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Determinants of Job Satisfaction and Transportation Performance among Long-Haul Truck Drivers

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Abstract: Amidst global labor shortages and high turnover in the long-haul trucking industry, effectively motivating and retaining drivers has become a critical challenge for transportation companies. Despite growing interest in occupational well-being, research connecting job satisfaction with transportation performance in this sector remains sparse. This study seeks to identify key factors influencing both job satisfaction and transportation performance among long-haul truck drivers. Employing structural equation modeling (SEM), a comprehensive survey analysis was conducted. The results reveal a significant positive relationship between job satisfaction and transport performance. Additionally, job stress and reward systems are identified as major predictors of job satisfaction, while personality traits and job design characteristics also significantly impact satisfaction levels (Hancock et al., 2013; Lannoo and Verhofstadt, 2016; Kollmann et al., 2020). This study provides new insights into long-haul truck driver management through a theory-driven research approach, helping transportation companies enhance driver management practices and offering important implications for the industry's sustainable development.

Keywords: Long-haul truck drivers; Job satisfaction; Transportation performance; Human resource management; Driver management

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1. Introduction

The seamless movement of goods is fundamental to modern supply chain operations (Boyce et al., 2016). With the ongoing expansion of globalization, the demand for road freight transport is expected to rise steadily (Apostolopoulos et al., 2010). As an essential backbone of the transportation industry, long-haul truck drivers shoulder heavy workloads to keep supply chains running efficiently (Sieber et al., 2014). However, many major global economies are facing persistent driver shortages and capacity constraints, compelling existing truck drivers to work under increasingly high-intensity conditions.

Long-haul transportation is inherently demanding and often accompanied by significant work-related stress (Suzuki et al., 2009). Prolonged driving hours, monotonous work routines, irregular scheduling, and elevated accident risks have collectively intensified the persistent shortage of professional drivers (Vries et al., 2017). Additionally, compensation structures within the trucking industry frequently amplify the pressures associated with working hours and scheduling constraints (Lemke et al., 2021). The ongoing imbalance between work and personal life significantly diminishes both job satisfaction and transportation performance, while also contributing substantially to workforce shortages (Boyce et al., 2016).

Despite the growing awareness of these challenges, research on job satisfaction and transportation performance among long-haul truck drivers remains relatively underdeveloped. Existing studies have primarily concentrated on three key areas. First, safety performance research focuses on enhancing driver awareness to mitigate transportation risks (Lemke et al., 2021; Vries et al., 2017; Shaw et al., 1998). Second, welfare policies and incentive mechanisms explore strategic initiatives aimed at reducing driver turnover rates (Ng et al., 2015). Turnover is influenced by various factors, including age, educational background, compensation, job stress, and career advancement opportunities (Beilock & Capelle, 1990). However, while job satisfaction is widely acknowledged as a key factor in employee retention, research on its specific determinants within the long-haul trucking industry remains limited. There is a notable gap in the theoretical literature regarding the mechanisms by which job satisfaction impacts transportation performance.

This study aims to fill the existing research gap by identifying the primary factors affecting job satisfaction and their subsequent influence on transportation performance within the long-haul trucking industry. The research is guided by the following questions:

RQ1: What factors influence the job satisfaction of truck drivers in long-haul transportation?

RQ2: How does job satisfaction affect the transportation performance of truck drivers?

To address these questions, this study develops a multidimensional structural equation model (SEM) incorporating four theoretical perspectives: reward system theory, job stressor theory, job characteristics theory, and personality theory. This study offers an in-depth analysis of the factors affecting job satisfaction and their impact on transportation performance, focusing on the relationships between job stress, reward systems, personality traits, and job design elements. The integration of these theoretical frameworks enables the development of novel insights into the effective management of long-haul truck drivers, offering empirically grounded strategies to improve both employee well-being and operational efficiency.

This research yields three key contributions. First, this study advances transportation performance management by clarifying the link between job satisfaction and performance outcomes within the long-haul trucking sector. Second, it offers actionable recommendations for logistics companies to enhance workplace conditions and career development, thereby boosting job satisfaction and decreasing turnover rates.

2. Review of Relevant Literature and Formulation of Research Hypotheses

2.1. Job Satisfaction

Job satisfaction is a core construct in organizational behavior and occupational psychology (Locke, 1976). It is generally defined as an individual's overall evaluation of their work experiences, characterized by positive emotions and a sense of fulfillment (Locke, 1976) . Extensive empirical research consistently shows that employees with high job satisfaction perform better, display more positive workplace behaviors, and contribute more effectively to organizational goals.

