

Research on the Influence of Organization-based Self-Esteem on New Generation Employees' Innovative Behavior Based on SEM

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Abstract:

Based on conservation of resource theory, this study regards organization-based self-esteem as personal resources, exploring the influence mechanism of organization-based self-esteem on the new generation employees' innovative behavior from the perspective of resource function. The research utilizes SPSS25.0 and Mplus8.3 to analyze 325 two-stage questionnaire survey data from 25 Chinese enterprises, and the main effect and mediating effects are tested by using the structural equation model. The results of the empirical analysis indicate that organization-based self-esteem has significant positive effects on innovative behavior, and work engagement mediates the relationship between organization-based self-esteem and innovative behavior. Therefore, the study provides a reference for better managing the new generation employees' innovation behavior.

Keywords: *New generation employees, Organization-based self-esteem, Innovative behavior, Structural equation model, Conservation of resource theory.*

I. INTRODUCTION

At present, post-90s and post-95s new generation employees are becoming increasingly important sources of innovation in Chinese enterprises. They are willing to accept new things, like to create something new and original, dare to challenge authority, and are more eager to achieve self-worth [1]. At the same time, they grew up in the era of globalization, which makes their self-cognition influenced by both the self-concept of Chinese traditional culture and the self-definition of Western culture, showing distinct bicultural characteristics, ie they are not only accustomed to defining their self-worth through Guanxi or collective, but also tend to focus on their own importance to the organization and increasingly pursue the realization of self-worth in the organization [1]. Therefore, how the new generation employees who are eager to achieve self-worth innovate, has become a hot issue of concern in the business and academic circles [2].

The concept of organization-based self-esteem (OBSE) captures the need of new generation employees that they focus on their own importance and realize their self-worth in the organization. It can be seen that

OBSE can more represent the self-cognitive state of the Chinese new generation employees in the organization, which is a typical personality characteristic with strong explanations for individual attitudes and behaviors [3]. Employees' innovative behavior (EIB) refers to all kinds of behaviors in which individuals produce creative ideas in the work process and strive to find new methods, technologies and processes to implement the creative ideas, which has high risks and consumes individual mental resources [4]. Based on conservation of resource theory, OBSE is considered as personal characteristics resource for employees. Employees with high OBSE enjoy sufficient psychological resources to better prevent resource loss and get new resources, thus gaining positive experience [5]. Therefore, it can be predicted that OBSE can affect EIB.

In the current research about organization-based self-esteem on employee innovation behavior, OBSE was mainly regarded as a self-evaluation or cognitive state [3]. These studies mainly used self-consistency theory and self-concept theory to explore its impact on innovative behavior [6], arguing that employees with high-level OBSE like to take risks to engage in innovative behaviors extremely. At the same time, some studies about the internal mechanism and organizational context of OBSE on EIB, discussed the mediating effect of knowledge sharing and work meaningfulness [7], and the moderating effect of perceived organizational support and structural formalization [8]. However, these studies rarely involve the conservation of resource perspective, and seldom consider OBSE as personal characteristics resources to explore its' effect on EIB.

Starting from the conservation of resource theory, organization-based self-esteem as personal resources can influence employees' behavior by affecting their cognition and emotion in work role engagement [9]. It means that high-level OBSE may support and incentive employees to fully engage in work, enhances their motivation and enthusiasm [5], and further promotes employees to concentrate on work and constantly overcomes various work challenges, enabling new generations employees to initiate innovative behavior [10]. Thus, OBSE as a personal resource, can improve their work role engagement, supporting new generation employees' greater ability to engage in risky and innovative behaviors.

In summary, based on the perspective of the conservation of resource theory, we take post-90s and post-95s new generation employees as the research object, and regards OBSE as personal resources, exploring the impact of OBSE on EIB from the perspective of resource function and the mediating effect of work engagement on the relationship between them. Based on the above analysis, we propose the following theoretical research model (See Fig 1).

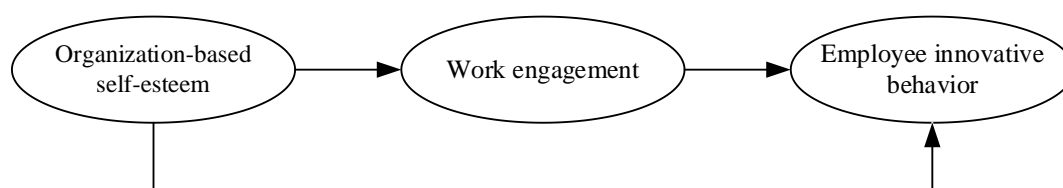


Fig 1: The theoretical research model

II. RESEARCH HYPOTHESIS

2.1 Organization-based Self-esteem and Employee Innovative Behavior

Organization-based self-esteem means the degree to which employees believe that their work role in the organizational situation can meet their needs, which reflects the individual's judgment of their status and value in the workplace as a specific organizational member [11]. Employees with high OBSE perceive themselves as important, meaningful, effective, and valuable in the workplace [11].

