

The Influence of Social Support on Job Engagement----Evidence from Preschool Teachers in Beijing

^{1*} Jing Lin, ^{2*} Chonlavit Sutunyarak

^{1,2} Chakrabongse Bhuvanarth International Institute for Interdisciplinary Studies,
Rajamangala University of Technology Tawan-ok, Bangkok, Thailand

*Corresponding Author: jing.lin@rmutto.ac.th, chonlavit_su@rmutto.ac.th

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ABSTRACT

The objectives of this study are to examine 1) the relationship between social support and job engagement of preschool teachers in Beijing, 2) the relationship between social support and professional commitment of preschool teachers in Beijing, 3) the relationship between professional commitment and job engagement of preschool teachers in Beijing, and 4) the role of professional commitment in social support and job engagement of preschool teachers in Beijing. Under the guidance of quantitative research methodology, this study adopts an online questionnaire to conduct an empirical investigation. In the context of preschool education institutions in Beijing, China, with the help of administrators, colleagues, and friends of preschool education institutions, this study adopted a simple random sampling method to conduct a questionnaire survey among 238 professional kindergarten teachers in the top 10 preschool education institutions in Beijing, to obtain research data. The data were analyzed using data processing software, including descriptive statistical analysis, reliability and validity tests, confirmatory factor analysis, and structural equation model analysis. The main findings of this study are 1) social support is positively correlated with job engagement, 2) social support is positively correlated with professional commitment, 3) professional commitment is positively correlated with job engagement; and 4) professional commitment mediates between social support and job engagement. Based on these findings, this study provides a feasible and extensive management framework and provides effective practical suggestions for improving the job engagement of teachers in preschool education institutions in Beijing.

1. Introduction

1.1 Background

Preschool education is essential to any state's education system and the first stage of students' education (Liu & Tan, 2020). The 2030 Framework for Action on Education issued by UNESCO proposes integrating high-quality preschool education for children into the lifelong education development system. In this framework, the United States, Canada, and Austria have made one year of preschool education universal; the Netherlands and Ireland offer two years of preschool education; Belgium, Mexico, and France provide free preschool education for children ages 2-3 (Xie, 2021). China also provides policies support and guidance for the development of preschool education (Gao, 2019). The Outline of the National Plan for Medium and Long-term Education Reform and Development (2010-2020) and Several Has presented an oral presentation at the Opinions of the State Council on the Current Development of Preschool Education (2010) emphasizes the importance of preschool education in the development and reform of education system. In the new period of the leapfrog development of preschool education implemented by the state, preschool teachers are the key to affecting the cognition and development of children and controlling the bottleneck of the development of preschool education (Lv, 2019). In 2018, Opinions on Deepening the Reform of the Construction of Teachers in the New Era proposed to comprehensively improve the quality of preschool teachers and build a high-quality teacher team. Therefore, preschool teachers have gradually become the fundamental factor affecting the reform and development of China's education.

With the support of the above policies, preschool teachers, as essential bearers and promoters of children's development and preschool education quality, have increasingly high vocational expectations from the state and society (Shi, 2017).

However, preschool teachers are facing not only new opportunities for career development but also many new challenges (Li, 2016).

At present, the reform and development of China's preschool education have entered a new stage of focusing on quality, and preschool teachers are the key to promoting the reform and development of preschool education, which requires a group of preschool teachers who love teaching to provide proper and quality preschool education to every child (Li, 2021). However, preschool education in China is confronted with many problems. For example, older preschool teachers have a strict sense of job burnout; young teachers have a high dismissal rate; the overall quality of preschool teachers is lower; professional identity and professional happiness are generally shared, etc (Liu & Tan, 2020). These problems hinder the improvement of the quality of preschool education, especially the construction of preschool teachers has brought fundamental challenges (Li, 2020).

The critical issue is that preschool teachers' professional belief needs to be firmer; coupled with the low social recognition of preschool education work, preschool teachers' professional commitment has been seriously challenged (Gao, 2019). Although most preschool teachers recognize their professional identity and strive to achieve their career goals, social support is lack, thus affecting their job engagement, which has become a significant challenge that urgently needs to be solved (Xie, 2021).

Job engagement is a positive, whole-hearted, and inner-driven work state. Individuals with high work engagement will focus their attention on work activities (Ahmed & Islam, 2018). The organization expects individuals to show energy, dedication, and focus on the work, perform the job role well and make the contributions scheduled by the organization (Didit & Nikmah, 2020). In the context of education, preschool teachers are the key practitioners in preschool education and the crucial implementers in promoting the development of preschool education (Gao, 2019). The vigorous growth of preschool education depends on preschool teachers with a high work commitment (Grant et al., 2019). The input level of preschool teachers to preschool education is the key to determining the quality of preschool education (Wang & Ho, 2020).

