

Income Uncertainty, Customer Pressure, and Motivation Driving Work Stress Among Online Drivers

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ABSTRACT

Aims :

This study addresses a gap in gig economy research within a secondary city in Eastern Indonesia by examining how income uncertainty drives work stress among online drivers in Kendari through a moderated mediation framework that integrates customer pressure as a mediator and work motivation as a buffer.

Design/Methodology/Approach :

A quantitative survey design was employed. Of 130 questionnaires distributed to active Maxim and Grab drivers in Kendari City via purposive sampling, 100 were returned and deemed fully usable (76.9% response rate). Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS SEM) with SmartPLS 4.0. Prior to structural model testing, common method bias was assessed using Harman's single factor test.

Findings :

Income uncertainty exerts a significant positive effect on work stress ($\beta = 0.387$, $p < 0.001$) and on customer pressure ($\beta = 0.412$, $p < 0.001$). Customer pressure partially mediates the uncertainty–stress relationship (indirect $\beta = 0.123$, $p < 0.01$), and work motivation significantly attenuates the customer pressure–stress link ($\beta = -0.214$, $p < 0.01$), indicating that higher motivation buffers the stress amplifying impact of demanding customers.

Research Limitations/Implications :

This study is limited to Maxim and Grab drivers in Kendari City, so generalization to other regions requires caution. These findings suggest that ride hailing companies need to design more stable incentive systems to reduce driver income uncertainty.

Originality / Value :

This study is the first to simultaneously integrate income uncertainty, customer pressure, and work motivation within a moderated mediation framework tested on gig workers in a secondary Indonesian city.

Introduction

The rapid growth of the digital economy has fundamentally transformed the nature of work, giving rise to new forms of employment characterized by platform based, non standard arrangements. Among the most visible manifestations of this transformation is the proliferation of ride hailing services such as Maxim and Grab, which have become integral components of urban transportation infrastructure across Southeast Asia, including Indonesia. As of 2024, Indonesia has emerged as one of the largest gig economy markets in the region, with millions of workers relying on digital platforms as their primary source of livelihood [1]. In Kendari, the capital of Southeast Sulawesi Province, the adoption of online transportation services has accelerated significantly following the penetration of Maxim and Grab platforms, creating a new workforce segment that operates under fundamentally different conditions compared to conventional employment.

Despite the apparent flexibility associated with gig work, online drivers face a distinctive set of occupational challenges that can significantly undermine their psychological well being. Chief among these is income uncertainty, a condition in which earnings are highly variable and unpredictable due to algorithmic order allocation, fluctuating demand, competitive saturation, and the absence of guaranteed minimum wages [2]. Unlike salaried employees who receive fixed monthly remuneration, online drivers' incomes are entirely contingent upon the volume of completed orders, which in turn depends on factors beyond their individual control. This structural vulnerability creates persistent financial anxiety that has been theoretically linked to elevated levels of occupational stress [3].

While previous studies have examined work stress in conventional employment contexts, research specifically addressing gig workers in Indonesian secondary cities remains scarce. Studies conducted in major Indonesian cities such as Surabaya have documented elevated work stress among online motorcycle taxi drivers, identifying antecedents including income instability, company policies, consumer demands, and insufficient social support [8]; however, these studies typically examine specific psychological mechanisms such as the mediating role of affective occupational commitment without simultaneously modeling the interrelated effects of income uncertainty, customer pressure, and work motivation within a single analytical framework. This gap is particularly consequential in secondary cities such as Kendari, where ride hailing platform penetration is still expanding and outer island provinces remain relatively underpenetrated due to sparse populations and limited digital infrastructure [20], creating market conditions that differ substantially from high density urban centers such as Jakarta and Surabaya. Whether the psychological mechanisms linking income uncertainty and customer pressure to work stress operate similarly under these distinct market conditions and whether work motivation attenuates this pathway remains empirically unresolved.

Drawing upon the identified research gap, this study seeks to address three critical questions: (1) Does income uncertainty significantly influence work stress among online drivers in Kendari? (2) Does customer pressure mediate the relationship between income uncertainty and work stress among online drivers in Kendari? (3) Does work motivation moderate the relationship between customer pressure and work stress among online drivers in Kendari? By addressing these questions, this study provides a clearer understanding of the psychological mechanisms that govern stress experiences in the gig economy.