Through several studies, the high-quality OBSE supports employees to be more willing to make behavior beneficial to the organization, and tend to actively implement extra-role behavior [12]. Employees with low OBSE often doubt whether their efforts and dedication can bring new ideas of value to the organization, and also doubt their ability to implement new ideas [13], while employees with high OBSE have a positive self-perception and tend to take organizational goals and value as part of their own [11]. They show a high-level sense of mission and responsibility to their organization, and are glad to greatly take risks and engage in more innovative behaviors to demonstrate their abilities and values and gain greater organizational benefits.

According to conservation of resource theory, employees tend to preserve, protect and acquire resources, employees with rich resources will pursue more new resources [5]. OBSE is a personal characteristic resource with important function and value, which helps individuals to acquire more new resources [5]. Compared to employees with low OBSE, the high-level OBSE employees are more confident in their ability to perform their roles in the organization, get abundant organizational resources and support, and are more sensitive to resource acquisition [14]. They are more inclined to make risky resource investments to acquire new resources by proactively implementing innovative behaviors, and can better prevent resource depletion due to risk-taking, thereby increasing the resource returns of individuals and organizations [5]. In this situation, employees will regard the implementation of innovation behavior as an important opportunity to obtain new resources, believing that more resources can be obtained through innovation (such as organizational status, self-worth, salary, etc.). These rich new resources make individuals more believe in their own value and ability, and then experience a higher level of OBSE, which will further enhance the motivation and ability of individuals to get new resources, making them more willing to implement innovative behaviors. Following this iteration, the high-quality OBSE new generation employees will be increasingly willing to carry out creative activities to achieve the goal of spiraling resource gains. Therefore, we propose the hypothesis.

HI: Organization-based self-esteem positively affects employees' innovative behavior.

2.2 Mediating Role of Work Engagement

Work engagement is a positive, fulfilling emotional and cognitive state related to work, which reflects an individual's level of commitment to their work role, its characteristics are vigor, dedication, and

absorption [15]. Vigor refers to the employee has abundant energy and good mental resilience; Dedication refers to the employee who has a strong sense of meaning, pride and full enthusiasm for work, and can devote himself or herself to the work and accept work challenges; Absorption is characterized by the individual's ability to concentrate on work and to take pleasure in it, they feel that time passes quickly and don't want to disengage from the work [10].

Several studies suggested that OBSE as an important psychological resource for employees in the workplace [5], plays an important role in the development of individual work engagement levels [15]. Employees with high OBSE have a wealth of resources and can get more resource benefits for fewer resources, making them highly motivated and dedicated to their jobs, thus showing a higher level of work engagement [5]. In addition, high-level OBSE can stimulate a sense of meaning, security and acquisition in an individual's commitment to their job role engagement, promoting employees to experience high-quality work engagement [15]. Specifically, high-level OBSE employees believe that they can compete their work roles, tend to internalize the organization [5], and are more willing to invest in work roles to strengthen positive self-perception and meet their resource acquisition needs. And employees with high OBSE have positive emotions in the workplace, which will be more confident and optimistic about the working environment. This high level of psychological security can reduce the negative impact of resource depletion in the process of work engagement [5]. Also, high OBSE employees have a strong ability to access resources and believe that they have enough resources to perform their role tasks [5]. In short, employees with a high level of OBSE are more likely to produce a high quality of work engagement and performance.

Innovative behavior is a complex behavior consisting of many links including the generation and implementation of ideas. It is a series of uncertain and risky attempts, which not only requires employees to have certain knowledge, ability and motivation, but also requires enough time and energy to the work, perseverance and courage to face various difficulties and setbacks [4]. Work engagement is a positive emotion and motivation state related to work, which can stimulate the enthusiasm and initiative of employees, thus contributing to their innovative behavior [16]. Employees with the high level of work engagement always persist in pursuing challenges at work, which helps to stimulate their intrinsic creative motivation. In this state of highly creative motivation, the possibility of individual continuous exploration of innovation is greatly increased. Therefore, these characteristics of high levels of work engagement employees can contribute to more innovative behavior.

