The Influencing Factors on Employees' Job Well-being -- Data from Architectural Material Enterprises in Guangdong Province, China

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ABSTRACT

Based on a thorough literature review, this research drew a conclusion on the previous definitions, measurement methods and the correlation between relevant variables of organizational support, self-efficacy and job happiness. Drawing upon previous researches and relevant literatures, this this research decided on the research content, proposed the research model and proposed the hypotheses of this research. An empirical research was conducted with quantitative research methods and an online questionnaire survey. Data collected from the questionnaire survey were analysed, including a descriptive statistical analysis, a reliability test, a validity test, a factor analysis, and a structural equation modelling analysis, to draw research conclusions with SPSS and AOMS software. This research identified that perceived organizational support of employees in Guangdong architectural material enterprises can positively predict their job well-being; that perceived organizational support by Guangdong architectural material enterprises employees can improve their work self-efficacy; that the employees' self-efficacy in Guangdong architectural material enterprises can promote their job well-being and that employees' self-efficacy in Guangdong architectural material enterprises plays a mediating role between their perceived organizational support and job well-being. Based on the research conclusions above, with actual situations taken into account, this research offered practical suggestions on management frameworks for future prospects.

1. INTRODUCTION

1.1 Background of Study

In contemporary society, with the improvement of the material living standard, job well-being has become the focus of academic research and an apparent reflection in national policy (Ruggeri et al., 2020). The nation, from the humanistic concept of building a harmonious society, and improving the job well-being index, also reflects the government's attention to the job well-being of the people (Liu et al., 2022). With the acceleration of economic globalization and the increasingly fierce external competition of enterprises, how to improve employees' job well-being more effectively and better retain outstanding talents has become an efficient problem faced by enterprise managers and organizational behaviourists. Therefore, based on many previous theoretical and empirical studies by scholars, this study takes the employees of Guangdong architectural material enterprises as the research object to explore the impact of perceived

organizational support on employees' job well-being. It also provides feasible management suggestions for enhancing employees' job well-being. This part expounds on the theoretical and practical significance of this study. By analysing the development trend of previous academic reviews, this thesis points out the current theoretical gaps and explains their theoretical value. The discussion of research results has benefited from a specific individual and organizational practice and has demonstrated practical significance.

1.2 Research Questions

This study takes the employees of architectural material enterprises in Guangdong Province as the research object, aiming to explore the relationship between perceived organizational support, self-efficacy, and employees' job well-being and provide a practical management framework for promoting employees' job well-being. Based on this, the research questions include: 1) What factors influence employees' job well-being in Guangdong architectural material enterprises? 2) What is the relationship between perceived organizational support and employees' job well-being in Guangdong architectural material enterprises? 3) How can a practical management framework be provided to promote the employees' job well-being in Guangdong architectural material enterprises?

1.4 Research Objectives

Based on the above research questions, this study to further achieve the following research objectives:1) To identify the influencing factors of employees' job well-being in architectural material enterprises in Guangdong Province. 2) To test the relationship between perceived organizational support and employees' job well-being in architectural material enterprises in Guangdong Province. 3) To provide a practical management framework to promote the employees' job well-being in Guangdong architectural material enterprises.

2. LITERATURE REVIEW

2.1 Contexts of Study

As a big economic province in China, the development of the architectural material industries in Guangdong Province is at the forefront of China. Regarding the building materials industry, Guangdong Province has a leading advantage in high-end architectural ceramics, sanitary ceramics, low-carbon cement, and other modern architectural materials in China. Most areas of the province have architectural materials industry layouts. In 2021, the number of architectural materials enterprises in Guangdong Province reached 9,166, leading the country. Guangzhou, Shenzhen, and Foshan City have gathered more leading enterprises in the architectural material industry.

2.2 The Theories of Study

1) Social Exchange Theory

The social exchange theory provides a theoretical basis for perceived organizational support (Nazir et al., 2018). Perceived organizational support is formed in the organization's evaluation of employees' work performance, attention to employees' interests, and recognition of employees' value. It is a perception of employees' support for the organization, which is also imbued with reciprocity. According to the social exchange theory and the principle of reciprocity, employees are willing to work hard in exchange for the organization's rewards, benefits, and resources (Aldabbas et al., 2021).

