

Job Flexibility, Job Security, and Job Satisfaction: The Role of Role Conflict among Online Transportation Drivers

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Abstract

This study aims to examine the relationships between job flexibility, job security, and job satisfaction, as well as the role of role conflict among online transportation drivers in Semarang City, Indonesia. The background of this research stems from large-scale demonstrations involving thousands of online transportation drivers in Central Java, reflecting demands on platform companies for fare regulation, application rental deductions, and legal protection for online transportation drivers as informal workers. This study employed a quantitative method using questionnaire data from 136 respondents. Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The results indicate that job flexibility ($\beta = 0.499$, $p < 0.001$) and job security ($\beta = 0.351$, $p = 0.001$) have significant positive effects on job satisfaction. However, role conflict does not moderate the relationships between job flexibility and job satisfaction ($p = 0.302$) and between job security and job satisfaction ($p = 0.356$). These findings indicate that job flexibility and job security are the main determinants of job satisfaction among online transportation drivers, while role conflict neither strengthens nor weakens these relationships. Practically, this study provides implications for online transportation companies to strengthen policies that enhance job flexibility and job security to improve online transportation driver job satisfaction. Theoretically, this research contributes to the literature by enriching the understanding of the relationships among job flexibility, job security, job satisfaction, and role conflict within the context of informal employment in the digital economy era.

Keywords: Job Flexibility; Job Security; Job Satisfaction; Role Conflict.

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INTRODUCTION

The development of the digital economy has driven changes in Indonesia's online transportation industry. Platform-based transportation services offer flexible work arrangements and accessible income opportunities; however, they also expose online transportation drivers to income uncertainty, limited labour protections, and fluctuating work demands (De Stefano, 2015).

Semarang City, Indonesia, as one of the hubs of online transportation activity in Central Java, demonstrates these dynamics through large-scale demonstrations involving thousands of online transportation drivers. These demonstrations reflect drivers' demands for fare regulation, transparency in application rental deductions, and legal protection for online transportation drivers as informal workers (Kompas.com, 2025).

Empirically, this context highlights the importance of examining job satisfaction among online transportation drivers. Previous studies consistently indicate that job flexibility and job security are key determinants of job satisfaction across various flexible and non-standard work arrangements (Allen et al., 2013; Greenhalgh & Rosenblatt, 1984; Hill et al., 1996). Job flexibility enables workers to manage working hours, while job security provides perceived income stability. However, in platform based work, algorithmic management systems, demand volatility, and company policies may alter how these job characteristics affect job satisfaction (Kässi & Lehdonvirta, 2018; Wood et al., 2019).

From a theoretical perspective, role theory posits that role conflict arising from incompatible work demands can undermine job satisfaction by generating psychological strain (Rizzo et al., 1970; Tubre & Collins, 2000). Empirical evidence in conventional organizational contexts suggests that role conflict may not only directly influence job satisfaction but also moderate the relationship between job characteristics, such as flexibility or security, and job satisfaction (Ilies et al., 2011). These findings, however, are largely derived from formal employment settings characterized by hierarchical supervision and structured roles.

Importantly, the moderating role of role conflict has rarely been examined among online transportation drivers operating in platform-based informal employment. Unlike traditional organizations, online transportation drivers in Semarang City, Indonesia, work under algorithmic control, lack direct leadership supervision, and experience precarious employment conditions. These distinctive features may reshape the way psychological stressors interact with structural job characteristics, potentially reducing the moderating influence of role conflict.

Despite the growing body of literature on job satisfaction in the gig economy, empirical studies that specifically test the moderating effect of role conflict on the relationships between job flexibility, job security, and job satisfaction among online transportation drivers remain limited and inconclusive, particularly in the Indonesian context.

Therefore, this study aims to examine the effects of job flexibility and job security on job satisfaction among online transportation drivers in Semarang City, Indonesia, while explicitly testing the moderating role of role conflict. By addressing this research gap, the study contributes to refining role theory within algorithmically managed informal work and provides practical insights for platform companies seeking to improve driver well-being.

Literature Review

The development of platform based informal work has attracted academic attention, particularly regarding how structural and psychological job characteristics influence workers' job satisfaction (JS). In the context of online transportation jobs, job flexibility (JF) is often highlighted as a primary attraction, as it enables online transportation drivers to set their own hours and adjust schedules to meet personal needs and market demand. Prior studies consistently indicate that greater perceived flexibility enhances autonomy and perceived control, which, in turn, positively contribute to job satisfaction (GOLDEN, 2001; Hill et al., 2001).

