Analysis on Influence of Psychological Empowerment to Intrinsic Motivation of First-line Employees in Service Businesses
——An Empirical Analysis of Banking Line

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Abstract: Confirmatory Factor Analysis (CFA) of data from a sample of 336 employees further confirmed scales' factorial validity. Then structure equations modeling (SEM) was used to cross-validate the relationship between psychological empowerment and intrinsic motivation using the sample. The results suggested that psychological empowerment was positive related to intrinsic motivation; meaning was positive related to intrinsic motivation; self-efficacy was positive related to intrinsic motivation.

Keywords: service industry, contact employees, empowerment, intrinsic motivation

1 Raise the Question

The first-line employees that interact directly with customers are the link between external environment and inner organization. They play a key role in the process of understanding, filtering and interpreting the information and resources between the organization and customers; they also have to face the pressures and conflicts from many aspects. Therefore the incentive to these first-line employees is very important. At present, many domestic services firm encourage their front-line staff with pecuniary incentives, job promotion and other external rewards as the primary means of employee motivation, but have the internal motivation of staff incentives only as a supplementary means. On the other hand, the research shows that if the services firms want to respond to customer needs timely, they must empower the related rights to the contact employees so that they can respond flexibly to the customer needs. However, there are many difficulties in the practice of solving the problem of authorization. How to carry on the policy of authorization? And what kind of impacts will be brought to these staff? These issues are the urgent problems that need to be solved in the practices of management.

The intrinsic motivation is considered as the intervening agency between the external environment and human beings. In many cases, the external environment exerts its influence on employees by intrinsic motivation. We think it’s very necessary to discuss the relationship between empowerment and intrinsic motivation, especially the infections exerted by empowerment that the first-line employees must have.

2 Research Methods

2.1 Psychological Empowerment
Conger defined the empowerment as “The efforts of staff – The improvement of performance expectations = self-efficacy promotion”. Thomas and Velthous further proposed the concept of psychological empowerment based on the Conger’s definition, In their opinion, the empowerment should be the complex from individual experience to mental state or cognition. This complex is four kinds of cognitive gestalt: the meaning of work; self-efficacy; self-reliance and influence of the work. Spreitzer revised and reprogrammed the measures of an empowerment questionnaire based on the cognition model of Thomas&Velthouse(1990). And tested the reliability and validity for the empowerment scale. The result shows that: The internal consistency of the Psychological Empowerment Questionnaire is between 0.79-0.85. And the indicators of confirmatory factor analysis also reached the standards set before. It showed that the psychological empowerment has good reliability and validity up to the test standard. Afterward, the reliability and validity of the psychological empowerment was also confirmed by the internal scholars Li Chaoping, who researched the project in the context of Chinese
Based on the above theory we assume:
H1 The psychological empowerment is constituted by the four factors. They are: the meaning of work; self-efficacy; self-reliance and influence of the work.

2.2 The relationship between Empowerment and intrinsic motivation
Almost all of the relevant scholars classify the human motives into two major categories; they are “internal motivation” and “external motivation”. The intrinsic motivation is the one that is engaging in the activity itself. The external motivation is for certain purpose which is beyond the activity itself. Intrinsic motivation is good for the improvement of work efficiency, work quality and creativity. Meanwhile, it’s the link to influences of external factors, many external influences and stimulating factors affect the individual behavior through the intrinsic motivation, such as the sense of accomplishment, job satisfaction, etc.

How to effectively improve the front-line staff’s intrinsic motivation should be one of the concerns for these service enterprises. Many studies have proven that the empowerment can encourage the efforts of employees; the staff’s effort is increased when authorizing. E.g. the study results of Aghion & Tirole (1997), Baker, Gibbons and Murphy (1999).

Some empirical studies found that, the factors such as the participation in decision making, the sence of organization support, the sense of organization justice etc have a major impact on the work motivation and job performance. The positive affection on the organizations will make employees develop a positive emotion like “Love me, love my dog” on their own work. Accordingly, the negative emotional to organizations also have the opposite effect. Rhoadesand Eisenberger believe that, Higher sense of organization support will encourage staff to produce the responsibility to the organization’s construction and developments, and even can help achieve the goals of company. And also can help improve the positive emotion on organization and work. So it can conducive to the improvement of intrinsic work motivation. Meanwhile, related studies also found that, even if the level of the work control and pressure are higher, the sense of the organization support would help offset the negative effects and increase the level of intrinsic motivation. Eby proposed a unified model for antecedent and consequence variables which can affect intrinsic motivation. This model take all the following factors as the antecedent variables that affect staff’s intrinsic motivation, the factors are empowerment, organization support, organization justice etc that are seen in inner organization, and job characteristics, responsibility, external feedback. And an empirical test has been done.

We make the following assumptions based on the above theory.
H2 Psychological Empowerment has a positive significant effect on intrinsic motivation
Also we assume that the four dimensions of psychological empowerment have a significant positive effect on the improvement of intrinsic motivation. Those are:
H3 The meaning of work has a positive significant effect on the intrinsic motivation.
H4 Self-reliance has a positive significant effect on the intrinsic motivation.
H5 Self-efficacy has a positive significant effect on the intrinsic motivation.
H6 The influence has a positive significant effect on the intrinsic motivation.