1.2 Research Scope

This study explores the factors affecting the job engagement of preschool teachers in Beijing. The research samples are in-service preschool teachers from Beijing, China, obtained from the top 10 preschool education institutions in Beijing, which is representative to a certain extent. According to the determination of the sample size, 238 preschool teachers within the research scope select to participate in the questionnaire survey.

1.3 Research Limitations

Although this study can achieve the research objectives, the conclusions also have theoretical and practical significance. However, it still has two limitations due to personal ability, energy, time, and research conditions. On the one hand, the limitations of geography. This study only conducted a sample survey within the geography of Beijing, and the research has a certain representativeness. However, considering the regional gap in the development of preschool education in China, the conclusions of this study cannot be applied to the whole preschool teachers in China. On the other hand, study the limitations of potential variables. Based on the research objectives, this study takes professional commitment as the intermediary factor to explore the influence of preschool teachers' social support on their job engagement, which has an essential theoretical supplement. However, there may still be other identifiable factors to be further verified in exploring the influence of preschool teachers' social support on their job engagement.

2. Literature Review

2.1 Contexts of Study

This study conducted empirical research on preschool teachers in preschool education institutions in Beijing to explore the influence of social support on preschool teachers' job engagement. Therefore, the context of this study is preschool education institutions in Beijing. As an essential part of primary education, preschool is the introductory stage of people's lifetime education (SALTALI, 2021). As an essential carrier to implementing preschool education policies and providing preschool education services, preschool education institutions bear the mission and responsibility of the country, society, family, and people (Shi, 2017). Several Opinions of the State Council on Deepening the Reform and Standardized Development of Preschool Education define the strategic goal of "universal, safe and high-quality development of preschool education" to achieve "children have access to education." Moreover, it further details the

target of popularization as "by 2020, the national three-year gross enrolment rate of preschool will reach 85%; universal three-year preschool education by 2035".

Since the release of the Several Opinions of the State Council on the Current Development of Preschool Education in 2010, China has gradually built a public service system for preschool education, increased financial input for preschool education, and increased the penetration rate of preschool education. Since 2011, China has implemented a three-year action plan for preschool education. The government has invested 153 billion yuan in the development of preschool education. According to the Beijing Municipal Commission of Education 2021, there are 1,899 kindergartens in Beijing, with 525,900 children enrolled, 88,500 teaching staff, and 44,700 full-time preschool teachers. According to the public budget education expenses per student in preschool education, the average public budget education expenses per student in Beijing increased year by year from 2017 to 2020, reaching 39,094.01 yuan in 2020, an increase of 4.35% over the previous year's 37,465.30 yuan.

In pedagogy research, scholars generally pay attention to the development of teachers in universities, middle schools, and primary schools and have obtained great research results (Chen, 2020; Liu, 2021; Yu, 2022). In recent years, with the support of the state to preschool education and the construction of teachers, the research in the context of preschool education institutions has also attracted the attention of scholars, especially the research on the behaviour of preschool teachers (Xie, 2021; Gao, 2019). Preschool teachers play a vital role in preschool education, whom are the essential cultivators of children's development, the undertakers and promoters of preschool education, and the supporters, collaborators, and guides of preschool learning activities (Lv, 2019). Therefore, in the context of preschool education institutions in Beijing, this study focuses on the influence of preschool teachers' social support on their job engagement and provides a feasible management framework for improving the job engagement of preschool teachers in Beijing.

2.2 Research Variables and Hypotheses

This section describes the definition of the study variables and then the conceptual definition of the variables of this study (including job engagement, social support, and professional commitment). Based on the study's literature review, to put forward the hypothesis.

2.2.1 Job Engagement

Job engagement is the process of combining the individual self with the job role, which is characterized by physical, cognitive, and emotional participation and connection (Ancarani, 2019). Job engagement is a positive, work-related emotional and cognitive state with dispersive and persistent characteristics (Bulińska-Stangrecka et al., 2021). Job engagement is an employee's psychological and emotional recognition of work, active integration into the work, paying their efforts for the organization, and thinking that work is happy and pleasant (Kustiawan et al., 2022). Based on the above discussion, this study defines preschool teachers' job engagement as the perfect integration of positive and lasting emotions and motivations shown by preschool teachers in their work. The research on job engagement has attracted the attention of researchers in many fields, such as management, pedagogy, and psychology (Liu & Tan, 2020). Studies have shown that individuals with high job engagement are full of vitality and enthusiasm, can effectively carry out work, actively enter the work state, get along well with colleagues, and think they have work capacity. On the contrary, individuals with a high degree of job burnout always feel exhausted and hostile toward work, reducing their sense of achievement (Lestari & Margaretha, 2021).

