

Preliminary Study on the Dynamics of Food Delivery Driver

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ABSTRACT

While previous studies have explored the intersection of flexibility and algorithmic control in gig work, there is a notable gap in understanding how drivers strategically manage their idle time, balancing personal autonomy and platform constraints. Additionally, while research has primarily focused on ride-hailing drivers, the experiences of food delivery drivers remain underexplored though it has a unique work environment. This study explores how food delivery drivers in Jakarta manage their daily routines and idle time within the gig economy using a qualitative approach combining non-participatory observations and interviews. The research reveals how drivers navigate idle periods and develop scheduling strategies while working through food delivery apps, shedding light on their time use and work dynamics in this unique context. The findings show that there is a complex interconnection between time, space, and activity, of drivers' idle time behavior. Furthermore, the research challenges the idea of complete freedom and flexibility in gig work as the scheduling system, designed to reduce idle time, limits drivers' freedom and flexibility. The result of this study could help platform operators refining their algorithms and support systems to better align driver autonomy with platform objectives, which could improve driver productivity, wellbeing, and satisfaction.

Keywords:

Choices, decision making, food delivery application, gig economy, gig worker

INTRODUCTION

The gig economy has emerged as a disruptive force in global labor markets, transforming traditional employment relationships into more flexible, on-demand arrangements. This model is frequently celebrated for offering greater freedom and flexibility compared to the rigid nature of conventional 9-to-5 employment. This flexibility is often cited as a key benefit, enabling them to align their work with personal schedules and preferences. For example, unlike traditional taxi services, ride-hailing platforms, as a part of gig economy ecosystem, allow drivers to select their working hours and choose which ride requests to accept, fostering a sense of autonomy and control (Li, 2023). In addition, Berger et al. (2019) note that the perceived ability to manage one's own schedule contributes to higher subjective wellbeing among gig workers.

Emerging research suggests that the experience of gig workers is more complex than the promise of autonomy implies. Despite the rhetoric of freedom, the operational frameworks of these platforms often impose constraints on drivers through algorithmic management to maintain productivity. The trade-off between freedom and productivity is rarely discussed in depth. Additionally, aspects related to this trade-off, such as how workers manage their idle time, make decisions, and navigate their daily routines, remain underexplored. This study aims to fill this gap by investigating the dynamics of food delivery drivers within the gig economy ecosystem, with the goal of understanding how they manage their day, handle idle periods, and structure their broader work routines.

While previous study focused on ride-hailing drivers, there is limited study focusing on food delivery drivers. Both ride-hailing drivers and food delivery drivers often experience traffic congestion during their routines, food delivery and ride-hailing drivers face different challenges in their work environments. Food delivery drivers often struggle with parking issues, long waiting for food preparation, and ensuring the food safety during transit. They may also encounter problems in finding pick-up and delivery location, especially in crowded or hard-to-navigate areas.

Besides these technical challenges, food delivery drivers in the gig economy face other notable challenges, including unstable income, lack of job security, and absence of benefits like health insurance (Salleh et al., 2023). They often work long hours, experience fatigue, and struggle with financial instability (Salleh et al., 2023). Safety risks, customer harassment, and rising operational costs are additional concerns (Du Toit & Phumzile, 2024). The complex nature of delivery work involves entangled physical, digital, social, and natural factors (Ma et al., 2023). Many drivers work 8-10 hours daily, with some working late nights for extra income (Jain & Sethi, 2024). Weekly earnings range from 2000 to 5000 rupees, but platform fees and personal expenses leave little for savings (Jain & Sethi, 2024).

The food delivery gig economy employs algorithmic management through digital platforms, offering workers perceived autonomy and flexibility (Sigroha & Kapoor, 2024). However, this autonomy is closely monitored and controlled by algorithms that govern workers' activities through instructions, ratings, and reviews. These mechanisms significantly impact workers' autonomy, job satisfaction, and labor rights. These algorithmic systems, ranging from customer rating mechanisms to dynamic pricing algorithms, also directly and indirectly influence driver behavior to meet platform objectives, not necessarily the drivers' preferences (Marquis et al., 2018). Wood et al. (2018) similarly highlight how algorithmic management can create paradoxical conditions in which drivers experience both flexibility and control, often leading to low wages, irregular hours, social isolation, and exhaustion.