However, in platform mediated work, the practical experience of JF is frequently constrained by algorithmic management, demand volatility, and platform imposed performance mechanisms. Although online transportation drivers are formally free to choose when to work, pressures arising from incentive structures, acceptance rates, and customer ratings may reduce the degree of actual control they experience (Howcroft & Bergvall-Kåreborn, 2019; Rosenblat, 2016). Despite these constraints, existing empirical studies largely confirm a direct positive relationship between JF and JS in gig economy settings. Therefore, this study proposes:

H1: Job flexibility (JF) has a positive and significant effect on job satisfaction (JS) among online transportation drivers.

Job security (JSy) represents another critical determinant of job satisfaction, particularly in informal and precarious employment arrangements. JSy reflects workers' perceptions of income continuity, access to work opportunities, and protection from sudden work loss. Prior research demonstrates that higher perceived job security is associated with improved job satisfaction and psychological well-being, even in non-standard employment contexts (Bazzoli & Probst, 2023; Greenhalgh & Rosenblatt, 1984). In online transportation jobs, perceived insecurity often arises from fluctuating demand, variable earnings, and the risk of account deactivation, making JSy highly salient for online transportation drivers' evaluations of their work conditions. Accordingly, this study hypothesizes:

H2: Job security (JSy) has a positive and significant effect on job satisfaction (JS) among online transportation drivers.

From a theoretical standpoint, role theory provides a foundation for examining the moderating role of role conflict (RC). RC arises when individuals face incompatible or competing role expectations, which generate psychological strain and diminish work-related well-being (Rizzo et al., 1970; Tubre & Collins, 2000). Prior studies in conventional organizational settings suggest that RC may weaken the positive effects of job characteristics on job satisfaction by eroding workers' perceptions of control and psychological safety (Ilies et al., 2011).

In the context of online transportation work, RC may emerge from conflicting demands such as the pressure to accept orders versus personal time preferences, speed versus safety, or income maximization versus fatigue management. Under high RC conditions, the benefits of JF may become less salient, as flexibility intended to provide autonomy may instead be perceived as stressful or illusory due to constant competing demands. Consequently, the positive influence of JF on JS may weaken when RC is high. Thus, the following hypothesis is proposed:

H3: Role conflict (RC) weakens the relationship between job flexibility (JF) and job satisfaction (JS) among online transportation drivers.

Similarly, RC may undermine the psychological benefits of job security. Although JSy provides a sense of stability and continuity, persistent role conflict may heighten daily stress levels, reducing the satisfaction derived from perceived security. In other words, even when online transportation drivers feel that their access to work is relatively secure, incompatible role demands may erode the positive emotional outcomes associated with that security. Based on this reasoning, the study proposes:

H4: Role conflict (RC) weakens the relationship between job security (JSy) and job satisfaction (JS) among online transportation drivers.

METHOD

This study employed a quantitative research approach to examine the relationships between job flexibility, job security, role conflict, and job satisfaction among online transportation drivers. The study population consisted of registered online transportation drivers operating in Semarang City, Indonesia.

A non-probability convenience sampling technique was used, with respondents selected based on accessibility and willingness to participate during data collection. This sampling

approach is appropriate given the absence of a comprehensive sampling frame for online transportation drivers. A total of 136 valid responses were obtained and used for data analysis.

Measurement instruments were adapted from internationally validated scales. Job flexibility was measured using the scale developed by Hill et al. (2001), job security was measured using the Job Security Index proposed by Bazzoli & Probst (2023), job satisfaction was assessed using an instrument adapted from Ali Jadoo et al. (2015), and role conflict was measured using the Role Conflict Scale developed by Rizzo et al. (1970).

Before hypothesis testing, validity and reliability assessments were conducted. During the initial convergent validity testing, several items with factor loadings below the acceptable threshold of 0.70 were removed from further analysis to improve measurement quality. After item elimination, all remaining indicators met the validity and reliability criteria.