2.2.2 Social Support

Social support refers to the level of support an individual perceives in the external environment (Hu et al., 2019). It is a kind of objective relationship that an individual can perceive. In this relationship, an individual can perceive the emotional experience and satisfaction generated by communication with others, the love, care, acceptance, and recognition from others, and the respect and understanding of an individual in society. Moreover, get help from others when needed (Li et al., 2021). Social support is information that convinces others that they are cared for, loved, respected, and valued. It includes actions that family, colleagues, and friends offer to alleviate an individual's distress or to convince others that they belong to a social network of shared responsibility (Menke et al., 2020). Social support is a social relationship system owned by individuals, which can support the development of individual sociality and external resources to solve the needs of individuals. In the process of social interaction, individuals gain spiritual and material support from their social relations (Walsh, 2020). Preschool teachers are preschool educators but also a member of the social network. To get social support, preschool teachers receive understanding, support, and help from

parents, spouses or lovers, friends, etc. (Shi, 2017). Based on those discussions, this study defines the social support of preschool teachers as the support from family, friends, leaders, colleagues, social organizations, and other sources established by preschool teachers through the interaction with the surrounding environment and their utilization of the support.

2.2.3 Professional Commitment

Professional commitment is a psychological bond established between an occupation and an individual. It can also be measured by the time an individual is willing to spend to progress in the occupation. In other words, professional commitment refers to the degree to which an individual is involved in a specific occupation, future career positioning, and long-term career planning (Sungu et al., 2019). Professional commitment is an attitude in which an individual identifies with and is committed to the occupation in which he or she is engaged (Afsar, 2019). Professional commitment refers to the degree to which an individual is reluctant to change his or her occupation because of individual identification and emotional dependence on the occupation or profession, individual investment in the occupation or profession, and the internalization of social norms (Dorenkamp & Ruhle, 2019). The professional commitment of teachers is the commitment of teachers to their teaching activities; that is, teachers take the initiative to affirm and actively participate in teaching activities in the teaching process, earnestly fulfill corresponding responsibilities and obligations, and standardize their education and teaching behaviors (Xie, 2021). Teachers' professional commitment is the recognition and preference of teachers for the profession and the degree to which teachers are willing to invest their energy in teaching work and gain emotional experience from it (Shi, 2017). Teachers' professional commitment refers to the satisfaction and loyalty of teachers engaged in preschool education and the resulting willingness to work and a sense of responsibility (Lv, 2019).

2.2.4 Research Hypotheses

Based on the above discussions, this study believes that there are hypotheses:

H1: Social support significantly predicted preschool teachers' job engagement in preschool education institutions in Beijing.

H2: Social support significantly predicted preschool teachers' professional commitment in preschool education institutions in Beijing.

H3: Preschool teachers' professional commitment significantly predicted their job engagement in preschool education institutions in Beijing.

H4: There is a mediating effect of preschool teachers' professional commitment between social support and job engagement in preschool education institutions in Beijing.

2.3 Empirical Framework

Based on the above research hypotheses and discussions, this study constructs an empirical model to verify the relationship between social support, professional commitment, and job engagement of preschool teachers in preschool education institutions in Beijing. As shown in the figure 1.

