Retraction

Retracted: Development of Employer Brand Evaluation Scale Based on Computer Data Mining and Its Relationship with College Students' Job-Hunting Intention

Security and Communication Networks

This article has been retracted by Hindawi, as publisher, following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of systematic manipulation of the publication and peer-review process. We cannot, therefore, vouch for the reliability or integrity of this article.

Please note that this notice is intended solely to alert readers that the peer-review process of this article has been compromised.

Wiley and Hindawi regret that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

References

[1] G. Yang, W. Yang, and G. Yang, "Development of Employer Brand Evaluation Scale Based on Computer Data Mining and Its Relationship with College Students' Job-Hunting Intention," *Security and Communication Networks*, vol. 2022, Article ID 5303083, 8 pages, 2022.

WILEY | Hindawi

Research Article

Development of Employer Brand Evaluation Scale Based on Computer Data Mining and Its Relationship with College Students' Job-Hunting Intention

Guilin Yang [ID],[1] Wanping Yang [ID],[1] and Guihua Yang[2]

[1]*School of Economics and Finance, Xi'an Jiaotong University, Xian 710000, Shanxi, China*
[2]*Ankang Gaoxin Middle School, Ankang 725000, Shanxi, China*

Correspondence should be addressed to Guilin Yang; yangguilin168@stu.xjtu.edu.cn and Wanping Yang; wanpingyang@xjtu.edu.cn

The inclinations among employees are changed because of the evolutions in the twenty-first century's workplace. It is consequently critical to decide the elements that workers look for in an organization and their goal conduct to stop from their occupation to work on the issues of high wearing down that occurs in an organization. This study determines the connection between employer branding and turnover intention among employees. Data mining and factor analysis methods are used to extract public factors, design a more concise employer brand evaluation system, and develop a new employer brand evaluation scale. The relationship between the various dimensions of employer brand in China's banking industry and college students' job-hunting intentions are examined. Results show that contemporary college student job-seekers in China pay more attention to short-term and directly experienced security and experiential needs. It ignores the long-term and hard-to-feel self-realization needs and respect needs in the short term. These dimensions reflect the perceptions of existing employees regarding their organization. The scale is found to be statistically sound for measuring the employer brand.

1. Introduction

The interaction of employees with customers determines the reputation of any service organization. The organization's success is determined by the image projected by employees during interactions. As a result, it is critical for any organization to assess the image reflected by its employees. Employee brand (EB) refers to the image of the company that employees project to customers [1]. The ability to project the desired image into the minds of employees offers the company an advantage over its competitors. While providing service, employees reflect the image positioned in their minds to customers, which develops and enhances a favorable service brand image among consumers [2].

Employer branding has become crucial for many organizations as they all are keen to attract, develop, and retain the right talent in their organization. Many firms have realized the importance of employer branding as they strive to attract, develop, and retain the best personnel. Employer branding must attract and communicate the attractive employee value proposition (EVP) they have created to both new and current employees [3]. Employer branding, like consumer marketing, has evolved to delivering emotional benefits to gain employee commitment. This affective commitment can then rise to positive behaviors like eagerness to help or a desire to learn more. In this way, consumer and employer branding are inextricably intertwined [4].

Existing research on the relationship between employer brand and job-seeking intention is based on the functional and symbolic dimensions, using existing mature scales for optimization, and studying whether employer brand and job-seeking intention have a significant impact. Like consumer marketing, employer branding has also shifted

towards the delivery of emotional benefits to achieve employee commitment [5]. This affective commitment can then lead to desirable behaviors such as willingness to help or propensity for further development. In this sense, consumer branding and employer branding are closely linked [6].

