

Smartphone Distraction and Work Performance Among Gojek Drivers in Bekasi City: A Correlational Study

Ardian Firdaus Saputra¹,Yuarini Wahyu Pertiwi²,Wahyu Aulizalsini Alurmei³

Universitas Bhangkara Jakarta, Indonesia¹⁻³

Corresponding email: 202210515179@mhs.ubharajaya.ac.id

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ABSTRACT

The proliferation of smartphone technology in gig economy settings has created a paradoxical dynamic for platform-based workers who simultaneously rely on and are potentially distracted by these devices. This study investigated the relationship between smartphone distraction and work performance among Gojek drivers in Bekasi City. Employing a quantitative correlational design, the study recruited 96 Gojek drivers through purposive sampling. Data were collected using the Smartphone Distraction Scale (SDS; Mascia et al., 2023) and the Employee Job Performance Scale (EJP; Na-Nan et al., 2018) and analyzed through Spearman's rank-order correlation given the non-normal distribution of the data. The results indicated a statistically significant negative relationship between smartphone distraction and work performance ($\rho = -0.288$; $p = 0.004$), albeit with weak effect size. These findings suggest that higher levels of smartphone distraction are associated with lower work performance, though the relationship is moderated by the functional role of smartphones in ride-hailing work contexts. The study contributes to the growing literature on digital distraction in occupational settings and underscores the importance of examining contextual factors when assessing technology-related work performance outcomes.

Introduction

The rapid advancement of digital technology has fundamentally transformed contemporary work arrangements, particularly within the platform-based transportation sector. Smartphones have evolved beyond mere communication tools to become indispensable operational devices that mediate nearly all aspects of work in ride-hailing platforms such as Gojek. Drivers depend on smartphones not only to receive orders but also to access navigation systems, communicate with customers, and process digital transactions. This pervasive integration of smartphones into the occupational fabric of platform workers renders the technology simultaneously enabling and potentially disruptive (Orhan et al., 2021).

Work performance constitutes one of the most critical indicators of occupational effectiveness and organizational productivity. Armstrong (2009) conceptualized work performance as the outcome of individual effort assessed across three primary

dimensions: quality of output, quantity of output, and timeliness of task completion in accordance with established organizational standards. In the context of ride-hailing drivers, work performance extends beyond order completion rates to encompass service quality, responsiveness to customer needs, and consistency in fulfilling occupational responsibilities. The multidimensional nature of work performance in gig economy contexts warrants careful empirical examination, particularly given the unique technological dependencies inherent in such work arrangements.

Smartphone distraction defined as attentional interference arising from interactions with or stimuli emanating from mobile devices during task execution represents a critical occupational hazard in contemporary digital work environments (Throuvala et al., 2021). The mechanisms underlying smartphone distraction are multifaceted, encompassing application notifications, social media engagement, personal messaging, and habitual device-checking behaviors that collectively impair attentional focus and cognitive resources available for primary work tasks (Orhan et al., 2021). For Gojek drivers, whose work demands sustained concentration, rapid decision-making, and continuous environmental awareness, such attentional disruptions carry both performance and safety implications.

The extant literature demonstrates an emerging body of evidence linking smartphone use to various dimensions of occupational behavior, including concentration, productivity, and task completion (Pertiwi et al., 2023). However, findings across studies remain inconsistent. While some research reports a negative association between elevated smartphone distraction and reduced occupational productivity, others suggest that smartphone use does not uniformly impair performance, as the device simultaneously functions as an essential work tool (Saputra et al., 2026). Furthermore, most prior investigations have focused on student populations, office workers, and administrative personnel, leaving platform-based workers particularly ride-hailing drivers substantially underrepresented in the empirical literature.

The Gojek platform represents a particularly salient context for examining smartphone-distraction dynamics given the complete operational dependence on mobile devices. This technological embeddedness creates an analytical paradox: the same device that enables work may simultaneously undermine it, suggesting that the relationship between smartphone distraction and work performance may be conditioned by the functional role of technology in specific occupational contexts. Such contextual specificity has been insufficiently addressed in existing research (Hutahaeen & Pertiwi, 2022a)

The present study was designed to address these gaps by providing rigorous empirical evidence regarding the relationship between smartphone distraction and work performance among Gojek drivers in Bekasi City. In doing so, it contributes to the expanding literature on technology-mediated work behavior in industrial and organizational psychology, with relevance to the emerging gig economy context. Based on established theoretical frameworks and prior empirical findings, the following research

hypothesis was advanced: there is a significant relationship between smartphone distraction and work performance among Gojek drivers in Bekasi City.

Method

Research Design

This study employed a quantitative correlational research design aimed at examining the association between smartphone distraction as the independent variable and work performance as the dependent variable. A correlational approach was selected given the study's objective of assessing the magnitude and direction of the relationship between two measured constructs without experimental manipulation (Sugiyono, 2018). The study population comprised all active Gojek driver-partners operating within Bekasi City, estimated at approximately 18,000 individuals.

