# Original Paper

# Challenges and Solutions for Ride-Hailing Motorbike Drivers in

# Vietnam: An Analysis of Working Conditions and Health

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## Abstract

In the digital age, ride-hailing motorbike services have become an indispensable part of the urban transportation system in Vietnam, attracting thousands of workers with their flexibility and income potential. However, occupation also poses numerous health and safety challenges. The job requires long working hours, exposure to harsh weather conditions, and highly competitive pressure, leading to physical and mental health issues such as muscle pain, fatigue, and stress. This research article employs a survey method to collect data from ride-hailing motorbike drivers to analyze the labor burdens they endure. Based on the findings, the study suggests solutions such as improving working conditions, developing health support programs, and implementing more flexible policies to enhance the quality of life and job satisfaction among workers, thereby contributing to the sustainable development of the industry in Vietnam.

## Keywords

Ride-hailing motorbike, occupational safety, mental health, working conditions, occupational stress, sustainable development

### 1. Introduction

With the explosion of e-commerce and online business models, the demand for goods transportation has become increasingly urgent and intense. In this context, the role of ride-hailing motorbike services in facilitating and advancing the development of the goods transportation sector cannot be denied. The critical nature of ride-hailing motorbike jobs has become more evident than ever as businesses, particularly online stores, demand flexibility and speed in delivery. Ride-hailing motorbikes offer a quick, flexible, and efficient mode of transportation in the congested urban traffic of major Vietnamese

cities, ensuring that goods are delivered to customers swiftly and on time. Leveraging information technology and mobile applications, this profession has become more accessible to many people, from major cities to rural areas seeking employment. The flexibility in work hours and the ability to earn a stable income without significant capital investment have attracted a large workforce to this industry. However, despite the apparent benefits, the ride-hailing motorbike profession also entails significant challenges, particularly regarding health, occupational safety, and psychological stress.

Issues such as long working hours, competitive pressure from the market, and unsafe working conditions not only directly impact physical health but can also lead to mental health problems like stress, anxiety, and burnout. This research aims to delve deeper into the labor burdens and working conditions faced by ride-hailing motorbike workers, while proposing reasonable solutions to improve their quality of life and working conditions. Through systematic analysis of survey data and assessments, this study aims to offer practical recommendations to ensure safety, health, and sustainable development for workers in the modern transportation technology industry.

#### 2. Overview of the Labor Burdens of Ride-hailing Motorbike Drivers

Labor burdens refer to the physical and mental demands and pressures that workers endure during their job. This includes the physical exertion of the work, time pressures, and a work environment that can negatively affect both mental and physical health.

Labor burdens are categorized into two main types: (1) Physical labor burdens: These include activities that require physical strength, resilience, and endurance. For ride-hailing motorbike drivers, this often involves continuous riding, facing harsh weather conditions, and maintaining uncomfortable postures.

(2) Mental labor burdens: These relate to the mental demands, pressure from performance expectations and work quality, as well as the stress of dealing with complex problems and managing time in uncertain work conditions.

Key factors influencing the labor burdens of ride-hailing motorbike drivers include:

Weather: Working outdoors in harsh conditions such as intense heat or heavy rain can increase physical burdens and cause stress.

Extended working hours: The lack of fixed working hours, often requiring overtime to meet customer demands, increases both mental and physical burdens.

Financial pressure: The pressure to earn a living and competition from other drivers within the same technological system can increase mental stress.

Isolation: Despite working in a bustling environment, ride-hailing motorbike drivers often feel lonely due to a lack of genuine and deep social interaction.

Impact of labor burdens: The labor burdens not only affect work efficiency but also impact the health and happiness of workers. In the case of ride-hailing motorbike drivers, these impacts can include Physical health - Health issues such as spinal problems, respiratory issues from prolonged exposure to dust and fumes, and eye problems due to continuous work in improper lighting conditions.

Mental health - Stress, anxiety, and depression due to work pressures and lack of social support can severely affect the psychological well-being of workers.

A better understanding of these burdens not only aids researchers but also helps policymakers and technology companies find solutions to improve working conditions for workers in this industry.