Another important aspect of gig work which remains underexplored is how drivers utilize their idle time, the periods between ride requests or the waiting period during the low-demand hours. Ma et al. (2022) found that ride-hailing drivers, on average, exhibit higher capacity utilization than traditional taxi drivers, suggesting that platform algorithms are effective in minimizing idle time. However, drivers still experience frequent periods of waiting, particularly during off-peak hours or in locations with low passenger demand. What drivers choose to do during these idle moments is an important component of their overall work strategy and directly affects their productivity, earnings, and wellbeing.

While some drivers use idle time for rest, social interactions, or personal tasks, others engage in activities aimed at improving their economic outcomes. These include repositioning to high-demand areas, monitoring multiple platforms simultaneously (multi-apping), or analyzing patterns in demand surges. Additionally, some drivers use idle periods to reflect on ride selection criteria, such as expected tip amounts, pickup distances, or the likelihood of receiving bonuses (Ashkrof et al., 2022). Likewise, Arora et al. (2024) found that drivers' relocation decisions significantly impact their performance and earnings, with a one-kilometer increase in relocation distance leading to decreases in order assignments, speed, and earnings. Only 25% of relocations were found to be balance-enhancing, with drivers often prioritizing familiar areas despite negative consequences. These actions reflect continuous negotiation between personal freedom and algorithmically influenced incentives, illustrating the nuanced ways drivers manage their time and optimize their performance.

Although prior research has explored the nexus between flexibility and algorithmic control, few studies have systematically examined the behavior of drivers and their strategy during idle time. In gig ecosystem, idle time directly affects gig workers' earnings. Idle time represents periods when workers are not engaged in paid work. Hence, if drivers have long period of idle time, there is a relatively high probability that they will lost higher earnings. Understanding these strategies on idle time can shed light on how drivers balance financial goals, personal autonomy, and platform constraints.

A recent study from Chen et al. (2025) revealed how online food delivery drivers make decision whether to accept or decline orders. The study elaborates that drivers decide whether to accept an order based on potential earnings, which are higher with a higher pay rate or in busy areas. After arriving at the restaurant, they reassess by considering how long they will have to wait for the next order. Waiting time is longer with a more time-consuming order or higher pay, and shorter with more nearby restaurants or busy areas. Orders are considered being good or poor based on the pickup and drop-off areas being busy and wait time at the restaurant.

In the discourse of gig economy, one theory that could be used to understand the dynamics of this issue is the Job Demand-Resources (JD-R) model developed by Arnold Bakker and Evangelia Demerouti. This model generally highlights the impact of job demands and resources on employee wellbeing and performance. It suggests that high job demands and low resources can lead to stress and burnout, while high resources can buffer the negative effects of demands and improve work engagement and motivation. The JD-R model is a widely used framework for examining work engagement and wellbeing (Lee, 2024). It is highlighted by the Conservation of Resources theory, which posits links between job demands, resources, and various work outcomes (Bon & Shire, 2022). The JD-R model has been applied to the gig economy context, where factors like workload, time pressure, job autonomy, and social support are considered alongside personal resources like psychological capital (Lee, 2024). In gig work, key job characteristics include precarity (job insecurity) and flexibility (job autonomy), which can impact workers' psychological wellbeing (Tara & Iqbal, 2023).

This study aims to explore the dynamics of food delivery drivers as part of the gig economy ecosystem. Through this research, we would like to understand how food delivery drivers go about their day, navigate idle periods and their broader work routines. In doing so, we aim to contribute to the ongoing discourse on labor dynamics in the gig economy, offering a more comprehensive view of autonomy, productivity, and the lived realities of gig workers. This research also challenges the simplified narratives of gig work flexibility and highlights the trade-off, and sometimes constrained, choices drivers must make to sustain their livelihoods.

