

The Employment Quality and the Influencing Factors of the New Business Form Employees from the Perspective of Platform Technology

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Abstract: Based on the perspective of platform technology, this study uses the questionnaire survey method to deeply analyze the employment quality and impact of 820 new business practitioners. SPSS software is used to analyze the employment quality of new employees from labor time, labor remuneration, labor relations, vocational training, labor disputes and mental health. We further used multiple regression to analyze the factors affecting the quality of employment. The study shows that the employment quality of women is significantly lower than men; the higher the employment quality is higher than that of rural residents. Accordingly, this paper proposes the platform enterprises to optimize the algorithm mechanism, give preferential policies to foreign hukou employment, enhance the occupational safety and health awareness of employees and the ability to protect their rights.

Keywords: New Business Form Practitioners; Employment Quality; T Test; Analysis of Variance; Linear Regression

1. Introduction

Relying on Internet platforms provide flexible service models, such as online ride-hailing, takeout delivery and Internet marketing. These emerging businesses have attracted a large number of labor force with their flexible working hours, low employment threshold and abundant employment opportunities. China are about 402 million workers, and 84 million workers in new forms of employment are [1], or one-fifth. The labor condition of employees in the new industry is an important link related to social harmony and stability. However, with the rapid development of the new industry, the working conditions of employees have begun to be widely concerned by all sectors of society.

This study aims to deeply analyze the labor status of new business practitioners, identify the existing problems, and explore the factors affecting their employment quality. Through these analyses, feasible improvement suggestions can be put forward to support the healthy development of new business industries and ensure that employees in these emerging fields can enjoy fair and guaranteed working conditions while promoting high-quality development. Therefore, an in-depth study of the labor status quo of employees in new business forms can not only help to improve the overall employment quality of these industries, but also has important theoretical and practical significance for promoting social equity and protecting the rights and interests of workers.

2. Literature Review

In the context of the contemporary digital economy, the flexible employment group under the new business form has gradually become an important part of the labor market. This paper provides a comprehensive literature review of the flexible employment personnel from the three aspects of employment quality, labor relations and social security.

First of all, in terms of the current situation of employment quality, the research shows that the flexible employment personnel under the new business form are generally facing the problem of low employment quality. The employment quality of this group is affected by individual characteristics, human capital and social capital characteristics, and the overall level of employment quality is low. Through the analysis of 206 survey data, [2] found that the comprehensive score of employment quality of new flexible youth was 62.3, among which the lowest social security score was the lowest, reflecting the problems of serious social security lack of youth, unsatisfactory salary and income, and limited career development space. The

research of Zhang Hongxia and Zhao Yan [3] also points out that the overall employment quality of flexible employment personnel in the new form of business is low, which is mainly affected by the characteristics of individuals, human capital and social capital.

Secondly, as for labor relations, there is often a lack of clear labor relationship between flexible employment personnel under the new form of business and platform enterprises. This vague labor relationship makes these workers face challenges in the protection of labor rights and interests. Yue Zongfu [4] proposed that the protection mechanism of workers endowment insurance rights and interests needs to be reformed, and suggested that the mechanism transformation of the protection mechanism of the new endowment insurance should be promoted by optimizing the reorganization of policy tools. This shows that the labor relations under the new business forms are complex and changeable, which require innovation and adaptation at the policy level. Finally, in terms of social security, there are obvious deficiencies in the flexible employment personnel in social security insurance. Zhao Qing [5] survey found that the social insurance participation rate of employees in new forms of business is relatively low, especially the social insurance participation rate related to employment. This shows that there is a large gap in the social security field for the new business form practitioners, which needs the attention and support at the policy level.

The contribution of this research lies in the detailed analysis and induction of new business personnel in different industries, such as online ride-hailing drivers, Internet medical personnel, network anchors, and online delivery personnel, so as to reveal their respective industry characteristics and specific problems they face. This in-depth discussion by industries and types not only enriches the understanding of the employment quality of new forms of personnel, but also provides a theoretical basis for the formulation of more targeted policy suggestions and intervention measures.

3. Survey Objects and Methods

This survey adopts the method of questionnaire survey, which includes employees of new business forms, including online ride-hailing drivers, food delivery workers, Internet marketing personnel, etc. The questionnaire

covers basic personal information, work type, working time, labor remuneration, labor relations, vocational training, labor disputes, mental health and professional pride. This paper mainly combines online and offline questionnaires and selects the questionnaires according to two established principles. Firstly, eliminate the online questionnaires for less than 90s; offline questions with the same answers, 939 questionnaires, 820 valid questionnaires, and an effective recovery rate of 87.33%.