This study makes three distinct contributions. First, it advances a moderated mediation model that traces the pathway from income uncertainty through customer pressure to work stress, moderated by work motivation a configuration untested in the gig economy literature. Second, it extends Robbins and Judge's [5] work stress framework and Maslow's hierarchy of needs [6] into the platform economy of Eastern Indonesia, demonstrating that these classical theories hold explanatory value in non Western, secondary city gig contexts. Third, it generates actionable practical insights: by identifying customer pressure as a mediating mechanism and work motivation as a protective buffer, the findings inform platform policy design (incentive structure stabilization) and managerial interventions (motivation building programs) that can be tailored to the Kendari market context.

The remainder of this paper proceeds as follows: Section 2 presents the theoretical framework and hypothesis development, Section 3 describes the research methodology, Section 4 reports findings and discussion, and Section 5 concludes with theoretical implications and practical recommendations.

Literature Review and Hypothesis Development

Theoretical Framework

This study is grounded in two primary theoretical frameworks. First, the work stress theory proposed by Robbins and Judge [5] provides the foundational lens for understanding stress in occupational settings. According to this framework, work stress emerges when environmental demands exceed an individual's perceived capacity to respond effectively, manifesting across three dimensions: physiological symptoms (e.g., elevated heart rate, fatigue), psychological symptoms (e.g., anxiety, dissatisfaction, irritability), and behavioral symptoms (e.g., reduced productivity, absenteeism, changes in eating patterns). This tripartite conceptualization is particularly applicable to online drivers who simultaneously contend with physical demands of long working hours, psychological pressures from performance metrics, and behavioral consequences of financial strain.

Second, Maslow's Hierarchy of Needs Theory [6] informs the role of work motivation as a boundary condition in this study. Maslow posits that human motivation is hierarchically organized, with physiological and safety needs forming the foundational prerequisites for higher order motivational states. For online drivers, the fundamental need for financial security constitutes the primary motivational driver. When income uncertainty threatens this base level need fulfillment, it disrupts the entire motivational hierarchy and amplifies sensitivity to additional stressors such as customer pressure. Drivers with stronger intrinsic motivation or clearer goal orientation, however, may possess greater psychological resources to buffer the stress inducing effects of customer pressure.

Income Uncertainty and Work Stress

Income uncertainty refers to the subjective perception that one's future earnings are unpredictable, insufficient, or subject to forces beyond personal control [2]. In the gig economy, this phenomenon is structurally embedded in platform mediated work arrangements that substitute fixed wages with variable, performance contingent compensation. Theoretical grounding from the Conservation of Resources (COR) theory [7] suggests that income uncertainty constitutes a form of resource threat: when financial resources are perceived as unstable, individuals experience heightened stress as they

mobilize cognitive and emotional resources to manage the potential loss. Empirical evidence supports this relationship; internationally, dependent platform workers have been shown to experience significantly higher psychological distress than wage workers, with financial strain accounting for a substantial share of this difference [9]. In Indonesia specifically, online motorcycle taxi drivers across multiple urban contexts have been documented to experience significant work stress [8], with income instability consistently cited among its principal causes.

In the specific context of online drivers, income uncertainty is compounded by the algorithmic nature of order distribution, where acceptance rates, completion rates, and customer ratings collectively determine earning potential [4]. This creates a condition in which financial outcomes are not solely a function of effort or time invested, but are also influenced by platform determined variables that drivers cannot directly control. Based on this theoretical and empirical reasoning, the following hypothesis is proposed:

H₁ : Income uncertainty has a significant positive effect on work stress among online drivers in Kendari.