RESEARCH METHODS

This study aims to explore the dynamics of food delivery drivers, such as how food delivery drivers manage the ebb and flow of their day, their idle periods and their overall work routines. A qualitative approach, combining observation and interviews, is employed to understand the dynamics of food delivery drivers within the gig economy sector. By using this approach, the study able to uncovers the unique story, challenges and opportunities faced by food delivery drivers. For instance, Penner et al. (2024) highlight the distinct barriers faced by gig workers with disabilities, requiring tailored support, while Webster & Zhang (2020) show how immigrant women use gig work as a pathway to entrepreneurship despite structural constraints. Additionally, qualitative research captures interpersonal dynamics and emotional experiences, often overlooked in quantitative studies. Moreover, it provides a deeper understanding of gig workers' lived experiences. Mohamed & Mat (2023), for example, demonstrate how workers adapt to shifting expectations post-pandemic, emphasizing the value of human-centered research for responsive policy and practice.

In this preliminary study, two non-participatory observations and two interview sessions were conducted. The purpose of the observations was to gain a general understanding of how food delivery drivers conduct their daily activities, including both active delivery work and idle time. Active delivery work refers to when drivers are *actively* delivering food. This can be seen from their behavior such as bringing food package from food merchants, placing the food package onto their motorcycle and riding their motorcycle away. Idle period refers to when drivers are *not actively* delivering food.

The observations took place around food merchants along Jalan Tebet Raya and the area around Tebet Station adjacent to Jalan KH Abdullah Syafei in Tebet, South Jakarta on October 13th 2024 at 1:17 PM - 2:00 PM and 2:00 PM - 2:30 PM respectively. This area was specifically chosen because there are many food delivery drivers idling and commuting around the area throughout the whole day, creating a dynamics that making it suitable for observation site. Key points of observation includes the number of drivers present near food merchants, the duration they wait to receive new orders, their general behavior, and how they manage their time while waiting.



Figure 1. Area of Observation Source: Screenshot of Google Maps (2024)

Following the observations, in-depth interviews were conducted with the objective of deep diving based on the observation results and understanding how drivers go about their day and how they make scheduling decision. For this interview, we selected two participants using a purposeful, random approach (Creswell, 2007) with one criterion: drivers on gig platform who deliver food. We believe that participants with this criterion will be able to tell their story and experience as food delivery drivers in the gig economy ecosystem hence proving us with meaningful information for the study. We assume the number of food delivery drivers who are actively working to be enormous, so, we randomly choose food delivery drivers as we see fit which according to Creswell (2007) could add credibility to sample.

There are some challenges in recruiting participants. Potential participants were very hesitant to be interviewed due to concerns that their voices and opinions might be reported to ride-hailing and food delivery companies, fearing it could negatively impact their jobs. So, on this preliminary study, we were able to find two persons who are willing to be interviewed with one condition: they did not give permission for voice recording and visual recording (photo or video). During these interviews, participants were asked several questions about how they make decisions when choosing their scheduling schemes, the duration of their working hours, how they spend their day, and how they navigate their idle time between active periods. Two participants were included in this study, they are, not in their real name, Ian (male, 24 years old) and Tri (male, 45 years old) who work with Grab platform. We conducted the series of interviews on October 25th and 26th 2024. Each interview lasts for about 30 - 60 minutes.

The data in this study consist of photographs taken during the non-participatory observations, field notes, and interview notes. As both interviewees did not consent to any form of recording, including photos, voice recordings, or video recordings. Therefore, the data that we collected was only through field notes, interview notes, and observation photographs. The validity and reliability of this research is maintained through methods triangulation; that is, by combining our observations data and interview data. Two researchers were involved in this study during research formulation, data collection, and data analysis stage as an effort in maintaining objectiveness.

There is no universally accepted procedure for qualitative research, as the process may vary depending on the context and complexity of the study. According to Mezmir (2020), qualitative data analysis generally involves four stages: familiarization, data reduction, data display, and report writing. In the first stage, familiarization, researchers must become acquainted with the diverse data collected. During this stage, we re-read the observational field notes and interview notes, identifying key issues, concepts, and themes emerging from the data. Qualitative research often produces more data than is needed for the final report, so data reduction involves narrowing the data using frameworks, research questions, and instruments. This process includes summarizing, coding, identifying themes, and writing stories. Since qualitative data are often unstructured, displaying the data means gradually transforming raw, disorganized data into a recognizable conceptual scheme. The final stage, report writing, involves analyzing the data by making sense of it and explaining how it relates to the research topic, drawing out key insights, patterns, or processes from the data.

