S19	I will help the leaders personally and be nice to them.	
	S20	I will take the initiative to actively assist the leaders in their work, even if these jobs are beyond my job responsibilities.		

The survey's analysis results of demographic variables are shown in [Table 4](#). Among the 278 subjects, the ratio of males to females was similar, with 129 males (46.4%) and 149 females (53.6%). The age distribution was relatively wide, among which the 26- to 30-year-old cohort was the most common, accounting for 131 participants (47.1%), followed by the 31- to 35-year-old cohort, with 95 people (34.2%); more than half of the participants finished undergraduate college, with 230 people (82.7%); and 132 people had worked in the company for more than 5 years, accounting for 47.5%.

Reliability Test and Project Purification

Preliminary reliability testing of the scale and item purification were carried out before exploratory component analysis of the data was performed, with Cronbach's coefficient and CITC values of each item being examined to judge internal consistency and single-overall correlation. As shown in [Table 5](#), the total Cronbach's coefficient of the 20 items in the initial scale of employee *zhengchong* behaviour is 0.907, and the CITC values of the 20 items and the results of the α coefficient after deleting items are shown in [Table 6](#). According to the experience standard, items with an α coefficient greater than 0.6 and a CITC index not less than 0.5 should be retained. The CITC index of Items S2, S14, and S20 are lower than 0.5, and the total α coefficient of the scale is improved after the deletion of Items S2 and S14, but the total α

Table 4 Characteristics of Participants in Exploratory Factor Analysis

Demographic Variable	Categories	Number of Participants	Percentage (%)
Gender	Male	129	46.4
	Female	149	53.6
Age	Under 20 years old	0	0
	21–25 years old	20	7.2
	26–30 years old	131	47.1
	31–35 years old	95	34.2
	36–40 years old	22	7.9
	Over 40 years old	10	3.6
Education background	Senior high school (technical secondary school) and below	7	2.5
	Junior college	22	7.9
	Undergraduate College	230	82.7
	Postgraduate	19	6.8
Years of work at the company	Under 1 year	1	4
	1–2 years	16	5.8
	2–3 years	39	14.0
	3–5 years	90	32.4
	More than 5 years	132	47.5
Working years with current leaders	Under 1 year	3	1.1
	1–2 years	40	14.4
	2–3 years	90	32.4
	3–5 years	84	30.2
	More than 5 years	61	21.9

Table 5 Results of the Internal Consistency Reliability Test of the *Zhengchong* Behaviour Scale

Number	CITC	α Coefficient After Entry Deletion	Number	CITC	α Coefficient After Entry Deletion
S1	0.618	0.902	S11	0.683	0.899
S2	0.285	0.908	S12	0.616	0.901
S3	0.606	0.902	S13	0.547	0.903
S4	0.589	0.902	S14	0.358	0.908
S5	0.549	0.903	S15	0.645	0.900
S6	0.553	0.903	S16	0.531	0.903
S7	0.573	0.902	S17	0.521	0.904
S8	0.608	0.901	S18	0.508	0.904
S9	0.556	0.903	S19	0.513	0.904
S10	0.656	0.900	S20	0.401	0.907

coefficient of the scale is unchanged after the deletion of Item S20. After a comprehensive investigation, Items S2, S14, and S20 are deleted based on simplifying the scale.

Exploratory Factor Analysis

First, the applicability of exploratory factor analysis was tested on the sample data. With the help of SPSS software, the KMO and Bartlett's test of the sample data were carried out, and the results showed that the KMO value was 0.876, which exceeded the critical empirical value of 0.7, indicating that there were many common factors in the sample data. The χ^2 value of Bartlett's test is 2929.005, which is significant ($p < 0.001$), indicating common factors among the correlation matrices of the data. In conclusion, the sample data can be used for the subsequent factor analysis.