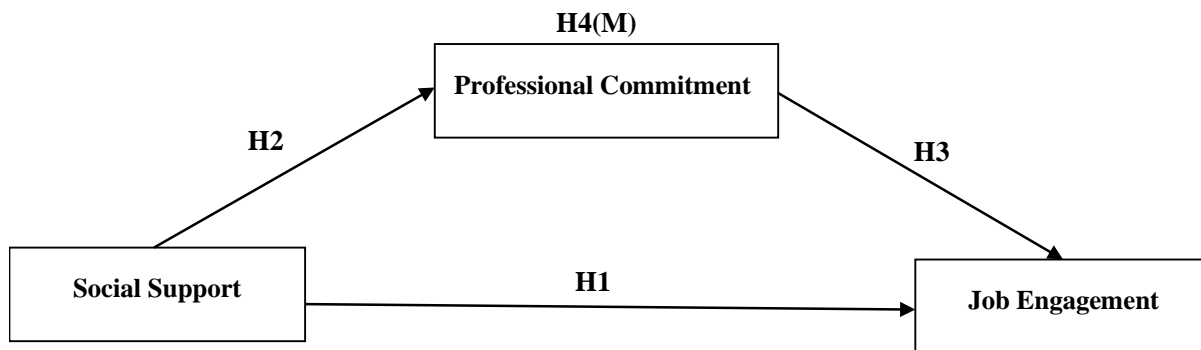


Figure 1 Empirical Framework

3. Methodology

3.1 Population and Sampling

China's preschool education institutions are divided into two forms: public and private. The public ones are run by the government's financial allocation, while the private ones have their own profits and losses. Full-time teachers in public preschool education institutions belong to the national education establishment, especially for kindergarten teachers in teaching positions, which is more challenging than that in private kindergartens. At present, public preschool education institutions in Beijing are equipped with two full-time kindergarten teachers and one child-care worker for each class. It also includes some non-teaching leadership positions and support staff. Among them, full-time kindergarten teachers play the most direct and significant role in guiding and educating children in the process of preschool education. To better obtain the work involvement of kindergarten teachers in work practice, the investigation process of this study selects full-time kindergarten teachers in teaching posts as more representative. Currently, Beijing has 1,657 preschool education institutions with 98,322 staff, including 47,973 full-time kindergarten teachers, according to *the Beijing Statistical Yearbook 2022*. To obtain representative samples, according to *the Beijing Municipal Education Commission* and *Beijing Association of Preschool Children Care Workers'* List of Beijing Public Preschool Education Institutions in 2023, the top 10 public preschool education institutions all belong to Beijing demonstration preschool education institutions and Beijing first-class preschool education institutions. The details are shown in the following table 3.1.

Table 1 List of Top 10 Beijing Public Preschool Education Institutions in 2023

Ranking	Name of Preschool Education Institution	Number of Employees	Full-time Preschool Teachers
1	Beijing First Kindergarten	80	24
2	Beijing Beihai Kindergarten	131	56
3	Beijing Donghuamen Kindergarten	69	38
4	Beijing Cotton Hutong Kindergarten	60	18
5	Blue Sky Kindergarten under the Beijing Air Force	220	56
6	Beijing Third Kindergarten	52	12
7	Beijing Tomorrow Childish Group	900	292
8	Beijing Children's Kindergarten	96	42
9	Beijing Jie Min Kindergarten	47	20
10	Beijing Sixth Kindergarten	70	26
	Total Number	1725	584

Source: *Beijing Municipal Education Commission*

Based on the above table 3.1, this study selects the preschool education institution with *the List of Top 10 Beijing Public Preschool Education Institutions in 2023*, to carry out an empirical investigation. A total of 584 full-time kindergarten teachers in this preschool education institution. This research is based on a simple sample size calculation formula, $n = N / [1 + N(e)^2]$, which calculates that the sample size is 238. With the support and help of administrators, colleagues, friends, teachers, and personal social resources, we contacted the kindergarten teachers of the preschool education institution in advance, and after obtaining the consent of the survey, we sent online questionnaires to the kindergarten teachers who met the requirements of the sample through the online questionnaire form. And this research adopts the simple random sampling method in the target population to investigate the research objects.

3.2 Operational Definition of Research Variables

This research defines social support, professional commitment, and job engagement. Among the independent variable is social support, the dependent variable is job engagement, and the intermediary variable is professional commitment. The research variables and operation definitions are shown in the table 3.2.

Table 2 Operational Definition of Research Variables

Social Support	The support from family, friends, leaders, colleagues, social organizations, and other sources established by preschool teachers through the interaction with the surrounding environment and their utilization of the support.
Professional Commitment	Preschool teachers' sense of identity and emotional dependence on the profession, their active input into the preschool education work, and their reluctance to change their profession due to the internalization of social norms.
Job Engagement	Job engagement as the perfect integration of positive and lasting emotions and motivations shown by preschool teachers in their work.

Source: elaborated by this study

3.3 Measurement and Questionnaire

According to the research objectives, this study adopted the relatively mature scale widely used in existing studies and developed the initial questionnaire. The 12-item scale of social support by Zimet et al. (1998) was adopted, and the internal consistency coefficient of the scale was 0.87. The 7-item scale of professional commitment by Suddaby et al. (2009) was adopted, and the internal consistency coefficient of the scale was 0.82. The 9-item scale of job engagement by Schaufeli (2006) was adopted, with an internal consistency coefficient of 0.80. All scales are sourced from relevant literature and verified by scholars. After determining the measuring tool, to construct the questionnaire content. There are 34 items in the questionnaire, which are mainly composed of demographic characteristics (questions 1-6, including gender, age, educational level, marital status, working experience, and salary level) and research variables (questions 7-18, examine "social support"; Questions 19-25 examine "professional commitment"; Questions 26-34, examine "job engagement"). The 7-Likert scale was adopted for the survey of variables items, with satisfaction from 1 to 7 indicating "strongly dissatisfied," "very dissatisfied," "dissatisfied," "general," "satisfied," "very satisfied," and "strongly satisfied." Please refer to the appendix for details of the questionnaire.

3.4 Data Collection

This study mainly conducted an online questionnaire survey among preschool teachers in the top 10 public preschool education institutions in Beijing, China, with the help of administrators, advisors, friends, classmates, and acquaintances. Meanwhile, relevant, and valid questionnaire participants can be obtained based on the resources of individual work.

4. Data Analysis and Results

4.1 Descriptive Statistical Analysis

Descriptive statistical analysis includes statistics of demographic information. In this study, the six basic information of the survey samples, including gender, age, education level, marital status, work experience, and salary level, were statistically investigated, corresponding to the first to sixth items of the questionnaire. The descriptive statistical analysis as shown in Table 3.