Data analysis was performed using Partial Least Squares Structural Equation Modelling (PLS-SEM) with SmartPLS. The structural model was evaluated using path coefficient estimation and bootstrapping procedures, following the guidelines of (Hair et al., 2021)

RESULT AND DISCUSSION

Result

Respondent Characteristics

This study involved 136 online transportation drivers operating in Semarang City, Indonesia. Table 1 presents the demographic characteristics of the respondents, including gender, age group, marital status, platform used, work experience, and monthly earnings.

Table 1. Respondent Characteristics

Characteristic	Category	Frequency	Percentage
Gender	Male	118	86,8%
	Female	18	13,2%
Age	17-22 years old	34	25%
	23-28 years old	38	27,9%
	29-34 years old	27	19,9%
	> 35 years old	37	27,2%
Marital Status	Single	58	42,6%
	Marriage	64	47,1%
	Divorced	14	10,3%
Platform	Gojek	19	13,9%
	Grab	28	20,6%
	Maxim	22	16,2%
	Shopee	61	44,9%
	Other	6	4,4%
Length Of Work	< 1 year	25	18,4%
	1-2 years	61	44,9%
	3-4 years	31	22,8%
	> 5 years	19	13,9%
Salary	< Rp. 2.000.000	55	39,8%
	Rp. 2.000.000 - Rp 4.000.000	59	42,7%
	Rp. 4.000.000 - Rp 6.000.000	19	13,8%
	> Rp. 6.000.000	5	3,7%

The majority of respondents are male (86,8%), indicating that online transportation services in Semarang, Indonesia, are predominantly male-driven. Most respondents are in the productive age groups of 23–28 years (27,9%) and >35 years (27,2%). Additionally, a large proportion of online transportation drivers are married (47,1%), implying family financial responsibility. Shopee is the most frequently used platform (44,9%), followed by Grab and Maxim. Most respondents have worked for 1–2 years (44,9%), indicating

moderate experience in gig employment. Regarding income, 43,4% earn between Rp. 2.000.000–Rp. 4.000.000 per month, placing them in the lower-middle income category.

Validity and Reliability Testing

To ensure that the measurement instruments used in this study have good construct validity and reliability, a convergent validity and reliability assessment was conducted. The results of the analysis are presented in Table 2.

Table 2. Convergent Validity and Reliability Results

Construct	Item	Loading Factor	Cronbach's alpha	Average variance extracted (AVE)
Job Flexibility	JF 1	0,833	0,848	0,686
	JF 2	0,838		
	JF 3	0,833		
	JF 4	0,808		
Job Security	JSy 4	0,851	0,817	0,646
	JSy 7	0,761		
	JSy 8	0,776		
	JSy 9	0,823		
Job Satisfaction	JS 2	0,742	0,877	0,576
	JS 4	0,716		
	JS 5	0,744		
	JS 6	0,764		
	JS 7	0,818		
	JS 8	0,770		
	JS 10	0,754		
Role Conflict	RC 1	0,775	0,734	0,653
	RC 5	0,836		
	RC 6	0,812		

All items show standardized loading values above the minimum threshold of 0,70, indicating strong convergent validity. In addition, each variable meets reliability requirements, with Cronbach's alphas above 0,70, indicating internal consistency. The AVE values for all constructs are above 0,50, indicating that the indicators sufficiently explain each latent variable's variance. Thus, all constructs in this study are valid and reliable for hypothesis testing.

Goodness of Fit

The goodness-of-fit test was conducted to assess whether the structural model adequately fits the empirical data. The fit indices used in this study include SRMR, d_ULS, d_G, the Chi-square statistic, and NFI. The detailed results are presented in Table 3.

Table 3. Model Fit Results

Index	Saturated model	Estimated model	Remark
SRMR	0,080	0,079	Fit
d_ULS	1,097	1,076	Fit
d_G	0,507	0,508	Fit
Chi-square	342,869	340,952	Fit
NFI	0,721	0,722	Fit

The SRMR value is below the 0,10 threshold, indicating a good global fit. The d_ULS and d_G values are within the acceptable range, demonstrating consistency between the empirical data and estimation results. The chi-square values also indicate that the dataset supports the model structure. The NFI, while exceeding the acceptable threshold of 0.70, indicates room for further model refinement. Therefore, the proposed structural model is considered fit and feasible for further hypothesis testing.