Table 6 Results of Exploratory Factor Analysis of Employee *Zhengchong* Behaviour

Dimension	Number	Factor 1	Factor 2	Factor 3	Factor 4
Showing abilities	S4	0.792	0.190	0.259	0.144
	S1	0.776	0.238	0.177	0.254
	S3	0.772	0.206	0.259	0.179
Collaborating and sharing	S9	0.159	0.892	0.128	0.094
	S6	0.180	0.835	0.150	0.063
	S7	0.129	0.814	0.222	0.088
	S8	0.197	0.707	0.241	0.180
Excluding outsiders	S13	0.057	0.057	0.833	0.136
	S11	0.195	0.195	0.790	0.141
	S15	0.198	0.198	0.784	0.095
	S10	0.190	0.190	0.784	0.122
Ingratiating upwards	S12	0.216	0.216	0.771	0.089
	S18	0.096	0.060	0.117	0.894
	S17	0.116	0.087	0.126	0.890
	S19	0.149	0.100	0.091	0.880
	S16	0.212	0.154	0.156	0.713

Second, according to Floyd & Widaman's suggestions,²⁸ the principal component method extracts By removing items that do not meet the relevant standards, a factor structure with significant theoretical significance and value can be obtained. Items are screened according to three main criteria: first, items must have a high load value on a specific factor; second, items must not have a high cross load on different factors; third, items must have a consistent connotation under a given factor. Based on factor analysis, item S5 has a high cross load across two factors, and this is contrary to the connotations of other items in the main factors, so it is necessary to delete this item and run factor analysis again. According to the four dimensions of employee *zhengchong* behavior, four factors are eventually extracted following the continuous factor analysis. A 73.949% contribution rate from the four factors is ideal for the total variance. In Table 6, 16 entries are retained, and their load on the factor to which they belong is greater than 0.50, with small crossloads in other dimensions, forming a robust factor structure. According to the prior research, the four factors are showing abilities, collaborating and sharing, excluding outsiders, and ingratiating upwards.

Confirmatory Factor Analysis

Questionnaire Recovery and Sample Collection

Confirmatory factor analysis was carried out on the items and conceptual structure of the employee *zhengchong* behaviour measurement scale. A second questionnaire was designed, and the second questionnaire survey was conducted. The Likert 5-point scale was adopted. This survey also used the online anonymous survey platform. The research samples came from private enterprises in Jiangsu, Zhejiang, Shanghai, Guangdong, Beijing, and other places and were widely distributed. From November 2020 to January 2021, 380 questionnaires were randomly distributed, and 380 questionnaires were recovered. After eliminating invalid questionnaires, 331 valid questionnaires were obtained, and the recovery rate of valid questionnaires was 87.11%. The analysis results of the demographic variables of the survey samples are shown in Table 7. Among the 331 subjects, the ratio of males to females was similar, with 162 males (48.9%) and 169 females (51.1%). The age distribution was relatively wide, among which the 26- to 30-year-old cohort was the most common, accounting for 182 participants (55.0%), followed by 31- to 35-year-old cohort, with 96 people (29.0%); more than half of the participants finished undergraduate college, with 273 people (82.5%); and 141 people had worked in the company for more than 5 years, accounting for 42.6%.

First-Order Confirmatory Factor Analysis

In this study, the structural equation model is built with the help of Amos 21.0 software to conduct confirmatory factor analysis on the sample data. The fitting situation of each nested model is shown in Table 8. Among the fitting index

Table 7 Characteristics of Participants in Confirmatory Factor Analysis

Demographic Variables	Categories	Number of Participant	Percentage (%)
Gender	Male	162	48.9
	Female	169	51.1
Age	Under 20 years old	0	0
	21–25 years old	37	11.2
	26–30 years old	182	55.0
	31–35 years old	96	29.0
	36–40 years old	9	2.7
	Over 40 years old	7	2.1
Education background	Senior high school (technical secondary school) and below	3	9
	Junior college	30	9.1
	Undergraduate College	273	82.5
	Postgraduate	25	7.6
Years of work in the company	Under 1 year	7	2.1
	1–2 years	39	11.8
	2–3 years	58	17.5
	3–5 years	86	26.0
	More than 5 years	141	42.6
Working hours with current leaders	Under 1 year	9	2.7
	1–2 years	72	21.8
	2–3 years	91	27.5
	3–5 years	88	26.6
	More than 5 years	71	21.5

Table 8 Results of Confirmatory Factor Analysis of Employee *Zhengchong* Behaviour