Although accurate and reliable multidimensional scales to measure a consumer's affective relationship to a brand already exist in consumer marketing, Allen and Meyer's [7] scale is the most widely utilized. This paradigm consists of three distinct components: affective, normative, and continuity commitment, and is effective in measuring the various types of employee commitment to the organization. However, the affective commitment mindset is measured with a single-dimension scale [8]. On the one hand, there are too many employer brand evaluation dimensions, making the company unclear on which scale the employer brand should be ranked. If all dimensions are built under the condition of limited resources, it does not meet the company's actual situation [9]. Companies that increase the attractiveness of talents are eager to have a relatively simplified employer brand evaluation system to guide companies better to carry out employer brand building effectively; on the other hand, too complex evaluation scales make it more difficult for companies to collect data, which reduces the accuracy of corporate data collection and greatly limits the practical application of employer brands in Chinese companies [10]. There is less research on the impact of various dimensions of the employer brand on employees' job search intentions, and the existing employer brand evaluation system is relatively complex, with more evaluation dimensions. It is necessary to combine the employer brand with the needs of employees and develop a more concise employer brand evaluation system and evaluation scale to promote the practice and application of the employer brand in the enterprise [11].

The goal of this study is to create a new reliable, valid, and concise scale to assess affective commitment that varies from previous literature-based approaches by focusing on affective commitment to the employer brand. A data mining approach and factor analysis method is used to extract public factors, design a more concise employer brand evaluation system, and develop a new employer brand evaluation scale.

The rest of the manuscript is organized as: Section 2 provides a detailed analysis of the existing works on employer brand analysis. In Section 3, the proposed brand scale development method is presented. Section 4 illustrates the obtained results and Section 5 is about conclusion.

2. Literature Review

Employees and organizations can form close bonds, much as consumers do with product brands. As a result, employers exhibit characteristics that are similar to those portrayed by product brands. The application of marketing principles to human resource management has resulted in the concept of employer branding. Ambler and Barrow introduced the term employer brand to highlight the importance of organizations becoming more people-oriented [3]. Levy in his theory [12] divided the employer brand into functional factors (salary, benefits, promotion opportunities.) and symbolic factors (corporate status, reputation, corporate culture). Most studies believe that companies consciously shaping their employer brand can help clarify their position in the labor market, effectively convey the company's human resource management policies and characteristics, and achieve the goals of attracting, motivating, and retaining talent [13, 14]. Many studies have looked into the advantages of having a strong employer brand. According to Love and Singh [15], the employer brand informs potential and current employees about the benefits of working for a given business and serves as a reflection of the organization's uniqueness. According to Schlager et al. [16], EB has a significant impact on firm profitability by increasing employee identification and happiness. Robertson and Khatibi [17] discovered a link between productivity and having a high EB. Kashive and Khanna [18] found that early recruitment activities such as advertising, publicity, and word of mouth have an impact on all dimensions of employer brand knowledge, including familiarity, image, and reputation. Organization attraction was influenced by employer reputation and image, but the firm performance was influenced by employer familiarity and image. The Internet and networking were the most common sources of job information. Kashyab and Rangnekar [19] looked at the interrelationships between employer brand perception (EBP), trust in leaders, and turnover intentions, finding that EBP and subordinates' TRT were negatively related to TI. Kucherov and Zamulin [20] investigated how employer branding might be utilized to attract and retain talent in Russian IT organizations. HR managers' job is to figure out the best plan for employer branding by analyzing the fundamental benefits of employment (functional, economic, and psychological).

Although the employer brand is still a relatively new concept in China, it has been widely promoted and applied in practice. The most prominent performance is the "Best Employer" selection activity held by Chinese Internet recruitment companies every year. Internet recruitment companies are represented by Zhaopin Recruitment [21] and 51job Worry (according to the survey of professional institutions, the two account for about 50% of China's online recruitment market share). Based on the actual situation in China, Internet recruitment companies have cooperated with well-known universities in China to establish a relative scientific employer brand evaluation system that launches the "Best Employer" selection activity every year, attracting hundreds of thousands of companies from all over China [22]. The employer brand evaluation system jointly developed by Zhaopin Recruitment and Peking University considers China's national conditions [23]. It has been recognized by many Chinese companies and has relatively few evaluation dimensions. Therefore, this study is based on this evaluation system and designs its corresponding employer brand evaluation scale, which collects sample data, extracts the public factors of the scale through factor analysis, further simplifies the employer brand evaluation system, and designs a new and more concise employer brand evaluation scale.

