



Original Research Article

A CROSS SECTIONAL STUDY TO ASSESS THE OCCUPATIONAL PROBLEMS OF ONLINE FOOD DELIVERY PARTNERS IN INDORE (M.P.)

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ABSTRACT

Background: Online Food delivery has become an integral part of our daily life. This market in India is mainly driven by youth and has provided employment to a big population. Despite the beneficial facilities, there lies multiple challenges faced by them which include time limitations, financial crisis and repercussions for damaging the product. The objective is to understand the socio-economic profile of food delivery partners. To identify & analyse the occupational problems of food delivery partners.

Materials and Methods: A cross sectional study was conducted among 100 food delivery partners from both swiggy & zomato using sequential sampling at geeta bhawan region in Indore city. After taking informed consent from the participants, interpersonal interview using a pre-designed semi structured questionnaire was carried out. Data were entered into MS Excel and analysed by using JAMOVI software.

Results: In our study majority of food delivery partners were HSC passed and working 5-7hrs/day and income was 2001-5000. The occupational problems were physical strain, mental health concerns, inadequate restroom access, and limited rights awareness. High stress levels and low income satisfaction further impact their well-being. Despite these issues, a majority expressed willingness to continue in this profession, highlighting its potential as a sustainable livelihood.

Conclusion: The study highlights that while a majority of food delivery partners are young, semi-educated individuals working moderate hours for modest income, they face significant occupational challenges. The willingness of most respondents to continue in this line of work suggests that with targeted improvements in workplace conditions has the potential to provide sustainable and dignified employment.

Keywords: Socio- economic level, Occupational problems, Food delivery partner.

INTRODUCTION

Our everyday lives now revolve around food delivery. In the last two years, this industry has seen significant change and is the fastest expanding sector. Using an app to order food from a restaurant is known

as online meal delivery; Zomato and Swiggy are two of the biggest companies in this market. A significant portion of our nation's workforce has benefited from it. Notwithstanding the advantageous facilities, food delivery partners still confront a number of difficulties, such as manual food handling, time constraints, financial difficulties, and consequences

for product damage. In addition to experiencing negative customer and restaurant owner behavior, there is an elevated risk of numerous work-related health issues.^[1-5]

Objectives:

- To understand the socio-economic profile of food delivery partners.
- To identify & analyse the occupational problems of food delivery partners.

MATERIALS AND METHODS

A cross sectional study was conducted among 100 food delivery partners from both swiggy & zomato using sequential sampling at geeta bhawan region in Indore city over a period of 3 months (July 2024 to Sept 2024). After taking informed consent from the participants, interpersonal interview using a pre-designed semi structured questionnaire was carried out. The sample size was calculated using the formula $n = \frac{Z_{\alpha}^2(p \cdot q)}{d^2}$ and taking prevalence of low backache 31%. Hence total sample size came out to be 94.6, rounded off to 100 using the sequential sampling method. The data was collected after taking informed consent from the participants, interpersonal interview using a pre-designed semi structured questionnaire was carried out. Data were entered into Microsoft Excel spread sheet and analyzed by using JAMOVI software. Appropriate statistical tests were applied wherever necessary. Frequencies and percentages were calculated for qualitative variables. The chisquare test was applied to test the significance of association between categorical variables. A p-value of less than 0.05 was considered as statistically significant.

$$n = \frac{Z_{\alpha}^2(p \cdot q)}{d^2}$$

$$n = \frac{4 * 31 * 69}{10 * 10} = 85.56$$

Z_{α} = confidence level at 95% (standard value of 1.96)

- Z_{α} = confidence limit at standard value of 1.96 \cong 2
- $q = 100 - p$
- p = prevalence of low backache 31%
- d = absolute error (10%)
- $86 + 8.6$ (Taking non-respondants as 20%)
- $[86 * (10/100) = 8.6]$
- $94.6 \cong 100$