In this study, the data analysis process begins with familiarizing ourselves with the data. We then identify the key issues emerging from the photographs and notes through open coding and categorizing and rich, thick description. We attempt to make sense of the data by creating a schematic diagram to shows how each issue or theme is interconnected. From this analysis, we draw insights and patterns in an attempt to draw meaningful conclusions.

RESULTS AND DISCUSSION

Results

The results of this study are synthesized from both the observations and interview sessions. Several key issues were identified through open coding, which was the first cycle of the analysis. The analysis is proceeded with assigning themes for each category of the issues that were identified. We then present how food delivery drivers spend their day (i.e., their work routine), the trade-off in their scheduling decision-making processes, and their behavior during idle time in the following subsections. *Results for observation*

Through our observations notes we listed several issues emerging from the data. We observed approximately 20 drivers around the observation site (Jalan Tebet Raya area) with diverse idle duration and activities. The table below summarizes the issues related to idle time behavior which then being categorized into three themes: space, duration, and activities.

Table 1. Open Coding and Themes		
Point of Observation	Open Coding	Themes
Where drivers are idle	Under big tree	Space/location
	Under shades	
	Nearby food and beverages sellers	
	On a sidewalk bench	
How long drivers are seemed idle	Idle for > 30 minutes	Long duration
	Idle for $5 - 10$ minutes	Short duration
What drivers do during their idle	Eating, drinking	Activity
period	Napping	
	Waiting to pick up orders	
	Smoking	
	Scrolling through social media	
	Watch video (such as YouTube)	
	Paling games on the phone	
	Talk with fellow drivers	

A variety of locations, such as being "under a big tree," "under shades," close to "food and beverage sellers," or sitting "on a sidewalk bench," are included in the open coding and categorized to the theme of "space or location." Regarding "duration," the codes draw attention to times when drivers are not moving, for more than 30 minutes or for five to ten minutes. Drivers' idle activities, such as "waiting to pick up orders," "eating or drinking," "napping," "scrolling through social media," "watching videos (e.g., YouTube)," "playing games on the phone," and "talking with fellow drivers," are all categorized into the "activity" theme. These themes and codes provide insights into the balancing act between work, rest, and social interaction by capturing the range of ways drivers manage their time when they are not actively working.



Figure 2. Drivers' idle location

Based on this observation result, we would like to deep dive into duration aspect of this idle behavior. We initially defined the idle period as the period when drivers are *not* actively working. Given this observation results, idle time might has different meanings. Drivers' idle time can represent a period of opportunity loss, including both longer waiting times for orders and the time spent waiting to receive new orders, in addition to intentional breaks when they are not actively working.

Results from Interviews

Built on the observations result, in-depth interviews were carried out with two participants. The objective of the interview is to further analyze the observation results, especially on the idle time duration, and gain a better understanding of how drivers navigate their day and make scheduling decisions. Rich, thick description is used to present and analyze the findings and extracting the main themes. Each subsection below describes three key themes related to the food delivery drivers: work routine, scheduling choices ("slot" vs regular schedule), and idle time behavior.

Work Routine of Food Delivery Drivers

The day starts early for Tri and Ian, who begin their work at 6 AM. They prefer to take ride orders, capitalizing on the high demand from customers heading to work. By 11 AM, they shift their approach. While Ian continues to take ride orders, Tri changes his focus to food delivery, taking "slot" or shift on Grab for food orders. This slot lasts for four hours, from 11 AM to 2 PM. As the day progresses, Tri becomes busier, receiving frequent rapid orders as he is on slot. His busy schedule makes him deliver food nonstop. Sometimes he has to skip lunch and work late. In contrast, Ian balances his workload by taking a long break from 1 PM to around 3:30 or 4 PM, resting at home. He never likes to drive at noon. Ian said, *"I never like to work at noon, the weather is hot, and it is very exhausting to drive under the scorching sun."* Ian's recharging activity includes having lunch, praying (performing salah), then he takes a nap. By 5 PM, the workday begins again. Tri continues working under his slot system until about 7 PM, after which he reverts to taking regular (non-slot) orders. Meanwhile, Ian has finished his break and is ready to return to regular food deliveries. Both drivers wrap up their day by 11 PM and head home.