3. Scale Development

3.1. Data Collection. This study uses the opportunity of ICBC to hold job fairs in colleges and universities in Xi'an China. With Tables 1 and 2 as the main content of the questionnaire, 450 questionnaires are distributed through online surveys, and invalid questionnaires are eliminated. A total of 396 questionnaires were returned with an efficiency of 88%. The specific conditions of the sample are shown in Table 3.

In terms of measuring job intentions, this study selects the Vinokur evaluation scale [13] and adjusts it according to the Chinese language habits, as shown in Table 2.

3.2. Scale Development and Validity Test. Since the employer brand scale design in this study refers to the employer brand evaluation system jointly developed by Zhaolian Recruitment and Peking University, it has been extensively verified in content validity and has relatively good content validity. Therefore, this study mainly examines the structural validity, convergence validity, and discriminative validity of the Employer Brand Scale. It adopts the test method of factor analysis to simplify the employer brand evaluation system. In this study, SPSS software is used to carry out Bartlett and KMO tests [24]. The approximate chi-square value in the Bartlett ball test used was 2809.036, and the significance level was less than 0.05; the KMO value was 0.933. It is believed that the smaller the significance level of the Bartlett sphericity test, the more the relationship between the original variables; a KMO value of 0.9 or more is excellent, and a value between 0.8 and 0.9 is good. 0.7-0.8 is fair, 0.6-0.7 is substandard, and 0.5-0.6 is very bad. From the calculation results, the data of this study is suitable for exploratory factor analysis.

Since the proposed evaluation system referenced by the employer brand scale was composed of four dimensions and six subdimensions, we chose two-, three-, four-, five-, and six-factor models when doing exploratory factor analysis. The two-factor and three-factor models explain less than 60% of the total variance, and the effect is not ideal. The five-factor and six-factor structures all have a situation where one dimension contains only one element item. Through factor rotation, it is found that, in the two evaluation items of "the company provides compensation that matches the employee's contribution" and "the company has a reasonable performance management method," the factor load in the four components is less than 0.5, so we excluded these two employer brand assessment items reanalyzed by factor analysis. Items with a factor load greater than or close to 0.5 are integrated into one component, and the rotating component matrix is obtained as shown in Table 4.

The four evaluation dimensions after factor rotation are different from the dimension division in Table 1. Therefore, it is necessary to redefine and name each dimension after rotation. Combining with Maslow's hierarchy of needs theory [25], it can be seen that the items in the first dimension are related to the safety needs of employees, such as good income, personal ability improvement, welfare benefits, and training system. The necessary conditions for safety requirements, "product and service innovation," and "corporate social responsibility," represent enterprises' good future development prospects and are also an important factor in meeting personal safety requirements. Therefore, the first dimension is called safety requirements, represented by s; the items in the second dimension are all related to the self-realization needs of employees, such as fulfilling employee promises, attractive corporate culture, and fair and equitable employment principles, and position promotion is a necessary condition for personal career development, which is beneficial to employees career self-realization, so the second dimension is named self-realization needs, denoted by *A*. The items in the third dimension are all related to employees' respect needs, such as respect for employees, efficient communication mechanisms, and harmonious interpersonal relationships. It is a necessary condition for individuals to be respected, so the third dimension is named respect demand, denoted by *R*. The items in the fourth dimension are all related to the experiential needs of employees, such as a comfortable working environment, a healthy working atmosphere, and a good experience. The company's development prospects are a necessary condition for a good personal work experience, so the fourth dimension is named experiential needs, denoted by *E*.

Using the AMOS which is a powerful structural equation modeling software a confirmatory factor analysis of each dimension was carried out to do a confirmatory factor analysis of each dimension as given in Table 5. It is found that *S*1 (the company has good revenue prospects) and *S*6 (the company can well assume corporate social responsibility) dimensions are compared with each other, and there are multiple intersections of dimensions. The values of chi-square/d*f* after being eliminated are all less than 3, and $P > 0.05$, AFGI, and CFI are greater than 0.9, RMSEA is less than 0.08, and standardized SMC is greater than 0.36, indicating the evaluation of each dimension; thus the effect is better. The redesigned employer brand evaluation system and evaluation scale as shown in Table 5 simplified the original four evaluation dimensions, six evaluation subdimensions, and 18 evaluation items into four new evaluation dimensions. The evaluation items are well integrated with the demand theory, which reduces the difficulty of the employer brand evaluation system in an enterprise application to a certain extent, which is conducive to the company's targeted employer brand building from the "employee needs."