3.1 Personal Basic Information

Sample basic information as inAs shown in Table 1, known from Table 1, The ratio of male and female employees in the new form of business shows a relatively balanced trend, at about 1:1. From the perspective of age distribution, the age of the new business form practitioners is mainly concentrated between 18 and 45 years old. People of this age group usually have strong learning ability and adaptability, and can quickly master the knowledge and skills required by the new business industry. In terms of educational level, the new types of employees are mainly high school / technical secondary school, college / higher vocational and undergraduate. Among them, the undergraduate degree accounts for nearly 40%, which shows that the new business industry has relatively high requirements for academic qualifications. In terms of household registration, most of the employees in the new forms of business are local household registration, and non-local household registration accounts for about 30%.

3.2 Diversified Types of Work to Promote the Transformation and Upgrading of Traditional Industries

According to the distribution of work types in Figure 1, the employees of the new business format cover many fields, from basic logistics to high-end skill services. Online delivery providers account for 15%, becoming the largest group, reflecting the rapid growth of e-commerce and instant delivery services. Internet marketers account for 12%, connecting merchants and consumers through multiple channels. Online writers, online design, consulting and programming professionals also account for a certain proportion, showing the need for professional skills. Internet education and training and medical practitioners account

for 11% and 8%, respectively, showing the changes and new opportunities of new business forms for traditional industries."Other" categories, such as truck drivers and agent drivers, accounted for 7%, further proving the diversity of the new business forms.

Table1. Basic Personal Information

		Number of People	Proportion (%)
Sex	Man	396	48.2
	Woman	425	51.8
Age	Under The Age Of 18	20	2.4
	18-25 Years Old	321	39.1
	26-35 Years Old	195	23.8
	36-45 Years Old	155	18.9
	46-55 Years Old	105	12.8
Degree Of Education	Age 56 And Over	25	3
	Junior High School And Below	57	6.9
	High School / Technical	154	18.8

	Secondary School		
	College / Higher Vocational	187	22.8
	Undergraduate Course	365	44.5
	Graduate Student Or Above	58	7.1
Marital Status	Married	382	46.5
	Unmarried	395	48.1
	Divorce / Widowed	43	5.2
Census Register	Local City Hukou	292	35.6
	Local Rural Hukou	232	28.3
	Registered Permanent Residence In Other Cities	147	17.9
	Rural Household Registration	149	18.1

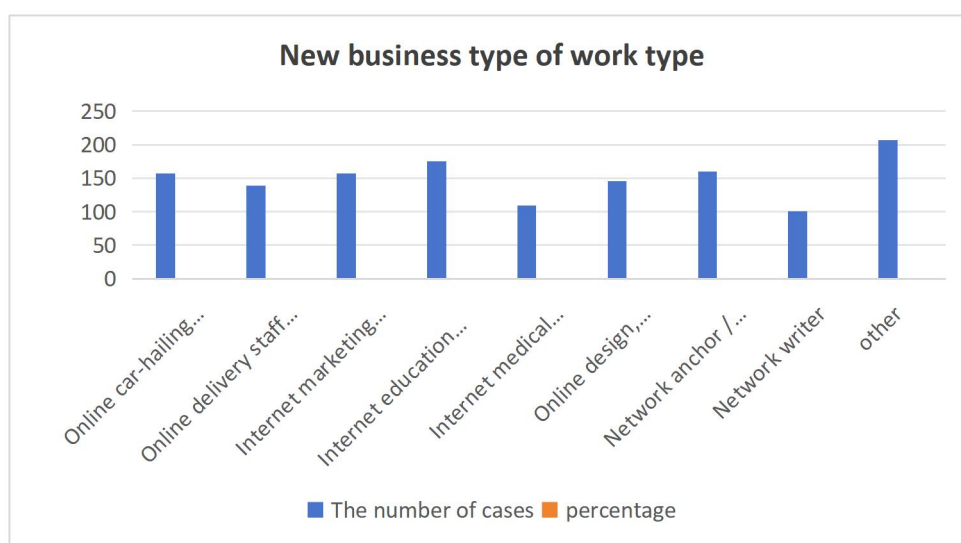


Figure 1. New Type of Work Type

3.3 The an Professional Pride Is Super Neutral and Has a Strong Sense of Identity

Since the dimension of professional pride is a scale questionnaire, so it is a continuous

numerical variable, the descriptive statistical analysis and one-sample T-test were selected to investigate the status quo. The analysis results are as follows:

Table 2. Analysis of Professional Pride Status

	The number of cases	The mean ± standard deviation	Inspection value	T	P
occupational pride	820	3.42±0.91	3	13.08	<.001

Note: Because it is a Likert 5 scale, 3 points indicate neutrality, so the test value is 3

It is clear from the above table that the survey data showed a more positive trend in terms of

professional pride. The professional pride of employees in the new format was 3.42 (standard

deviation 0.91), significantly higher than the neutral value of 3 points (T value 13.08, P value less than 0.001). This result shows that practitioners have a strong sense of satisfaction and identity with their professional identity and work. They may see their work as valuable and able to develop their talents in new business areas to achieve self-worth.

3.4 Analysis of the Current State of Mental

Table 3. Analysis of the Current Mental Health Status

	The number of cases	The mean ± standard deviation	Inspection value	T	P
mental health	820	3.10±0.94	3.00	2.9	0.004

Note: Because it is a Likert 5 scale, 3 points indicate neutrality, so the test value is 3

It can be clearly seen from the above table that the average score of mental health is 3.10, significantly higher than 3 (neutral), and the P-value of single sample T-test is <0.05, which indicates that the self-evaluation of employees in the new business form is not completely positive, and there is certain psychological pressure or

Health Status

Since the mental health dimension is a scale questionnaire, the mental health data are continuous numerical variables, and descriptive statistical analysis and one-sample T-test were selected to investigate the current situation. Firstly, the scale data was preprocessed with SPSS 29 software. Since the serial number and score of mental health dimension are the same, the analysis results are as follows:

distress. However, the score did not reach the level of negative evaluation, indicating that the employees of the new industry can maintain a certain mental health state on the whole, but they still need to pay attention to it and take measures to further improve their mental health level.

Table 4. Analysis of Variance Between Age and Mental Health

	Age (mean value ± SD)						F	p
	Under: 18 years old (n=20)	18-25 years old (n=320)	26-35 years old (n=195)	36-45 years old (n=155)	46-55 years old (n=105)	56 years and older (n=25)		
mental health	2.66±1.09	3.07±0.93	3.22±0.94	3.01±0.91	3.07±0.88	3.36±1.14	2.247	0.048*

* p<0.05 ** p<0.01

As can be seen from the above table, the analysis of variance (one-way analysis of variance analysis) was used to study the difference of age in mental health. It can be seen from the above table that all different age samples are significant in mental health (p <0.05), which means that different age samples have differences in mental health. Specific analysis shows that age showed 0.05 significance for mental health (F=2.247, p=0.048), and the mental health status of age group 26-35 years and 56 years and above was higher than that of 18 years old, and the mental health status of age group 26-35 years was

higher than that of 36-45 age group. According to this result, it can be seen that most people under 18 years old are in adolescence, and both the physical and psychological development are in the stage of rapid development. The psychological and emotional fluctuations are large, so the mental health status will be lower than that of the young group and the elderly group. The age of 36-45 is in the middle age, which may be affected by menopause. In addition, life and work pressure are greater, and mood fluctuations will be greater, so the mental health level is lower than that of the young group aged 25-36.

Table 5. Analysis of Variance Between Educational Level and Mental Health

	Education level (mean value ± standard deviation)					F	p
	Junior high school and below (n=57)	High school / Technical secondary school (n=154)	Junior college / higher vocational college (n=186)	Undergraduate program (n=365)	Graduate student and above (n=58)		
mental health	2.84±0.89	3.13±0.95	3.24±0.93	3.05±0.93	3.07±0.98	2.394	0.049*

* p<0.05 ** p<0.01

From the above table, using the variance analysis (all called one-way variance analysis) to study the degree of education for mental health,

a total of 1 differences, as can be seen from the table: different cultural level samples for mental health all are significant (p <0.05), means that

different cultural level samples for mental health are different. Specific analysis shows that the educational level is 0.05 significance for mental health ($F=2.394$, $p=0.049$), and the specific comparison difference shows that the mental health of high school / technical secondary school degree and college / higher vocational degree is better than that of junior high school or below, and the mental health level of undergraduate degree is higher than that of college / higher vocational degree. According to this result, it can be seen that due to the low education level of junior high school or below, they may not receive the relevant knowledge of mental health and do not know how to regulate mental health, so the mental health level is lower than that of people with higher education. Bachelor degree has received the systematic mental health education knowledge of college

students, know how to adjust the mental health status, so the mental health status of bachelor degree is higher than the lower degree.