3 Empirical Study
3.1 Scale Selection
We adopt the questionnaire of Psychological Empowerment Scale established by Spreitzer. Four parts included in the questionnaire: the meaning of work; self-efficacy; self-reliance and influence of the work. The work motivation scale we chosen is the intrinsic motivation scale made by scholar Wang Bin, who made it based on the “work preference scale” developed by Amabile (1994). The revised intrinsic motivation subscale has six topics. The cronbach’s α value of the sub-scale is 0.82. In this study, we adopt Likert’s five-point scale.
3.2 Samples and data
The survey is targeted at reception staff of commercial banks, included teller, customer manager, etc. These commercial banks are Sichuan branch of CBC, Sichuan Branch of ICBC, Bank of China Sichuan Branch. 85 branches in total. About 600 questionnaires were given out, and withdrew 504 questionnaires. After got back all the questionnaires, we sorted out the questionnaires, removed the questionnaires with much blanks and intense reflections. Finally received 336 valid questionnaires.

3.3 Survey process
All the surveys are completed by the investigators from the business enterprises in the concentrated period of time when they have the business training. Researchers answered certain questions on the spot. If some researchers were not at the scene of the survey, the survey agents have been trained in advance, and provided them with guidance and implementation manual. Before the survey, the testers will be told that the survey results are completely confidential; results are only for scientific research. Withdraw the questionnaires after the testers finished the test.

3.4 The results from exploratory factor analysis
The samples were randomly divided into two parts; the first part had 168 samples, used for exploratory factor analysis. The second part had 168 samples that are used for confirmatory factor analysis.

3.4.1 Exploratory factor analysis
The method of principal component analysis (PCA) was employed to analyze the empowerment scale in exploratory factors. Had the KMO sampling appropriateness test and Bartletts' spherical test, the value of the KMO is 0.86. The value of Bartletts' spherical test χ² is 2642.35 (degree of freedom: 66), reached the remarkable level. It demonstrates that data is suitable for factor analysis. Use principal component analysis and Promax oblique rotation method to analyze the multidimensional structure of individual innovative behavior. We extract four factors by using the standard of “Eigen value greater than 1, Load factor more than 0.50”. Total explained variance is 80.95%. Factor loading matrix is shown as table 1.

<table>
<thead>
<tr>
<th>number</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.90</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0.87</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0.88</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>0.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>0.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>0.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td>0.84</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td>0.94</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td>0.88</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td>0.90</td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td>0.93</td>
</tr>
</tbody>
</table>

3.4.2 Confirmatory factor analysis.
Use the data obtained from survey to verify the factor structure of psychological empowerment scal. And compared the factor 1 model - That all items measured the same dimension. Four factors models are meaning of work; self-efficacy; self-reliance and influence of the work in different dimensions. Use
Amos to have the confirmatory factor analysis, we can find that the fit indices includes: \( \chi^2/df \), GFI, AGFI, NFI, IFI, TLI, CFI, RMSEA etc. The results of CFA shown that Four-factor model of psychological empowerment is supported by the data. H1 gets the support from the data; the psychological empowerment is constituted by the four dimensions that are meaning of work; self-efficacy; self-reliance and influence of the work.

### Table 2: The CFA results for empowerment scale (n=336)

<table>
<thead>
<tr>
<th>Model</th>
<th>( \chi^2/df )</th>
<th>GFI</th>
<th>NFI</th>
<th>IFI</th>
<th>TLI</th>
<th>CFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>virtual model</td>
<td>40.62</td>
<td>0.61</td>
<td>0.58</td>
<td>0.59</td>
<td>0.49</td>
<td>0.59</td>
<td>0.245</td>
</tr>
<tr>
<td>One-factor</td>
<td>21.08</td>
<td>0.61</td>
<td>0.58</td>
<td>0.59</td>
<td>0.49</td>
<td>0.59</td>
<td>0.245</td>
</tr>
<tr>
<td>Four-factor</td>
<td>1.96</td>
<td>0.96</td>
<td>0.97</td>
<td>0.98</td>
<td>0.98</td>
<td>0.98</td>
<td>0.054</td>
</tr>
</tbody>
</table>

3.5 The result of main variables descriptive statistics analysis

From the table 1, we can see that the coefficient of concordance of meaning of work; self-efficacy; self-reliance, influence of the work and intrinsic motivation are 0.87, 0.88, 0.87, 0.90 and 0.85 respectively. All are over the critical level 0.7; therefore the data has an excellent reliability. Since all items in questionnaire are from the previous literature that have been proven and verified many times, so we can make sure that the data had good content validity.