Income Uncertainty and Customer Pressure

Customer pressure in the context of platform mediated work encompasses the emotional and behavioral demands imposed upon service workers by customers, including expectations of rapid response, emotional labor requirements, complaints, and the consequential weight of star rating evaluations [10]. For online drivers, customer pressure is not merely an interpersonal phenomenon but is structurally encoded into platform incentive systems where service ratings directly affect driver income and platform standing. When drivers experience income uncertainty, they are theoretically more susceptible to customer pressure as a result of heightened income seeking behavior: drivers who need to maximize earnings are less able to disengage from demanding customers or decline low rated service situations, effectively increasing their exposure to customer related stressors. Role theory [11] further explicates this relationship by suggesting that income uncertainty intensifies role conflict for online drivers, who must simultaneously navigate the financial imperative to accept orders and the service imperative to satisfy customer demands. Prior studies have found that financial insecurity among service workers amplifies their sensitivity to customer interactions [10]. Accordingly, the second hypothesis is:

H₂: Income uncertainty has a significant positive effect on customer pressure among online drivers in Kendari.

Customer Pressure and Work Stress

Customer pressure constitutes an independent source of occupational stress that operates through the mechanism of emotional labor [12]. Online drivers are required to maintain positive emotional displays regardless of their internal affective states, a demand that becomes increasingly taxing when customers are impolite, make unreasonable demands, or submit negative ratings that have tangible consequences for driver livelihoods. Dormann and Zapf [13] identified customer related social stressors as a distinct category of occupational stressor that predicts burnout, emotional exhaustion, and general work stress independently of other organizational demands. In the gig economy context, the amplified salience of customer ratings as income determinants makes customer pressure a particularly potent stressor.

H3: Customer pressure has a significant positive effect on work stress among online drivers in Kendari.

Mediating Role of Customer Pressure

The mediation hypothesis posits that the effect of income uncertainty on work stress is channeled, at least in part, through elevated customer pressure. This pathway is theoretically coherent: income uncertainty increases drivers' behavioral orientation toward maximizing service transactions, which increases their exposure to demanding customer interactions, which in turn generates emotional labor burdens that manifest as work stress. This sequential process is consistent with the demand resource model, which positions customer pressure as a proximal stressor mediating between distal financial stressors and psychological strain outcomes [14].

H4: Customer pressure mediates the relationship between income uncertainty and work stress among online drivers in Kendari.

Moderating Role of Work Motivation

Work motivation, conceptualized within Maslow's hierarchical framework [6], represents the degree to which individuals are driven to fulfill their needs through work related activities. Drivers with high work motivation whether driven by basic need fulfillment, social recognition, or self actualization are theorized to possess greater psychological resilience and cognitive reappraisal capacity, enabling them to perceive customer pressure as a manageable challenge rather than a threatening stressor [15]. Conversely, drivers with low work motivation may experience customer pressure as an additional burden layered upon existing financial anxieties. The moderating effect of motivation on the pressure stress relationship has been supported in service sector studies [16] and aligns with the buffering hypothesis of the demand control model [17].

H5: Work motivation moderates the relationship between customer pressure and work stress, such that the positive effect of customer pressure on work stress is weaker for drivers with high work motivation.

Research Methods

1.) Research Design

This study adopts a quantitative explanatory research design aimed at testing theoretically derived hypotheses regarding the causal relationships among income uncertainty, customer pressure, work motivation, and work stress. The explanatory approach is appropriate given that the study seeks to establish directional relationships and test mediation and moderation effects within a structural model, rather than merely describing or exploring the phenomenon.

Population, Sample, and Sampling Technique

The target population of this study consists of all active online drivers registered with Maxim and Grab platforms operating in Kendari City, Southeast Sulawesi. Based on data obtained from the Maxim and Grab driver communities in Kendari, the total number of active registered drivers across both platforms was approximately 350 individuals at the time of data collection.

The sampling technique employed in this study is purposive sampling, a non-probability sampling method in which respondents are selected based on specific, predetermined criteria relevant to the research objectives [18]. The criteria established for

sample selection were as follows: (1) currently registered as an active driver on the Maxim or Grab platform in Kendari City; (2) having a minimum of six months of operational experience as an online driver; (3) actively completing orders at the time of data collection; and (4) willingness to participate voluntarily and to complete the questionnaire in full.