Table 3 The Descriptive Statistical Analysis

	Category	Frequency	Percentage
Gender	Male	4	1.7%
	Female	234	98.3%
Age	<30 years old	169	71.0%
	30-45 years old	59	24.8%
	> 45 years old	10	4.2%
Education Level	Junior college	8	3.4%
	Undergraduate	224	94.1%
	Master	6	2.5%
	Single	209	87.8%
Marital Status	Married	25	10.5%
	Divorced	4	1.7%
	< 5 years	224	94.1%
Work Experience	5-10 years	11	4.6%
	> 10 years	3	1.3%

Salary Level	<5000 yuan	6	2.5%
	5000-10000 yuan	221	92.9%
	>10000 yuan	11	4.6%

Sample size: 238.

Source: elaborated by this study

As can be seen from Table 4.1, among 238 professional kindergarten teachers, 234 are female, accounting for 98.3%. It can be inferred that preschool education institutions mainly have female teachers. According to the age distribution, there are 228 professional kindergarten teachers less than 30 and 30-45 years old, accounting for 95.8%, accounting for most of the sample. It can be inferred that professional kindergarten teachers are mainly young and middle-aged. From the educational level, 224 professional kindergarten teachers have undergraduate, accounting for 94.1%. Compared with other cities in China, Beijing's education system has higher educational requirements directly related to the comprehensive level of society. Regarding marital status, 209 professional kindergarten teachers were single, accounting for 87.8%, consistent with the sample mentioned above of young professional kindergarten teachers. In terms of working experience, there are 224 professional kindergarten teachers with less than five years, accounting for 94.1%. Because in this survey, most of the professional kindergarten teachers are new or young. In addition, from the perspective of the salary level, 221 professional kindergarten teachers have a salary between 5000 to 10000, accounting for 92.9%. It can be inferred that the overall salary level of teachers in preschool education institutions in Beijing is relatively balanced. Compared with the average social salary released by Beijing, it is at the medium level, like the individual educational level and working experience.

4.2 Reliability

The reliability test is the stability of the test results under different conditions. In this study, Cronbach's α coefficient was used to test the internal consistency of each scale. The Taber (2018) noted that Cronbach's α coefficient values of 0.60 to 0.65 were rejected, 0.65 to 0.70 acceptable, 0.70 to 0.80 reasonably good, and 0.80 to 0.90 very good. This study's test reliability results in Table 4.

Table 4 The Reliability Test

	Cronbach's Alpha	N of Items
	0.937	34
SS	0.932	12
PC	0.888	7
JE	0.906	9

Source: elaborated by this study

As seen from Table 4.2, Cronbach's α coefficient value of the total items is 0.937, and Cronbach's α coefficient value of each variable tested separately is above 0.8, indicating that this scale has good reliability and is suitable for further verification and analysis.

4.3 Confirmatory Factor Analysis (CFA)

4.3.1 Validity Test

Before factor analysis, a validity test should be done to determine whether the measuring tool can accurately measure the things to be measured. Validity analysis can be judged by the KMO test and Bartlett's spherical test results. The closer the KMO value is to 1, the more suitable it is for factor analysis. If the KMO value is above 0.9, it is very suitable; between 0.8 and 0.9 is very good; between 0.7 and 0.8 is suitable; between 0.6 and 0.7 is barely suitable; between 0.5 and 0.6 is not suitable; anything below 0.5 is considered very inappropriate. Bartlett's sphericity test is suitable for factor analysis only when the chi-square value is significant, and the significance is less than the given significance level. The results of the KMO test and Bartlett's spherical test in this study are shown in Table 5.

Table 5 The KMO and Bartlett's Test

KMO		0.928
Bartlett's Spherical Test	Approx. Chi-Square	3546.719
	df.	378
	Sig.	0.000

Source: elaborated by this study

The KMO and Bartlett sphericity test results are shown in Table 4.3, where the KMO value is 0.928, more than 0.9, and the Bartlett sphericity test significance value is 0.000, indicating that the validity of the questionnaire is perfect and suitable for factor analysis.

4.3.2 Aggregation Validity Test

In the combination reliability, the standardized factor load (Std.) of all potential variables in each item was over than 0.6, and all were significant at the level of 0.001, indicating that the combination reliability of the model was good. Each potential variable average variance extracted (AVE) is more than 0.5, and the composite reliability (C.R.) exceeds 0.7, indicating that the aggregation validity is reliable. The aggregation validity test in this study as shown in Table 4.4.

