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Research on Work-Related Injury Insurance Issues for Online Car-Hailing Drivers Based on Occupational Risk Theory

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Abstract: With the development of the Internet era with sharing characteristics and the increasing demand for convenient travel, the online car-hailing industry, which relies on the Internet platform as an operating base, has developed rapidly in China. As of June 2022, there are 300 online car-hailing platforms in China, the scale of online car-hailing users has reached 405 million, and the number of online car-hailing orders has reached 6.96 billion. More and more workers are beginning to join the group of online car-hailing drivers to cope with the difficulties of finding a job. However, unlike ordinary employment methods, employment on online car-hailing platforms involves multiple parties such as operators, laborers, and labor users. The relationship is complicated, and there are characteristics such as flexibility in employment methods, diversity in service practices, and ambiguity in the subject of employment. Under the premise that the labor relationship between online car-hailing drivers and online car-hailing platforms has not yet been clarified, there is a problem of lack of work-related injury insurance for online car-hailing drivers, which makes them unable to be protected when facing labor disputes, which is not conducive to the continuous, benign and healthy development of the online car-hailing market. As the number of platform employees represented by online ride-hailing platform drivers continues to increase, whether the work-related injury rights and interests of these practitioners can be effectively protected is directly related to the stability of the development of China's platform employment model. Based on this, this paper starts with the theory of occupational risk and studies the work-related injury insurance issues of online ride-hailing drivers.

Keywords: Online Ride-Hailing Drivers, Work-Related Injury Insurance, Occupational Risk.

1. Research Background of Work-related Injury Insurance for Online Ride-hailing Drivers

China's economic development has entered a new stage of high-quality and digital development. According to data from the Ministry of Industry and Information Technology of China, the scale of China's digital economy exceeded 45 trillion yuan in 2021, accounting for 39.8% of GDP [1]. However, with the development of the digital economy and platform economy, the traditional employment model can no longer meet the needs of employees. Online car-hailing drivers have become an emerging labor group. According to the "China Sharing Economy Development Report (2021)", in 2020, the number of platform enterprise employees and sharing economy service providers in China reached 6.31 million and 84 million respectively, an increase of 6 million over the previous year [2]. The number of online car-hailing drivers also doubled. However, in recent years, online car-hailing drivers have faced labor security disputes, and how to protect their rights and interests has become a difficult problem. In July 2021, various state ministries and commissions issued the "Guiding Opinions on Maintaining the Labor Security Rights and Interests of Workers in New Employment Forms", proposing the requirement of protecting workers' rights and interests through multiple channels, reflecting the country's emphasis on the protection of labor rights and interests. This article takes online car-hailing drivers as the research object, analyzes the problems existing in their work-related injury insurance, and puts forward suggestions for improving their labor security based on existing research results and actual needs.

2. Concepts Related to Work-related Injury Insurance for Online Ride-hailing Drivers

2.1 Occupational Risk Theory

Occupational risk theory holds that occupational risk is a problem that any practitioner may face. The International Labor Organization's "Workers' Work Convention" clearly states that the work rights and interests of workers must be protected, and no specific distinction should be made between workers' occupations, and equal labor rights and interests protection should be implemented. As long as they are social workers, they should enjoy social insurance rights and interests by obtaining labor remuneration through their own labor and thus maintaining their own livelihood. In the process of providing driving services, online car-hailing drivers are also likely to encounter risks such as unemployment, illness, and old age, and they should enjoy protection.

2.2 Non-standard Employment

In 2016, the International Labor Organization released the "World Report on Non-standard Employment", which systematically discussed the connotation of "non-standard employment". It defined standard employment as full-time work, employment with no fixed term, and employment that constitutes a direct subordinate employment relationship between two parties, while the rest of the employment is non-standard employment, including temporary employment, part-time work, multiple employment relationships, hidden employment and dependent self-employment [3]. Referring to

the definition of the International Labor Organization, Chinese scholar Wang Yongjie believes that non-standard employment includes part-time employment, multiple employment relationships (such as labor dispatch), temporary employment (employment with a term of completing a certain work task and seasonal employment), hidden employment, etc. [4].

3. Online Ride-hailing Drivers

Online taxi-hailing refers to the business activities of building a service platform based on Internet technology, accessing qualified vehicles and drivers, and providing non-cruising taxi-hailing services by integrating supply and demand information [5]. Online taxi drivers mainly include two groups: one is the full-time driver group, which has signed a labor contract with the online taxi platform and enjoys work-related injury insurance. The other group is the private car owner group. Since this group has a higher degree of freedom in the working environment, the online taxi platform generally cooperates with them through an agreement and does not sign a labor contract. This article uses the national survey data on the employment status of online taxi drivers and refers to the "non-standard employment" theoretical framework of the International Labor Organization to divide them into standard employment and non-standard employment. Taxi operating companies sign labor contracts with online taxi drivers, and online taxi drivers have employee status, which is standard employment; labor dispatch and employment without an employment relationship with the platform or taxi operating company are non-standard employment.