So Total Sample Size = 100

Inclusion Criteria

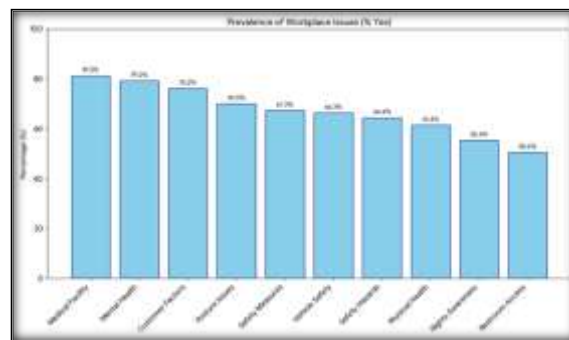
- Registered online food delivery partners of Indore city.
- Minimum 6 months of work experience in this sector.

Exclusion Criteria

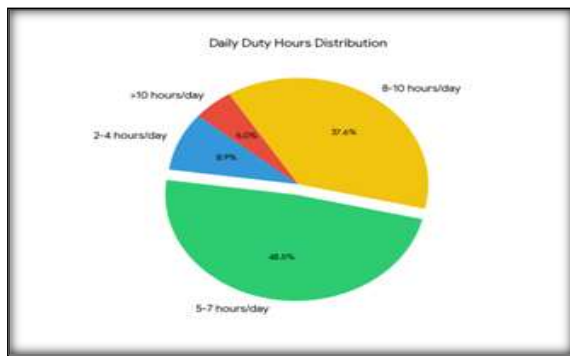
- Food delivery partners who were not willing to participate.
- Food delivery partners who were not available during the study.

RESULTS

In our study majority of food delivery partners were HSC passed and working 5-7hrs/day and income was 2001-5000. The occupational problems were physical strain, mental health concerns, inadequate restroom access, and limited rights awareness. High stress levels and low income satisfaction further impact their well-being. Despite these issues, a majority expressed willingness to continue in this profession, highlighting its potential as a sustainable livelihood.



The analysis of workplace conditions revealed that the highest positive responses were recorded for medical facilities (81.2%), mental health issues (79.2%), and customer-related factors (76.2%). In contrast, the lowest positive ratings were observed for restroom access and condition (50.5%) and rights awareness (55.4%). These findings highlight critical deficiencies in essential infrastructure and legal literacy, as well as ongoing challenges related to physical safety hazards and ergonomic posture. Psychological and environmental stressors were prominent among the participants. A significant majority (71.3%) of workers reported experiencing moderate to high levels of job-related stress. Furthermore, 71.3% of respondents indicated that irregular working hours had a substantial negative impact on their well-being, providing ratings of 4 or 5 on the impact scale. Regarding financial compensation, satisfaction was generally low to neutral; 60.4% of the cohort expressed neutral satisfaction (rating 3) with their income, while 16.8% reported low satisfaction (rating 2). Despite these challenges, participants reported higher satisfaction levels regarding technical and operational aspects of the gig. Respondents were generally satisfied with the user-friendliness of the delivery applications and the degree of autonomy over their work. Specifically, 36.6% of delivery partners felt they possessed a high level of control over their schedules (rating 5). This sense of autonomy may contribute to the finding that over 67% of respondents expressed a willingness to continue in this line of work (rating 3 or above). Overall job satisfaction leaned toward the neutral range, with 44.6% of participants providing a rating of 3 and 34.7% providing a rating of 4.



DISCUSSION

The present cross-sectional study was conducted to assess the socio-economic profile and occupational problems faced by the online food delivery partners of Indore. The gig economy has opened new avenues of work, especially for the youth, with the fast growth of digital platforms like Zomato and Swiggy. However, the findings of this study indicate that food delivery work provides a livelihood but also presents a number of occupational challenges such as physical strain, psychological stress, irregular work hours, and inadequate workplace facilities. In the present study, majority of the participants were young and completed higher secondary education. Other studies on gig economy workers in India have also reported similar demographic characteristics.^[6]