General Drivers' Idle Time Behavior

The different scheme between regular and slot schedule creates different idle time duration as each framework structures work and break differently. The regular schedule follows a long, diverse, unpredictable pattern, whereas the slot schedule enables for less and more predictable idle time. In order to understand drivers idle time behavior, we first conducted non-participatory observations which were followed by interviews. From our observations, drivers often exhibit similar patterns during idle periods. They typically rest under the shades, e.g., under large trees near street-side food, near beverage establishments such as beverages seller on a bike or "starling" and small food kiosk or "warung". They also either sit on their motorcycles, on benches, or at the sidewalk. During these breaks, we observed their common activities include smoking, eating or drinking, browsing social media or playing games on their phones, and interacting with other drivers such as having small talks or conversations. During our observation, we noted over 20 drivers, some remaining idle for more than 30 minutes, while others stayed for shorter periods (around 5-10 minutes). We assume that those with brief idle times are either receiving new orders quickly or making a short stop to pick up food from the merchant. We differentiated these two activities by observing driver behavior: some would park their motorcycles, check their phones, drink water, then put on their helmets and leave, suggesting a quick turnaround between orders. Others, however, parked their motorcycles, entered a specific food merchant, returned to their vehicle, and then departed, indicating a pick-up task at that location. To further understand the idle time behavior, we followed up the observation with interviews deep diving into the three factors we found from the observations. We found that drivers idle time is shaped by three factors: *time*, *space*, and *activity* which are intertwined with one another.



Figure 4. The intertwined between time, space, and activity

The diagram in Figure 4 shows the interconnection between time, space, and activity which shaping the behavior of drivers during their idle periods. Specific times of the day influence the type of space drivers seek when they are idle. For instance, the time of day can affect whether drivers choose

to wait in places closer to food merchants or other locations based on their needs and preferences. The duration of their wait also determines what activities the drivers do during idle time, as longer idle times will often lead to drivers engaging in various activities, such as using their phones or playing video games on their phones, eating, or resting. Meanwhile, the space or location where drivers choose to wait impacts which activities are feasible for them. For example, some spaces may offer benches for rest, while others may not be suitable for sitting or eating. Conversely, the activities that drivers choose to their preferred activities, such as places with food vendors or quiet corners for relaxation.

Where do drivers spend their idle time? Drivers experience two types of idle periods: long and short durations. Long idle times occur when drivers intentionally take a break and are not receiving orders. During these breaks, drivers often rest at home, enjoy a proper nap, have lunch, or pray (salah). On the other hand, short idle times happen when drivers are waiting for orders to complete or waiting for new orders. During these shorter breaks, drivers typically find spaces like *warungs* (local food stalls) to quickly grab cold drinks and snacks, or mosques where they can take a quick nap, charge their phones, and pray (salah). Some drivers also spend their idle time under a tree, taking a brief rest under the shade and drinking water, while others stop at a gas station to take a toilet break or fill up on gas.

The nature of these idle periods also influences the activities drivers engage in. During long idle times, drivers take the opportunity to recharge by charging their devices, taking a proper nap, having lunch, or praying. These breaks allow them to rest and refresh. In contrast, during short idle times, drivers often engage in activities such as browsing social media, replying to messages, drinking water, taking a quick power nap, or watching videos. These activities help pass the time as they wait for their next order.

"Slot" vs "Regular" Schedule

In our interview with the participants, we asked about how long their usual idle time. Tri did not answer the question right away and asked, "It depends on what idle period you are referring to, is it idle period when we are on slot or regular schedule?"

