



# Analysis of vocational training for workers in new employment patterns based on spss statistics

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**Abstract.** With the rapid development of the platform economy, the group of new employment pattern workers is expanding, and improving the welfare of new employment pattern workers is not only a realistic problem, but also a hot spot of academic concern. Based on the questionnaire survey data and analysed by using spss software, this study examines the education and training needs of new employment pattern workers in a city, and puts forward suggestions to improve the vocational training of this group through government guidance, community co-construction, and platform assistance.

**Keywords:** Workers in new forms of employment, Vocational training, Dilemmas and responses

## 1 Introduction

This study conducted a questionnaire survey on the status quo of new employment pattern workers in a city through questionnaires and research interviews, covering all counties and municipalities within the jurisdiction of a city, and the target of the survey was the new employment pattern workers (mainly the three major groups of couriers, delivery workers, and online car drivers) within a city, and the survey was conducted in March 2023, and the questionnaires were distributed through the online platform, and a total of 1,208 valid samples were obtained after the data were cleaned up.

The basic idea of this study is to understand the basic information about the occupational characteristics and willingness of workers in new employment patterns in a certain city through a basic information questionnaire, and analyze the current situation of workers in new employment patterns through quantitative methods. It will conduct a comprehensive quantitative and qualitative analysis of the current situation of education and training for workers in new forms of employment, analyze the difficulties they face, and, based on the results of the research and the conclusions of the quantitative and qualitative analysis, put forward a path to improve the vocational training of workers in new forms of employment.

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## **2 Dilemma of vocational training for workers in new employment patterns**

### **2.1 High mobility of workers in new forms of employment**

With the development of the platform economy, the scale of new employment pattern workers is getting bigger and bigger, but the enterprises are diversified, the forms of employment are flexible, and the new employment groups are highly dispersed, with frequent and rapid mobility, so that it is difficult for traditional vocational training and other forms to meet the requirements for effective coverage. According to the mapping statistics, as of the end of July, the number of new industries and new employment groups in a certain city that have taken part in vocational learning and training is relatively small, and for the training for the workers of new employment patterns, there are fewer services and publicity, and there is insufficient work coverage. Services and publicity for workers in new forms of employment are fewer, and the coverage of the work is insufficient. Through the research, it was found that the organization and effective coverage of vocational training for workers in new employment patterns is characterized by difficulties in three areas. First, the organization system is difficult to build because of the diversity of businesses, loose organization, and flattening of management. Secondly, the small size, rapid changes and poor risk-resistance make it difficult to provide real-time follow-up coverage. Small and micro enterprises are susceptible to the market environment, flexible business adjustments, business scale is sometimes large and sometimes small, often there is a party organization can not be formed or covered by the bankruptcy or relocation and so on <sup>[1]</sup>. Thirdly, the new employment groups are flexible, autonomous and dispersed, and the platform enterprises do not care about people, so it is difficult to find out the bottom figure to realize effective coverage. For example, there are hundreds of new employment groups on certain platforms, but the personnel and payroll levels of riders and drivers do not belong to the platform enterprises, and some of them are labor outsourcing, with the platform enterprises failing to carry out work such as identification and statistics, and with limited branch management authority.