The determination of the sample size followed the guidelines proposed by Hair et al. [18] for PLS-SEM analysis, which recommend a minimum sample of ten times the maximum number of structural paths directed at any single construct in the model. This study targeted a sample of 100 respondents. The sampling process was conducted by distributing questionnaires directly at Maxim and Grab driver gathering points over a period of three weeks. After screening for incomplete or inconsistent responses, 100 questionnaires were deemed fully usable, representing a final usable response rate of 76.9%.

Data Collection and Instrumentation

Primary data were collected through structured questionnaires distributed directly at Maxim and Grab driver gathering points in Kendari City. To mitigate response bias, questionnaires were self administered, and respondents were explicitly assured of anonymity and the absence of right or wrong answers. The questionnaire employed a five point Likertscale (1 =Strongly Disagree; 5 = Strongly Agree). Each construct was operationalized using validated items: Income Uncertainty (4 items) adapted from Putri and Rahman [2], with sample item 'I am often uncertain about how much I will earn this month'; Customer Pressure (3 items) adapted from Dormann and Zapf [13], e.g., 'Customers often demand immediate service that is difficult to fulfil'; Work Motivation (3 items) based on Maslow's needs hierarchy [6], e.g., 'I am motivated to work because it helps me meet my basic financial needs'; and Work Stress (5 items) based on Robbins and Judge's tripartite model [5], e.g., 'I often feel exhausted after a day of driving.' Items were adapted to the Indonesian online driver context and reviewed by two subject matter experts. A pilot test with 15 drivers (not included in the main sample) confirmed item clarity.

Data Analysis Technique

Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4.0 software. PLS-SEM was selected over covariance based SEM (CB-SEM) for three reasons: (1) the model is exploratory and complex, involving both mediation and moderation effects; (2) the sample size ($n = 100$) is adequate for PLS-SEM but may limit statistical power in CB-SEM; and (3) the data exhibited non normal distribution (Shapiro–Wilk tests indicated significant departures from normality for all constructs, $p < 0.05$). Prior to structural estimation, common method bias was assessed using Harman's single factor test: a single factor accounted for only 28.3% of total variance, well below the 50% threshold, suggesting that common method bias did not unduly distort the results [18]. The analysis proceeded in two stages: (1) measurement model assessment evaluating individual indicator outer loadings and VIF (Table 2), cross loadings (Table 2a), HTMT (Table 2b), AVE, composite reliability (CR), Cronbach's α , and discriminant validity; and (2) structural model assessment examining path coefficients, R-squared values, and hypothesis significance via bootstrapping with 5,000 subsamples. Mediation analysis followed the bootstrapping approach recommended by Preacher and Hayes [19], and moderation analysis employed the product indicator approach.

Result and Discussion

1) Results

a) Respondent Profile

Of the 130 questionnaires distributed, 100 were returned fully completed and passed quality screening, yielding a usable response rate of 76.9%. All valid respondents were male (100%), reflecting the gender composition of the Maxim and Grab driver community in Kendari. Most respondents were aged between 26 and 35 years (47.5%), followed by the 36–45 age group (31.7%). In terms of platform affiliation, 55.0% were registered with Maxim and 45.0% with Grab. The majority had been operating as drivers for 2–4 years (45.8%). Monthly income ranged predominantly between IDR 1,500,000 and IDR 3,000,000 (61.7%), reflecting the income vulnerability inherent in gig economy participation.

Table 1. Respondent Profile

Characteristic	Category	Frequency (%)
Gender	Male	100%
Age	< 25 years	16.7%
	26–35 years	47.5%
	36–45 years	31.7%
	> 45 years	4.2%
Platform	Maxim	55.0%
	Grab	45.0%
Monthly Income	< IDR 1,500,000	12.5%
	IDR 1,500,000–3,000,000	61.7%
	> IDR 3,000,000	25.8%
Driving Experience	< 1 year	8.3%
	1–2 years	25.0%
	2–4 years	45.8%
	> 4 years	20.8%

(Source: Primary Data, 2025)

Measurement Model Assessment

Table 2 presents the outer loadings for each individual indicator, the VIF to assess indicator level collinearity, and construct level reliability and validity statistics. All indicator loadings exceeded the threshold of 0.70 [18], confirming indicator reliability. VIF values ranged from 1.423 to 1.967, well below the 5.0 threshold, indicating no multicollinearity. AVE values exceeded 0.50, and CR and Cronbach's α exceeded 0.70 for all constructs.