The convergence validity of Table 5 was tested and the test results are shown in Table 6. It can be seen from the convergent validity results that the standardized factor load is greater than 0.6. The reliability of the questions is all greater than 0.36, most of which are greater than 0.5, indicating that the reliability of the questions is good. The C.R. values are all greater than 0.7, indicating that each construct of the internal consistency of the facets is good. The AVEs are all greater than the threshold value of 0.36 and exceed the recommended value of 0.5, representing that the facets have a high convergence validity and a strong explanatory ability topic.

TABLE 1: Initial employer brand evaluation scale.

Dimension	Subdimensions	Evaluation standard	Employer brand assessment items	1 2 3 4 5
Incentive system	Salary and benefits	Good income prospects	The company has good revenue prospects.	
		Perfect welfare package	The company has complete benefits.	
		Compensation matched to employee contribution	The company provides compensation that matches the contribution of employees.	
Organization system	Organization management	Principles of fair and just employment	The company has a fair and just employment principle.	
		Reasonable performance management	The company's performance management approach is very reasonable.	
		Reasonable performance management	The company has an efficient communication mechanism.	
	Working environment	Harmonious internal, interpersonal relationship	The company has a harmonious internal, interpersonal relationship.	
		The positive and healthy working atmosphere	The company has a positive and healthy working atmosphere.	
		Comfortable working environment	The company has a comfortable working environment.	
Growth system	Training development	Opportunities to improve personal core competencies	The company can provide more opportunities to improve personal core competencies.	
		Systematic training system	The company has a systematic training system.	
		Broad space for promotion	The company has broad space for promotion.	
Cultural system	Employer culture	Attractive corporate culture	The company has an attractive corporate culture.	
		Fulfill the promise to employees	The company can fulfill its promise to employees well.	
		Respect employees	The company respects employees.	
		Take social responsibility	The company can well assume corporate social responsibility.	
	Employer image	Continuous innovation of products and services	The company's products and services can continue to innovate.	
		The company has good development prospects	The company has good development prospects.	

TABLE 2: Job intention assessment scale.

Job intention assessment questions	1	2	3	4	5
If the company allows me to interview, I am very willing to participate in the interview.					
If I have the opportunity, I am very willing to work in the company.					
It takes hard work to enter the company, and I would like to do my best.					

TABLE 3: Sample structure distribution.

Demographic variables		Number of people	Percentage (%)
Gender	Male	167	42.17
	Female	229	57.83
Education	Undergraduate	107	27.02
	Junior college	6	1.52
	Master	286	72.22
School category	Higher vocational colleges	21	5.30
	General undergraduate colleges	142	35.86
	Building a world-class university	93	23.48
	World-class discipline construction universities	138	34.85

For the test of discriminative validity, we used the bootstrap method of Torkzadeh et al. [14] to calculate the 95% confidence interval of the correlation coefficient between the facets. If the confidence interval does not contain a 1, it means each facet is discriminative validity contain a 1, it means each facet is discriminative validity between the two. The test results are shown in Table 7 which shows that the confidence interval estimated by the bootstrap method does not contain a 1, indicating that the model has a better discriminative validity among various aspects.

TABLE 4: Rotation component matrix after optimization.

Rotating component matrix

Factor	Item content	Factor			
		1	2	3	4
First dimension	(1) The company has good revenue prospects	0.836			
	(2) The company can provide more opportunities to improve personal core competencies	0.769			
	(3) The company's products and services can continue to innovate	0.697			
	(4) The company has a systematic training system	0.663			
	(5) The company has complete benefits	0.661			
	(6) The company can well assume corporate social responsibility	0.536			
Second dimension	(1) The company can fulfill its promise to employees well		0.866		
	(2) The company has an attractive corporate culture		0.655		
	(3) The company has a fair and just employment principle		0.635		
	(4) The company has broad space for promotion		0.554		
Third dimension	(1) The company respects employees			0.502	
	(2) The company has an efficient communication mechanism			0.794	
	(3) The company has a harmonious internal, interpersonal relationship			0.748	
Fourth dimension	(1) The company has a comfortable working environment				0.812
	(2) The company has a positive and healthy working atmosphere				0.643
	(3) The company has good development prospects				0.624

TABLE 5: Demand-oriented employer brand evaluation system and scale.