### **2.2 Insufficiently standardized education and management of workers in new employment patterns**

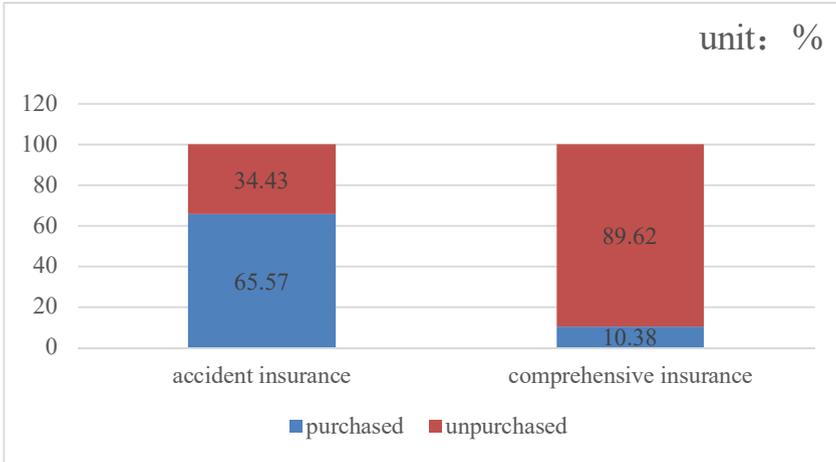
The overall educational level of the new employment pattern group is on the low side, and there are some part-time workers with university degrees. Occupational characteristics make the contradiction between work and study more prominent, and the traditional vocational education management mode of fixed time and fixed point can not be adapted to the job characteristics of the new industry and new employment groups.<sup>[2]</sup> For the new industry, new employment groups in the education management is also facing a lot of problems. First, the contradiction between the rapid movement of personnel and the lagging management of education and training organizations. Occupations such as takeaway food delivery workers have low entry thresholds and no room for promotion. Second, the contradiction between work and study is prominent. The

new employment groups daily life fast-paced, high work intensity, less free time, "always on the road" "always online" is the norm, the average daily working time of more than 10 hours of the population accounted for 45.22%. At the same time, the courier industry administration, goods sorting, first-line distribution and other positions work and rest time is not synchronized, some practitioners day and night is the norm, it is difficult to traditional requirements for a unified time to organize and carry out activities. Third, the management of vocational education is not targeted. Training activities in a single form, limited to the completion of the deployment of the higher level of the required action, reading from the book more, learning documents, not in line with the actual business, vocational needs, lack of attractiveness.

### **2.3 Vocational training has not been fully integrated into the pattern of urban grassroots governance**

New employment groups work long hours, labor intensity, earn hard money, but the legitimate rights and interests are difficult to be effectively protected.<sup>[3]</sup> Many takeaway food delivery workers who join the network generally do not have five insurance and one gold, and lack the necessary labor protection. 34.43% of the newly employed groups have not purchased accidental injury insurance, and 89.62% of the workers do not have "five insurance and one gold". (Fig. 1) In order not to exceed the time limit and deduct money, many takeaway delivery workers still choose to run red lights and go against the traffic light, so the probability of traffic accidents rises sharply, and at the same time, they will also lose the protection of accident insurance.

High-intensity work also makes it difficult for newly employed groups to have the time and energy to participate in normal social interactions and enjoy basic leisure and entertainment, with a stronger sense of detachment from city life. Few people are willing to take up this job as a long-term career because of insufficient social security, unsatisfactory employment prospects, and a low sense of social identity.<sup>[4]</sup> According to statistics, 60.43% of the city's newly employed groups have been working for less than a year. It was also found in the research that most of the groups who can insist on delivering couriers and takeaways are married due to the fact that it is hard physical labor, and "having an old man and a young man at the top and at the bottom" is the responsibility behind this group, but due to the high cost of living, the reality of housing, marriage and dating, and children's schooling, it is difficult for newly employed groups to take this job as a long-term career. The new employment groups find it difficult to consider this job as a long-term career due to the high cost of living, housing, marriage and dating, children's schooling and other practical problems.



**Fig. 1.** Purchase of commercial insurance by workers in new employment patterns

### 3 Path options for promoting the high-quality development of vocational training for workers in new forms of employment

#### 3.1 Vigorously promoting the physical and effective coverage of vocational training organizations and work for workers in new forms of employment.