From the conservation of resource perspective, OBSE has natural motivational properties as a personal resource, which can stimulate individual motivation, increase employees' work engagement, and thus positively affects employees' work behavior [5]. The higher employees' organization-based self-esteem, the higher quality of meaning, security, and acquisition they experience in their work role engagement, and show the higher level of work engagement. Employees with the higher work engagement are full of vigor, dedication, and absorption in their work [16]. They are more likely to generate creativity and persist in the implementation process, and carry out more innovative behaviors. Based on these reasons, this study proposes the following assumptions.

H2: Work engagement mediates the relationship between OBSE and innovative behavior, such that OBSE increases employees' work engagement, and the increased work engagement promotes employees' innovative behavior.

III. RESEARCH METHODOLOGY

3.1 Sample and Procedures

The sample was 325 post-90s and post-95s new generation employees from 25 enterprises in Nanjing and Suzhou of China, including manufacturing, software, information technology services, and construction industries. Accordingly, this study used a two-stage questionnaire to collect data to minimize the common method bias brought by a cross-sectional survey. At Period 1, this research measures organization-based self-esteem and control variables. At Period 2 (4 weeks later), data on work engagement and innovative behavior were collected.

We distributed the questionnaires with the cooperation of the company's human resource department. To meet employees' confidentiality requirements and get as factual data as possible, we collected questionnaires in a specific conference room, and employees who participated in the survey directly returned the questionnaire to us. 400 questionnaires were distributed at each stage. At Period 1, we received 367 filled questionnaires and 358 in the second stage. In this study, the questionnaire was screened according to the matching and response conditions. After eliminating the invalid questionnaires, 325 valid questionnaires were left, and the effective recovery rate of the questionnaire was 81.25 %.

The demographics of the respondents were as follows: 58.77% were male, and 41.23% were female. Their ages varied from 25 years and below (11.08%), 26 years-30 (49.23%), 31 years and above (39.69%). Participants' highest level of education included bachelor' s degrees (81.23%), junior college degrees and below (9.54%) and master's degrees and above (9.23%). Moreover, their work seniorities varied from 4 years-6 (40.31%), 1 year-3 (27.69%), 7 years-10 (26.77%), and 1 year and below (5.23%).

3.2 Measurement

In this study, to ensure reliability and validity of the measurement scales, the mature scales were used, have been published in prestigious international journals and validated many times in the China context. The research variables' questionnaire items were measured using a seven-point Likert scale, 1 means strongly disagree and 7 means strongly agree.

3.2.1 Organization-based self-esteem

Organization-based self-esteem was measured using a 10 items global scale developed by Pierce et al. (1989) [11]. Typical items such as "I am important in this organization". Cronbach's alpha was 0.929.

3.2.2 Work engagement

Work Engagement was measured with 9 items by Schaufeli et al. (2006) [17]. This scale consisted of three dimensions, which included vigor, dedication and absorption. Typical items such as “At my work, I feel bursting with energy”. Cronbach’s alpha was 0.883.

3.2.3 Employee innovative behavior

Employee innovative behavior was measured using 6 items developed by Scott and Bruce (1994) [4]. The sample item: “I am glad to promote and champion ideas to others at work.” Cronbach’s alpha was 0.857.

3.2.4 Control variables

To more clearly confirm the relationship between the variables and avoid the impact of other irrelevant variables, this study used gender, age, education level, and tenure as control variables.

3.3 Analytical Method

In this study, we used SPSS 25.0 and Mplus8.3 to analyze the questionnaire data. The analysis strategies were as follows: firstly, we used SPSS 25.0 to conduct Harman’s Single-Factor Test, descriptive statistical analysis and correlation analysis. Secondly, we conducted confirmatory factor analysis through Mplus8.3, including testing convergent validity and discriminate validity. Thirdly, we utilized Mplus8.3 to test research hypothesizes, including using the bootstrapping approach to test the main effect and the mediating effect.

IV. EMPIRICAL ANALYSIS AND RESULTS

4.1 Common method Variance Test

In order to avoid the negative effect of common method deviation, this study takes measures to reduce common method deviation in the design and issuance of questionnaires. First, we used two rounds of anonymous questionnaire surveys. Also, we developed multiple versions of the questionnaire by reordering the questions. Since the collected data is self-reported by the same subject, although it is a two-stage survey, it is still necessary to test whether there is a common method bias effect. Thus, the Harman single factor analysis was utilized to examine the effect of common method biases. The results indicated that the explanatory covariate of the first factor was only takes 34.449% of the variance, which is lower than the recommended 40%. Therefore, the severity of common method biases is not significant.