Table 6 The Convergence Validity Test

Potential Variables	Items	Std.	C.R.	AVE
SS	SS1	0.707	0.933	0.539
	SS2	0.852		
	SS3	0.679		
	SS4	0.710		
	SS5	0.684		
	SS6	0.741		
	SS7	0.687		
	SS8	0.741		
	SS9	0.914		
	SS10	0.653		
	SS11	0.739		
	SS12	0.660		
PC	PC1	0.661	0.891	0.541
	PC2	0.877		
	PC3	0.795		
	PC4	0.722		
	PC5	0.622		

	PC6	0.693		
	PC7	0.749		
	JE1	0.880		
	JE2	0.750		
	JE3	0.545		
	JE4	0.723		
	JE5	0.867	0.909	0.530
JE	JE6	0.695		
	JE7	0.727		
	JE8	0.683		
	JE9	0.619		

Source: elaborated by this study

As seen from Table 4.4, in the aggregate validity test result, the CR. values of each potential variable are 0.933, 0.891, and 0.909, respectively, all exceeding the standard reference value of 0.7. The AVE values of mean-variance extraction were 0.539, 0.541, and 0.530, all greater than the standard reference value of 0.5, and the aggregation validity was reliable.

4.3.3 Discriminative Validity Test

The discriminative validity test was carried out on all potential variables to test the differentiation between each variable. The absolute correlation coefficient value between any two potential variables was less than the square root of the corresponding factor AVE, indicating a certain degree of differentiation between the three research potential variables. The discriminative validity test in this study is shown in Table 7.

Table 7 The Discriminative Validity Test

Potential Variables	SS	PC	JE
SS	0.734		
PC	0.564	0.736	
JE	0.512	0.636	0.728

Note: The diagonal is the square root of the corresponding dimension AVE.

Source: elaborated by this study

As can be seen from Table 4.5, absolute values of correlation coefficients between any two potential variables in SS, PC, and JE are all less than the square root of the corresponding factor AVE. For example, the absolute value of the relative coefficient between potential variable SS and JE is 0.512, less than the square root of AVE 0.734 of potential variable SS and 0.728 of AVE of potential variable PC. Therefore, it shows a particular differentiation among the three research potential variables. Finally, the confirmatory factor analysis diagram has been constructed as shown in Figure 2.

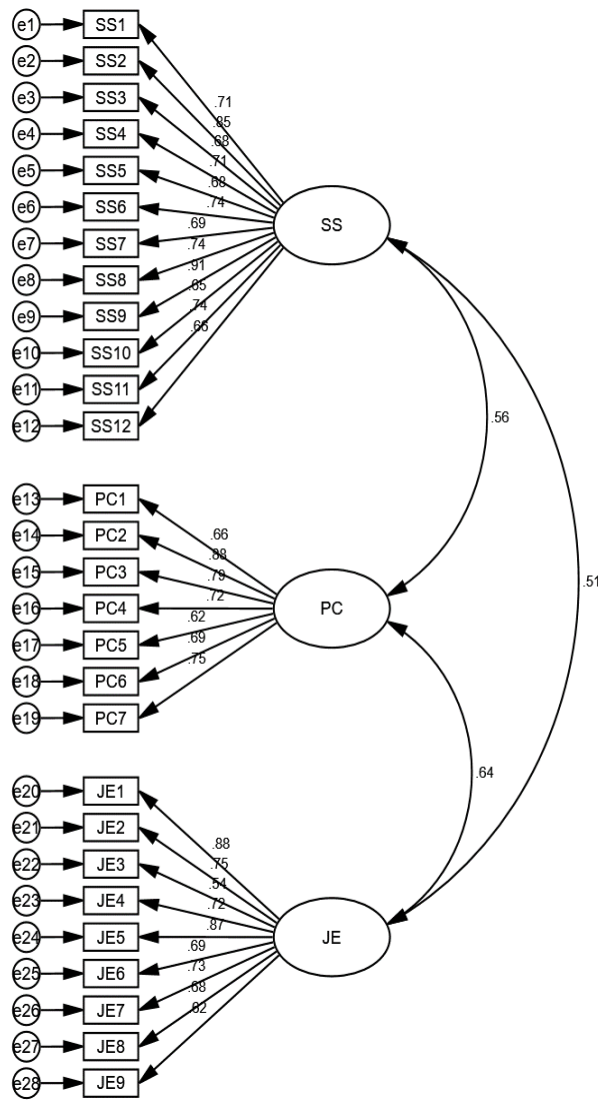


Figure 2 The Confirmatory Factor Model Diagram
 (Source: elaborated by this study)

As shown in Figure 2, the standardized structure diagram of the confirmatory factor analysis model shows that the factor load coefficient between each potential variable and its measurement index is above 0.6, and all factor loads are within the range of the reference standard, indicating that the model has a good fit.

4.4 Structural Equation Model

This study to construct a structural equation model diagram of the relationship between social support, professional commitment, and job engagement to verifying the research hypothesis, as shown in Figure 3.