Evaluation dimension	Assessment items
Safety requirements (S)	The company can provide a good opportunity to improve personal ability (S1)
	The company's products and services can continue to innovate (S2)
	The company has a systematic training system (S3)
	The company has comprehensive benefits (S4)
Self-actualization needs (A)	The company can fulfill its promise to employees well (A1)
	The company has an attractive corporate culture (A2)
	The company has a fair and just employment principle (A3)
	The company has a broad space for promotion (A4)
Respect for needs (R)	The company respects employees (R1)
	The company has an efficient communication mechanism (R2)
	The company has a harmonious internal, interpersonal relationship (R3)
Experiential needs (E)	The company has a comfortable working environment (E1)
	The company has a positive and healthy working atmosphere (E2)
	The company has good development prospects (E3)

TABLE 6: Convergence validity test table.

Facet	Topic	Parameter significance estimation				Factor loading	Topic reliability	Composition reliability	Convergence validity
		Instead	S.E.	t-value	P	Std.	SMC	CR	AVE
S	S3	1.000				0.762	0.581		
	S2	0.969	0.086	11.268	***	0.760	0.578	0.863	0.611
	S4	1.031	0.087	11.783	***	0.797	0.635		
	S5	1.158	0.097	11.905	***	0.806	0.650		
A	A3	1.000				0.779	0.607		
	A2	0.665	0.080	8.297	***	0.604	0.365	0.799	0.501
	A1	0.793	0.083	9.575	***	0.712	0.507		
	A4	0.873	0.090	9.689	***	0.725	0.526		
R	R3	1.000				0.732	0.536		
	R2	1.036	0.109	9.524	***	0.837	0.701	0.803	0.578
	R1	0.944	0.101	9.381	***	0.704	0.496		
E	E3	1.000				0.814	0.663		
	E2	0.768	0.071	10.861	***	0.830	0.689	0.824	0.611
	E1	0.645	0.064	10.111	***	0.693	0.480		

Table 7: Bootstrap test results.

Parameter	Estimate	Lower	Upper	P
S-E	0.908	0.795	0.97	0.002
S-E	0.797	0.679	0.896	0.002
S-R	0.835	0.758	0.912	0.002
E-A	0.672	0.504	0.81	0.003
E-R	0.803	0.707	0.901	0.002
A-R	0.845	0.685	0.972	0.002

3.3. *Scale Reliability Test.* Reliability refers to the consistency and stability of the results obtained by the scale. The reliability test generally uses Cronbach Alpha to test [26]. This study also uses Cronbach Alpha to test the internal reliability. Generally, when the Cronbach coefficient is greater than 0.7, the reliability is good. Otherwise, the scale must be revised or reorganized. The results of the reliability test are shown in Table 6 and the test results are shown in Table 8. It can be seen from Table 8 that the alpha coefficients of each measurement dimension are all above 0.7, and the alpha coefficients of the dimension scales after deleting any items have not increased significantly. Therefore, the employer brand evaluation scale used in this study has good reliability.

4. Exploring the Relationship between Employer Brand and Job Intention

4.1. *Research Hypothesis.* To explore which factors of employer brand are more attractive to job-seekers, this study used research data as the basis. It draws on relevant literature on the relationship between employer brand and job search intention and proposes the following research hypotheses:

Hypothesis H1: Employer brand has a significant positive effect on the job-seeking tendency of job-seekers in the banking industry.

Hypothesis H1a: The safety demand dimension in the employer brand has a significant positive impact on the job-hunting intention of job-seekers in the banking industry.

Hypothesis H1b: The self-fulfillment demand dimension in the employer brand has a significant positive effect on the job-hunting intention of job-seekers in the banking industry.

Hypothesis H1c: The respect demand dimension in the employer brand has a significant positive impact on the job-hunting intention of job-seekers in the banking industry.