Model	χ^2	df	χ^2/df	RMSEA	GFI	PGFI	NFI	TLI	CFI
Single factor	1075.627	101	10.650	0.171	0.668	0.496	0.670	0.631	0.690
Two factors	847.838	100	8.487	0.151	0.722	0.531	0.740	0.714	0.762
Three factors a	668.992	98	6.826	0.133	0.772	0.557	0.795	0.777	0.818
Three factors b	546.781	98	5.579	0.118	0.794	0.572	0.832	0.825	0.857
Three factors c	403.173	98	4.114	0.097	0.848	0.611	0.876	0.881	0.903
Four factors	219.301	95	2.308	0.063	0.922	0.644	0.933	0.950	0.960
Second-order model	226.867	97	2.339	0.064	0.919	0.656	0.930	0.949	0.959

Notes: Three factors a showing abilities, collaborating and sharing, excluding outsiders+ ingratiating upwards; Three factors b showing abilities, collaborating and sharing + excluding outsiders, ingratiating upwards; Three factors c showing abilities + collaborating and sharing, excluding outsiders, ingratiating upwards.

options, the fitting index of the four-factor model is best. It can be considered that the fitting index of the four-factor model has reached an ideal level, which shows that the four dimensions of showing abilities, collaborating and sharing, excluding outsiders, and ingratiating upwards have good distinguishing validity. The structure of the four-factor model is reasonable.

The factor loading of the four-factor structural equation model is shown in [Figure 2](#). From the figure, the standardized load coefficients of all the measurement items of employee *zhengchong* behaviour on the corresponding latent variables are higher than 0.5, and all of them pass the *t* test, which is significant at the level of $p < 0.001$. This shows that the variables in this study have good aggregation validity and further verifies the rationality of the four-dimensional structure.