### 3. Research Methodology

This study employs a survey research method, utilizing a questionnaire designed to gather detailed information about the working conditions, stress levels, and health issues of ride-hailing motorbike drivers. The survey was distributed both online and in person to active drivers in major cities across Vietnam. Data was collected from the responses of 50 drivers and analyzed using statistical software to assess the impact of labor factors on the health and happiness of the workers. The analysis includes both quantitative and qualitative methods, aiming to identify general trends and propose effective intervention solutions.

#### 4. Current State of Labor Burdens for Ride-hailing Motorbike Drivers

# 4.1 Distribution of Working Hours for Ride-hailing Motorbike Drivers

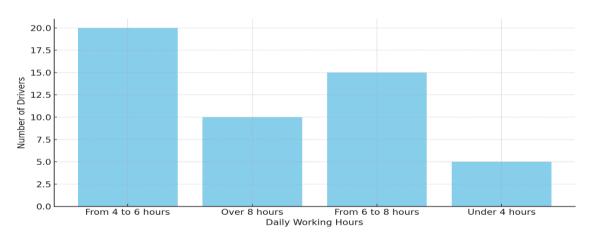


Figure 1. Distribution of Daily Working Hours for Ride-hailing Motorbike Drivers

The chart above shows the distribution of daily working hours for ride-hailing motorbike drivers.

From 4 to 6 hours per day: This is the most common working time range, with 42% of drivers, representing the highest proportion among the drivers. This suggests that many drivers choose to work for a moderate duration, possibly due to flexibility or to balance work with personal life.

Over 8 hours per day: 24% of drivers work more than 8 hours per day, which is a rather long working period that could lead to fatigue and high stress. This group may be facing greater pressures, both physically and mentally.

From 6 to 8 hours per day: This group includes 20% of drivers, indicating a significant number choose to work almost a standard shift.

Under 4 hours per day: Comprising 14% of the group, these drivers might be part-time or those who only choose to work during peak hours to maximize income without spending much time on this job. While the proportion of ride-hailing motorbike drivers working from 4 to 6 hours per day is high, the survey results regarding daily shifts show that most of their day is spent on standby for work. There are 54.9% of drivers working all three shifts in a day. A very small percentage of drivers (3.9%) only work in the morning shift (from 5 am to 12 pm), 29.4% of drivers only work the afternoon shift (from 12 pm to 6 pm), and 11.8% work during the evening shift (from 6 pm to 12 am).

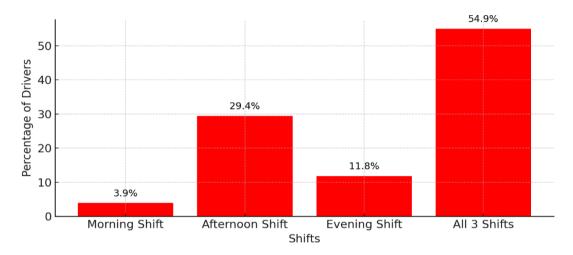


Figure 2. Distribution of Daily Shifts among Ride-hailing Motorbike Drivers

The results indicate that although the official working hours (time spent picking up and delivering goods) of the drivers are not extensive (mostly ranging from 4 to 6 hours), drivers spend a lot of time monitoring their phones to receive information from customers, with work time scattered throughout the day. This leads to the workers having no official break time. They always have to be attentive to work throughout the day, which can have negative consequences on health and quality of life. The ride-hailing motorbike profession allows workers to be flexible with their time; they do not need to work regular office hours or adhere to a fixed shift schedule. A significant majority of workers, 54.9%, choose to work all three shifts in a day, indicating that many have chosen ride-hailing motorbike driving as their primary source of income. For many, this job is no longer seen as part-time work but has become a primary occupation. Workers are choosing this field due to the decent income, lack of time constraints, and the freedom it offers even while working. However, working all three shifts in a day and extending over a long duration can greatly impact the health and physical condition of the workers.