2) Cognitive Social Theory

The social cognitive theory provides a theoretical basis for self-efficacy. Self-efficacy is widely used in psychology, sociology, and management research to understand the individual's perception or belief in their abilities. People with high self-efficacy usually overestimate their ability to choose tasks beyond their actual ability, while people with low self-efficacy will have the opposite choice (Schunk & DiBenedetto, 2020).

3) Self-determination Theory

Self-determination theory provides a theoretical basis for employees' job well-being. Motivation depends on the evaluation of the internalization process of behavior or goal, the development of skills to achieve the goal, the maintenance of positive relationships with significant others, and the experience of self-determination (O'Donoghue & Werff, 2021). A central principle of the theory is that human motivation comes from satisfying internal psychological needs.

4) Research Variables

This section describes research variables and conceptually defines variables (perceived organizational support, self-efficacy, and employees' job well-being). Based on the literature review of those research variables, the hypothesis of this study is proposed.

2.3 Research Hypothesis

1) Perceived Organizational Support and Employees' Job Well-being

Perceived organizational support can enhance employees' loyalty and dependence, strengthen their sense of ownership and responsibility, and increase their job well-being. Based on this, this study believes that there is a particular relationship between perceived organizational support and

employees' job well-being in architectural material enterprises in Guangdong Province and proposes the hypothesis:

H1. Perceived organizational support of employees in Guangdong architectural material enterprises can positively predict their job well-being.

2) Perceived Organizational Support and Self-efficacy

Perceived organizational support can affect people's choice of behavior, including whether they are willing to make better efforts for the organization (Wen et al., 2019). Thus, it can affect the persistence and effort level of the selected behavior, including the degree of confidence in completing specific tasks. Based on this, this study believes that there is a specific relationship between perceived organizational support and employee self-efficacy in Guangdong architectural material enterprises and proposes the hypothesis:

H2. Perceived organizational support by Guangdong architectural material enterprises employees can improve their work self-efficacy.

3) Self-efficacy and Employees' Job Well-being

Zhang (2021) examined the relationship between employees' sense of work will, self-efficacy, and job well-being. The research results show that self-efficacy can positively predict employees' job well-being (Zhang, 2021). Based on this, this study believes that there is a specific relationship between self-efficacy and employees' job well-being in Guangdong architectural material enterprises and puts forward the hypothesis:

H3. The employees' self-efficacy in Guangdong architectural material enterprises can promote their job well-being.

4) Perceived Organizational Support, Self-efficacy, and Employees' Job Well-being

Therefore, when employees feel the support given by the organization, they will think that it is the organization's recognition and affirmation of their workability, which will significantly improve their work confidence, have a higher self-efficacy, and thus enhance their employees' job well-being (Budomo, 2022). Based on this, this study believes that there is a particular relationship between perceived organizational support, self-efficacy, and employees' job well-being in Guangdong architectural material enterprises and puts forward the hypothesis:

H4. Employees' self-efficacy in Guangdong architectural material enterprises mediates their perceived organizational support and job well-being.

2.4 Empirical Framework

Based on the above research hypothesis and discussions, this study constructed an empirical framework to verify the relationship between perceived organizational support, self-efficacy, and employees' job well-being. As shown in Figure 1.