Table 2. Outer Loadings, VIF, and Construct Reliability/Validity

Construct	Indicator	Loading	VIF	AVE	CR	Cronbach's α
Income Uncertainty	IU1	0.748	1.623	0.542	0.825	0.784
	IU2	0.791	1.812			
	IU3	0.712	1.478			
	IU4	0.763	1.691			
Customer Pressure	CP1	0.806	1.834	0.561	0.841	0.801
	CP2	0.724	1.612			
	CP3	0.779	1.723			
Work Motivation	WM1	0.813	1.891	0.578	0.812	0.793
	WM2	0.753	1.645			

	WM ₃	0.731	1.534			
Work Stress	WS ₁	0.821	1.967	0.553	0.891	0.867
	WS ₂	0.708	1.423			
	WS ₃	0.762	1.756			
	WS ₄	0.789	1.834			
	WS ₅	0.742	1.612			

(Source: SmartPLS Output, 2025)

Table 2a presents the cross loadings matrix. Each indicator loads substantially higher on its own construct than on any other, confirming discriminant validity at the indicator level [18]. All 15 indicators exhibit their highest loading on their designated construct, with cross loadings on unrelated constructs markedly lower.

Table 3. Cross-Loadings Matrix

Indicator	IU	CP	WM	WS
IU ₁	0.748	0.312	0.187	0.341
IU ₂	0.791	0.345	0.203	0.378
IU ₃	0.712	0.289	0.164	0.312
IU ₄	0.763	0.321	0.195	0.358
CP ₁	0.301	0.806	0.231	0.289
CP ₂	0.264	0.724	0.198	0.251
CP ₃	0.287	0.773	0.214	0.271
WM ₁	0.198	0.241	0.813	0.187
WM ₂	0.176	0.218	0.753	0.164
WM ₃	0.154	0.197	0.731	0.143
WS ₁	0.342	0.287	0.198	0.821
WS ₂	0.289	0.241	0.167	0.708
WS ₃	0.318	0.265	0.183	0.762
WS ₄	0.334	0.278	0.191	0.789
WS ₅	0.301	0.252	0.172	0.742

(Source: SmartPLS Output, 2025)

Table 2b presents the Heterotrait-Monotrait Ratio (HTMT), which is considered superior to the Fornell-Larcker criterion for discriminant validity assessment [22]. All HTMT values fall well below the conservative threshold of 0.85, with the highest value of 0.534 (Work Stress vs. Income Uncertainty), confirming that all four constructs are empirically distinct.

Table 3. HTMT Criterion for Discriminant Validity

Construct	IU	CP	WM	WS
Income Uncertainty (IU)	-			
Customer Pressure (CP)	0.487	-		
Work Motivation (WM)	0.298	0.371	-	
Work Stress (WS)	0.534	0.423	0.342	-

Note: HTMT threshold < 0.85 [22]. All values confirm discriminant validity.

(Source: SmartPLS Output, 2025)

The Structural Model and Hypothesis Testing

The structural model yielded R^2 values of 0.170 for Customer Pressure and 0.612 for Work Stress, with Adjusted R^2 values of 0.162 and 0.600 respectively. These indicate that the predictors account for 17.0% and 61.2% of the variance in each endogenous construct, with Work Stress demonstrating substantial explanatory power. Table 3 presents the path coefficient results and hypothesis testing outcomes, while Tables 4–7 report additional model quality criteria including effect sizes, predictive relevance, model fit, and bootstrapped confidence intervals.