In view of the actual production and life of workers in new forms of employment, we have innovated methods, paths and mechanisms, strengthened the "dual responsibility" of the competent authorities, the main responsibility of platform enterprises, and the role of streets and communities, effectively integrated the vocational training needs of new employment groups into the social governance system, and realized that there are people to grasp, manage and contact services.<sup>[5]</sup>

**Dynamic investigation and mapping.** A clear bottom line and clear situation is the basis for carrying out vocational training for workers in new employment patterns. It is necessary to consolidate the local management and pocket responsibility of the party organizations of streets (townships) and communities, strengthen the management responsibility of the industry authorities and industry party committees, conduct a comprehensive mapping of franchised enterprises, cooperative enterprises, courier outlets, take-away delivery stations, and fleets of online car drivers, etc., and realistically map out the basic situation of the new forms of business and employment groups, and get a detailed understanding of the number and distribution of the organizations in the jurisdiction and industry, as well as the The specifics of the operation of the class, categorized and established information ledgers. Because of the rapid development and change of new business enterprises and the rapid movement of workers in new employment forms, the information ledger must be managed dynamically. It is necessary to strengthen communication and cooperation with platform enterprises, fix the time period for mapping and investigating, and update the information ledgers established in real time, so as to ensure that the latest and most accurate data are available.

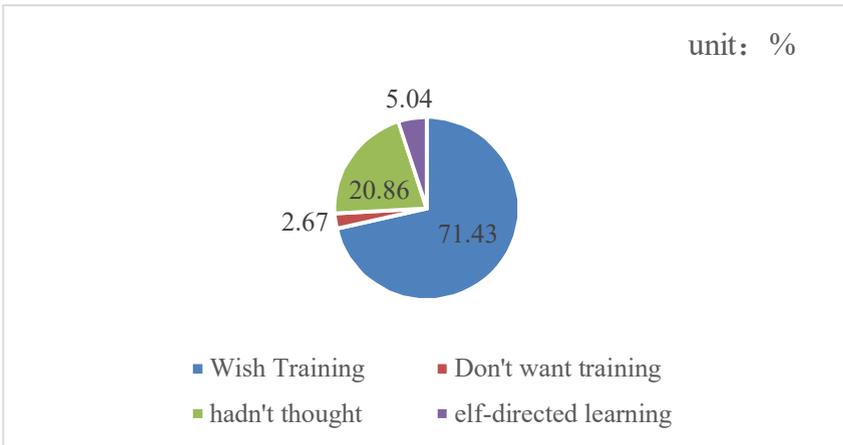
**Innovative coverage methods.** To strengthen the organization and coverage of vocational training, it is necessary to combine "tangible" and "effective", "virtual" and "real". Combine "tangible" and "effective", "virtual" and "real", improve the organizational structure with tangible coverage, realize the function of grass-roots party building with effective coverage, strengthen the influence with real entity coverage, and play a cohesive role with virtual coverage. Specifically, it is necessary to adhere to the joint efforts of territorial management and industry management and promote them as a whole, thereby breaking down administrative barriers; to strengthen communication with platform enterprises, in particular, to strengthen the connection between the higher platforms of platform enterprises under the jurisdiction, to clear the blockage points, and to do a good job of up and down linkage work; according to the characteristics of the industry of the new business, the size and shape, the organizational form, as well as the characteristics of the work of the new employment groups, further adapting to the Internet mindset, using Internet means to explore the organization and work coverage of vocational training that combines physical and virtual, online and offline, and to realize that it should be built as much as possible.

**Playing the role of enterprises.** One of the important purposes of carrying out vocational training for workers in new forms of employment is to cultivate development soil for enterprises in new forms of business, provide services and guarantees for new employment groups, and thus promote better economic and social development. A large number of new employment groups are dependent on platform enterprises for their work, and are employees managed by the enterprises. Therefore, to carry out vocational training in this field, it is necessary to obtain the support of enterprises and give full play to their role. Promoting vocational training for workers, taking into account the interests of enterprises, finding a balance between the rights of workers and the interests of the company, coordinating the relationship between third-party labour companies, cooperating and franchised enterprises, and making training not only to improve the skills of workers, but also to ultimately benefit the enterprise, has become an important means of promoting the healthy development of enterprises. Therefore, enterprises must be able to see tangible results, whether temporary or long-term, tangible or intangible. Therefore, it is necessary to realize full coverage of vocational training services and guidance among relevant enterprises, further supervise and guide relevant platforms and enterprises to further establish and improve the mechanism for scheduling the vocational growth and learning planning of new employees of new forms of enterprises, and to comprehensively understand and grasp in real time the relevant backgrounds and basic situations of contracted individuals, so as to incorporate mobile personnel into education and management in conjunction with the actual situation.