Kumar et al. found that most of the delivery riders in Raipur were young adults with a moderate level of education who entered the gig economy because of limited opportunities for employment in the formal sector. These results indicate that the gig economy is mainly attracting young people who are looking for flexible or short-term jobs. The findings of the present study also revealed that most of the food delivery partners worked for around 5–7 hours per day, and their monthly incomes were modest. Many of the respondents expressed neutral to low satisfaction with their earnings. Several previous studies have also shown income dissatisfaction among gig workers. Gig platforms provide flexible employment but workers often face financial instability due to varying incentives, no fixed salaries and no social security benefits, Lakshmi et al. reported.^[7]

One of the main findings of this study is the high level of stress and psychological burden of delivery partners. Most respondents reported moderate to high levels of stress associated with their job, and many reported mental exhaustion or burnout. The findings of this study are in line with the study done by Suresh et al., in Coimbatore which showed that food delivery executives are often stressed due to time pressure, customer expectations and algorithm-based performance monitoring. Physical health problems were also often identified in this study. Several delivery partners expressed how their body ached and felt sore from sitting for long periods of time and the repetitive nature of the delivery job.^[8]

Reddy et al. found similar results and identified musculoskeletal disorders, fatigue and ergonomic problems as common occupational hazards among last mile delivery workers. Delivery work is of the sort that generally involves long hours of sitting on the back of motorcycles, carrying heavy delivery bags, and constant exposure to traffic hazards, which can lead to health problems of a long-term nature. The present study also found that a significant number of respondents reported safety hazards relating to road conditions and transportation. Road safety risks have been widely studied in the literature on the working conditions of delivery riders. Previous research on gig economy workers has found that pressure to deliver quickly has been associated with risky driving behaviour and greater accident rates among delivery workers.

Another major finding of this study is the lack of basic infrastructure like rest areas and restroom facilities. About half of the respondents said that they had sufficient access to toilets on the job. This finding shows a substantial gap in the occupational welfare provisions for gig workers. Studies of platform-based workers highlight similar issues, noting that gig workers often lack access to basic workplace amenities due to their work in public spaces instead of traditional workplaces. The study also found that there was relatively low awareness among delivery partners about labour rights and social security benefits. More than half of respondents had little or no idea what their rights as workers were.

This finding is in line with previous studies on gig economy workers and suggests that many platform workers are categorized as independent contractors and are thus not subject to traditional labor regulations. Most respondents in this study expressed their readiness to continue working as delivery partners, despite facing several occupational challenges. This may be due to the perceived benefits of gig work including flexible hours, autonomy in choosing shifts and relatively easy entry into the workforce. Similar findings have been reported in research on gig economy employment, where workers often value flexibility despite income insecurity and occupational risks.

Overall, the findings of the present study imply that the online food delivery sector has emerged as a significant source of employment but at the same time exposes workers to a number of occupational health, safety and socio-economic challenges. Solving these problems requires the joint efforts of platform companies, policymakers and public health authorities. Improving workplace infrastructure, providing health support services, strengthening road safety measures and educating on labour rights could greatly improve the well-being and job satisfaction of food delivery partners.

CONCLUSION

The study indicates that while the majority of the food delivery partners are young, semi-educated,

working for moderate hours with modest income, they face multiple occupational challenges. The fact that most respondents were happy to continue in this work suggests that, with some specific improvements to working conditions, this can be a sustainable and dignified form of employment. Study helps to understand the socio-economic level and occupational problems faced by food delivery partners. The findings of this study indicate that food delivery partners are generally satisfied with the usability of the apps and the level of control they exert over their work, but they face major occupational challenges, particularly regarding physical strain, mental health, access to restrooms and knowledge of their rights. They also have high stress levels and low income satisfaction impacting their well-being.

However, most of them still wanted to continue in this profession because of its potential as a sustainable means of livelihood. Focused efforts to improve working conditions, health support and policy awareness are vital to improve their quality of life and job satisfaction. The majority of respondents were willing to continue working in this line of work, which suggests that with targeted improvements in workplace conditions, particularly around access to

restrooms, safety, and mental health support, this sector has the potential to provide sustainable and dignified employment.

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