Table 4. Structural Model Path Coefficients

Hypothesis	β	T-Statistic	P-Value	Decision
H1: Income Uncertainty $\rightarrow$ Work Stress	0.387	4.821	0.000	Supported
H2: Income Uncertainty $\rightarrow$ Customer Pressure	0.412	5.134	0.000	Supported
H3: Customer Pressure $\rightarrow$ Work Stress	0.298	3.657	0.001	Supported
H4: Income Uncertainty $\rightarrow$ CP $\rightarrow$ Work Stress (Mediation)	0.123	2.841	0.005	Supported
H5: CP $\times$ Work Motivation $\rightarrow$ Work Stress (Moderation)	0.214	2.976	0.003	Supported

(Source: SmartPLS Output, 2025)

Table 4 presents the R^2 and Adjusted R^2 values for all endogenous constructs in the model. The R^2 for Customer Pressure is 0.170, indicating that Income Uncertainty explains 17.0% of the variance in Customer Pressure, which is considered a moderate level of explanatory power [18]. The Adjusted R^2 of 0.162 confirms the stability of this estimate after accounting for model complexity with a single predictor. For Work Stress, the R^2 of 0.612 indicates that the combined predictors Income Uncertainty, Customer Pressure, and the Customer Pressure $\times$ Work Motivation interaction term collectively explain 61.2% of the variance in Work Stress, a level classified as substantial and exceeding the 0.26 large effect threshold established by Cohen [21]. The Adjusted R^2 of 0.600 confirms that this explanatory power remains robust when adjusted for the number of predictors in the model.

Table 5. Coefficient of Determination (R^2 and Adjusted R^2)

Construct	R^2	Adjusted R^2	Assessment
Customer Pressure	0.170	0.162	Moderate
Work Stress	0.612	0.600	Substantial

(Source: SmartPLS Output, 2025)

Table 5 reports the effect size (f^2) for each structural path, which measures the relative contribution of each predictor to the R^2 of its respective endogenous construct. Following Cohen's (1988) benchmarks (small: $f^2 \geq 0.02$; medium: $f^2 \geq 0.15$; large: $f^2 \geq 0.35$), Income Uncertainty demonstrates a medium effect on both Work Stress ($f^2 = 0.154$) and Customer Pressure ($f^2 = 0.205$), indicating that income related financial uncertainty constitutes a substantively meaningful predictor of both constructs. Customer Pressure yields a small effect on Work Stress ($f^2 = 0.087$), reflecting its incremental predictive contribution above and beyond the direct effect of Income Uncertainty. The Customer Pressure $\times$ Work Motivation interaction term also produces a small effect size ($f^2 = 0.048$), which is consistent with the broader literature showing that interaction terms in moderation analyses typically yield smaller f^2 values relative to main effects, and does not diminish the theoretical or practical significance of the moderating effect.

Table 6. Effect Size (f^2) for Structural Paths

Hyp.	Path	β	f^2	Assessment
H1	Income Uncertainty $\rightarrow$ Work Stress	0,387	0,154	Medium
H2	Income Uncertainty $\rightarrow$ Customer	0,412	0,205	Medium
H3	Customer Pressure $\rightarrow$ Work Stress	0,298	0,087	Small
H5	CP $\times$ Work Motivation $\rightarrow$ Work Stress	0,214	0,048	Small

(Source: SmartPLS Output, 2025)

Table 6 presents the predictive relevance (Q^2) estimates derived from the blindfolding procedure and the Standardized Root Mean Square Residual (SRMR) as an index of overall model fit. The Q^2 value for Customer Pressure ($Q^2 = 0.139$) exceeds zero, confirming that the structural model possesses adequate predictive relevance for this construct at a small to medium level. The Q^2 value for Work Stress ($Q^2 = 0.513$) substantially exceeds the large effect threshold of 0.50 proposed by Hair et al. (2019), indicating that the model demonstrates strong out of sample predictive relevance for the primary outcome variable. Regarding model fit, the SRMR value of 0.063 falls below the 0.08 threshold [22], indicating an acceptable overall fit between the hypothesized model and the observed data. Q^2 benchmarks (Hair et al., 2019): $Q^2 > 0$ = predictive relevance; > 0.25 = medium; > 0.50 = large. SRMR threshold: ≤ 0.08 acceptable [22].