Equity theory explains job satisfaction by suggesting that individuals assess fairness at work by comparing their inputs (e.g., time, effort, skills) with the rewards they receive, such as compensation, promotions, and recognition (Kollmann et al., 2020). When perceived equity exists, employee motivation and satisfaction are likely to rise; conversely, perceived inequities tend to diminish satisfaction and increase the likelihood of turnover.

In the context of long-haul trucking, extended work hours, though compensated with higher wages, do not lead to improved job satisfaction. This is primarily due to difficult working conditions and poor work-life balance (Boyce et al., 2016). These factors highlight the complexity of job satisfaction in trucking, where financial incentives alone are insufficient for ensuring driver well-being and reducing turnover.

2.2. Determinants of Job Satisfaction

Previous studies show that job satisfaction among long-haul truck drivers is influenced by factors such as stress, rewards, personality, and job design, but they lack a unified theoretical framework.

To bridge this gap, the present study synthesizes concepts from reward system theory, job stress theory, job characteristics theory, and personality theory to develop a comprehensive structural equation model. The inclusion of the four dimensions—job stress, reward mechanisms, personality attributes, and job design features—is based on their capacity to holistically capture the fundamental challenges and distinctive demands inherent in the long-haul trucking profession. These dimensions are consistent with established psychological and management theories on job satisfaction. Together, they encompass both external factors (e.g., job stressors and job characteristics) and internal psychological mechanisms (e.g., personality traits and perceptions of reward fairness), providing a comprehensive framework for understanding job satisfaction variations within this occupational group. This model explores the combined effects of these factors on job satisfaction and transportation performance among long-haul truck drivers. Specifically:

Reward System Theory emphasizes enhancing employee motivation through effective incentive measures.

Job Stressor Theory analyzes the sources of stress in the work environment and their impacts on employees.

Job Characteristics Theory examines the alignment between job tasks and individual characteristics.

Personality Theory focuses on the moderating role of individual personality traits in coping with job stress.

By integrating these theoretical frameworks, this study provides a robust conceptual foundation to guide organizational management practices and informs the development of more effective policies aimed at enhancing job satisfaction and improving operational performance among long-haul truck drivers.

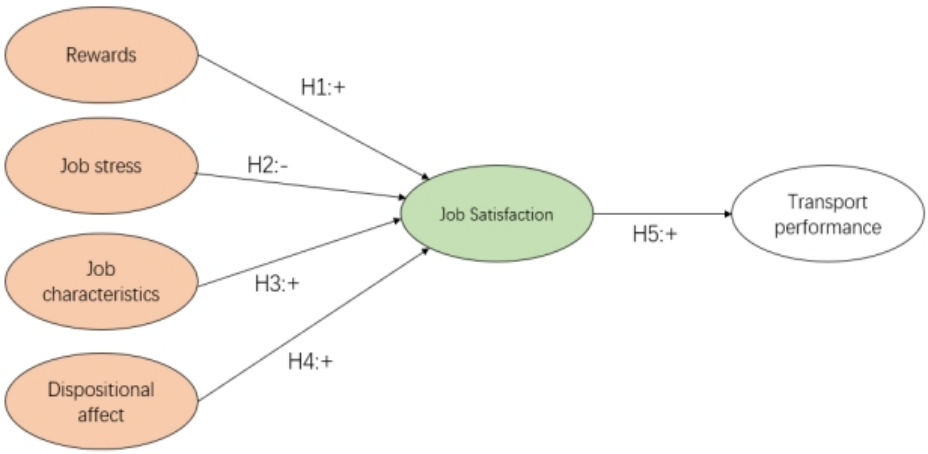

Figure 1. Key Influencing Factors of Job-Related Outcomes in the Long-Haul Trucking Profession

The reward system approach constitutes a strategic component of human resource management aimed at motivating employees, enhancing performance, and facilitating the achievement of organizational objectives through the provision of incentives. Rewards can encompass both financial incentives, such as base salary and performance bonuses, and non-financial

incentives, including career advancement opportunities, skill development programs, and forms of recognition. Incentive structures can be tailored to the needs of long-haul truck drivers (Kudo and Belzer, 2019), with the combined use of rewards and discipline being an effective recruitment and retention strategy. Belzer and Sedo (2018) emphasized that compensation levels serve as a key motivator influencing individuals' decisions to enter and remain in the trucking profession. Therefore, promotion and pay as key indicators of job satisfaction and lack of attention to truck driver welfare may lead to a decrease in supply chain efficiency as truck drivers are core participants in the transport function (Boyce et al., 2016). Drawing on reward system theory, the following hypotheses are proposed:

Hypothesis 1: Reward systems improve job satisfaction among long-haul truck drivers.