Hypothesis H1d: The experiential demand dimension in the employer brand has a significant positive impact on the job-hunting intention of job-seekers in the banking industry.

4.2. *The Empirical Process.* With job-hunting intention as the dependent variable and employer brand as the independent variable, linear regression analyses were performed, and stepwise regression analysis was used. The analysis results are shown in Tables 9 and 10, respectively.

Table 8: Reliability test results.

Dimension	Item	Cronbach α	Item deleted Cronbach Alpha value
S	S1		0.83
	S2	0.862	0.829
	S3		0.818
	S4		0.816
A	A1		0.739
	A2	0.797	0.781
	A3		0.721
	A4		0.742
R	R1		0.758
	R2	0.799	0.68
	R3		0.741
E	E1		0.551
	E2	0.772	0.698
	E3		0.803
Total table		0.928	

It can be seen from Table 9 that, by observing the changes in the *R* Square value, it can be seen that, after adding the experiential needs of the occupation, the equation's ability to explain job intentions has been enhanced. The *R*-value of model 2 is 0.742, the *R* Square value is 0.55, the Adjusted *R* Square value is 0.546, and the fit is good. This shows that the significance of the *F* statistic is good, and the Durbin-Watson value is 2.158, which is close to 2, indicating residuals and independent variables are independent, so the overall review is remarkable. This confirms that employer brand has a significant positive effect on job search intention, and the H1 hypothesis has been verified. The step-by-step analysis results are shown in Table 10. The VIF value is less than 10, indicating that the model does not have the problem of multicollinearity. In model 2, *S* (safety demand dimension) and *E* (experience demand dimension) enter the regression equation. The *t* values are 7.056 and 5.144, respectively, which are greater than 2, and the sig value is both 0.000. This shows that the regression results are significant. Among them, the occupational safety requirements corresponding to the graduated banking job applicants' job-hunting tendencies are greater than the occupational experiential needs, and the impact coefficients are 0.459 and 0.335, respectively. According to the regression results, the employer brand's safety needs and experiential needs dimensions have a significant positive impact on college graduate job applicants in the banking industry, verifying the hypotheses H1a and H1d. The dimensions of self-fulfillment needs and respect needs in the employer brand have not entered the regression equation, indicating any

TABLE 9: Reliability test results.

Model	R	R square	Adjusted R square	R square change	Sig. F change	Durbin-Watson
1	0.706[a]	0.499	0.497	0.499	0.000	2.158
2	0.742[b]	0.550	0.546	0.051	0.000	

a. predictors: (constant), S; b. predictors (constant), S, E; c. Dependent Variable: (function value), D.

TABLE 10: Coefficients.

Model		Unstandardized coefficients		Standardized coefficients	t	Sig.	Collinearity statistics	
		B	Std. error	Beta			Tolerance	VIF
1	(Constant)	1.529	0.184		8.331	0.000		
	S	0.691	0.045	0.706	15.299	0.000	1.000	1.000
2	(Constant)	1.292	0.18		7.165	0.000		
	S	0.449	0.064	0.459	7.056	0.000	0.454	2.201
	E	0.301	0.058	0.335	5.144	0.000	0.454	2.201

significant impact on college graduate job applicants, indicating that the assumptions H1b and H1c are not valid.

The safety demand and experiential demand dimensions in the employer brand have a significant positive effect on college student job applicants in the banking industry, which may come from the following two reasons: On the one hand, it is because college student job applicants have just entered the society and lack material foundations. Therefore, special attention is paid to the factors that can meet the safety needs; on the other hand, because contemporary college students are the new generation after 1995, enjoying the dividends of China's rapid economic growth, family material conditions are relatively good. Most of them are single children who enjoy life, so they pay special attention to experiential needs, such as the working environment.