### **3.2 Comprehensively strengthening the education and management of workers in new employment patterns**

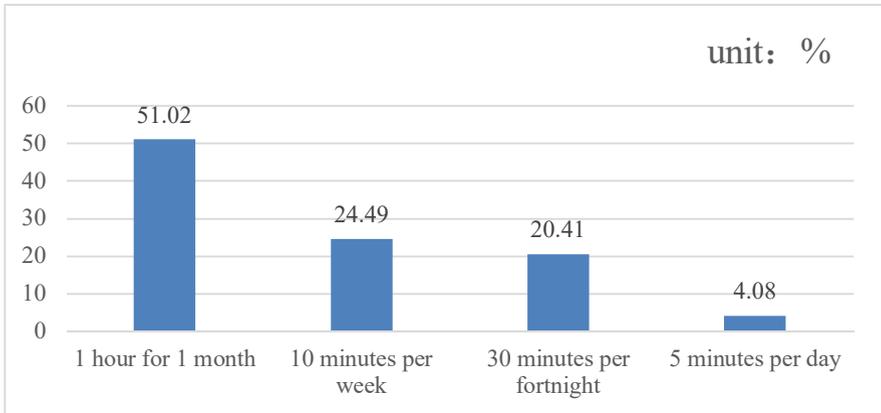
Focusing on the working characteristics of newly employed groups, it insists on combining categorised education with flexible education, and stratified management with effective management; it carries out group learning activities according to the industry, according to the enterprise, and according to the individual; it encourages learning

backbones to play an exemplary role; and it guides volunteers to mobilise to participate in and contribute to the work. **Growing the learning team.** In response to the problem of learning and training among workers in new employment patterns in a city, measures must be taken to strengthen training publicity and personnel incentives for workers in new employment patterns, and to grow the learning team. The research found that 71.43% of the respondents have the willingness to train and improve (Fig. 2). As it is necessary to attach great importance to and reasonably guide Strengthen the training absorption of workers by vocational institutions through the development of a variety of forms to realize the development of backbones into advanced personnel and the training of advanced personnel into models.



**Fig. 2.** Willingness of workers in new forms of employment to be trained

**Enriching forms of education.** Since the work of workers in new employment patterns is different from ordinary occupations, when carrying out vocational training activities, it is necessary to combine the work characteristics of newly employed groups with innovative educational methods. Statistics have found that, in the research sample, the proportion of those who study on their own and have the will to do so, in terms of choosing the frequency and duration of centralized learning and other activities to be carried out, prefers a low-frequency, long-duration approach, i.e., "once a month for one hour each time", which accounts for 51.02% of the total (Fig.3). Therefore, in carrying out vocational training organization and education coverage, the basic principle of "standard + characteristics" should be used to formulate vocational training activity programs, combining the operating characteristics of enterprises and their age and needs, enriching the themes of the activities, exploring the forms of backbone rotation leadership, industry joint learning, and institution-enterprise co-construction and co-learning, so as to enhance the infectiousness and attractiveness of organizational life. At the same time, the company insists on combining centralized training with decentralized self-study, promotes learning methods such as "10 minutes before work" and "monthly concentrated learning", provides online learning resources and channels, and encourages online self-study using fragmented time.