### Table 3: The result of main variables descriptive statistics analysis (n=336)

<table>
<thead>
<tr>
<th>variables</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The meaning of work</td>
<td>1.97</td>
<td>0.75</td>
<td>0.87</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Self-efficacy</td>
<td>2.51</td>
<td>0.93</td>
<td>0.45</td>
<td>0.88</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Self-reliance</td>
<td>2.08</td>
<td>0.77</td>
<td>0.50</td>
<td>0.51</td>
<td>0.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Influence of the work</td>
<td>2.71</td>
<td>0.87</td>
<td>0.35</td>
<td>0.51</td>
<td>0.39</td>
<td>0.90</td>
<td></td>
</tr>
<tr>
<td>5. Intrinsic motivation</td>
<td>1.84</td>
<td>0.66</td>
<td>0.53</td>
<td>0.30</td>
<td>0.48</td>
<td>0.26</td>
<td>0.85</td>
</tr>
</tbody>
</table>

P.S.1: All correlation coefficients reached the remarkable level when p<0.01
P.S.2: The oblique & bold numbers above the diagonal are consistency coefficients of internal variables

3.6 Structure equation model analysis

The Synthetic Effects of empowerment on intrinsic motivation, Structure equation model was analyzed by using AMOS7.0. Test results as pic 1 shown, The fit indices are as follows: \( \chi^2/df=1.90 \), less than the critical value 3.5, GFI=0.97, NFI=0.95, IFI=0.98, TLI=0.97, CFI=0.98, all are over 0.90 level. RMSEA=0.052, far be less than critical value 0.08, this model is showing the good entirety fitness.

0.72

Pic 1: The relationship between empowerment and intrinsic motivation

P.S. The values in this model are the standardized path coefficient. P <0.01

We continue to use the software AMOS 7.0 structure equation model to study the relationship between the four dimensions of empowerment (they are meaning of work; self-efficacy; self-reliance, influence of the work) and intrinsic motivation. The test results are shown as pic 2. The fit indices are as follows: \( \chi^2/df=1.74 \), is less than the critical value 3.5, GFI=0.93, NFI=0.94, IFI=0.97, TLI=0.97, CFI=0.97, all are over the level 0.90, RMSEA=0.047, is far less than critical value 0.08, this model is showing the good entirety fitness.
The direction of the path coefficient and significance are two bases that can tell if the two variables are tenable.
The data verified and supported H2 (Psychological empowerment has a positive significant effect on intrinsic motivation), verified and supported the H3 (The meaning of work has a positive significant effect on the intrinsic motivation), Denied H4 (Self-reliance has a positive significant effect on the intrinsic motivation), Supported H5 (Self-efficacy has a positive significant effect on the intrinsic motivation). Denied H6 (The influence has a positive significant effect on the intrinsic motivation).

4 Analysis of the Results

4.1 The dimensional structures of psychological empowerment
In this study, we tested the four-dimensional structures of empowerment, at the same time; we also tested the reliability and validity of Spreritzer’s empowerment scale. The results show that, the Inner consistency of empowerment scale reached the requirements of organizational behavior science. The results of Exploratory factor analysis and confirmatory factor analysis shown that, the empowerment scale has a four-dimensional structure. The different dimensions of empowerment, including the meaning of work, self-efficacy; self-reliance, influence of the work, were associated with each other. The correlation coefficient is between 0.35 to 0.51, they were moderately correlated with each other. It shows that the empowerment in the domestic service sector is also a four-dimensional structure. The reliability and validity of empowerment scale is also verified under the special cultural background. This study result has good agreement with the result of this scale’s empirical research studied by some domestic scholars Li Chaoping etc.

4.2 The empowerment has a significant impact on intrinsic motivation.
This study shows that the empowerment has the significant positive impact on intrinsic motivation. In each dimension of empowerment, the meanings of work and self-efficacy have the significant positive impact on intrinsic motivation. This is same with the ideas from Fletcher, Hansson & Bailey, Li, Lee and Solmon, who agree that the self-efficacy can contribute to the internal motivation. However, self-reliance and the influence of the work don’t have the significant impact on intrinsic motivation.

5 Implications of Conclusions

5.1 Conclusion
The following conclusions can be obtained by the positive analysis of banking: Firstly, authorizing has a directly influence to intrinsic motivation of employees. Secondly, the meaning of work and self-efficacy of authorized dimensions have positive significant influence to intrinsic motivation of employees, but autonomy and impact of work have not the same significant influence.
5.2 Implications
First, in the banking industry or other services with similar characteristics, managers can improve intrinsic motivation of employees by giving authorization to them, which way is more durable than merely rely on external stimuli. Higher work motivation and creative consciousness will emerge after intrinsic motivation of employees improved.
Secondly, Modern service industries such as personal banking business is undergoing dramatic changes, from easy business processing to banking center, give greater emphasis on customer focus, and to satisfy all kinds of customer needs through differentiation and customization. So it is necessary to meet the needs of enterprise development through giving frontline staff correct authorization to improve their professional skills and quality of service. 
Thirdly, on the one hand, service enterprises should put importance on perceived meaning of work and self-efficacy of frontline staff; on the other hand, its can control staff autonomy and perceived impact of work properly. This is not only can achieve the purpose of increasing intrinsic motivation of employees, but also can reduce the negative influence caused by improper authorizations.

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References

[3]. Li chaoping, Li xiaoxuan, Shi kan, Chen xuefeng.
[14].WANG bin, Research of china enterprise technology talent’s innovation behavior[D], HWHAI