4. Analysis of the Current Status of Work-related Injury Insurance for Online Ride-hailing Drivers

4.1 Analysis of the Current Status of Work-related Injury Insurance Policies for Online Ride-hailing Drivers

In order to regulate the online car-hailing market, the government has introduced a series of policies to supervise and regulate online car-hailing platforms. At present, the online car-hailing industry is characterized by standardized management. The platform needs to comply with relevant laws and regulations, obtain operating qualifications, and conduct strict review and management of drivers. In 2022, the State Council issued the "14th Five-Year Plan for Market Supervision Modernization", which pointed out: Improve the regulatory rules and standards for new transportation formats such as online car-hailing, shared bicycles, car time-sharing rentals, and online freight. Guide platform companies to improve service levels and attract more operators to start businesses online.

1) The Ministry of Industry and Information Technology, the Ministry of Transport and other seven ministries jointly drafted the "Online Car-hailing Service Management Measures" (Interim) in 2015. Article 18 of the Measures stipulates that the operating platform of online car-hailing shall ensure that its drivers have legal qualifications, and the platform enterprise needs to sign a labor contract with the

driver. "The original design of this provision was to effectively circumvent the obstacles to the identification of the labor relationship of online car-hailing and better protect the rights and interests of drivers. However, in fact, the labor contract clause restricts the cost control of the online car-hailing platform, increases the cost of the platform, and is greatly opposed. Therefore, when the Measures were officially adopted, the specific provisions were "the legal qualifications of the driver shall be guaranteed by the online car-hailing platform, and at the same time, a labor contract or other agreement shall be signed with the driver in accordance with laws and regulations, working hours, frequency of service, etc." This clause actually puts the decision-making power on whether to sign a labor contract in the hands of the online car-hailing platform. Although on the one hand it promotes the development of the online car-hailing industry, on the other hand it gives the platform a lot of room to operate in circumventing labor relations.

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2) In July 2016, the General Office of the State Council issued Document No. 58 [2016] "Guiding Opinions on Deepening Reform and Promoting the Healthy Development of the Taxi Industry" [6], which played a significant role in regulating the online car-hailing industry. First, it formally recognized the legal status of online car-hailing. The document pointed out that it was necessary to encourage the emergence of differentiated business models, which in fact encouraged the development of online car-hailing. Second, it required online car-hailing platforms to conduct necessary production and operation management of their drivers and to safeguard their legitimate rights and interests. However, the provisions were somewhat vague. If the two parties signed a labor contract, it should be concluded in accordance with the law and social insurance should be paid for the driver. For those who did not sign a labor contract but signed other agreements, the online car-hailing platform should pay accident insurance for the driver, which made the document not very operational.

3) In 2019, the Ministry of Transport, the Ministry of Industry and Information Technology and other six departments revised the Interim Measures for the Administration of Online Taxi Booking Services. Although China's laws on online taxi regulation are gradually improving, there are still relatively few regulations on social insurance for online taxi drivers. It only emphasizes that the online taxi platform has the obligation to purchase social insurance for online taxi drivers under the premise of signing a labor contract.

4.2 Analysis of Working Hours of Online Ride-hailing Drivers

According to the working hours statistics of the national survey data on the employment status of online ride-hailing drivers, online ride-hailing drivers work an average of 6.25 days a week, 11.06 hours a day, and an average of 70.16 hours a week, with overtime workers accounting for as high as 89.73%. The average weekly working hours of platform practitioners are not only higher than the standard working hours stipulated by the current labor laws and regulations, but also much higher than the average weekly working hours of the working-age population published in the "China Labor Statistical Yearbook" (2019) in the same year of the survey, which is about 52% higher. In terms of the average number of

working days, standard employees work an average of 6.46 days a week, which is higher than the 6.19 days of non-standard employees. The average weekly working hours of standard employees are 75.70 hours, which is 10.14% higher than the average weekly working hours of 68.73 hours of non-standard employees.