Population and Sample

Participant recruitment employed a non-probability purposive sampling strategy, yielding a final sample of 96 respondents who met the established inclusion criteria: (1) active status as a Gojek driver-partner, (2) current residence in Bekasi City, (3) age between 18 and 40 years, and (4) voluntary informed consent to participate in the study. The sample size was determined in accordance with Slovin's formula, producing a statistically adequate sample for the intended analytical procedures.

Measurment

Data were collected via a self-administered online questionnaire distributed through Google Forms. The smartphone distraction variable was operationalized using the Smartphone Distraction Scale (SDS), adapted from (Mascia et al., 2023) based on the theoretical framework proposed by Throuvala et al. (2021). The SDS comprises 16 items assessing the degree to which smartphone interactions interfere with primary task performance. Work performance was measured using the Employee Job Performance Scale (EJP), adapted from (Na-Nan et al., 2018) based on Armstrong's (2009) theoretical model. The EJP contains 13 items evaluating work quality, work quantity, and timeliness of task completion. Both instruments utilized a five-point Likert response format and were subjected to forward and back-translation procedures followed by expert judgment review to ensure linguistic and conceptual equivalence.

Internal consistency analyses confirmed adequate reliability for both instruments: the SDS yielded a Cronbach's alpha of .866, and the EJP yielded a Cronbach's alpha of .797, both exceeding the conventionally accepted threshold of .700. Data analysis was conducted using JASP (version 0.19.2.0) and encompassed descriptive statistics, the Kolmogorov-Smirnov normality test, linearity testing, and hypothesis testing. Given that normality assumptions were violated for the work performance variable ($p < .001$), the Spearman's rank-order correlation was employed as a nonparametric alternative to Pearson's r , following the recommendation of (Ergin & Koskan, 2023) and (Maryadi, 2020) that nonparametric procedures are appropriate when distributional assumptions are not satisfied.

Results and Discussion

Participant Characteristics

Table 1 presents the sociodemographic profile of the 96 research participants.

Table 1. Sociodemographic Profile of Research Participants

Variable	Category	<i>n</i>	Percentage (%)
Gender	Male	94	97.9
	Female	2	2.1
Age (years)	19–22	22	22.9
	23–26	43	44.8
	27–30	25	26.0
	> 30	6	6.3
Primary Occupation	Gojek Driver (primary)	31	32.3
	Gojek Driver (secondary)	65	67.7
Driver Tenure	< 1 year	10	10.4
	1–3 years	52	54.2
	4–6 years	26	27.1
	> 6 years	7	7.3
Marital Status	Single	83	86.5
	Married	13	13.5
Total		96	100

The participant profile reveals a predominantly male sample (97.9%), consistent with the gender composition of ride-hailing driver populations in Indonesia where male workers constitute the overwhelming majority (Telaumbanua et al., 2025). The modal age cohort was 23–26 years (44.8%), indicating that Gojek driving in Bekasi City is primarily undertaken by young adults. Notably, two-thirds of participants (67.7%) reported that Gojek driving constituted supplementary rather than primary employment, with the majority (54.2%) having accumulated between one and three years of professional driving experience. The predominantly unmarried status of participants (86.5%) further characterizes the sample as composed largely of economically independent young adults navigating early-career employment through platform-based work arrangements (Pertiwi & Muminin, 2025).

Descriptive Statistics

The descriptive analysis revealed notable distributional differences between the two variables. The convergence of mean and median values for smartphone distraction ($M = 33.97$, $Mdn = 34.00$) indicates a symmetric and relatively balanced distribution. The higher standard deviation for smartphone distraction ($SD = 7.67$) compared to work performance ($SD = 4.72$) suggests substantially greater inter-individual variability in distraction experiences, whereas work performance scores were comparatively homogeneous across the sample.

Table 2. Descriptive Statistics for Smartphone Distraction and Work Performance

Variable	<i>N</i>	Mean	Median	SD
Smartphone Distraction	96	33.97	34.00	7.67
Work Performance	96	50.53	52.00	4.72

Note. SD = Standard Deviation.

Normality Testing

Table 3 presents the results of the Kolmogorov-Smirnov normality test.

Table 3. Kolmogorov-Smirnov Normality Test Results

Variable	KS Statistic	p-value
Smartphone Distraction	.074	.664 (Normal)
Work Performance	.226	< .001 (non-normal)

The Kolmogorov-Smirnov test indicated that while smartphone distraction scores approximated a normal distribution ($KS = .074$, $p = .664$), work performance scores significantly deviated from normality ($KS = .226$, $p < .001$). Visual inspection of Q-Q plots corroborated these findings, revealing systematic deviations in the lower and upper distributional tails for work performance residuals. Violation of the normality assumption for one or both variables renders parametric correlation procedures inappropriate; consequently, Spearman's rank-order correlation was employed for hypothesis testing, in accordance with the recommendations of (Ergin & Koskan, 2023) and (Maryadi, 2020).