Structural Model Evaluation

The structural model evaluation was conducted to assess the strength of the relationships among the latent variables in the research model. Figure 1 illustrates the final PLS-SEM structural model, including direct and moderating effects of role conflict. The coefficients displayed on the model provide insight into the significance and direction of the hypothesized relationships.

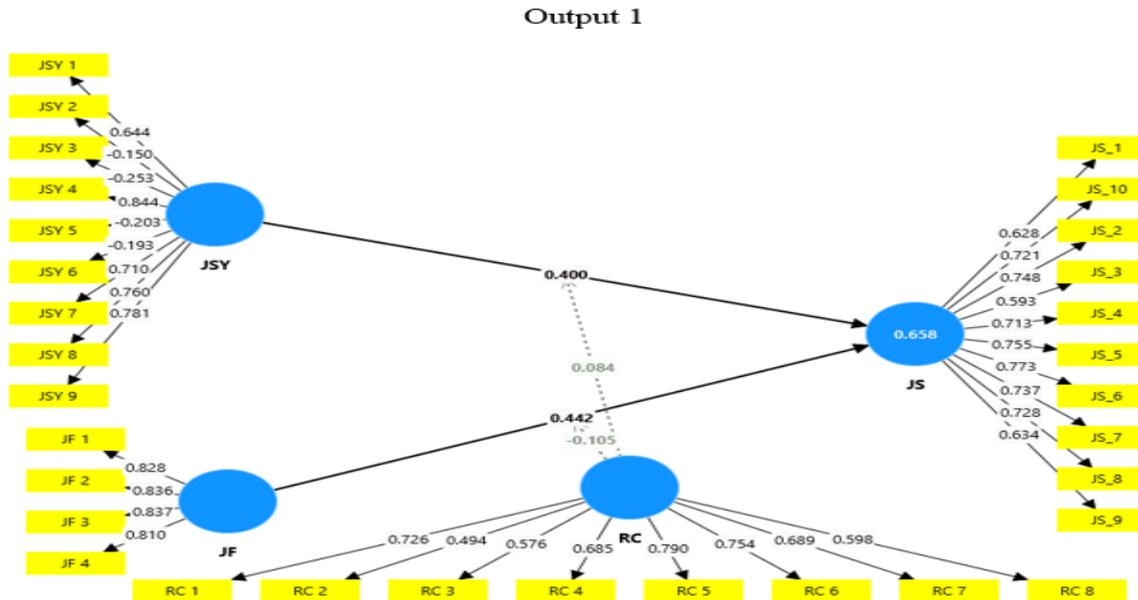


Fig. 1. Structural Model (PLS-SEM Output)

JF shows a positive predictive effect on JS, with a path coefficient of 0,442, suggesting that greater JF tends to enhance JS among online transportation drivers. Similarly, JSy positively influences JS, with a coefficient of 0,400.

On the other hand, RC shows small interaction coefficients, suggesting a weak moderating effect on the relationships between JF → JS and JSy → JS. The R-square value for JS is 0,658, indicating that 65,8% of the variance in JS is explained by JF, JSy, and RC.

Hypothesis Testing

Hypothesis testing was conducted using a bootstrapping procedure in SmartPLS to evaluate the significance of each structural relationship in the model. Table 5 summarizes the path coefficients, p-values, and hypothesis decisions.

Table 4. Hypothesis Testing Results

Relationship	Path Coefficients	P values	Conclusion
JF -> JS	0,499	0,000	Accepted
JSy -> JS	0,351	0,001	Accepted
RC x JF -> JS	0,080	0,302	Rejected
RC x JSy -> JS	-0,089	0,356	Rejected

The findings indicate that JF and JSy each have a statistically significant positive effect on JS, as their p-values are <0,05. However, neither moderating hypothesis was supported. RC does not significantly moderate the effect of JF on JS nor the effect of JSy on JS. This suggests that regardless of the level of RC experienced, JF and JSy remain consistent predictors of JS among online transportation drivers in Semarang City, Indonesia.

Discussion

Direct Effects of Job Flexibility and Job Security

The findings indicate that job flexibility (JF) and job security (JSy) are key determinants of job satisfaction (JS) among online transportation drivers in Semarang City, Indonesia. Flexibility in managing working hours enhances perceived autonomy, enabling online transportation drivers to balance work demands with personal needs, while job security provides a sense of income continuity and psychological stability. These findings are consistent with prior research in the gig economy, which identifies autonomy and perceived security as central drivers of well-being in flexible and non-standard employment arrangements (GOLDEN, 2001; Wood et al., 2019).