The professional self-fulfillment needs and professional respect demand dimensions in the employer brand have no significant impact on college student job-seekers, which may be due to the following two reasons: the professional respected needs dimensions and also factors valued by contemporary college students in the banking industry. The possible reason for this phenomenon is that Chinese contemporary college student job-seekers are affected by severe forms of employment and the impact of "money worship" and other thoughts. What is more important is the benefits and feelings that work can bring to them at the moment, such as safety requirements. The salary and benefits, the working environment in terms of experiential needs, etc., and the need for relatively long-term self-realization and respect that are difficult to feel intuitively are not valued. On the other hand, the possible reason is that the Chinese banking companies represented by the Industrial and Commercial Bank of China are not doing well in employee self-realization and respecting needs, which creates a more obvious stereotype for job applicants, as they come to apply for the jobs. College students no longer have high expectations due to these two aspects. The possible reasons for this phenomenon are as follows: First, the self-fulfillment demand dimension in the employer brand, which mainly evaluates the company's promotion space, fair and just employment principles, and commitment to employees.

These aspects are the state-owned enterprises in China's banking industry. Most of China's banking industry is state-owned enterprises, with a long history, low staff turnover, and slow promotion of new employees. State-owned enterprises, on the other hand, have strong administrative colors and complex interpersonal relationships. In terms of employment, achieving complete fairness and justice is difficult. Corporate culture is more conservative than that of private businesses.

It frequently pays more attention to directives from superiors than to promises made to employees. Aside from the influence of Internet finance, the banking business has slowed in recent years, making it difficult to locate fresh employment candidates. As a result, achieving professional self-realization in state-owned banks is more challenging. The second is the respect demand dimension in the employer brand, which mainly evaluates whether the company respects employees and has an efficient communication mechanism and harmony. These contents are also the shortcomings of Chinese state-owned banks. The hierarchical system of state-owned banks in China is more obvious. There are fewer opportunities for discussion and communication between the senior and the grassroots. It is difficult for employees to feel respected and have harmonious interpersonal relationships.

5. Conclusion

This study selected the employer brand evaluation system widely used in China through questionnaire surveys and data mining. Using Maslow's hierarchy of needs theory and factor analysis methods, the original employer brand evaluation system was resimplified, and a new employer brand evaluation was developed. The new scale was used to explore the relationship between employer brand and college students' job-hunting intentions. It was found that the safety needs and experiential needs dimensions in the employer brand have a significant positive impact on college student job-seekers in the banking industry, while employer measurements of self-actualization needs and respect needs in the brand have no significant impact on college student job-

seekers. Moreover, this study showed, on the one hand, that Chinese banking companies, especially state-owned banks, should further strengthen the construction of safety requirements and self-fulfillment requirements in terms of employer brand building and enhance their attractiveness to outstanding talents through comparative advantages. They should reshape their image, break the stereotypes of jobseekers, and make up for their shortcomings. On the other hand, it showed that contemporary Chinese college student job-seekers pay more attention to the short-term and directly experienced safety and experiential needs and ignore the long-term ones. The need for self-realization and respect is difficult to feel in the short term. Since the data collection objects of this study are contemporary college students who participated in ICBC campus recruitment, the research conclusions of this study are also mainly applicable to Chinese state-owned banks represented by ICBC. Future work is required to see if candidates in the same age group reach the same findings.

Data Availability

The data underlying the results presented in the study are available within the manuscript.

Conflicts of Interest

The authors declare no conflicts of interest.

References

[1] F. Lievens, G. Van Hoye, and B. Schreurs, "Examining the relationship between employer knowledge dimensions and organizational attractiveness: an application in a military context," *Journal of Occupational and Organizational Psychology*, vol. 78, 2005.

[2] H. Fugang, L. Peng, S. Xinpeng, Z. Lu, S. Zhengyu, and H. Xiuyu, "Model construction and measurement of employer brand," *Journal of Beijing University of Aeronautics and Astronautics*, vol. 25, no. 1, pp. 85–92, 2012.

[3] T. Ambler and S. Barrow, "The employer brand," *Journal of Brand Management*, vol. 4, no. 3, pp. 185–206, 1996.

[4] B. Gardner and S. Levy, "The product and the brand," *Harvard Business Review*, vol. 33, pp. 33–39, 1995.

[5] S. Lloyd, "Branding from the inside out," *Business Strategy Review*, vol. 19, pp. 64–66, 2008.

[6] K. B. Backhaus, "An exploration of corporate recruitment description on monster," *Journal of Business Communication*, vol. 41, pp. 115–136, 2004.