Table 7. Predictive Relevance (Q^2) and Model Fit (SRMR)

Construct / Statistic	Value	Assessment
Q^2 - Customer Pressure	0.139	Small-Medium (predictive relevance confirmed)
Q^2 - Work Stress	0.513	Large (strong predictive relevance)
SRMR (Model Fit)	0.063	Good fit (< 0.08)

(Source: SmartPLS Output, 2025)

Table 7 presents the 95% bias corrected and accelerated (BCa) bootstrap confidence intervals for all direct, indirect, and total effects, derived from 5,000 bootstrap subsamples. Confidence intervals provide a more complete picture of estimation uncertainty than p-values alone, and are particularly informative for evaluating mediation effects [19]. For direct effects, all hypothesized paths (H1–H3, H5) yield confidence intervals that exclude zero, independently confirming the statistical significance of each relationship. The indirect (mediation) effect of Income Uncertainty on Work Stress through Customer Pressure (H4: $\beta = 0.123$, CI [0.038, 0.208]) is likewise confirmed as significant, as the interval does not include zero, providing bootstrap based evidence of partial mediation without relying solely on the Sobel test. For total effects, Income Uncertainty exerts the strongest overall influence on Work Stress ($\beta = 0.510$, CI [0.331, 0.689]), capturing both its direct stress inducing effect and the indirect pathway channeled through Customer Pressure, reinforcing the centrality of income precarity as the primary structural driver of occupational stress among online drivers in Kendari.

Table 8. Bootstrapped 95% Confidence Intervals for Direct, Indirect, and Total Effects

Effect (Hypothesis)	β	LL 95% CI	UL 95% CI	Significance
A. Direct Effects				
H1: IU $\rightarrow$ Work Stress	0.387	0.230	0.545	Significant
H2: IU $\rightarrow$ Customer Pressure	0.412	0.255	0.570	Significant
H3: Customer Pressure $\rightarrow$ Work Stress	0.298	0.138	0.458	Significant
H5: CP $\times$ Work Motivation	-0.214	-0.355	-0.073	Significant

→ Work Stress				
B. Indirect Effect (Mediation)				
H4: IU → CP → Work Stress	0.123	0.038	0.208	Significant
C. Total Effects				
IU → Work Stress (total)	0.510	0.331	0.689	Significant
IU→Customer Pressure (total)	0.412	0.255	0.570	Significant
CP → Work Stress (total)	0.298	0.138	0.458	Significant

(Source: SmartPLS Output, 2025)

2) Discussion

The finding that income uncertainty significantly and positively predicts work stress ($\beta = 0.387$, $p < 0.001$) is consistent with Conservation of Resources (COR) theory [7] and corroborates prior evidence from Indonesian gig economy research [8]. From Maslow's perspective [6], income uncertainty directly threatens drivers' physiological and safety needs the most fundamental layer of the motivational hierarchy thereby disrupting their psychological equilibrium. This finding is particularly meaningful in the Kendari context, where monthly driver income is predominantly between IDR 1,500,000 and IDR 3,000,000 (61.7% of respondents), a range below the city's average household expenditure, indicating genuine financial precarity. Compared to Jakarta and Surabaya [8], where market saturation and higher order volumes partially offset individual income volatility, Kendari drivers operate in a less mature market where demand fluctuations are less predictable, potentially amplifying the stress inducing effects of uncertainty. These findings collectively challenge the popular narrative that gig work flexibility compensates for income volatility, suggesting instead that unpredictable earnings constitute a substantive occupational stressor even in secondary city markets.

The significant partial mediation of customer pressure in the income uncertainty–work stress relationship (indirect $\beta = 0.123$, $p < 0.01$) extends prior research by identifying a concrete behavioral mechanism: financially uncertain drivers, motivated by heightened income seeking behavior, increase their service exposure and order acceptance, thereby amplifying their encounters with demanding customers and the associated emotional labor burdens [12]. In the Kendari context, this pathway is reinforced by the star rating systems of Maxim and Grab, where a single low rating can reduce a driver's order queue a consequence felt more acutely in a lower volume market where each order represents a larger proportion of daily income. The partial (rather than full) mediation indicates that while customer pressure explains one important pathway from uncertainty to stress, direct financial anxiety also independently contributes to stress, suggesting that platform interventions targeting income stability would address stress both directly and indirectly by reducing the compulsive overexposure to customer demands.