The Non-Moderating Role of Role Conflict

Contrary to expectations derived from role theory, role conflict (RC) does not moderate the relationship between job flexibility and job satisfaction, nor between job security and job satisfaction. This suggests that online transportation drivers may perceive role conflict as a normalised and inherent aspect of platform-based work rather than as a disruptive psychological stressor. Similar patterns have been observed in gig and platform work, where workers often adapt to competing demands as part of everyday labour conditions (Rosenblat, 2016).

Moreover, online transportation drivers appear to adopt a predominantly transactional psychological frame, prioritising tangible, immediate outcomes such as income stability and work flexibility over relational or structural aspects, such as role clarity. Previous studies on platform-mediated labour highlight that material rewards and algorithmic control often outweigh relational job considerations in shaping worker satisfaction (Kässi & Lehdonvirta, 2018; Wood et al., 2019)

Theoretical Implications

Overall, these findings suggest that in highly precarious and algorithm-mediated work environments, material and control related job characteristics may exert such strong direct effects on well-being that they attenuate or even nullify the moderating influence of psychological role stressors. Rather than contradicting role theory, this evidence invites a contextual refinement of the theory, indicating that the relevance of role conflict as a moderator depends on employment structure, power asymmetry, and the degree of algorithmic control (Ilies et al., 2011).

In informal platform based work, where employment relationships are weakly institutionalised and role boundaries are fluid, traditional assumptions regarding role clarity and role stress may require reconsideration. This study, therefore, contributes to the literature by extending role theory to the context of gig work and digital labour platforms (De Stefano, 2015).

Practical Implications

From a practical perspective, the findings indicate that platform companies seeking to enhance driver satisfaction should prioritise policies that strengthen real flexibility and perceived income security. Transparent incentive mechanisms, predictable access to work opportunities, and fair evaluation systems are likely to be more effective than interventions aimed solely at reducing role related stress, as prior studies on platform governance and worker well-being Kässi & Lehdonvirta (2018) have shown.

CONCLUSION

This study examines the relationships among job flexibility, job security, and job satisfaction among online transportation drivers in Semarang City, Indonesia, and tests the moderating role of role conflict. The findings demonstrate that job flexibility and job security have significant positive effects on job satisfaction. In contrast, role conflict does not moderate the relationships between job flexibility and job satisfaction or between job security and job satisfaction.

These results indicate that, within platform-based informal employment, job satisfaction is primarily driven by tangible and structural job characteristics rather than by psychological role related stressors. Online transportation drivers appear to prioritise autonomy in work scheduling and perceived income continuity over concerns related to role ambiguity or conflicting demands. This highlights the distinctive nature of gig work, where role conflict may be normalised and perceived as an inherent aspect of daily work rather than as a factor that undermines satisfaction.

Theoretical Implications

From a theoretical perspective, this study contributes to refining role theory by demonstrating that the moderating influence of role conflict is context dependent. In highly precarious and algorithm-mediated work environments, material and control-related job characteristics may exert such strong direct effects on job satisfaction that they neutralise the moderating role of psychological stressors. This finding suggests that traditional organizational stress models require contextual adaptation when applied to platform-based and informal employment settings.

Managerial and Policy Recommendations

From a practical standpoint, the findings suggest that platform companies should focus on strengthening substantive aspects of job flexibility and job security. Flexibility should involve genuine autonomy in determining working hours without implicit algorithmic penalties, such as reduced order allocation or loss of incentives. Job security can be enhanced through transparent performance evaluation systems, clearer policies regarding account suspension or deactivation, and more predictable access to work opportunities.

For policymakers, the results underscore the importance of developing regulatory frameworks that enhance income stability and social protection for online transportation drivers without undermining the flexibility of platform work. Such measures may include minimum income guarantees, access to social insurance schemes, and guidelines governing platform accountability.

Limitations and Future Research

Despite its contributions, this study has several limitations. The use of a cross sectional design limits causal inference, and the focus on a single city may affect generalisability. Future research could employ longitudinal designs, include multiple regions, and incorporate additional variables such as incentive structures, operating costs, and work family balance to further advance understanding of job satisfaction in platform based employment.

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