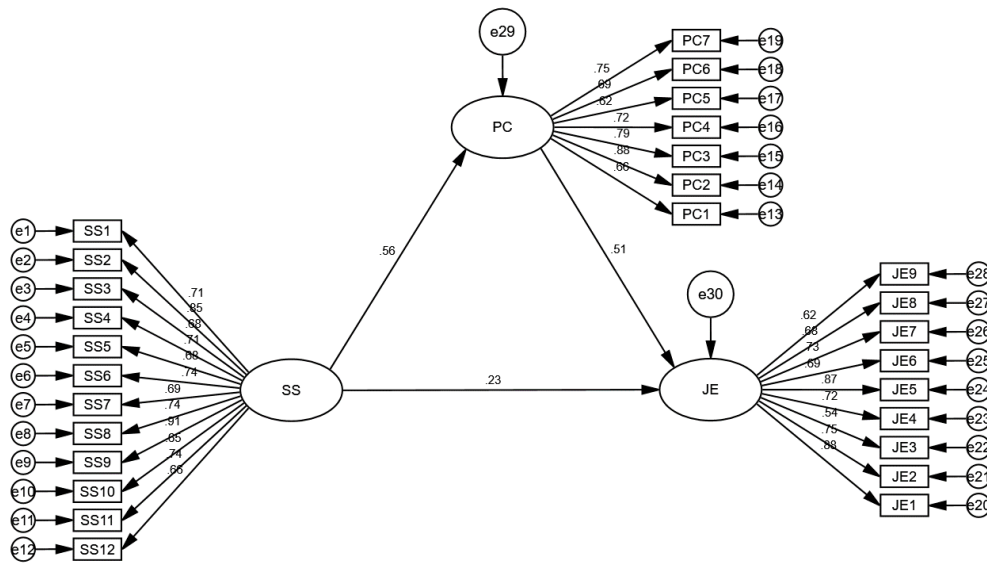


Figure 3 The Structural Equation Model Diagram
 (Source: elaborated by this study)

4.4.1 Model Fitting Index Test

In the model fitting index test, the model fitting degree is determined by the results of indicators including χ^2/df , RMSEA, GFI, AGFI, IFI, TLI, and CFI, referring to the standard value interval. Generally, the Chi-square degree of freedom ratio (χ^2/df) value is less than 3, and the root means square error of approximation (RMSEA) is less than 0.08, indicate have a good model fit in this model. For other indicators, such as the comparative fitting index (CFI) and Tucker-Lewis's index (TLI), the closer the index is to 1, the better the fitting degree of the model is. The better the fit if the index is more significant than 0.9. If the sample size is small, 0.8 is acceptable. According to the structural equation model fitting index test analysis, as shown in Table 8.

Table 8 The Fitting Indexes of the Structural Equation Model

Fitting index	χ^2/df	RMSEA	GFI	AGFI	IFI	TLI	CFI
Reference standard	<3	<0.08	>0.8	>0.8	>0.8	>0.9	>0.9
Result	1.548	0.052	0.849	0.823	0.944	0.938	0.943

Source: elaborated by this study

According to the structural equation model fitting index test results in Table 4.6, the χ^2/df value is 1.548, less than 3, indicating a good fit. The RMSEA value was 0.052, less than 0.08, indicating good adaptation. CFI, TLI, etc., reach the reference standard value and are well adapted, which is suitable for further analysis of the model.

4.4.2 Direct Effect Path Test

The estimated value β of the detection path, the standardized path coefficient Estimate, and the SE, CR, and P-value were obtained by calculating the data in the structural equation model. Suppose CR is more significant than 1.96 and the p-value is less than 0.05. In that case, it can be considered that this path coefficient can pass the significance test within the 95% confidence interval, indicating that the corresponding path hypothesis of the pre-set model is valid. Otherwise, the hypothesis is not valid. The direct effect path test results are shown in Table 9.

Table 9 The Direct Effect Path Test

Hypothesis	Path	Estimate	β	S.E.	C.R.	P	Result
H1	SS→JE	0.308	0.225	0.104	2.956	0.003	Validated
H2	SS→PC	0.516	0.564	0.081	6.351	***	Validated
H3	PC→JE	0.758	0.508	0.131	5.778	***	Validated

***: $P < 0.001$.

Source: elaborated by this study

As can be seen from Table 4.7, the test results show that the CR of all paths is greater than 1.96. SS had a significant positive effect on JE ($\beta=0.225$, $p=0.003<0.05$); The positive effect of SS on PC was significant ($\beta=0.564$, $p<0.001$); The positive effect of PC on JE was significant ($\beta=0.508$, $p<0.001$). Therefore, all direct effect path tests are feasible, and research hypotheses H1, H2, and H3 are valid.

4.4.3 Indirect Effect Path Test

With the above direct effect path tests supported, indirect effect path tests of structural equation models were further conducted to verify hypothesis H4 in the study. Indirect effect path test results are shown in Table 10.

