

An Analysis of The Effects of Excess Qualification and Self-Efficacy on Individual Performance -- Based on Experimental and Mathematical Statistics Analysis

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Abstract — In order to improve the balanced development ability of enterprises in the economic market and create higher profits and values for enterprise organization and operation, the effects of excess qualification and self-efficacy on the individual performance were analyzed. The influence of different factors on individual performance was clarified by using the neural network analysis method and the factors were then screened. Next, the assessment index system based on the individual performance was constructed. Delphi method was introduced to analyze the weight value of the corresponding index. In the process, the quality and quantity of individual performance were selected as the assessment index of enterprise qualification surplus, and the index of personal attitude was taken as the evaluation index of employee self-efficacy. Then based on the analysis results, the action mechanism diagram of excess qualification on the individual performance was drawn, and then the action effect hypothesis of H1 was put forward. Combined with the causal variable model of self-efficacy, the mediating effect of self-efficacy on the individual performance were analyzed and the hypothesis of H2 was proposed. With a comprehensive discussion, the results of effect analysis were obtained: excess qualification had a negative impact on the individual performance, while self-efficacy had a positive impact on the individual performance.

Keywords — Excess qualification; Self-efficacy; The individual performance; Effect; Analysis method; Indicator.

1 INTRODUCTION

After the popularization and popularization of higher quality education in China, more talented people cannot get jobs that match their abilities. As a result, they had to roll into basic work. For example, doctoral graduates from prestigious universities and returnees with master's degrees could engage in technical positions, whereas they finally chose to work in work in the grass-roots in small-sized and medium-sized enterprises. This phenomenon caused great repercussions and public opinion discussions at the time. From the perspective of social industry economics, this development trend of talents was the embodiment of the inadequate utilization of resources in society, even could be identified as the loss and waste of resources. This

phenomenon would not only make the salary of talents deviate from the expected salary, but also cause enterprises with high ability talents to face great turnover risk^[1]. Additionally, when large quantities of talents flooded into grass-roots jobs, it would be an occupation of employment resources for social workers, which would eventually lead to serious development imbalance in the human resource market. Besides the effects caused by the qualifications of the surplus, the individual performance was also affected by self-efficacy with a deep analysis of the industrial development. Aiming at the balanced development of China's economic market, the individual performance was considered as an assessment index, research on the influence of excess aptitude and self-efficacy on the individual performance was conducted in this paper.

2 ANALYSIS OF THE EFFECT OF QUALITY EXCESS AND SELF-EFFICACY ON THE INDIVIDUAL PERFORMANCE

2.1 The establishment of an assessment index system based on individual performance

In order to improve the individual performance of the job group in the enterprise, and to obtain an acknowledgement of the impact of excess qualification and self-efficacy on the individual performance, it is necessary to establish an assessment index system based on the individual performance before relevant work. In this process, Delphi method was used to analyze the weight value of corresponding indicators in combination with the needs of enterprises in market organization and operation^[2]. The contents of the individual performance assessment index system were shown in Table 1 below.

TABLE 1 EVALUATION INDEX SYSTEM BASED ON THE INDIVIDUAL PERFORMANCE

Weight	Secondary index	Weight
0.32	Occurrence times of routine business	0.07
	Work ability shaping	0.07
	Innovation business quota	0.09
0.41	Business execution efficiency	0.11
	Team work to implement business efficiency	0.16
	Effective tasks completed	0.14
0.27	Work attendance	0.07
	Job discipline	0.05
	Sense of belonging	0.05
	Sense of responsibility and dedication	0.10

For the contents in Table 1, indicators such as the quality and quantity of the individual performance can be used to assess enterprise excess qualification. The index of personal attitude was taken as the evaluation index of employee self-efficacy. In this way, the construction of the assessment index system was constructed