Job stressor theory seeks to identify the underlying causes of job stress, enabling organizations to implement strategies that reduce stress and enhance both employee performance and well-being. Existing research indicates that truck drivers are exposed to numerous occupational stressors, including persistent time pressure, social isolation, negative public perception, driving-related hazards, substandard working conditions, fatigue, and experiences or fears of violence (Kudo and Belzer, 2019). These stressors affect long-haul truck drivers' job satisfaction through both direct and indirect routes. Occupational stress is significant for drivers with long periods away from home and limited social support (Shattell et al., 2010). Chronic exposure to such stressors may contribute to adverse mental health outcomes and diminished satisfaction with work life (Shattell et al., 2010). Based on the previous analysis, the following hypothesis is proposed:

Hypothesis 2: Increased job-related stress is associated with a significant reduction in job satisfaction among long-haul truck drivers.

Job characteristics theory posits that job design and nature are critical determinants of employee job satisfaction. Hackman and Oldham's (1976) model identifies five key job attributes—skill variety, task identity, task significance, autonomy, and feedback—that foster motivation and meet psychological needs. Empirical evidence shows these attributes enhance employees' sense of meaning, responsibility, and accomplishment, leading to greater job satisfaction and motivation. Based on this, the following hypothesis is proposed:

Hypothesis 3: Core job characteristics, such as skill variety, task identity, task significance, autonomy, and feedback, positively influence job satisfaction among long-haul truck drivers.

Personality traits significantly influence job satisfaction. According to personality-job fit theory, alignment between personality and job requirements improves transportation performance (Inceoglu and Warr, 2011). Traits that commonly affect job satisfaction include positive or negative affect, control points, and burnout tendencies. Studies show that individuals with positive affect and an internal locus of control report higher job satisfaction, while those with lower burnout tendencies experience greater satisfaction (Yuen et al., 2018). Given the challenges long-haul truck drivers face, such as monotony, isolation, and family stress, positive personality traits may buffer these effects. Therefore, the following hypothesis is proposed:

Hypothesis 4: Personality traits, such as a positive outlook, strong internal control, and low burnout susceptibility, enhance job satisfaction among long-haul truck drivers.

This study identifies four key factors—reward systems, occupational stress, job characteristics, and personality traits—as critical determinants of job satisfaction.

2.3. Relationship Between Job Satisfaction and Transportation Performance

Empirical research shows a positive link between job satisfaction and transportation performance, indicating that higher job satisfaction leads to better individual performance and organizational efficiency (Hancock et al., 2013; Lannoo and Verhofstadt, 2016). Employees with elevated job satisfaction typically exhibit lower absenteeism, superior work quality, enhanced operational productivity, and stronger organizational loyalty (Beaskoetxea and García, 2015).

Meta-analytic findings consistently show a positive relationship between job satisfaction and transportation outcomes (Christen et al., 2006). While this relationship has not been extensively validated in the context of long-haul trucking, findings from other sectors indicate a similar pattern. Based on this, the following hypothesis is proposed:

Hypothesis 5: Job satisfaction enhances transportation performance in long-haul truck drivers.

3. Research Methodology

3.1. Measurement Variables

To empirically test the hypotheses, 22 measurement variables were developed based on a comprehensive review of literature, covering six core constructs: rewards, job stress, job characteristics, personality traits, job satisfaction, and transportation performance (Table 1).