Categorical Distribution of Study Variables

Categorical analysis of smartphone distraction scores revealed that most participants (82.3%) exhibited low levels of distraction, with only 7.3% reporting high distraction levels. This distributional pattern suggests that, within the occupational context of ride-hailing, drivers demonstrate a general capacity to manage smartphone use in alignment with work demands. The smartphone appears to function primarily as a functional work instrument for receiving orders, navigating routes, and completing transactions rather than as a source of off-task distraction (Telaumbanua et al., 2025). This interpretation is consistent with (Saputra et al., 2023) argument that occupational context and task structure substantially moderate the experienced level of technology-induced distraction.

Table 5. Categorical Distribution of Smartphone Distraction Scores

Category	Score Range	<i>n</i>	Percentage (%)
Low	$X < 40$	79	82.3
Moderate	$40 \leq X \leq 44$	10	10.4
High	$X > 44$	7	7.3
Total	—	96	100

Work performance scores were markedly concentrated in the high category, with 96.9% of participants scoring above the designated threshold. This distributional skewness toward high performance likely reflects both the self-selection of capable individuals into platform-based work and the performance monitoring mechanisms embedded within Gojek's rating systems, which create external incentive structures for maintaining service quality. This finding aligns with (Michael Armstrong, 2009) contention that work performance is a complex, multidetermined construct influenced by individual capabilities, motivational factors, and environmental conditions.

Hypothesis Testing: Spearman's Rank-Order Correlation

Table 6. Spearman's Rank-Order Correlation Between Smartphone Distraction and Work Performance

Variables	<i>Spearman's ρ</i>	<i>p</i>
Smartphone Distraction → Work Performance	-0.288	.004

Note. p-values are two-tailed. Effect size interpretation follows Sugiyono (2018): ρ in the range 0.20–0.399 indicates a weak relationship.

Spearman's rank-order correlation revealed a statistically significant negative relationship between smartphone distraction and work performance ($\rho = -0.288$, $p = .004$), supporting the research hypothesis. According Sugiyono (2018) correlation strength classification, this coefficient falls within the weak range (0.20–0.399), indicating that while the direction of association is negative and statistically reliable, smartphone distraction accounts for a relatively modest proportion of variance in work performance outcomes. The study hypothesis was therefore supported: there is a statistically significant negative association between smartphone distraction and work performance among Gojek drivers in Bekasi City.

Several theoretical and contextual mechanisms may account for the modest magnitude of the observed association. First, the functional integration of smartphones within ride-hailing operations may attenuate the disruptive potential of device use, as interactions with the Gojek application are task-relevant and operationally necessary rather than purely distracting (Hutahaeen & Pertiwi, 2022b). Second, consistent with (Michael Armstrong, 2014) multidimensional model of work performance, individual performance outcomes are determined by a broad array of factors beyond attentional distraction, including work motivation, task experience, self-regulatory capacity, physical condition, and occupational fatigue. This is further supported by the work of Saputra et al. (2026), who demonstrated that psychological safety and work stress collectively mediate perceptions of work productivity in organizational settings, highlighting the complex, multicausal nature of performance phenomena.

The role of individual characteristics warrants consideration in this context. Gojek's non-restrictive educational entry criteria give rise to a heterogeneous driver population whose diverse educational backgrounds may differentially influence task comprehension, time management, and adaptive problem-solving capacities. Such individual differences in human capital are likely to contribute to performance variability independently of smartphone distraction (Marganda et al., 2020). Moreover, extraoccupational stressors including economic pressure, family obligations, and subjective health conditions constitute additional determinants of work performance that operate largely orthogonally to smartphone distraction (Robbins & Judge, 2017). The present findings accord with Pertiwi et al.'s (2023) observation that toxic psychological environments in the workplace, including chronic stressors, can substantially undermine occupational productivity, suggesting that the affective and motivational dimensions of performance deserve greater empirical attention in future research.

The present study also contributes to the broader discourse on technology use in digital labor markets. The paradox of smartphone as simultaneously an enabling tool and

a potential distractor is emblematic of the complex technology-work interface that characterizes twenty-first-century gig employment. Future research should consider mediation models that incorporate psychological variables such as self-regulation and work engagement as potential boundary conditions of the smartphone distraction–performance relationship, consistent with the theoretical framework advanced by (Orhan et al., 2021).

Conclusion

This study demonstrated a statistically significant negative relationship between smartphone distraction and work performance among Gojek drivers in Bekasi City ($p = -0.288$, $p = .004$), with a weak effect size indicating that smartphone distraction is one of several variables contributing to performance outcomes. The occupational context in which smartphones serve as primary operational tools substantially conditions the nature and magnitude of this relationship. Most participants exhibited low smartphone distraction (82.3%) and high work performance (96.9%), consistent with the interpretation that functional smartphone use in ride-hailing contexts may partially buffer the attentional costs typically associated with mobile device use.

The multidetermined character of work performance in this population is underscored by the modest correlation coefficient, suggesting that factors such as work motivation, experience, self-regulatory skills, and occupational stressors constitute important additional determinants. Future research would benefit from examining mediation and moderation models that incorporate these variables, as well as investigating longitudinal associations to better understand the developmental trajectory of smartphone-related distraction in platform-based employment.

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