2.2 The mechanism of excess qualification on the individual performance

Excess aptitude refers to the nature of personal ability and enterprise to provide jobs for its present serious mismatch phenomenon. Generally, employees believed that their own ability

was far higher than the ability of work in the enterprises within the state. Then the imbalance of cognitive would make the employees generate the ideas of their personal idle capital, which was not only conducive to the full play of individual ability, but was also bad to the improvement of personal performance^[3]. From this, the hypothesis H1 of the effect of excess qualification on the individual performance was proposed: Excess of qualification for the individual performance was negative, the impact of personnel working within the enterprise was "heard" state, the state would make the enterprise in the market at a disadvantage situation, causing the trend of the passive work eventually led to the talents. During this process, enterprises failed to improve the phenomenon of excess qualification in time, which led to inadequate use of organizational ability of personnel, and ultimately ultimately led to brain drain and significant decline of the individual performance of talents^[4]. With a comprehensive consideration above, the action mechanism diagram of excess qualification on the individual performance was constructed, and it was shown in Figure 1 below.

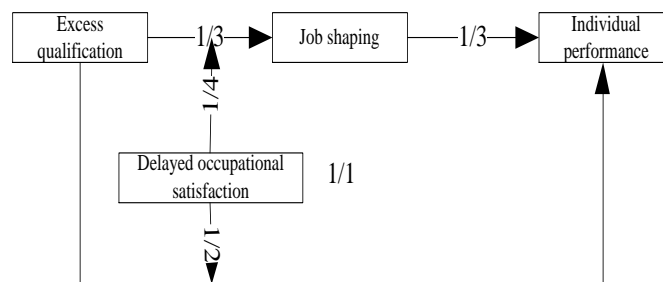


Figure 1 Effect Mechanism of excess qualification on individual performance

Drawn from Figure 1 above, it could be concluded that the enterprise's career delayed gratification. To some extent, it reflected the self-regulation ability of individual workers in the enterprise and the individual performance promotion regulation comprehensive level. When enterprises adjusted individuals' career delayed gratification, individual employees could restrain some irrational impulsive behaviors and restrain their own desires and external temptations, in order to realize adjustment of their own work behaviors and emotions^[5].

However, in this process, when the enterprise provided the opportunity to delay the job satisfaction for the over-qualified employees, they would consider from the perspective of long-term interests, to avoid short-term interests, and accelerated the process by creating higher profits for the enterprise and improving personal performance. But, if the over-qualified employees did not quickly realize that the enterprise have offered them plastic jobs in this procedure, they would think that they were unfairly treated by the enterprise, thereby weakening their enthusiasm and creativity. Simultaneously, corresponding the individual performance appeared a downward trend in this process. Although some enterprise employees expected to improve the status quo in some way during this process, most individuals chose to accept these problems. This also verified the hypothesis H1 proposed above: excess qualification had a negative impact on the individual performance. Based on the above analysis, in order to realize

the improvement of related problems in this aspect, internal post scheduling and rationalization should be carried out according to the needs of the enterprise in the market development. On this basis, according to the corresponding professional direction of high ability talents, to provide them with matching jobs and to improve the negative impact of excess qualification on individual performance.

2.3 The Mediating Effect of self-efficacy on the individual performance

After analyzing the mechanism of excess qualification on the individual performance, this chapter analyzed its mediating effect on the individual performance from the perspective of self-efficacy. During the process of analysis, it should be clear that self-efficacy was the prediction for the individual to perform some sort of social behavior prediction effect. While during the process of prediction, when an individual had clear instructions for a certain behavior, it could be achieved according to the goals set by themselves. This kind of cognition was a way of self-motivation, and it was also the main causal relationship between self-efficacy and the intermediary effect of the individual performance^[6].

For further understanding of the influence trend of this effect, a corresponding hypothesis H2 was proposed as follows. Self-efficacy had a positive impact on the individual performance. When employees had a higher self-awareness, they would deepen their neighboring work fields according to their own skill differences. At the same time, abilities transferred. To sum up, the essence of self-efficacy was the level of individual self-esteem, which played a significant role in promoting individual performance, and this role had a certain causal relationship. For a deep description of this relationship, causal variable model of self-efficacy was displayed in Figure 2.