Table 1: Comparison of working hours and protection between standard employment and non-standard employment

in platform employment

in platform employment			
Category	Standard employment	Non-standard employment	Over all
Average number of working days per week	6.46	6.19	6.25
Average working hours per day/hours	11.66	10.91	11.06
Average weekly working hours/hours	75.7	68.73	70.16
Overtime work ratio (>40 hours per week)/%	97.09	87.84	89.73
Proportion of social insurance paid by platform companies/%	52.55	10.54	19.12

Source: 2019-2020 Online Car-hailing Driver Employment Status Survey

4.3 Analysis of the Status of Online Ride-hailing Drivers Participating in Work-related Injury Insurance

Data from a nationwide survey of online ride-hailing drivers' employment status shows that platform drivers have a clear lack of social insurance, especially medical insurance and work-related injury insurance. Among online ride-hailing drivers, only 19.12% of them have social insurance paid by platform companies, and more than 80% of them have failed to participate in urban employee social insurance. Even for platform drivers with written labor contracts, only 52.55% have participated in social insurance, and 47.45% of standard employment drivers still do not have social insurance. Among non-standard employment online ride-hailing drivers, only 10.54% have participated in social insurance, and nearly 90% of non-standard employment online ride-hailing drivers do not have social insurance. A large number of drivers are "free" from the current social insurance system [7].

The demand for work-related injury protection for online ride-hailing drivers is relatively urgent, and the public is paying close attention to it. For this reason, some regions have introduced specific policies to further protect the rights and interests of relevant workers, such as the "Measures for Employers in Zhejiang Province to Recruit Specific Personnel Who Do Not Meet the Conditions of Establishing Labor Relations to Participate in Work-Related Injury Insurance (Trial)", which includes 7 categories of specific personnel who do not meet the conditions of establishing labor relations into the scope of work-related injury insurance protection, including online ride-hailing drivers. Employers of these groups can participate in work-related injury insurance and pay work-related injury insurance premiums for their single insurance type according to the principle of "voluntary participation in insurance", and insured persons can enjoy various work-related injury insurance benefits paid by the work-related injury insurance fund according to regulations. However, the policy lacks mandatory nature. In order to reduce costs, the platform will ignore the protection needs of online ride-hailing drivers, and the policy effect is not ideal.

5. Issues with Work-related Injury Insurance for Online Ride-hailing Drivers

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Based on the national survey data on the employment status of online ride-hailing drivers and the overall characteristics of online ride-hailing drivers, this paper analyzes the problems they encounter in terms of labor protection. The lack of labor rights protection for online ride-hailing drivers under the platform economy is closely related to the identification of labor relations, the construction of labor protection systems, unreasonable payment, and the lack of protection awareness of employees.

5.1 Difficulty in Identifying Labor Relations

China's social insurance system is based on the Labor Law. Under the premise of a clear labor relationship, workers can enjoy social security in five aspects, including work-related injuries, medical care, and retirement. Online ride-hailing drivers with non-standard employment do not meet the requirements of a clear labor relationship and find it difficult to enjoy the protection of the Labor Law. However, occupational risk theory holds that all workers have the right to be protected. The lack of a labor relationship restricts online ride-hailing drivers from maintaining their protection rights and interests, giving platform companies the opportunity to refuse to assume the obligation to pay for workers' work-related injury insurance, thus "turning away" most online ride-hailing drivers from work-related injury insurance [8]. Once an injury occurs during operation, the driver cannot enjoy the relief of work-related injury insurance. The driver bears the risk of injury independently, and there is a huge difference in social insurance benefits compared to employees with a clear labor relationship. In other words, within the framework of the current social insurance system, online ride-hailing drivers with non-standard employment find it difficult to enjoy the work-related injury insurance rights and interests that ordinary workers have.

5.2 Imperfect Labor Security Policies

Non-standard employment is a new product of the development of information technology in modern society. There are still problems in the relationship between the employer and the employee and the recognition of the labor relationship. The formulation of protection policies is also lagging behind. Since 2012, China's online taxi industry has been developing and expanding. In order to promote the integrated development of the taxi industry and the Internet, the Interim Measures for the Management of Online Taxi Booking Services came into effect on November 1, 2016. Article 18 of the Interim Measures stipulates that "online taxi platform companies shall ensure that the drivers providing services have legal qualifications for employment, and in accordance with relevant laws and regulations, sign various forms of labor contracts or agreements with drivers based on the characteristics of working hours, service frequency, etc., to clarify the rights and obligations of both parties." Although it is stipulated that online taxi platforms have the obligation to enter into various forms of contracts or agreements with online taxi drivers, it does not specify in detail which types of online taxi drivers are targeted? What kind of labor

relationship is established [9]?