4.2 Reliability and Validity Test

Firstly, in the study, SPSS 25.0 and Mplus 8.3 were utilized to test the reliability of the scales. As seen in TABLE I, Cronbach's α and Composite Reliability (CR) of the four scales were over 0.80, explaining that all measurements have good reliability. Secondly, the study used Mplus 8.3 to test convergent validity and discriminant validity. And the standardized factor loadings of all items were above the cut-off value of 0.60 and the Average Variance Extracted (AVE) of all scales ranged from 0.502 to 0.607 (AVE>0.5, see TABLE I), which shows that convergent validity within acceptable criteria. As shown in TABLE II, the correlation values for each construct were lower than the square root of each variable's AVE. Additionally, the confirmatory factor analysis (CFA) in Mplus 8.3 was performed, which revealed that the four-factor baseline hypothesized model (organization-based self-esteem, work engagement, supervisor-subordinate guanxi, employee innovative behavior) provides the best model fit ($\chi^2=277.059$, $df=203$, $\chi^2/df=1.365$, CFI=0.981, TLI=0.978, RMSEA=0.034, SRMR=0.033). This further illustrates that the discriminant validity of the measurements we used in this study is satisfactory.

TABLE I. Results of reliability and validity tests

| Scale | Number of items | Factor loading | Cronbach's α | Composite reliability | Average variance extracted |
|-------|-----------------|----------------|---------------------|-----------------------|----------------------------|
| OBSE | 10 | 0.603-0.891 | 0.929 | 0.933 | 0.586 |
| WE | 9 | 0.703-0.860 | 0.883 | 0.933 | 0.607 |
| EIB | 6 | 0.648-0.753 | 0.857 | 0.858 | 0.502 |

Notes: OBSE=organization-based self-esteem, WE=work engagement, EIB=employee innovative behavior.

4.3 Descriptive Statistical Analysis

As seen in TABLE II, the means, standard deviations and correlations for all scales are showed, including some control variables, which included gender, age, educational level and tenure with the organization. Descriptive analysis indicates that OBSE has a positive correlation with employee innovative behavior ($r=0.546$, $p<0.01$), and work engagement ($r=0.506$, $p<0.01$). Work engagement has a positive correlation with employee innovative behavior ($r=0.657$, $p<0.01$). The descriptive Statistical Analysis proved the significant correlation between OBSE, work engagement and employee innovative behavior, thus the hypotheses have been initially verified.

TABLE II. Means, standard deviations and correlations

| Variables | Mean | SD | 1 | 2 | 3 | 4 | 5 | 6 | 8 |
|----------------------|-------|-------|--------|---------|--------|---|---|---|---|
| 1. Gender | 1.412 | 0.493 | - | | | | | | |
| 2. Age | 2.286 | 0.654 | -0.040 | - | | | | | |
| 3. Educational level | 1.997 | 0.434 | -0.057 | -0.016 | - | | | | |
| 4. Tenure | 2.886 | 0.862 | -0.033 | 0.600** | -0.079 | - | | | |

| | | | | | | | |
|---------|-------|-------|---------|--------|---------|--------|-------------------------|
| 5. OBSE | 5.173 | 0.896 | -0.079 | 0.039 | 0.181** | 0.093 | (0.766) |
| 6. WE | 5.165 | 0.934 | -0.121* | 0.060 | 0.061 | 0.117* | 0.506** (0.779) |
| 7. EIB | 5.369 | 0.894 | -0.100 | -0.032 | 0.054 | 0.033 | 0.546** 0.657** (0.709) |

Notes: N=325, * p< 0.05, ** p< 0.01. The square root of AVE for each variable is shown in parentheses. OBSE=organization-based self-esteem, WE=work engagement, EIB=employee innovative behavior.

4.4 Hypotheses Test

In this research, we used Mplus 8.3 to construct Structural Equation Modeling(SEM) to test the hypotheses, and further verify the mediating effect between the variables using Bootstrapping, with a sample size of 10,000 and a confidence interval of 95%. The mediation model of work engagement was acceptable: $\chi^2 = 217.477$, $df=149$, $\chi^2/df = 1.460$, $CFI=0.980$, $TLI=0.977$, $RMSEA=0.038$, $SRMR=0.031$.