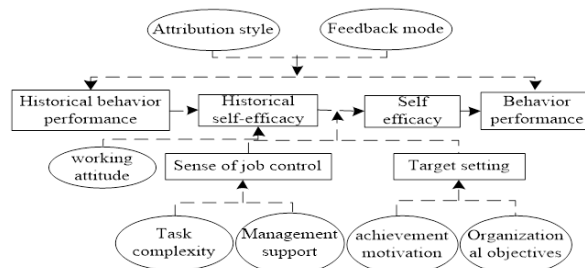


Figure 2 Causal variable model of self-efficacy

As shown in Figure 2, when an enterprise issued work tasks or performance instructions for employees, employees' self-efficacy would be generated. Most of the managers' achievements in this process were accumulated experience, but for employees who had little work experience in this process, their personal achievements were produced by historical self-efficacy. During execution of the individual performance implementation, the staff's self-efficacy would change, which mostly depended on the difficulty of task implementation and the degree of control of the superior leadership on their work behavior.

During the procedure of personal performance execution, the self-efficacy of post staff would change, which mostly depended on the difficulty of task execution and the control degree of superior leaders on their work behavior. Based on the analysis of the former, when the task was difficult, employees would have a challenging psychology, that is, they would increase their investment in personal performance at work. On the other hand, based on the analysis of the latter level, when the superior leader had a certain degree of control over his work behavior, the leader's motivation would be transformed into individual work motivation, but any kind of work motivation would play a role in promoting individual business. Therefore, the H2 hypothesis proposed above could be verified in this way. To implement this work concretely, we need to integrate the needs of enterprises in the process of market organization and operation, the positions arranged by enterprises for talents, and the rational planning of employees' work. Based on the above analysis, the conclusion was drawn: the effects of excess qualifications and self-efficacy on individual performance were different, in which excess qualifications had negative effects on individual performance, while self-efficacy had positive effects on individual performance.

3 CASE STUDY

From the above analysis, the influence of excess qualifications on the individual performance was negative, while the influence of self-efficacy on the individual performance was positive. In order to confirm the analysis results of this paper, we tested the results in the way of practical application.

This study took a small enterprise in the market as an example, and the number of grassroots employees in this enterprise was 23. The number of middle-level employees was 7; The number of staff working at the top level was 4. Among the grass-roots jobs, there are 3 doctoral students who graduated from famous schools and 2 master's degree talents who returned from overseas, which was in line with the selection requirements of experimental enterprises in this paper. On this basis, taking the profit data of the enterprise in the market in 2019 as a reference, the targeted acquisition of experimental data was carried out. The experimental data were shown in Table 2 below.

TABLE 2 PROFIT DATA OF ENTERPRISES IN THE MARKET IN 2019

Month	Profit	Month	Profit
January	5.43 million yuan	July	5.80 million yuan
February	6.08 million yuan	August	6.95 million yuan
March	6.75 million yuan	September	6.40 million yuan
April	5.94 million yuan	October	6.51 million yuan
May	5.85 million yuan	November	5.42 million yuan
June	6.50 million yuan	December	5.99 million yuan

After obtaining the experimental data, according to the analysis results of this paper, post adjustment and comprehensive scheduling were carried out for high-ability talents in the enterprise. For example, for the highly educated groups in grass-roots jobs, the executive directors of enterprises could adjust their posts according to their majors in combination with the current business development and job requirements. For talents with business administration

majors, they could be adjusted to middle-level department managers. And for special technical and scientific research talents, they can move to front-line jobs in enterprise product development and production lines. And marketing talents can be adjusted to enterprise market management departments, etc. According to the functions of the existing middle-level post staff, the post coordination was carried out, and on this basis, the post-adjusted talents were assigned tasks rationally, and after the assignment of tasks was completed, the post talents were motivated in time, giving them enough psychological suggestion of self-efficacy.

After completing the relevant work, the monthly profit data of the enterprise in the process of market organization and operation was obtained, then the data as the basis for evaluating the analysis results were used in this paper. For example, for enterprises that have solved the problem of excess qualifications and enhanced the self-efficacy of post-working talents, their corresponding monthly profit quota should present an increasing trend. Once this hypothetical demand was met, the results of this analysis can be valid, that was, excess qualifications had a negative impact on the individual performance, while self-efficacy had a positive impact on the individual performance. On the contrary, the hypothesis was not valid, and the result of this analysis was wrong. On this basis, this experiment was carried out. The experimental data corresponded to the enterprise's profit value in the market in 2020. In order to verify the changing trend of enterprise's profit, the obtained data were arranged into a line chart, and the enterprise's profit data in 2019 was taken as a reference to analyze the experimental results. The results have been shown in Figure 3 below.