Table1. Underlying Constructs and Measured Indicators

Construct	Variable	Measurement Items	Literature Source
Rewards	X1	The compensation provided by my employer is consistent with industry norms.	Li et al. (2014)
	X2	The family-related welfare benefits offered by my organization are appropriate.	
	X3	Opportunities for advancement within the company are fairly structured.	
	X4	The organization offers adequate training and professional development programs.	
Job stress	X5	There is a significant imbalance between my work and personal life.	Fairbrother and Wam (2003)
	X6	Support from coworkers in the workplace is inadequate.	
	X7	Assistance from road regulatory personnel is insufficient.	
	X8	My work hours and scheduling are poorly structured.	
	X9	The conditions for working and living within the vehicle are subpar.	
Job characteristics	X10	My position requires the utilization of a broad range of skills.	Hackman and Oldham (1976)
	X11	I am responsible for completing comprehensive and clearly defined tasks.	
	X12	My work has a meaningful impact on others.	
	X13	I have the autonomy to decide how to execute my tasks.	
	X14	I receive regular and constructive feedback regarding my work performance.	
Dispositional affect	X15	I generally experience positive feelings while at work.	Alarcon et al. (2009)
	X16	I feel a strong sense of control over my job responsibilities.	
	X17	I frequently experience fatigue during work.	
Job satisfaction	Y1	I am satisfied with my current job role.	Wanous et al. (1997)
	Y2	I am pleased with the overall performance of my organization.	
	Y3	I am satisfied with my career.	
Transport performance	Y4	I have a tendency to be frequently absent from work.	Sánchez-Beaskoetxea and Coca García (2015)
	Y5	I commit relatively few errors in the course of my duties.	
	Y6	I perform my work tasks with a high degree of efficiency.	

Notes: Items Y4 and X17 are deliberately phrased in a negative manner to serve as attention-check mechanisms, thereby verifying that respondents are thoroughly reading and thoughtfully completing the questionnaire.

As detailed in Table 1, the construct of reward systems encompasses both material and non-material job-related incentives. These are operationalized through a composite evaluation of remuneration, family-related benefits, career advancement opportunities, and access to professional development programs. Job stress is defined by five negative factors: (1) insufficient work-life balance, (2) limited support from colleagues, (3) absence of organizational or managerial support, (4) disruptions to daily routines indicative of poorly structured schedules and disorganized task allocations, and (5) suboptimal physical working conditions, including extended driving hours and insufficient infrastructure for rest and recovery (Fairbrother and Warn, 2003; Li et al., 2014).

Job characteristics are assessed using five key dimensions: skill variety, task completeness, the perceived significance of work outcomes, autonomy in task execution, and frequency of feedback, as defined in Hackman and Oldham's (1976) model. Personality factors are evaluated through essential psychological traits, including emotional resilience, locus of control (perceived control over work and life), and susceptibility to burnout.

All constructs are measured on a 7-point Likert scale, ranging from 1 ("strongly disagree") to 7 ("strongly agree"), with 4 as the neutral midpoint.

Job satisfaction was assessed through holistic evaluative items capturing respondents' overall contentment with both their

current job and employing transportation firm. Responses were rated on a 7-point Likert scale, with 1 as "very dissatisfied" and 7 as "very satisfied." Transportation performance was evaluated using three specific metrics: frequency of absenteeism, incidence of operational errors (such as traffic violations or cargo damage), and perceived efficiency in transport operations, including adherence to schedules and route optimization. The items were rated on a 7-point Likert scale, with 1 as "strongly disagree" and 7 as "strongly agree," and 4 indicating neutrality (Sánchez-Beaskoetxea and Coca García, 2015).

3.2. Questionnaire Development and Implementation

A web-based survey was developed for efficient data collection, consisting of three sections, with the first detailing the study's objectives and background. The second section presented 23 observed variables, each accompanied by detailed definitions, as summarized in Table 1. Participants were requested to assess each item using a standardized response scale. The final section gathered demographic data, including job title, nationality, driving experience, and age, utilizing both categorical and interval-level measurement formats.

Survey participation invitations were distributed via email to 75 logistics and transportation firms operating within China. Company contact details were obtained through regional logistics associations and publicly available business directories. Six logistics companies agreed to participate in the study. Preliminary survey versions were reviewed by human resource managers, particularly those with experience in managing long-haul truck drivers, to ensure clarity and content validity. Upon confirmation, detailed instructions for survey completion were disseminated to designated company liaisons, who subsequently distributed the survey to eligible truck drivers.

To reduce common method bias, a one-month interval was implemented between measuring exogenous (Stage 1) and endogenous variables (Stage 2). During Stage 1, a total of 400 survey invitations were issued, yielding 324 valid responses. Subsequently, these 324 participants were re-contacted for Stage 2 of the data collection. Ultimately, 262 respondents completed the second phase. Detailed demographic information of the participants is presented in Table 2.