Tri then explained the difference between "slot" and regular schedule. The term "slot" is actually referring to the Grab Shift feature which allows drivers to choose time slots and work areas from various available options. Shift offers additional incentives per trip and/or guaranteed minimum rates per shift and nudge drivers to keep taking orders. Drivers can plan and determine the timing and location for receiving orders. Drivers who pick a "slot" or shift will be prioritized to receive orders, resulting in less idle time between orders. However, the fee per order is actually lower than for regular drivers (those who do not pick a shift). Regular drivers also tend to experience longer waiting times between orders as they are not prioritized to receive orders. Tri said, "If we take the slot, the orders keep coming nonstop, we don't stop. It's just that the fare is low."

The choice between "slot" or regular schedules is also influenced by the drivers' characteristics. In the case of Ian, a single and young driver, he never uses the slot scheme. He is comfortable with a higher level of unpredictability, as he can adapt to fluctuations in order demand and income. This flexibility allows him to adjust his work hours and take orders based on real-time opportunities. Ian's willingness to work under such uncertain conditions reflects his lower need for financial stability and his ability to tolerate the risks of not knowing exactly when or where his next order will come from and how much he will earn in a day.



Figure 4. Trade-off between "slot" and "regular" schedules

On the other hand, Tri, who is much older than Ian and married, prefers the structure and security that the "slot" system offers. He always opts for slots during certain period of time, usually during the lunch period when demand is higher and more predictable. By choosing the slot, Tri guarantees himself a steady flow of orders during this high-demand time, reducing income uncertainty. This certainty is necessary for Tri, who likely has additional responsibilities and financial commitments, such as providing for his family. By working within a scheduled period, Tri can better manage his earnings and ensure that he meets his financial needs for the day.

Discussion

Scheduling Type Effect: Trade-off between flexibility and income certainty

Learning how drivers went about their day and their decision to choose slot, or regular schedule provides a deeper understanding of the trade-off between productivity and freedom. The "slot" system on ride hailing platform allows drivers to prioritize certain work hours, reducing idle time by ensuring they are continually receiving orders. However, this "slot" system is contrasts with the experience of regular drivers, who may face longer wait times and higher variability in earnings. The choice between taking a "slot" and opting for regular orders not only impacts their earning potential but also influences how drivers spend their idle time, as those on a "slot" experience less idle time and more consistent work. Furthermore, on a more philosophical perspective, this has blurred the idea of freedom and flexibility which are offered by gig work. Under the "slot" system, drivers are no longer free and flexible as they are bounded by the shift schedule and are nudged by the algorithm to keep taking orders. As coined by Marquis et al. (2018), Salleh et al. (2023), and Wood et al. (2018), platform operational frameworks frequently employ algorithmic management to constrain drivers, such as dynamic pricing

algorithms and customer ratings which leads to a paradoxical situation where drivers feel both in control and flexible yet resulted in low pay, erratic schedules, social isolation, and fatigue.

Drivers Profile and Work Preferences

Taking on a different perspective, the difference in approach of choosing slot versus regular schedule in the case of Ian and Tri highlights how personal circumstances, such as age, family status, and financial responsibilities, shaping their view on general certainty/uncertainty and affect drivers' preferences for income certainty. While Ian's flexibility allows him to work with the fluctuation of demand, Tri's need for stability drives him to seek out more predictable and structured work schedules. This contrast underscores the broader trade-off between flexibility and income certainty in the gig economy. For some drivers, the freedom to choose when and where to work is more important than guaranteed earnings, while for others, financial stability and predictability are essential for managing their personal lives and expenses, especially for those who are on gig platform full time (Keith et al., 2019). Additionally, Tri, as a person with more financial responsibility, is willing to work long hours under the "slot" system in order to get higher, stable earnings; similar to what Jain & Sethi (2024) found their study.

Idle time: Trade-off between wellbeing and productivity

The study also highlights the trade-off between wellbeing and productivity in the context of gig work, particularly regarding idle time. While idle time is often seen as unproductive, idle time is not wasted but serves as an opportunity for drivers to rest, to recharge mentally and physically, meet personal needs and optimize their work routines. The concept of idle time as recharge time resonates with Tara & Iqbal (2023) and Lee (2024) as well as the JD-R theory which discuss the relationship between job demand and wellbeing. The findings reveal that during long idle periods, drivers have the opportunity to rest, eat, pray, or recharge mentally and physically, whereas short idle periods are usually spent on activities such as browsing social media, watching videos, or a quick break. Both short and long idle periods provide opportunities for drivers to recharge their energy, mentally and physically, as an effort to maintain their wellbeing.