According to the working hours statistics reported, online ride-hailing drivers work an average of 6.25 days a week, 11.06 hours a day, and 70.16 hours a week. The proportion of overtime workers is as high as 89.73%, which is much higher than the average weekly working hours of the working-age population of about 52% published in the survey "China Labor Statistical Yearbook" (2019). Long - term and normalized overtime work is more likely to lead to work-related injuries and safety accidents, and has an adverse impact on individual online ride-hailing drivers and the development of the entire platform economy [10] [11].

Guiding Opinions (2021) issued by the National Development and Reform Commission and other departments pointed out that we should actively explore the formulation and implementation of relevant policies for the protection of labor rights and interests in cross-platform and multi-employer flexible employment. We should improve the policy system for the protection of labor rights and interests of informal employment groups [1 2]. It can be seen that the country has begun to pay attention to non-standard employment as a specific form of work, but there is a lack of a corresponding legal system and no specific system has been issued, resulting in a lack of specific legal basis.

5.3 The Setting of Work-related Injury Insurance Premiums is Unreasonable

Whether it is truly implemented is the key to evaluating the effectiveness of the system. There is still an inappropriate payment setting for online car-hailing drivers to actually obtain work-related injury insurance. For online car-hailing platforms, not signing labor contracts with drivers, but realizing contractual cooperation between the two through sharing of labor income, can reduce the human resource costs of online car-hailing platforms, minimize their labor liability risks, and maximize their benefits. Objectively, it makes it difficult for online car-hailing drivers to enjoy the same work-related injury insurance benefits as other workers.

In addition, the mobility of online ride-hailing drivers is relatively high, which further weakens the willingness of the platform to pay insurance for them. For these companies, paying for work-related injury insurance will increase a lot of costs, but rarely bring benefits. In order to reduce cost expenditures, the platform will ignore the work-related injury protection needs of online ride-hailing drivers and evade the responsibility of payment. Although other social insurance employees stipulated by law can participate, if online ride-hailing drivers want to participate in social insurance, they can only participate as individuals. Individual payments and unit payments are different. The work-related injury insurance of ordinary workers is paid entirely by the company, and the full cost is borne by individuals, which will bring greater economic pressure to online ride-hailing drivers. In this case, the burden of online ride-hailing drivers is increased, and the responsibility burden of the platform is reduced. For online ride-hailing drivers, they are at the lower level of the labor structure and have meager incomes. Letting practitioners pay entirely on their own will undoubtedly increase the burden on workers.

5.4 Security Awareness Needs to be Improved

Some online car-hailing drivers are not very willing to participate in social insurance, lack a forward-looking vision and sensitivity to risks, and their self-protection awareness still needs to be strengthened, so they often do not choose to insure. In addition, the survey data on the employment status of online car-hailing drivers shows that among online car-hailing drivers, 41.17% are aged 30 to 39, 34.16% are aged 40 to 49, and 10.06% are aged 50 to 59. Most online car-hailing drivers who are in the stage of having elderly parents and young children have great economic pressure. At this stage, they are more concerned about how to obtain more economic income to maintain the basic expenses of their current lives, and they invest less in work-related injury insurance. At the same time, influenced by Confucianism and family concepts, the formation of social insurance awareness of some people has been restricted to a certain extent, and it is difficult to change the traditional concept of relying on the family to solve problems in a short period of time, which also provides certain resistance to the payment of insurance.

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6. Standardizing Labor Protection Measures for Online Ride-hailing Drivers

6.1 Relaxation of Social Insurance Certification

Give full play to the positive effect of platform economy in promoting employment, standardize platform employment, strengthen the protection of online car-hailing drivers, improve their work-related injury insurance system, and realize the connection between new labor relations and work-related injury insurance. Online car-hailing drivers with non-standard employment do not fall into the category of labor relations. When determining work-related injury insurance, it is first necessary to determine whether there is a labor relationship between the worker and the employer that complies with the law. In real life, in order to reduce labor costs, online car-hailing platforms also evade the obligation to protect online car-hailing drivers, making it even more difficult to provide labor protection for online car-hailing drivers. With the diversification of employment forms and the increasing number of platform practitioners becoming an important trend, the relatively fixed and unified status of traditional work-related injury insurance recognition and labor relations must change. The "Guiding Opinions on Maintaining the Labor Security Rights and Interests of Workers in New Employment Forms" jointly issued by eight departments clearly stated: Enterprises should guide and support new employment forms that do not fully meet the conditions for establishing labor relations to participate in corresponding social insurance according to their own circumstances, and clarify the obligations and rights of platform companies and workers. Therefore, it is necessary to pay attention to the issue of how to connect the diversification and uncertainty of labor relations with the certainty and minimum security of insurance recognition.