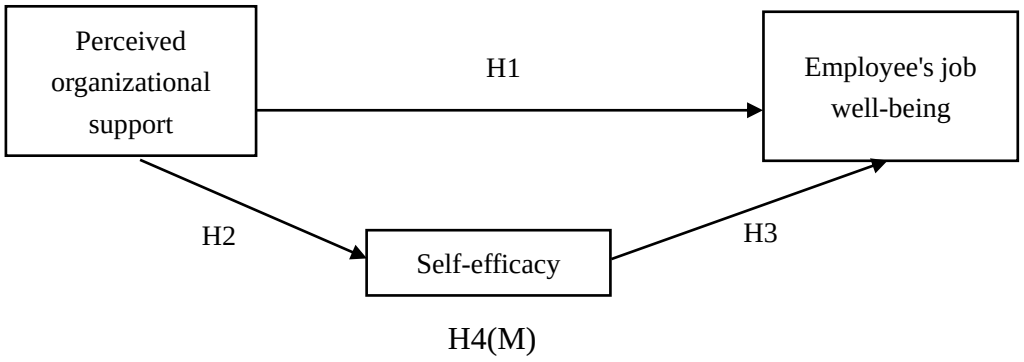

Figure 1 Empirical Framework of Study

3. RESEARCH METHODOLOGY

3.1 Population and Sampling

Based on the confirmation of the research population, to ensure the representativeness of the study in a specific study area, this study used a simple random sampling method to select 200 people from the target population for investigation.

3.2 Operational Definition of Variables

This study defines perceived organizational support, self-efficacy, and employees' job well-being. Among them, the independent variable is perceived organizational support, the dependent variable is employees' job well-being, and the intermediary variable is self-efficacy.

3.3 Measurement and Questionnaire

According to the research objectives, this study adopted the relatively mature scale widely used in the existing research and developed the initial questionnaire of the study. After determining the measurement scales, determine the questionnaire content. The questionnaire has a total of 38 items. Please refer to the appendix for details of the questionnaire.

3.4 Ethical Considerations

In empirical research, ethical consideration is a vital link, and the confidentiality and anonymity of the respondents must be ensured throughout the research process.

4. DATA ANALYSIS

4.1 Descriptive Statistical Analysis

SPSS software is used to conduct descriptive statistics on samples, as shown in Table 1.

Table 1 The Descriptive Statistical Analysis

	Category	Frequency	Percentage
Gender	Male	51	25.5%
	Female	149	74.5%
Age	<30 years old	129	64.5%
	30-45 years old	61	30.5%
	> 45 years old	10	5.0%
Educational Level	Junior College	12	6.0%
	Undergraduate	183	91.5%
	Master	5	2.5%
Marital Status	Single	175	87.5%
	Married	22	11.0%
	Divorced	3	1.5%
Work Experience	< 5 years	184	92.0%
	5-10 years	13	6.5%
	> 10 years	3	1.5%
Salary Level	<5000 yuan	1	0.5%
	5000-10000 yuan	191	95.5%
	>10000 yuan	8	4.0%

Sample size: 200.

(Source: This study)

4.2 Reliability Test

In this research, Cronbach's α coefficient was used to test the internal consistency of each scale. According to scholar suggestion, Cronbach's α coefficient values of 0.60 to 0.65 is rejected; 0.65

to 0.70 is acceptable; 0.70 to 0.80 is quite reasonable; 0.80 to 0.90 is very good. In this research, test reliability results in SPSS software are shown in Table 2.

Table 2 The Reliability Test

	Cronbach's Alpha	N of Items
	0.975	38
VF	0.915	8
SE	0.951	6
SP	0.980	18

(Source: This study)

4.3 Confirmatory Factor Analysis

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. Using SPSS software, processing validity analysis can be judged by the KMO and Bartlett's spherical test results. The closer the KMO value is to 1, the more suitable it is for factor analysis. 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 spherical test is suitable for factor analysis only when the chi-square value is significant and the significance level is less than the given significance level. The results of the KMO test and Bartlett's spherical test in this research are shown in Table 3 below.

Table 3 The KMO and Bartlett's Test

KMO		0.947
Bartlett's Spherical Test	Approx. Chi-Square	8871.880
	df.	703
	Sig.	0.000

(Source: This study)

4.3.2 Convergence Validity Test

According to the researchers, the combination reliability of all potential scale variables reached the minimum standard value of 0.6, and all were significant at the level of 0.001, indicating that the combination reliability of the model was good. AVE values of average variance sampling are all greater than 0.5, indicating that the model has good aggregation validity. The confirmatory factor analysis in this research was aggregated for the validity test, as shown in Table 4.