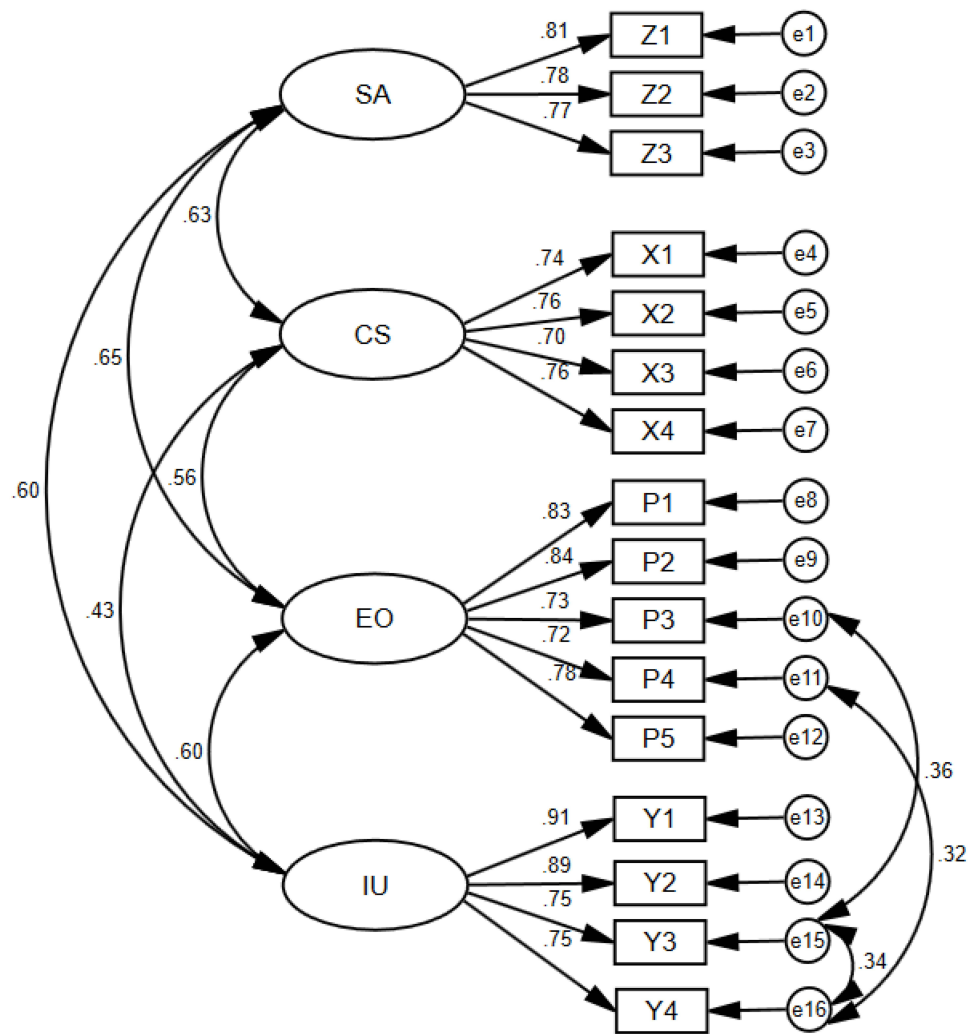


Figure 2 Parameter estimation of the 4-factor structural model of employee *Zhengchong* behaviour.
Abbreviations: SA, showing abilities; CS, collaborating and sharing; EO, excluding outsiders; IU, ingratiating upwards. The same below.

Second-Order Confirmatory Factor Analysis

The second-order model test results are shown in Figure 3. The path coefficients of the 4 dimensions, namely, showing abilities, collaborating and sharing, excluding outsiders, and ingratiating upwards, are all higher than the critical value of 0.7. Therefore, the researchers can consider that the inherent quality fitting degree of the second-order structural equation model of employee *zhengchong* behaviour is acceptable, and the four dimensions can better reflect the actual level of *zhengchong* behaviour.

In addition, each fitting index of the second-order structural model also reached the ideal level: $\chi^2/df=1.580$, RMSEA=0.037, GFI=0.964, PGFI=0.670, NFI=0.958, TLI=0.980, and CFI=0.984 (see Table 9). In summary, it can be concluded that the hypothesized four dimensions (showing abilities, collaborating and sharing, excluding outsiders, and ingratiating upwards) can better converge to the higher concept of employee *zhengchong* behaviour.

Reliability and Validity Test of the Scale

Reliability Test

To analyse the reliability of the conceptual framework of employee *zhengchong* behaviour, the 331 valid sample data from the second survey were used to analyse the reliability of the 16 questions in the four dimensions, primarily by calculating each dimension’s Cronbach’s coefficient. According to common practice, Cronbach’s α coefficient of the scale is above 0.7, which signifies good reliability. As shown in Table 9, Cronbach’s α coefficients of the four dimensions