As seen in TABLE III, the results showed that the total effect is 0.594($p<0.001$; bias-corrected confidence intervals (95% CI): 0.478 to 0.689, not contain zero; percentile confidence intervals (95% CI):0.483 to 0.694, not contain zero), and the direct effect of organization-based self-esteem on employee innovative behavior is 0.205($p<0.05$, bias-corrected confidence intervals (95% CI): 0.024 to 0.383, not contain zero; percentile confidence intervals (95% CI): 0.023 to 0.382, not contain zero). Taken together, the organization-based self-esteem had a significant positive effect on new generation employees' innovative behavior, supporting H1. In addition, the indirect effect of the path "OBSE→WE→EIB" is 0.389($p<0.05$, bias-corrected confidence intervals (95% CI): 0.264 to 0.552, not contain zero; percentile confidence intervals (95% CI): 0.260 to 0.546, not contain zero). Thus, hypothesis H2 was also supported, the work engagement significantly mediated the relationship between the organization-based self-esteem and employee innovative behavior.

TABLE III. Regression results for main and mediation effect

| | Point Estimate | Products of Coefficients | | | BOOTSTRAP 10000 TIMES 95% CI | | | |
|-------------------------------|----------------|--------------------------|-----------|---------|------------------------------|-------|------------|-------|
| | | S.E. | Est./S.E. | P-Value | Bias Corrected | | Percentile | |
| | | | | | Lower | Upper | Lower | Upper |
| Total effect | 0.594 | 0.054 | 11.003 | 0.000 | 0.478 | 0.689 | 0.483 | 0.694 |
| Indirect effect (OBSE→WE→EIB) | 0.389 | 0.073 | 5.363 | 0.000 | 0.264 | 0.552 | 0.260 | 0.546 |
| Direct effect (OBSE→EIB) | 0.205 | 0.092 | 2.225 | 0.026 | 0.024 | 0.383 | 0.023 | 0.382 |

Notes: N=325, Bootstrap sample size = 10000, OBSE=organization-based self-esteem, WE=work engagement, EIB=employee innovative behavior.

V. CONCLUSION

5.1 Theoretical Contributions

In the work context of Chinese organizations, “post-90s and post-95s” new generation employees are increasingly pursuing the realization of self-worth, emphasizing their value to the organization. However, present studies rarely regard organization-based self-esteem as personal characteristics resource to explore its relationship with innovation behavior. Based on the conservation of resource theory, this study analyzed the influence mechanism of OBSE on the new generation employees’ innovative behavior from the perspective of resource function.

In addition, this study considered OBSE as employees’ personal resources, and explored the supporting role of new generation employees’ OBSE on innovation behavior from the perspective of resource function. Further, work engagement as an individual cognitive state was regarded as employees’ personal resource, and the mediating role of work engagement between OBSE and employee innovation behavior was expounded, thus revealing the path between OBSE and new generation employees’ innovative behavior.

In summary, this study focused on the functional characteristics of personal resources in the conservation of resource theory, and also provides a reference for designing management strategies to better promote new generation employees’ innovative behavior.

5.2 Managerial Implications

According to COR theory, employees tend to acquire, maintain, cultivate and protect the resources they value. Employees with more resources are more sensitive to resource acquisition and have stronger ability to obtain new resources. First, organization-based self-esteem is a distinctive individual characteristic resource of the new generation employees, enterprises can take measures in job design, positive feedback and reward to improve employees’ sense of OBSE, promoting their innovative behavior. For example, increasing their management participation, enhancing job autonomy, allowing them to undertake more challenging tasks and be directly responsible for the work results, so as to improve their sense of existence, value and acquisition in the organization, thus promoting more innovative behaviors. Second, managers can express their confidence in their subordinates by affirming and appreciating their innovative behaviors, consciously strengthen their communication and interaction with them, create a working environment of mutual trust and respect for freedom, and enhance their enthusiasm for work engagement, so as to guide employees to show more innovative behaviors.

5.3 Research Limitations and Prospects

Although this study has a certain theoretical contribution and practical value, future research should consider some limitations. Firstly, the samples only came from 25 enterprises in Nanjing and Suzhou,

which may affect the scope of application of the research conclusion. Future studies may consider expanding the scope of industry and region to verify or revise the findings through diverse data.

Secondly, this study adopted the way of employee self-report to collect two-stage questionnaire data. Although the Harman single factor test results showed that homologous variance was within the acceptable range, future studies can collect data on the corresponding variables from different sources (e.g., supervisors assess the innovative behavior of their subordinates), thereby increasing the rigor of research.

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