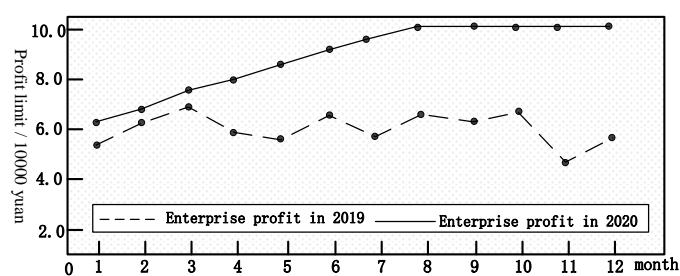


Figure 3 Experimental results

Based on the above experimental results, it could be clearly seen that the market profit of the enterprise in 2020 showed a trend of gradual improvement after the adjustment of internal talent positions. The corresponding monthly profit value increased compared with that in 2019. When the annual income of an enterprise increased, the performance of talents corresponding to positions with adjusted qualifications also showed an upward trend. From the above analysis, it could be seen that the changing trend of numerical value verifies the results of this analysis. Therefore, it could be considered that the results of this analysis conform to the changing trend of market industry. That was, the results of this study had high reliability, which could be used as a basis to adjust the internal human resources structure of the industry.

4 CONCLUSION

In the process of the development of China's economic enterprises, talent surplus was a problem that the core managers need to think about for a long time. At present, the related research on talent surplus has been constantly fermenting and has become a common research topic all over the world. This phenomenon was more remarkable in some developing countries. In order to solve the negative influence and intervention caused by excess qualifications and self-efficacy on individual performance, this paper carried out research on the design of the analysis method of the effect of the former on the individual performance. After the completion of this study, the hypothesis was verified by practical application. It proved that the influence of excess qualification on the individual performance was negative, while the influence of self-efficacy on the individual performance was positive. However, the structure type of the experimental enterprise selected by the application analysis of this example was relatively simple. There is a problem deviation between the final result and the actual result. Therefore, enterprises with different scales, different development directions and different construction types could be selected as the research objects in the later research on this aspect, and the research results can be verified through many examples.

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REFERENCES

- [1] Zhao Lijing, Zhang Zhengtang, Song Kuntai, etc. The effect of over-qualification on employee creativity: a moderated mediation Model [J]. *Science of Science and science and technology management*, 2020, 41(04):83-97.
- [2] Zhao Hengchun, Peng Qing. The Effect of Employees' sense of over-qualification on Job Engagement: Based on the mechanism of job achievement and fairness sensitivity [J]. *Journal of Zhengzhou University (Philosophy and Social Sciences)*, 2020, 53(02): 67-72+127.
- [3] Li Xia, Liu Haizhen, Li Qiang. The relationship between perceived over-qualification and job satisfaction: The mediating role of psychological contract breach and emotional exhaustion [J]. *Chinese Journal of Clinical Psychology*, 2021, 29(03): 562-566.
- [4] Zhong Jing, Peng Ke, Luo Jinlian. How "Big Talent" can be Used: A study on the impact of over-qualification on employee innovation behavior from the Perspective of equity[J]. *Science of Science and science and technology management*, 2021, 42(05): 142-155.
- [5] Wang Miaomiao, Zhang Jie, Bi Yanzhao, etc. Underachievement or over-achievement: A review of over-qualification research [J]. *Journal of Wuhan University of Technology (Information and Management Engineering)*, 2021, 43(02): 168-173+179.
- [6] Yang Weiwen, Li Chaoping. The effect and mechanism of perceived over-qualification on individual performance: a meta-analysis based on emotion-cognitive processing system and cultural context[J]. *Journal of psychology*, 2021, 53(05):527-554.