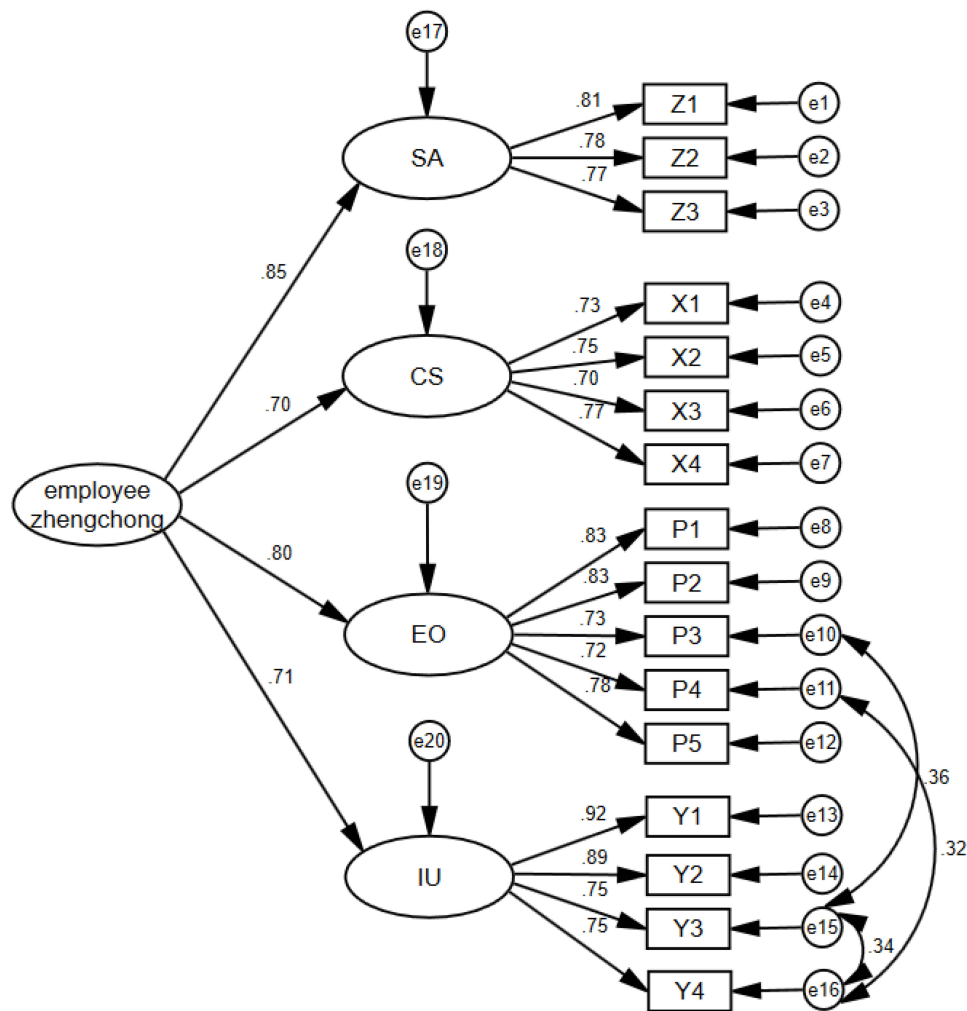


Figure 3 The results of second order confirmatory factor analysis of employee *Zhengchong* behaviour scale.

of employee *zhengchong* behaviour are all more significant than 0.7, and the total Cronbach’s α coefficient of the scale is 0.916, which indicates that the scale has good reliability.

Validity Test

From the point of view of content validity, the generation of the employee *zhengchong* behaviour measurement scale in this study is based on extensive literature research and rooted in the analysis of interview data. After the first draft of the questionnaire was formed, aiming to make the measurement items more complete and targeted, relevant experts were invited to demonstrate and modify the expression of the items repeatedly, and employees were invited to try to fill in the feedback. Moreover, the initial questionnaire was formed through continuous modification and improvement. Meanwhile, many widely distributed sample data were randomly collected, and inappropriate items were further deleted by quantitative analysis. Therefore, judged on rationality, the content validity of the constructed employee *zhengchong* behaviour scale was appropriate in this study.

Table 9 Reliability Coefficient of Employee *Zhengchong* Behaviour Scale

	Showing Abilities	Collaborating and Sharing	Excluding Outsiders	Ingratiating Upwards	Scale
Chronbach's α	0.830	0.826	0.885	0.905	0.916
Number of items	3	4	5	4	16

Table 10 Convergence Validity Analysis of Employee *Zhengchong* Behaviour Scale

	Showing Abilities	Collaborating and Sharing	Excluding Outsiders	Ingratiating Upwards
AVE	0.619	0.545	0.608	0.691
CR	0.830	0.827	0.885	0.899

Table 11 Discriminatory Validity Analysis of Employee *Zhengchong* Behaviour Scale

	Showing Abilities	Collaborating and Sharing	Excluding Outsiders	Ingratiating Upwards
Showing abilities	(0.787)			
Collaborating and sharing	0.530**	(0.738)		
Excluding outsiders	0.556**	0.480**	(0.780)	
Ingratiating upwards	0.502**	0.363**	0.531**	(0.831)

Note: ** $p < 0.01$.

From the perspective of structural validity, the standardized load coefficients of the 16 items in the four dimensions of employee *zhengchong* behaviour are all higher than 0.5 (see Figure 3) and reach significant levels. The calculated average variance extracted (AVE) and composite reliability (CR) are shown in Table 10. The AVE values and CR values of the four factors of showing abilities, collaborating and sharing, excluding outsiders, and ingratiating upwards are all higher than 0.5 and 0.7, so it can be considered that the four-dimensional structure of employee *zhengchong* behaviour has good convergence validity. Table 11 shows the correlation coefficients among the four dimensions of employee *zhengchong* behaviour in this study. The maximum correlation coefficient is 0.556, far less than 0.85, which meets the standard, and each correlation coefficient among the four dimensions is less than the square root of the corresponding AVE. Therefore, the four dimensions of employee *zhengchong* behaviour have good discriminant validity. In summary, it can be concluded that the four-dimensional structure of employee *zhengchong* behaviour constructed in this study has good discriminant validity.