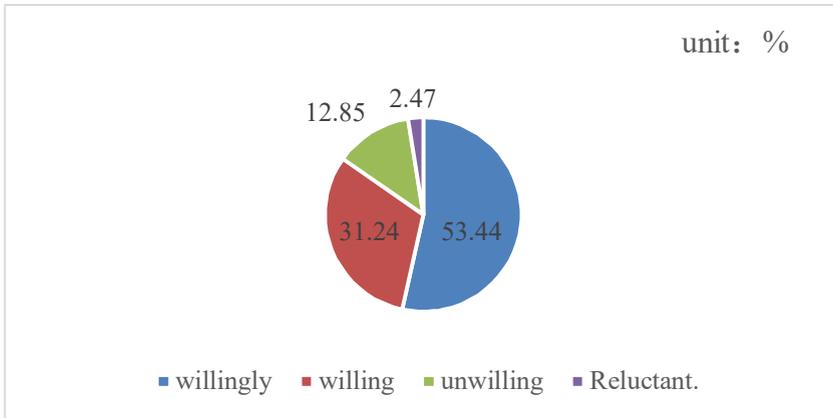
**Fig. 3.** Frequency and time tendency of centralized learning for workers in new employment patterns

**Motivate the backbone to play a role.** Adhere to the implementation of "red courier", "pioneer rider", "red steering wheel", party members demonstration post, party members commando team and other practices, to play the role of pioneers and models in the peak season protection, project attack, The party members play the role of backbone in peak season protection, project attack and technical innovation, and help enterprises to do a good job in epidemic prevention and control, safety management, cost reduction and efficiency, etc., to help stabilize the operation and expand the market. Focusing on the "double eleven" and other important nodes of the express delivery industry, widely mobilized the express delivery industry party members and workers "bright identity, when the vanguard", through the formation of the "party group commando team" "Pioneer Riders Group" and other forms of recognition of the task of attack, for the healthy development of the industry to escort.

### 3.3 Promoting the integration of vocational training for workers in new forms of employment into the urban grassroots governance pattern

It is necessary to give full play to the Party's advantages in mass work, take the Party's work to new employment groups, attract them, organize them, and stabilize them, and promote the integration of all types of new employment-format workers into the urban grassroots governance pattern. **Guiding participation in urban grassroots governance.** The research found that workers in new employment patterns have a high willingness to participate in community volunteer services by utilizing the convenience of their own work, with the proportion of those willing to participate in community volunteer services reaching 84.68% among the 973 samples interviewed (Fig.4). Therefore, it is necessary to fully recognize the importance of new employment groups in urban grass-roots governance, give full play to the advantages of express delivery outlets throughout urban and rural areas, as well as the advantages of couriers and delivery workers who walk the streets and alleys, and integrate party members and volunteers

from new employment groups into the comprehensive governance management system, and organize them to play a role in early warning of abnormal situations, direct reporting of emergencies, and conveying social and public opinions.<sup>[6]</sup>



**Fig. 4.** Willingness of newly employed groups to participate in community volunteering

**Building a comprehensive service platform.** The analysis shows that there is a significant positive correlation between the factors of "Intensity of willingness to participate in community volunteer service", "Confidence in career prospects" and "How do you recognize the job" for workers in the new employment pattern, indicating that the correlation coefficients are 0.341 and 0.539 respectively. The correlation coefficients are 0.341 and 0.539, indicating that the higher the degree of identification with the job, the stronger the tendency to participate in community volunteer service and the more confident they are in the prospect of the occupation. Therefore, in order to give full play to the role of the newly employed group as a team in grassroots governance and to enhance occupational confidence, it is necessary to find ways to enhance their identification with their work. The joint construction of a service platform dedicated to the new employment group by party departments, government departments, group organizations and communities represents the government's and community's recognition and support for the new profession and the new employment group, and it is one of the ways to enhance their recognition of their work. Therefore, by integrating the resources of streets, communities, neighborhoods and bank outlets, a "red post" integrating learning and education, party activities and convenient services has been set up to build a comprehensive service platform and carry out care and concern, so that they can have a place to stay after work, thereby continuously improving their job recognition.