However, there is a significant trade-off between wellbeing and productivity. Long idle time, while providing much-needed rest, could also results in opportunity loss, as drivers experience delays in receiving orders or face long wait times between orders. This loss of potential income reduces their overall earnings, which can lead to dissatisfaction or financial stress, particularly in the gig economy sector where income is often tied directly to active working hours. In contrast, short idle periods may not result in lost earnings, but they come at the expense of rest, potentially leading to mental fatigue or decreased wellbeing if drivers do not get sufficient time to recharge.

These findings highlight the delicate balance between maintaining wellbeing and maximizing productivity. While being idle for long periods can hurt a driver's productivity due to lost income opportunities, short idle periods, though productive in terms of income, can negatively impact drivers' health and wellbeing. This trade-off reinforces the idea found by Berger et al. (2019) that the ability to

manage one's schedule, which directly relates to how drivers handle idle time, significantly contributes to their subjective well-being. Balancing these competing demands: recharging during idle time without sacrificing income potential, is a key challenge that gig workers must navigate, and platforms may need to consider ways to minimize unnecessary idle time while allowing for adequate breaks to maintain workers' health and productivity.

CONCLUSION AND RECOMMENDATION

This study emphasizes the complexities of managing idle time in the gig economy, where drivers must balance the need for rest with the pressure to stay available for orders. The findings indicate that while flexibility is a key benefit of gig work, it is often limited by the operational systems of gig platforms.

The results show how drivers plan their days throughout the whole day. With extended pauses for rest, meals, or prayer and brief pauses for things like social media browsing, idle time is essential. These activities are influenced by the location of idle time; drivers near mosques may pray, while people who rest under trees or visit food stalls eat or socialize. The difficulties drivers have juggling rest and remaining available for orders are highlighted by this interaction of time, space, and activity.

The vstudy's conclusions also point out that flexibility comes at a price: uncertain income. This study extends the JD-R model to the gig economy, demonstrating that high job demands negatively impact workers' income stability in addition to their wellbeing. It also challenges the idea that gig work offers total freedom and flexibility. Although gig platforms' "slot" system is designed to cut down on idle time, it actually limits drivers' freedom and flexibility, making it difficult to define what freedom really means in the gig work ecosystem.

Managerial Implications

This finding offers several important managerial implications for gig economy platforms, especially those in the food delivery industry. Given that idle time is linked to drivers' decision-making (i.e., choosing between "slot" work and regular orders), gig platforms could design targeted incentives to encourage desirable behaviors and addressing the income uncertainty. For example, offering minimum pay per day and higher incentives for drivers who spend less time waiting for orders or encouraging them to take longer breaks at specific times could help regulate demand and improve overall service levels. In addition, drivers' ability to manage idle time effectively also impacts their work-life balance. In this case, gig work platforms could introduce reward systems that incentivize drivers to maintain a healthy balance between work and rest. For instance, providing weekly incentive for drivers who maintain healthy working hours or achieve certain rest benchmarks could promote behaviors that contribute to both wellbeing and productivity. By providing tools to help drivers better manage their rest periods, such as recommending ideal resting spots or giving access to amenities like charging stations at designated rest areas, platforms can help drivers maintain a healthier work-life

balance and increase their wellbeing. Likewise, this could lead to greater driver satisfaction, reducing burnout and increasing retention.

Limitations and Further Avenue of Research

As this is a preliminary study, it includes only a limited number of participants and observations site. Nonetheless, despite these limitations, the findings pave the way for future research that could explore the trade-off between productivity and flexibility in gig economy work, as well as how drivers' preferences for certainty or uncertainty influence their scheduling decisions. Additionally, further studies with a more diverse range of participants and locations are necessary to fully understand the concept of freedom for gig workers in different sectors and how it is practiced in the gig economy ecosystem.

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