Table 4 The Convergence Validity Test

Potential Variables	Items	Std.	C.R.	AVE
POS	POS1	0.932	0.906	*0.566*
	POS2	0.960		
	POS3	0.920		
	POS4	*0.459*		
	POS5	*0.517*		
	POS6	0.780		
	POS7	*0.450*		
	POS8	0.776		
SE	SE1	0.820	0.951	0.764
	SE2	0.880		
	SE3	0.908		
	SE4	0.898		
	SE5	0.906		
	SE6	0.830		
JW	JW1	0.797	0.981	0.740
	JW2	0.804		
	JW3	0.847		
	JW4	0.872		
	JW5	0.754		

JW6	0.810
JW7	0.895
JW8	0.889
JW9	0.915
JW10	0.916
JW11	0.894
JW12	0.900
JW13	0.888
JW14	0.846
JW15	0.884
JW16	0.910
JW17	0.849
JW18	0.786

(Source: This study)

It can be seen from table 4.4 that the AVE values of POS do not reach the standard of 0.5; it can be seen from the factor loading of the items (Estimate) that POS4, POS5, and POS7 do not reach 0.6. Therefore, these items are deleted, and the confirmatory factor analysis is performed again. With the help of AMOS software, the confirmatory factor analysis measurement model diagram was constructed, as shown in Figure 2.

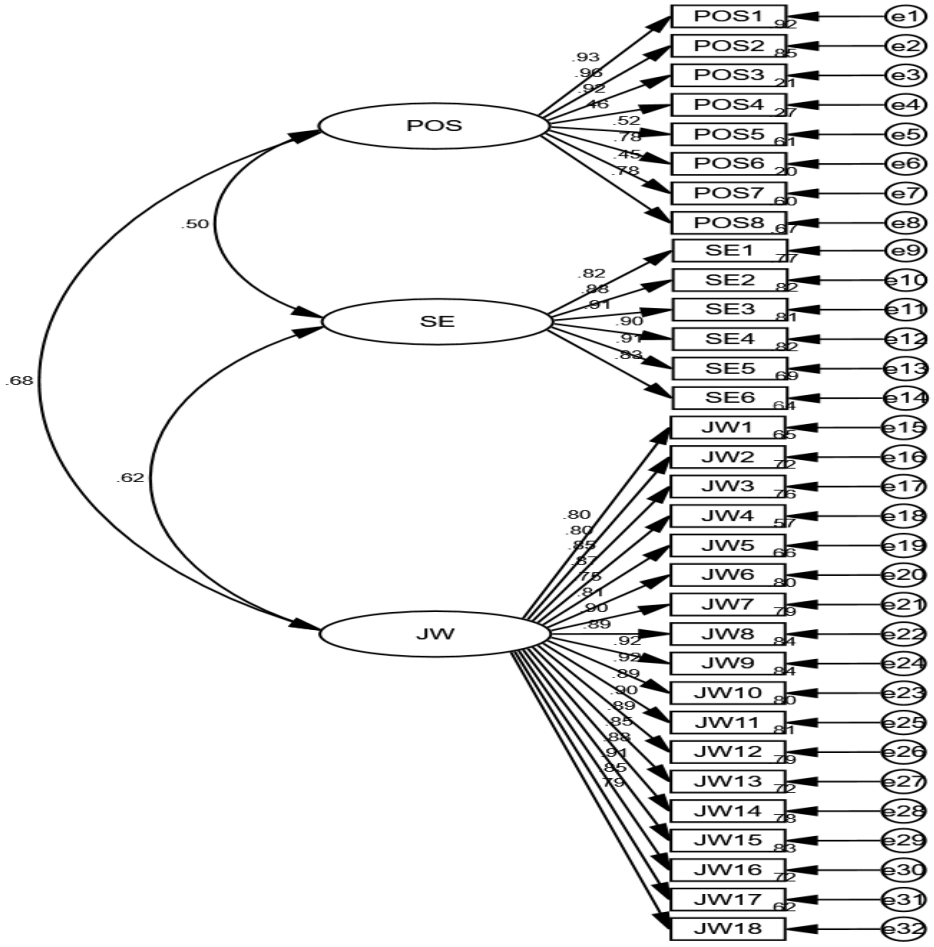

Figure 2 The Confirmatory Factor Model Diagram

(Source: This study)