4.2 The Impact of Working Hours on the Quality of Life of Ride-hailing Motorbike Drivers

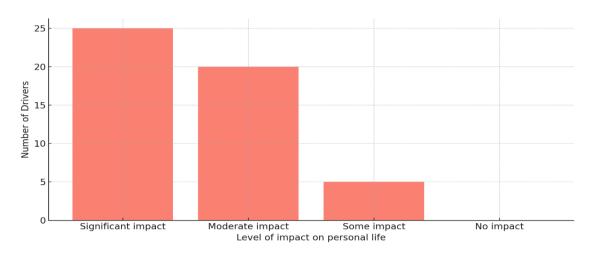


Figure 3. Impact of Working Hours on the Quality of Life of Ride-hailing Motorbike Drivers

The chart above depicts the extent to which working hours affect the personal life quality of ride-hailing motorbike drivers.

Negligible impact (54% of respondents): This is the largest group, suggesting that many drivers feel their job does not significantly affect their personal life. This may indicate that they have managed to balance their work and personal life or have adapted to job demands without feeling overwhelmed.

Moderate impact (36%): A considerable number of drivers feel that their job considerably affects their life. This could be due to long working hours or unfavorable working conditions impacting their ability to engage in personal activities or spend time with family and friends.

Significant impact (10%): This group feels that their job greatly impacts their life, potentially causing fatigue, stress, or even health issues. Although not a large number, it is noteworthy because it indicates that the job can have a serious detrimental effect on the lives of some individuals.

No impact (1 individual): Very few people feel that their job does not affect their life at all, which might reflect very favorable working conditions or that they work very lightly or for few hours.

The chart shows that while many drivers may maintain a balance between their work and personal life, a significant proportion still feels that their job affects their quality of life. This calls for intervention measures such as improving working conditions, providing health support, and offering supportive services to minimize the negative impact of work on the personal lives of workers.

4.3 Health Issues Reported by Ride-hailing Motorbike Drivers

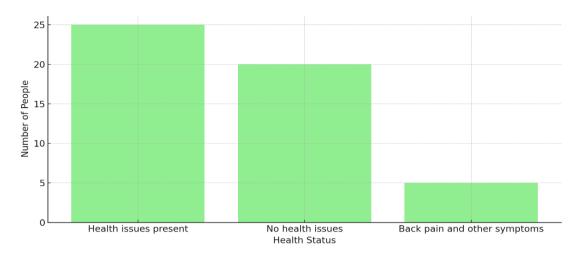


Figure 4. Health Issues Reported by Ride-hailing Motorbike Drivers

The chart above displays the health conditions reported by ride-hailing motorbike drivers. Health issues present (27 individuals): This is the largest group, indicating that around half of the drivers experience health problems directly related to their work. This reflects the physical and mental stress that the profession can induce, including problems like back pain, fatigue, or vision issues due to prolonged exposure to inappropriate lighting conditions.

No health issues (21 individuals): A relatively large number of drivers feel that their job does not cause them any health problems. This could be due to better working conditions, effective time management and labor efforts, or because they have only been in the job for a short period.

Back pain and other symptoms (2 individuals): A few reports specific issues like back pain, which is common in occupations requiring continuous physical activity, such as driving. This is an alarming signal about the potential long-term impact of this job on physical health.

The data shows that a significant proportion of ride-hailing motorbike drivers face work-related health issues. This calls for attention and intervention from tech companies and local authorities to improve working conditions, provide appropriate equipment, and safeguard the health of workers. Implementing preventive measures and health support could help to mitigate the negative impacts and improve the quality of life for those in this profession.

4.4 Stress and Anxiety Levels of Ride-hailing Motorbike Drivers

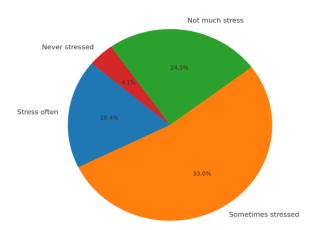


Figure 5. Stress and Anxiety Levels Reported by Ride-hailing Motorbike Drivers

The pie chart above represents the levels of stress and anxiety reported by ride-hailing motorbike drivers. Sometimes stressed (26 individuals - 46.4%): This is the largest group, indicating that a substantial number of drivers experience stress, but not consistently. The stress may stem from job demands, time pressures, or unstable working conditions.