Research Discussion and Conclusions

Discussion

In this study, the researchers innovatively divide employee *zhengchong* behaviour into four specific dimensions, both positive and negative. Huang⁷ defined “zhengchong” as subordinates’ flattery, infighting, or collaboration of horizontal relationships to gain the leaders’ favour. Huang¹² further divided *zhengchong* behaviour into four main dimensions: pleasing leaders and showing off, flattering and serving, suppressing competitors, and uniting others among enterprises. The above definition of “zhengchong” has a specific pejorative emotional colour. However, from the viewpoint of enterprise management practice, employee *zhengchong* behaviour does not contain only negative aspects. This paper divides *zhengchong* behaviour into four positive and negative dimensions based on in-depth interviews and ground theory. Positive *zhengchong* behaviour includes demonstrating abilities, collaborating, and sharing, while negative *zhengchong* behaviour includes excluding outsiders and ingratiating upwards.

Furthermore, this study developed a measurement scale of “employee zhengchong”. The researchers strictly followed the development steps of the scale and, based on exploratory factor analysis, constructed a 4-dimensional employee *zhengchong* behavior index system with 16 items, and passed the reliability test, which showed the items in each core category of the scale had a good consistency. Confirmatory factor analysis proved that the 4-dimensional structure of employee *zhengchong* behavior was the best. Combined reliability and mean-variance AVE method proved that the scale had good discrimination validity, conceptual validity and aggregation validity.

Theoretical Implications

Compared with previous studies, this study defines employee *zhengchong* behaviour more objectively and comprehensively, which provides a theoretical basis for further study of employee *zhengchong* behaviour and expands the relevant

theoretical research on employee behaviour. In addition, this study innovatively develops the employee *zhengchong* behaviour scale. It provides an effective measurement tool for the quantitative research of “employee *zhengchong* behaviour.” The development of the employee *zhengchong* behaviour scale can offset the shortcomings of previous quantitative research on the role of employee *zhengchong* behaviour, promote the transformation of employee *zhengchong* behaviour from conceptual discussion to empirical analysis, and provide the possibility for further research on the mechanism of employee *zhengchong* behaviour.

Practical Implications

This study has important implications for enterprise practice; the following vital enlightenments are obtained:

1. This study has deepened the understanding of enterprise managers on employee *zhengchong* behaviour and enabled them to form a more profound and more comprehensive cognition of “employee *zhengchong* behaviour.”
2. The exploration of the structural dimension of employee *zhengchong* behaviour clarifies for leaders the basic content of each dimension of employee *zhengchong* behaviour, which can be used to guide leaders in piloting employees’ positive *zhengchong* behaviour in different dimensions and restraining employees’ negative *zhengchong* behaviour, thereby enhancing employees’ efficiency and laying foundations for the sustainable development of enterprises.

Conclusions

Based on the definitions of *zhengchong* by Taiwan scholars Huang Rui-xiang and Huang Guo-zhan, this study adopts the ground theory approach and conducts a pioneering in-depth study on employee *zhengchong* behaviour in the family firms of mainland China. This study focuses on the concept and measurement of employee *zhengchong* behaviour. For the concept of employee *zhengchong* behaviour, the structural dimensions are constructed, and then a corresponding scale for measuring employee *zhengchong* behaviour is developed. Furthermore, the clarification of the concept of employee *zhengchong* behaviour and the development of the scale in this paper provide not only a reference for further research but also important directions for family firm leaders to better apply differential management practices to promote positive employee attitudes and thus improve firm performance.

Ethics Statement

This study was carried out following the recommendations of the Ethical Principles of Psychologists and Code of Conduct by the American Psychological Association (APA). All participants gave written informed consent following the Declaration of Helsinki. The ethics committee approved the protocol of Jiangsu University, China.

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Disclosure

The authors declare that they have no conflicts of interest.

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