6.2 Multi-party Consultation to Protect Labor Rights and Interests

Government departments, platform enterprises and trade unions are the main entities of platform employees. The three

parties coordinate and cooperate to form a social consultation mechanism with active multi-party interaction and clear division of responsibilities. With the advancement of technology and changes in the employment structure, appropriate policy intervention is necessary. It can even be said that "how future employment will develop under the new situation will largely depend on the country's employment policy" [1 3]. In view of the importance of platform employment and the new challenges it poses to the current labor market system, it is necessary to further play the role of policy and, on the basis of adapting to and supporting platform employment, actively create a policy environment that is friendly to platform employment in order to adapt to, support and regulate platform employment.

The government takes the lead in designing a union organization framework for online ride-hailing drivers and establishing corresponding union organizations, which both require strong support from the government. Platform practitioners, including online ride-hailing drivers, joining the corresponding unions can not only enhance their sense of industry identity, but also improve their awareness of participating in work-related injury insurance and reasonably safeguard their labor rights and interests.

As for the platforms, they can strengthen risk prevention measures such as restrictions on overtime work orders, take the initiative to assume the burden of proof for the identification of occupational injuries among employees, change the situation of unequal responsibilities between the platforms and online ride-hailing drivers, and promote the enhancement of the voice of online ride-hailing drivers.

6.3 Clarifying the Insurance Collection and Payment Ratio

According to the income of online car-hailing drivers, multiple insurance payment levels can be set. Specifically, the payment practices of enterprise employees can be referred to reasonably set the payment base standard and payment coefficient. Ordinary workers do not need to pay work-related injury insurance premiums themselves, all of which are borne by the enterprise. Compared with ordinary workers, online car-hailing drivers have weakened labor relations. Therefore, their payment of work-related injury insurance should be different from that of ordinary workers. Based on this standard, combined with the labor relationship status of online car-hailing drivers, the specific amount can be set by the local government according to the actual level of economic development, and the platform will pay a certain proportion. For online car-hailing drivers, they can also bear part of the work-related injury insurance costs, which will not impose a large burden on the drivers. Under the condition that the level of protection remains unchanged, compared with the work-related injury insurance of employees, the insurance premiums of online car-hailing drivers are slightly adjusted, which takes into account fairness to a certain extent.

6.4 Improving the Protection Awareness of Online Car-hailing Drivers

Improve the protection awareness of online car-hailing drivers and change the public's protection concept through

comprehensive publicity. The main target of China's current social insurance system is the standard employment group, and the non-standard employment group is still excluded. To this end, we should let everyone know that online car-hailing drivers are also an important part of the employment group in modern society, and their rights and interests protection also belongs to the scope of the modern social security system. On the one hand, we should increase the publicity of the work-related injury insurance policy for platform employees. Due to the rapid development of social economy, the scale of the online car-hailing driver group has expanded, and the number of people who need to participate in insurance has continued to increase. In the future, they will be the main body of insurance. Improve their work-related injury insurance. For example, online car-hailing drivers who have conditions have not actively participated in insurance because they do not understand the details of insurance. To this end, we should increase the publicity of work-related injury insurance, let the public have a clearer understanding of the insurance requirements, objects, and methods involved in social insurance, promote non-standard practitioners to participate in insurance, and eliminate their worries. On the other hand, we should focus on promoting the policy system of the work-related injury insurance rights and interests of online car-hailing drivers. Local governments can carry out publicity in daily public activities, public service halls, and commercial areas of cities. Let online ride-hailing drivers understand the country's tendency to support development and the policy requirements for protecting their personal rights and interests, and provide support for better safeguarding their own rights and interests.

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7. Conclusion

Online ride-hailing services provide consumers with more choices for travel services. Their high-quality development plays an important role in promoting healthy competition in the online ride-hailing market and safeguarding consumer welfare. Whether the online ride-hailing market can develop healthily depends to a certain extent on the protection of the rights and interests of online ride-hailing drivers. The protection of work-related injury insurance for online ride-hailing drivers is conducive to regulating the platform labor market, encouraging more and more workers to find employment through this method, and providing support and assistance for expanding social employment models and improving social security levels. This paper studies the online ride-hailing driver group and analyzes the problems they encounter in labor relationship identification, policy improvement, payment ratio setting, and protection awareness improvement based on occupational risk theory. However, as far as the specific labor rights of online ride-hailing drivers are concerned, there are still many issues to be studied. The solution to these problems requires the joint efforts of the government, society, enterprises, and individual workers to jointly promote the implementation of work-related injury insurance rights and interests of online ride-hailing drivers.

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