Not much stress (12 individuals - 21.4%): This group feels less stressed, possibly because they adjust better to job requirements, or they have better working conditions compared to others.

Often stressed (9 individuals - 16.1%): This group frequently experiences stress, which can negatively affect their physical and mental health. This requires interventions to alleviate stress factors and provide appropriate support.

Never stressed (2 individuals - 3.6%): Very few reports no stress from work, suggesting that this job exerts a certain level of pressure on almost everyone.

The majority of ride-hailing motorbike drivers feel stressed at least occasionally, with some regularly feeling high levels of stress. This underscores the necessity of developing mental health support programs and improving working conditions to reduce the burdens and pressures of work, thereby enhancing the quality of life and work efficiency for workers in this field.

# 5. Discussions and Solutions

#### 5.1 Discussions

The analysis of data from surveys of ride-hailing motorbike drivers reflects several important aspects concerning working conditions and their impact on workers' health and quality of life. While this job provides opportunities for flexible scheduling and can result in a stable income, the physical and mental health challenges it poses cannot be ignored.

Stress and fatigue are two prominent factors among the health issues frequently faced by ride-hailing motorbike drivers. Elements like time pressure, fierce competition, and a lack of support can exacerbate these conditions. It is crucial for tech companies to recognize the importance of managing health and safety for their workers, not only from a legal standpoint but also as their social

responsibility.

To alleviate the burdens on workers, intervention programs need to be designed to address the specific challenges faced by them. This may include training sessions on time management skills, mental health counseling, and providing easily accessible medical services. Additionally, conducting regular surveys to monitor the health and happiness of workers can also help tech companies to adjust their policies in a timely and effective manner.

This study opens up new avenues for further research into the relationship between working conditions and worker health in the tech industry, while suggesting interventions that may help improve the quality of life for workers in the future.

5.2 Solutions for Ride-hailing Motorbike Drivers in Vietnam

We propose several solutions to improve working conditions and health for ride-hailing motorbike drivers in Vietnam as follows:

5.2.1 Regulations on Working Hours for Drivers

The government and tech companies need to set specific regulations for drivers' working hours, such as:

Limiting continuous working hours: Establish regulations or policies to limit the number of continuous driving hours per day or per shift. For example, restrict drivers from operating more than 8-10 hours daily to minimize fatigue and the risk of accidents.

Mandatory rest periods: Clearly define mandatory rest periods between driving shifts, including lunch breaks and rest times between work periods, ensuring drivers have adequate time to rest and recover after each shift.

Financial support for rest time: Consider providing financial support for drivers during their rest periods, ensuring they do not feel pressured to work continuously to earn an income.

App utilization encouragement: Encourage drivers to use app features like "rest mode," allowing them to temporarily stop receiving orders for a fixed period to rest.

Time management and health and safety training: Organize training programs on time management and basic occupational health and safety, helping drivers understand the importance of proper rest and effective work time management.

# 5.2.2 Developing a Community Network and Support for Drivers

Tech companies should: (1) Organize community events: Conduct regular meetings or workshops to share experiences and knowledge about the ride-hailing motorbike profession. Such events help drivers meet, exchange information, and learn from one another. (2) Create online forums or groups: Establish forums or groups on social media platforms like Facebook, Zalo, or WhatsApp, where drivers can share information, address work-related issues, and support each other. (3) Set up internal communication channels: Use newsletters, emails, or mobile apps to provide information and updates about the industry, new policies, or significant work-related changes. (4) Establish collaborative relationships: Partner with other organizations and communities, including tech company representatives, social

organizations, and government agencies, to create a multi-dimensional support network for drivers. (5) Conduct training and workshops: Hold training and workshops on essential skills such as safe driving, communication, financial management, and time management to enhance the drivers' capabilities and work efficiency.

By creating a strong and supportive community environment and sharing information, ride-hailing motorbike drivers will have opportunities to learn, develop skills, and collectively overcome daily work challenges.