In addition, the fitting index of confirmatory factor analysis was used as a reference. According to previous studies, scholars generally adopt CMIN/DF, RMSEA, GFI, AGFI, NFI, TLI, and CFI as model-fitting evaluation indexes. The value of CMIN/DF is generally three as the critical value; the smaller, the better. The RMSEA index value is between 0 and 1, and the closer it is to 0, the better; usually, 0.08 is the critical value. The GFI, NFI, TLI, and CFI are all between 0 and 1, and 0.9 is usually taken as the critical value, and the closer the value is to 1, the better the fitting effect is. The fitting indexes of the confirmatory factor model are shown in Table 5 below.

Table 5 The Fitting Indexes of the Confirmatory Factor Model

Fitting index	CMIN/DF	RMSEA	GFI	AGFI	NFI	TLI	CFI
Reference standard	< 3	< 0.08	> 0.9	> 0.85	> 0.9	> 0.9	> 0.9
Result	*4.426*	*0.131*	*0.603*	*0.545*	*0.766*	*0.793*	*0.808*

(Source: This study)

It can be seen from the fitting index in Table 4.5 that each fitting index is not within the reference standard range (including CMIN/DF, RMSEA, GFI, AGFI, NFI, TLI, and CFI). Therefore, should delete some items and the confirmatory factor analysis should be performed again. The convergence validity analysis after deleting the item is shown in Table 6.

Table 6 The Convergence Validity Test (Delete Items)

Potential Variables	Items	Estimate	C.R.	AVE
POS	POS1	0.938	0.961	0.891
	POS2	0.974		
	POS3	0.919		
SE	SE1	0.828	0.947	0.781
	SE2	0.893		
	SE3	0.913		
	SE4	0.889		
	SE5	0.894		
JW	JW3	0.841	0.955	0.729
	JW5	0.746		
	JW6	0.798		
	JW9	0.900		
	JW11	0.903		
	JW12	0.912		

JW13	0.881
JW17	0.835

(Source: This study)

It can be seen from Table 4.6 that in the convergent validity test of delete items, C.R. values of the combination reliability of each potential variable are 0.961, 0.947, and 0.955, respectively, which all exceed the expected reference value of 0.7. AVE values extracted by mean-variance were 0.891, 0.781, and 0.729, all greater than the average reference value of 0.5. And all the factor loading of the items (Estimate) reach 0.6. Therefore, the convergence validity test of deleted items was reliable.

4.3.3 Discriminative Validity Test

The discriminative validity test was carried out on all research variables to test the differentiation between different latent variables. The discriminative validity test of confirmatory factor analysis in this research is shown in Table 7.

Table 7 The Discriminative Validity Test (Delete Items)

Potential Variables	POS	SE	JW
POS	**0.944**		
SE	0.466	**0.884**	
JW	0.622	0.620	**0.854**

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

(Source: This study)

As can be seen from Table 7, the absolute values of correlation coefficients between any two potential variables, POS, SE, and JW, are all less than the square root of the corresponding factor AVE. Therefore, it shows a specific differentiation among the three potential variables studied. The confirmatory factor analysis model diagram of deleted items as shown in Figure 3.