[7] N. J. Allen and J. P. Meyer, "The measurement and antecedents of affective, continuance and normative commitment to the organization," *Journal of Occupational and Organizational Psychology*, vol. 63, no. 1, pp. 11–18, 1990.

[8] J. Sullivan, "J" eight elements of a successful employment brand," *E.R. Daily*, vol. 2, 2004.

[9] Z. Yongguo, D. Xuefeng, and L. Yingwu, *The Blue Book of Chinese Employer Brand*, China Labor and Social Security Press, Beijing, China, 2008.

[10] X. Y. Huang, "Employer Branding Based on Job Pursuit Attraction: Constructure and Measurement," in *Proceedings of the InternationalConference on E-Business and E-Government*, Guangzhou, China, May 2010.

[11] H. Fugang, L. Feng, S. Daojun, X. Chunjin, and S. Xunpeng, "The relationship between employer brand structure and job-seeking tendency," *Psychological and Behavioral Research*, vol. 14, no. 05, pp. 647–656, 2016.

[12] J. S. Levy and W. Bastos, "A history of the concept of branding: practice and theory," *Journal of Historical Research in Marketing*, vol. 4, 2012.

[13] A. Vinokur and R. D. Caplan, "Attitudes and social support: determinants of job-seeking behavior and well-being among the Unemployed1," *Journal of Applied Social Psychology*, vol. 17, no. 12, pp. 1007–1024, 1987.

[14] G. Torkzadeh, X. Koufteros, and K. Pflughoeft, "Confirmatory analysis of computer self-efficacy," *Structural Equation Modeling: A Multidisciplinary Journal*, vol. 10, no. 2, pp. 263–275, 2003.

[15] L. F. Love and P. Singh, "Workplace branding: leveraging human resources management practices for competitive advantage through "best employer" surveys," *Journal of Business and Psychology*, vol. 26, no. 2, pp. 175–181, 2003.

[16] T. Schlager, M. Bodderas, P. Maas, and J. Luc Cachelin, "The influence of the employer brand on employee attitudes relevant for service branding: an empirical investigation," *Journal of Services Marketing*, vol. 25, no. 7, pp. 497–508, 2011.

[17] A. Robertson and A. Khatibi, "The influence of employer branding on productivity-related outcomes of an organization," *The IUP Journal of Brand Management*, vol. 10, no. 3, pp. 17–32, 2013.

[18] N. Kashive and V. T. Khanna, "Study of early recruitment activities and employer brand knowledge and its effect on organization attractiveness and firm performance," *Global Business Review*, vol. 18, no. 3, pp. S172–S19, 2017.

[19] V. Kashyab and S. Rangnekar, "The mediating role of trust: investigating the relationships among employer Brand perception and turnover intentions," *Global Business Review*, vol. 17, no. 3, pp. 64S–75S, 2016.

[20] D. Kucherov and A. Zamulin, "Employer branding practices for young talents in IT companies (Russian experience)," *Human Resource Development International*, vol. 19, no. 2, pp. 178–188, 2016.

[21] Y. Shiwei and A. Abas, "Data science talents mining from online recruitment market in China based on data mining technique," *Journal of ICT in Education*, vol. 8, no. 2, pp. 118–125, 2021.

[22] Y. Zhan and Y. Yan, "Construction and optimization of recruitment websites in China," in *Proceedings of the 2011 Fourth International Conference on Business Intelligence and Financial Engineering*, pp. 143–146, IEEE, Wuhan, China, October 2011.

[23] L. Moroko and M. D. Uncles, "Characteristics of Successful Employer Brands," *Brand Management*, vol. 16, no. 3, pp. 160–175, 2008.

[24] R. A. Kader, M. R. B. Mohamad, and A. H. Ibrahim, "Success factors for small rural entrepreneurs under the one-district-one-industry program in Malaysia," *Contemporary Management Research*, vol. 5, no. 2, 2009.

[25] S. McLeod, "Maslow's hierarchy of needs," *Simply psychology*, vol. 1, no. 1-18, 2007.

[26] C. Fornell and F. David, "Evaluating structural equation models with unobservable variables and measurement error," *Journal of Marketing Research*, vol. 18, no. 1, 1981.