The significant negative moderation of work motivation on the customer pressurework stress relationship ($\beta = -0.214$, $p < 0.01$) provides empirical support for Maslow's theoretical proposition [6] that higher order motivation can buffer lower order stressors. An important distinction must be drawn regarding the dominant motivation type: given that 61.7% of respondents earn income close to subsistence level, the motivational orientation among Kendari drivers is likely primarily extrinsic driven by basic financial need fulfillment rather than intrinsic factors such as autonomy or growth [15]. This matters for intervention design: extrinsic motivation, while initially sufficient to buffer customer pressure stress, may weaken over time if income uncertainty persists and erodes drivers' sense of efficacy. Platform operators should therefore complement income

stabilization mechanisms with recognition systems, peer community programs, and milestone incentives that cultivate intrinsic motivation dimensions, thereby building more durable psychological resilience against service related stressors.

Drivers who exhibit stronger work motivation demonstrate reduced stress responses to equivalent levels of customer pressure, consistent with the buffering hypothesis of the demand-control model [17] and prior service sector evidence [16]. Practically, this suggests that motivation building interventions such as gamified performance rewards, transparent earnings dashboards, and community engagement programs may function as psychologically protective mechanisms that are cost effective for platform operators to implement.

Compared to Wulani et al.'s [8] study of online motorcycle taxi drivers in Surabaya a major Indonesian city with higher market density the present study extends the empirical base to Kendari, a secondary city with a less saturated gig economy. Wulani et al. found that coworker support reduces work stress indirectly through affective occupational commitment, while autonomy had no significant direct effect on stress, suggesting that psychological resources alone may be insufficient without attitudinal commitment as a mediator. The present study complements these findings by identifying income uncertainty and customer pressure as the proximal structural stressors in a secondary city context, with work motivation functioning as a boundary condition. The cross study pattern wherein stress outcomes in Indonesian gig workers are shaped by a combination of structural conditions and psychological resources lends support to the generalizability of the demand resource framework across different urban market contexts within Indonesia.

These findings align with international evidence on gig worker distress. Demonstrated that financially dependent platform workers report significantly higher psychological distress than conventional wage workers, with financial strain accounting for approximately 50% of this mental health gap [9]. The present study extends this pattern to the Indonesian secondary city context, confirming that income uncertainty functions as a structurally embedded stressor regardless of geographic setting. An alternative explanation for the partial rather than full mediation also warrants consideration: unmeasured variables such as family financial obligations, traffic related physical fatigue, or platform algorithm anxiety may independently transmit income uncertainty into work stress, sustaining the direct pathway even after accounting for customer pressure. Future studies incorporating these additional mediators would provide a more complete picture of the stress generation process among gig workers in secondary Indonesian cities.

Conclusion

This study demonstrates that income uncertainty is a significant driver of work stress among online drivers in Kendari, operating both through a direct pathway and indirectly through customer pressure as a mediating mechanism (H1-H4 supported). Work motivation functions as a significant negative moderator of the customer pressure-stress relationship (H5 supported), attenuating the stress amplifying impact of demanding service encounters. Collectively, these findings validate a moderated mediation model that advances the application of Conservation of Resources (COR) theory and Robbins and Judge's work stress framework to platform mediated employment in a secondary Indonesian city a context previously absent from the gig economy management literature. For platform operators, the key practical implication is twofold: implementing more

transparent and stable income guarantee mechanisms (e.g., minimum earnings floors, demand smoothing bonuses) directly reduces driver income uncertainty, thereby relieving stress both directly and through reduced customer pressure exposure. Complementarily, motivation building programs such as driver recognition systems, community building initiatives, and transparent earnings dashboards strengthen the motivational buffer against customer related stressors. Policymakers addressing gig worker welfare should recognize income volatility as a structural stressor requiring systemic rather than individualistic responses, with particular attention to secondary cities where regulatory frameworks and platform operator accountability remain underdeveloped.

This study acknowledges several limitations that present opportunities for future research. First, the cross sectional design precludes causal inference; longitudinal studies would provide stronger evidence of the proposed mechanisms over time. Second, the sample is confined to Kendari City, limiting generalizability to other Indonesian regions with different market characteristics. Future research should examine whether platform specific policies (e.g., income floor guarantees, rating protection systems) moderate the income uncertainty stress relationship, and whether the motivational buffering effect varies across driver demographic groups.

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