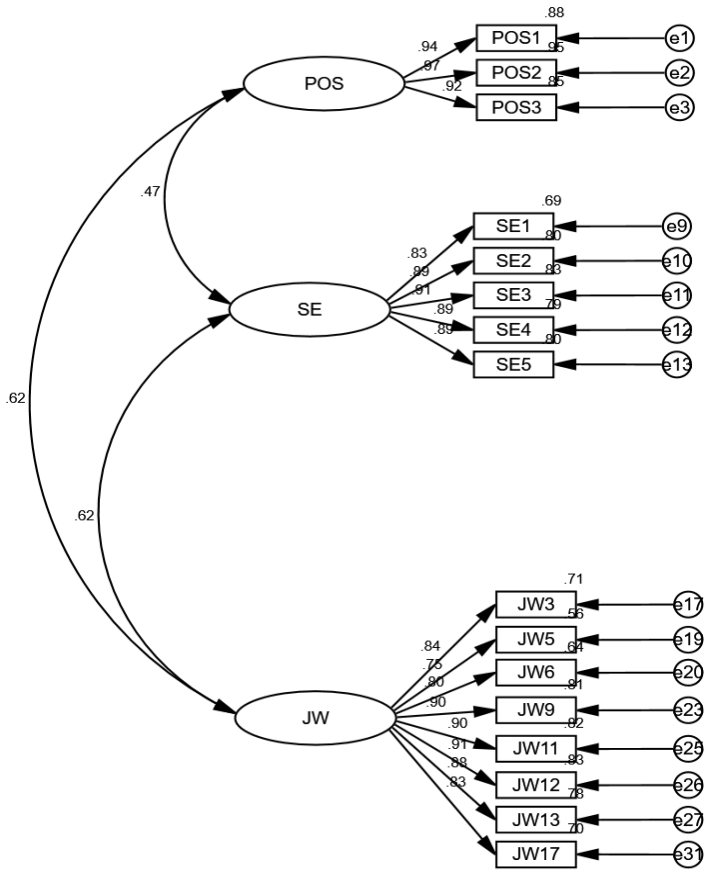

Figure 3 The Confirmatory Factor Model Diagram (Delete Items)

(Source: This study)

The fitting indexes of the confirmatory factor model of deleted items are shown in Table 8.

Table 8 The Fitting Indexes of the Confirmatory Factor Model (Delete Items)

Fitting index	CMIN/DF	RMSEA	GFI	AGFI	NFI	TLI	CFI
Reference standard	< 3	< 0.08	> 0.9	> 0.85	> 0.9	> 0.9	> 0.9
Result	2.042	0.072	0.969	0.868	0.942	0.963	0.969

(Source: This study)

It can be seen from Table 4.8 that the fitting indexes confirmatory factor model of the deleted items are all within the reference standards range, indicating that the adjusted model has an excellent fitting degree.

4.4 Structural Equation Model

AMOS software was used to build a structural equation model of the relationship between research variables to verify the research hypothesis. The structural equation model diagram in this study is shown in Figure 4.