Table 10 The Indirect Effect Path Test

Effect	Path	Effect Value	Standard Error	Bootstrapping	
				95% CI	95% CI
Total effect	SS→JE	0.512	0.085	0.310	0.655
Direct effect		0.225	0.082	0.062	0.389
Indirect effect	SS→PC→JE	0.287	0.065	0.167	0.430

Source: elaborated by this study

According to the test results in Table 4.8, the 95% upper and lower interval of the total effect of the path SS to JE is [0.310,0.655], excluding 0, indicating that the total effect between SS and JE is significant, and the effect value is 0.512. The 95% upper and lower interval of the direct effect path is [0.062, 0.389], excluding 0, indicating that the direct effect between SS and JE was significant, and the effect value is 0.225. The upper and lower 95% interval of the indirect path from SS to PC to JE is [0.167, 0.430], excluding 0, indicating that PC significantly mediates between SS and JE, and the effect value is 0.287. Therefore, it can be confirmed that research hypothesis H4 is valid.

4.5 Verification of Research Hypothesis

Based on the above research results, we further summarized the verification results of the research hypothesis, as shown in Table 11.

Table 11 The Verification Results of the Research Hypothesis

Research Hypothesis	Conclusion
H1. Social support has positively correlated with job engagement.	Supported
H2. Social support has positively correlated with professional commitment.	Supported
H3. Professional commitment has positively correlated with job engagement.	Supported
H4. Professional commitment has a mediating effect between social support and job engagement.	Supported

Source: elaborated by this study

As seen from Table 11, in the test of the direct effect relationship between the research variables social support, professional commitment, and job engagement, there is a positive correlation between each variable, and the research

hypotheses H1, H2, and H3 are all supported. In addition, professional commitment plays a significant mediating role between social support and job engagement. Therefore, the research hypothesis H4 is supported, which expresses that professional commitment is mediating between social support and job engagement.

5. Conclusion

5.1 Discussion

In the structural equation model, the fit degree of the model is tested first, and all the test indexes are within the range of reference standards, indicating that the model has an excellent fit degree. Second, the direct effect path test showed that the C.R. of all paths was more significant than 1.96, and the p-value was less than 0.05, indicating that all direct effect path coefficients could pass the significance test within the 95% confidence interval. Therefore, the study's H1, H2, and H3 hypotheses were valid. Finally, the indirect effect path test results showed that the upper and lower 95% interval of the indirect path of the path SS to PC to JE was [0.167,0.430], excluding 0, indicating that PC had a significant mediating effect between SS and JE. The effect value was 0.287, indicating that PC significantly mediated between SS and JE. Therefore, it can be confirmed that research hypothesis H4 is valid. To sum up, this study can effectively verify established research hypotheses through data analysis, and all the hypotheses proposed in this study are supported.

5.2 Conclusion

This study takes teachers in preschool education institutions in Beijing as the research object, analyzes the relationship among social support, professional commitment, and job engagement based on empirical research, and draws the following conclusions through data analysis and discussion: 1) Social support is positively correlated with job engagement, 2) Social support is positively correlated with professional commitment, 3) Professional commitment is positively correlated with job engagement, 4) Professional commitment mediates between social support and job engagement. This empirical research results confirm the research hypothesis, answer the research questions, and achieve the research objectives. According to the research results, effective practical suggestions are provided for improving teachers' job engagement in Beijing's preschool education institutions.

5.3 Recommendation

Based on the results of this study, we have the following three practical recommendations. As following: Firstly, for preschool education institutions, formulating policies and paying attention to the organizational and social support of professional kindergarten teachers from the organizational construction and teacher development of their educational institutions is to ensure the status of preschool education in social development. To stimulate and improve the professional commitment of preschool teachers to promote their job engagement and better contribute to the institution and the cause of preschool education. Secondly, for the administrators of preschool education institutions, in the development and construction of preschool teachers' teaching teams and career, vocational training and development education of teachers should be strengthened so that preschool teachers can feel the attention and support of society to preschool teachers, to enhance their professional commitment and promote job engagement of preschool teachers in preschool education. Primarily through the improvement of the preschool teacher assessment system and other ways so that every preschool teacher establishes a correct view of society and education, guides them to assume social responsibilities better, and makes outstanding contributions to the country's preschool education cause. Thirdly, for the teachers of preschool education institutions, with the support and attention of society and institutions, can effectively improve their professional commitment, better devote themselves to their work, and serve the institutions and the cause of preschool education. Any occupation has its different values in society. As a particular occupation, preschool education bears the critical responsibility and sense of mission of the country and the society and needs the support of the society more. Every worker is dedicated to their specific work practice in their career. Professional commitment is the embodiment of their professional identification and job engagement. In addition, job engagement is the best way to show that an individual is passionate about self career and pursuing career development. Therefore, with social support, preschool teachers can improve their professional commitment and have the best state of their job engagement.

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