4. Analysis of the Influencing Factors of Employment Quality

The linear regression model of the employment quality of the new business form practitioners is as follows:

$$Y = \beta_0 \pm \beta_1 X \pm \epsilon \quad (1)$$

Y is the score of employment quality index, X is the individual characteristic variable of practitioners in the new business format, such as gender, age, education level, household registration, β_0 is the intercept term, β_1 is the influence degree of X on Y, and ϵ is the error term. The regression results are shown in Table 6:

Table 6. Regression Results for Employment Quality

	Non-standardized coefficients		Standardization coefficient	T	Conspicuousness
	B	Standard error	Beta		
(constant)	20.178	0.696		28.997	0
sex	0.907	0.229	0.135	3.96	0.001***
age	-0.264	0.118	-0.095	-2.237	0.026**
degree of education	-0.168	0.114	-0.053	-1.467	0.143
marital status	-0.772	0.242	-0.135	-3.193	0.001**
census register	-0.366	0.105	-0.121	-3.492	0.001***

Note: Dependent variable: quality of employment, * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

According to the data, there was a significant correlation between gender, age, marital status, household registration and employment quality, $P < 0.05$, further, a significant positive correlation between gender and employment quality, that is, the employment quality of men in new business forms was generally higher than that of women. Possible reasons include better men in job type, work intensity and working environment in new industries. There was a significant negative correlation between age and the quality of employment (the correlation coefficient was -0.264, $P < 0.05$). This shows that with the increase of age, the employment quality of new business employees gradually decreases. The possible reason is that as they get older, they may face more family responsibilities and declining physical function problems, leading to their reduced competitiveness in new industries. The influence of the educational level on the quality of employment was small (the correlation coefficient was -0.168, $P > 0.05$). This may mean that in the new industry, the difference of education level on the quality of

employment is not significant. However, this does not mean that the education level is not important, as it may indirectly affect the quality of employment through other ways (e. g., skill level, learning ability, etc.). There was a significant negative correlation between household registration and employment quality (the correlation coefficient was -0.366, $P < 0.001$). This shows that the foreign rural hukouThe employment quality of employees in new forms of business is lower than that of local urban hukou. The possible reason is that the cost of living is higher in cities and the social support network is weaker, which leads to more challenges and difficulties in the new business industries.

5. Research Conclusion

The employment quality of employees in new forms of business is affected by many factors, including household registration differences, the imbalance of vocational training, the lack of social security, the prevalence of labor disputes and the long working hours. The mechanisms

behind these phenomena involve the lack of social capital, policy discrimination, economic pressure, market orientation, cognitive deviation, fuzzy labor relations, policy lag, lack of rights and interests awareness and lack of law enforcement. Due to the high cost of living, weak social support network and the limitation of policy system, they are at a disadvantageous position in the job market [7]. The imbalance of vocational training reflects the market pursuit of immediate benefits while ignoring the importance of long-term occupational safety and health. The lack of social security is closely related to the ambiguity of labor relations. New business forms, it is often difficult for employees to establish the formal labor relationship with the platform, so that they cannot enjoy the complete social security. The universality of labor disputes reveals the vulnerability of employees in the protection of new forms of business, especially in the identification of industrial injury and social insurance participation. The problem of long working hours [8] is related to the employment mode and flexible attribute of the new form of business, which often emphasizes efficiency and ignores the work and life balance of workers.

6. Countermeasures and Suggestions

In view of the analysis results of this study, the paper proposes the following specific and targeted countermeasures and suggestions to improve the employment quality of the new business form practitioners. Algorithm optimization and work allocation fairness; it is suggested that platform enterprises realize the fairness and rationality of work allocation through algorithm optimization. Specifically, enterprises should develop a dynamic balance model to balance the workload and income, and ensure that the work and rest time of employees meet the requirements of national labor regulations. Development and implementation of targeted employment policies; the government shall formulate and implement preferential employment policies for foreign registered employees, including but not limited to housing subsidies, tax relief and employment information services, to reduce their living costs and provide equal employment opportunities. Promotion of occupational safety and health education; enhance vocational safety and health awareness of employees through vocational education and training. It is recommended to

work with trade associations to promote occupational health standards and best practices and to hold regular lectures and seminars related to occupational health. Enhance female employment competitiveness; provide parenting support system and digital skills training for female practitioners, and promote STEM education [9] to enhance its employment competitiveness in new formats.

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