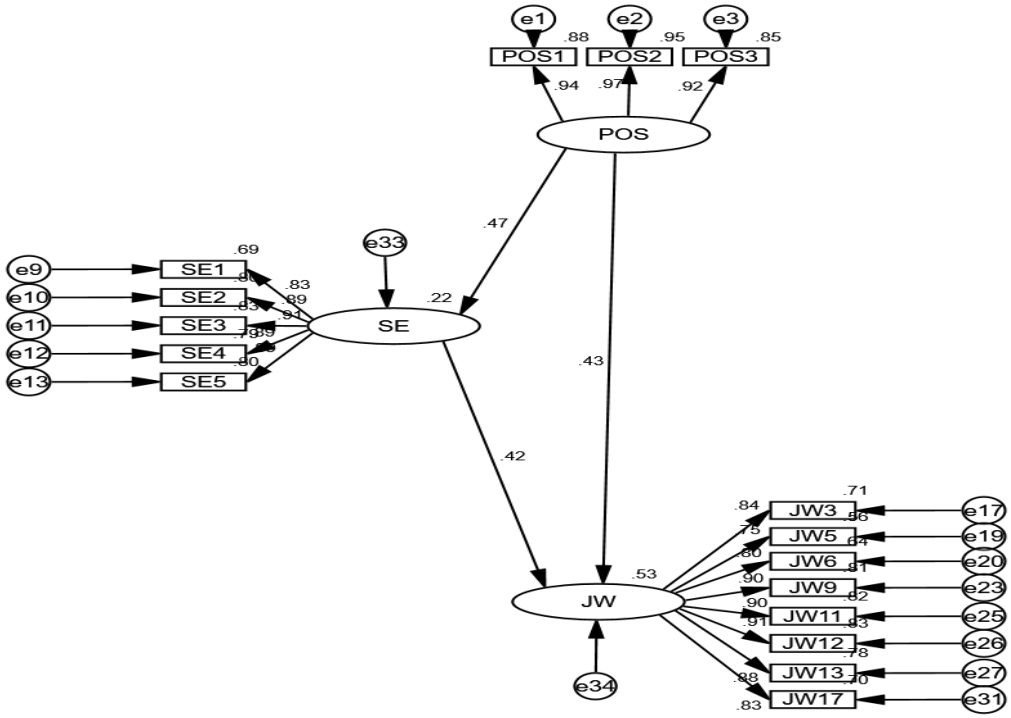

Figure 4 The Structural Equation Model Diagram

(Source: This study)

4.4.1 Direct Effect Path Test

The estimated value β of the detection path, the standardized path coefficient estimate, the standard error S.E., C.R., and the significance p-value were obtained by calculating the data in the structural equation model. The researchers pointed out that C.R. is more significant than 1.96 and the p-value is less than 0.05; 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 present 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	β	Estimate	S.E.	C.R.	P	Result
H1	POS→JW	0.350	0.425	0.052	6.685	***	Validated
H2	POS→SE	0.360	0.466	0.054	6.621	***	Validated
H3	SE→JW	0.450	0.422	0.071	6.341	***	Validated

*** indicate P < 0.001.

(Source: This research)

As can be seen from Table 4.9, the test results show that the C.R. of all paths is more significant than 1.96. The positive effect of POS to JW was significant (β=0.350, C.R.=6.685, p<0.001). The positive effect of POS to SE was significant (β=0.360, C.R.=6.621, p<0.001). The positive effect of SE to JW was significant (β=0.450, C.R.=6.341, p<0.001). Therefore, all direct effect path tests are feasible, and research hypotheses H1, H2, and H3 are validated.

4.4.2 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 the mediation hypothesis H4 in the research. Indirect effect path detection results are shown in Table 10.

Table 10 The Indirect Effect Path Test

Effect	Path	Effect Value	Standard Error	Bootstrapping 95% CI	
Indirect effect	POS→SE→JW	0.197	0.044	0.087	0.236

(Source: This research)

According to the detection results in Table 4.10, the upper and lower 95% interval of the indirect path POS→SE→JW is [0.087,0.236], excluding 0, indicating that SE significantly partially mediates between POS and JW, and the effect value is 0.197. Therefore, it can be confirmed that research hypothesis H4 is validated.

5. CONCLUSIN

5.1 Discussion

To sum up, this research can effectively verify established research hypotheses through data analysis, and all the hypotheses proposed in this research are supported. Through data analysis and discussion, the following conclusions are drawn. 1) Employees' perceived organizational support in Guangdong architectural material enterprises can positively predict their job well-being. 2) Perceived organizational support by Guangdong architectural material enterprises employees can improve their work self-efficacy. 3) The employees' self-efficacy in Guangdong architectural material enterprises can promote their job well-being. 4) Employees' self-efficacy in Guangdong architectural material enterprises is mediating between their perceived organizational support and job well-being. The empirical results confirm the research hypothesis, answer the research questions, and achieve the objectives. According to the research results, effective practical suggestions have been provided to improve the job well-being of employees in architectural material industries.

5.2 Future Research

Although this research has achieved established objectives, theoretical and practical results have been achieved. Based on these findings. We also provide directions and suggestions for future research based on these findings. Finally, in future research, scholars can discuss more factors that may affect employees' job well-being based on this study, which is also a further improvement of this study and is beneficial for supplementing the academic theory of this research theme.

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