**Strengthening protection of rights and interests and public opinion propaganda.** The analysis shows that there is a significant negative correlation between the willingness of newly employed workers to participate in community volunteer service and the factor of "Have you ever encountered very unpleasant experiences or disputes at work", with a correlation coefficient of -0.254, which indicates that the more unpleasant experiences workers encounter at work, the lower their willingness to participate in volunteer service. This indicates that the more unpleasant experiences workers

in new forms of employment encounter at work, the lower their willingness to participate in volunteer service. The survey found that 75.13% of the newly employed workers chose "not to deal with it" and "to solve the problem privately" after encountering unpleasant disputes at work (Fig.5), indicating that most of the newly employed workers would not report the disputes to the government or the government after encountering them at work. This indicates that most workers in new forms of employment do not seek help from the government or enterprises after encountering disputes at work. In addition, there is a significant positive correlation between the monthly income level of workers in new forms of employment and whether or not they buy accidental injury insurance, and there is a significant positive correlation between the intensity of their willingness to participate in vocational training and whether or not they buy five insurance policies and one pension. There is a significant positive correlation between the strength of willingness to participate in vocational training and "whether to purchase 'five insurance and one pension'". Therefore, it is necessary to provide psychological guidance, health checkups, and friendship services on a regular basis by urging and guiding enterprises to optimize their platform algorithms, employing workers in compliance with the law, and establishing a mechanism for clarifying complaints and exempting them from liability. Supporting the purchase of basic urban pension, medical care, work-related injuries and other social insurance for flexibly employed people, and striving to raise the level of labor rights and interests protection for newly employed groups.<sup>[7]</sup>By strengthening vocational planning and skills training, selecting the most beautiful little brother and the most beautiful driver, telling the story of the group, and promoting the positive energy of the industry, efforts have been made to enhance the occupational social identity of newly employed workers.

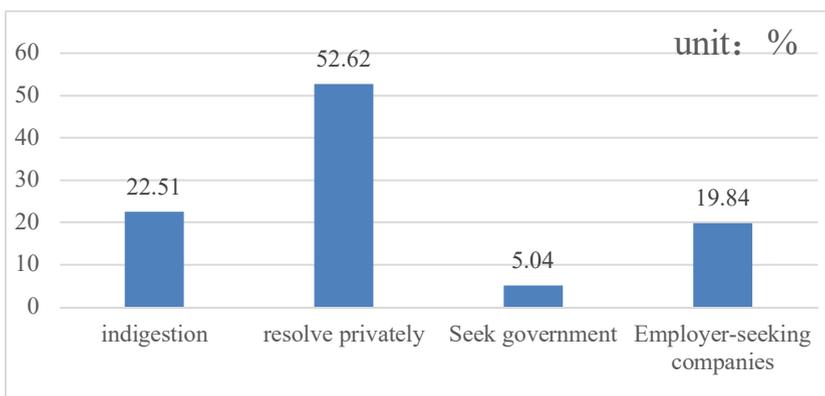


Fig. 5. Dispute Resolution for Workers in New Employment Patterns

## 4 Conclusions

A quantitative analysis was conducted to study the difficulties faced by workers in new forms of employment in terms of vocational training, which is characterized by high occupational mobility, insufficiently regulated management, a strong willingness to

learn and train, and a lack of effective training services at the grass-roots level in urban areas. It is necessary to vigorously promote the organization of vocational training for workers in new forms of employment and the provision of matching and liaison services. Innovative working methods should be used to give good play to the role of platform enterprises, enrich diversified forms of education, build comprehensive service platforms, guide integration into urban grass-roots service networks, and strengthen the protection of rights and interests and public opinion campaigns, in order to enhance the quality of the comprehensive vocational training services provided to workers in new forms of employment.

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