#### 5.2.3 Tech Companies Need to Establish Safe Working Conditions for Drivers

Tech companies must ensure drivers are provided with adequate personal protective equipment such as helmets, gloves, raincoats, thermal clothing, and safety shoes to protect them from the risk of injury while driving. Additionally, they should organize traffic safety training courses that include safe driving techniques, road traffic rules, and emergency response skills to raise awareness and preparedness for drivers. Tech companies should encourage and support drivers to perform regular inspections and maintenance on their motorbikes to ensure they remain in safe and efficient operating condition. They should also create policies or regulations to minimize time pressure on drivers, including proposing reasonable delivery times and limiting the number of orders within a certain period. Tech companies need to create a comfortable and safe working environment for drivers by providing safe stopping points, parking areas, and rest areas between trips. They should also provide psychological and emotional support services to help drivers manage stress and anxiety from daily work, thereby improving their morale and focus.

Tech companies should encourage the use of safety features on mobile apps, including emergency call modes, location sharing, and incident reporting to help drivers handle emergencies quickly and effectively.

Financial support and legal assistance for drivers should be provided in cases of insurance issues, accidents, or disputes with customers.

By implementing these measures, we can create a safe working environment and protect ride-hailing motorbike drivers, helping to reduce the risk of accidents and protect their health.

## 5.2.4 Tech Companies Need to Support Drivers in Improving Health

Tech companies should organize and cover the costs of regular health check-ups for drivers, as mandated by law, to be conducted once a year to detect and address any health issues that could impact their ability to work.

Establish psychological and mental support programs: Offer counseling and psychological support services to help workers cope with stress and job pressure, as well as to improve their quality of life. Counseling sessions can be organized face-to-face or via phone calls or online chats.

Enhance health education: Organize educational programs and counseling on health, including nutrition, exercise, and stress management, to raise awareness and knowledge about maintaining good health.

Encourage physical activity: Promote regular physical activities, including scheduled exercise, walking,

or yoga, to improve cardiovascular health, muscular strength, and flexibility.

Create comfortable working conditions: Provide information and support so drivers can create a comfortable and safe working environment, including maintaining adequate hydration.

Promote healthy eating: Organize nutritional education programs and provide information on the benefits of maintaining a healthy and balanced diet.

By implementing these solutions, ride-hailing motorbike drivers in Vietnam can improve their health and enhance their quality of life.

#### 5.2.5 Developing Flexible Policies

The government can apply encouraging and supportive policies, such as lower taxes or financial aid, to encourage ride-hailing motorbike drivers and improve their working conditions.

Develop preferential policies and support during epidemics or crises: These policies could include financial aid, reducing operating fees, or providing special support packages during difficult times.

Encourage worker participation in policymaking: Create opportunities for workers to engage in discussions and contribute their opinions on policy decisions related to their jobs, ensuring the policies developed are appropriate and effective.

These solutions not only help improve the quality of life and job satisfaction for workers but also contribute to the sustainable development of the ride-hailing motorbike sector in Vietnam.

#### 6. Conclusion

The analysis of the survey data shows that the ride-hailing motorbike profession in Vietnam, while being a flexible career choice, also poses numerous challenges to the physical and mental health of the workers. Particularly, working long hours under harsh weather conditions, combined with intense market competition, has led to significant levels of stress and fatigue. Common health issues include back pain, fatigue, and stress-related illnesses. Moreover, the data also reflect that some workers feel the job significantly affects their quality of life.

In this context, tech companies and local authorities need to focus more on improving working conditions for workers. This could include the implementation of training programs on health and occupational safety, providing appropriate protective equipment, and adopting measures to alleviate isolation at work by enhancing communication and providing psychological support to workers. Additionally, establishing more flexible work policies, allowing workers to have more control over their working and resting hours, will also play a significant role in improving health and increasing happiness for workers.

Finally, the collaboration among stakeholders, including the state, businesses, and social organizations, is essential to ensure a safe and healthy work environment, thereby enhancing the quality of life and job satisfaction for ride-hailing motorbike drivers.

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