Table2. Respondent Demographics

Statistical Items	Demographic Information	Frequency (n = 262)	Percentage (%)
Corporate name	SF Express Logistics	60	22.9
	JD Logistics	44	16.8
	Cainiao Logistics	49	18.7
	Yunda Logistics	29	11.1
	Xiangyu Logistics	26	9.9
	China Post Logistics	54	20.6
Age	20-30	52	19.8
	30-40	92	35.1
	40-50	79	30.1
	Above 50	39	14.9
Entire period of actual operation	0-5	78	29.8
	5-10	93	35.4
	10-15	66	25.2
	Above 15	25	9.5

4. Results

4.1. Initial Data Processing and Preparation

Reverse scoring was applied to negatively worded variables, like burnout tendency (x17) and absenteeism (y4), before conducting the SEM analysis to ensure data consistency. This transformation involved subtracting each respondent's score from the maximum value on the 7-point Likert scale. The incorporation of negatively worded items served as a methodological safeguard to enhance respondent attentiveness and ensure the reliability of survey responses.

Reverse scoring is a crucial step in SEM analysis, as it helps maintain the consistency of factor loadings for each underlying construct. Following this, the covariance matrix for all observed variables was computed using the statistical

analysis software PRELIS and subsequently used as input data for the structural equation modeling process.

4.2. Metrics Model

This study used the two-step SEM method (Anderson & Gerbing, 1988), beginning with the evaluation of the measurement model to assess the latent constructs' reliability, followed by testing the structural model. All analyses were performed using LISREL 8.8 software. Table 3 shows the CFA results, including standardized factor loadings (λ), t-values, AVE, and CR for each latent construct.

Table3. Confirmatory Factor Analysis

Variable	Construct	λ	t	CR	AVE
X1	RE	0.945		0.960	0.857
X2	RE	0.913	27.626		
X3	RE	0.916	27.971		
X4	RE	0.928	29.245		
X5	JS	0.859		0.935	0.743
X6	JS	0.838	17.540		
X7	JS	0.898	19.898		
X8	JS	0.889	19.542		
X9	JS	0.822	16.964		
X10	JC	0.762		0.882	0.600
X11	JC	0.808	13.364		
X12	JC	0.825	13.677		
X13	JC	0.775	12.752		
X14	JC	0.696	11.311		
X15	DA	0.710		0.799	0.571
X16	DA	0.811	10.172		
X17	DA	0.743	9.965		
Y1	JOS	0.832		0.887	0.723
Y2	JOS	0.825	15.457		
Y3	JOS	0.892	16.963		
Y4	TP	0.792		0.796	0.566
Y5	TP	0.740	11.238		
Y6	TP	0.724	11.023		

Notes: CMIN = 294.512, DF = 215, CMIN/DF = 1.37, $p < 0.01$, RMSEA = 0.038, TLI = 0.979, CFI = 0.982.

Table 3 shows a chi-square statistic of 294.512 with 215 degrees of freedom and a p-value below 0.05, indicating a significant difference between the model and the data. However, fit indices such as RMSEA (0.038), TLI (0.979), and CFI (0.982) suggest a strong model fit, confirming the six-factor model's effectiveness in reflecting the relationship between job satisfaction and transportation performance.

Construct validity assesses how well a set of observed variables represents the underlying theoretical constructs. This study assessed construct validity using convergent and discriminant validity, with statistical measures outlined in Table 4.

Table4. Assessment of Convergent and Discriminant Validity

Construct	1	2	3	4	5	6
Rewards	0.926					
Job stress	0.618	0.862				
Job characteristics	0.646	0.452	0.774			
Dispositional affect	0.238	0.238	0.274	0.756		
Job satisfaction	0.591	0.511	0.593	0.321	0.850	
Transport performance	0.552	0.507	0.458	0.320	0.545	0.753

Table 4 shows that all constructs have AVE values above 0.50, confirming adequate convergent validity. Furthermore, the composite reliability (CR) for each construct surpassed the 0.7 threshold, with values of 0.960, 0.935, 0.882, 0.799, 0.887, and 0.796 (see Table 3), further supporting convergent validity. Moreover, the AVE values for all constructs surpass the squared inter-construct correlation coefficients, confirming strong discriminant validity. These results validate the six-factor model's reliability and provide a foundation for further structural analysis.

4.3. Structural Model Framework

A structural model was developed from the validated measurement model by removing bidirectional paths, simplifying the model to focus on key causal relationships. The remaining bidirectional paths were converted to unidirectional to more accurately reflect the hypothesized directional effects. As shown in Figure 1, the structural model illustrates the connections between job satisfaction determinants—specifically, job stress, reward systems, and other influencing factors—and their effects on transportation performance. All parameter estimates, including factor loadings and structural path coefficients, were standardized for clarity.

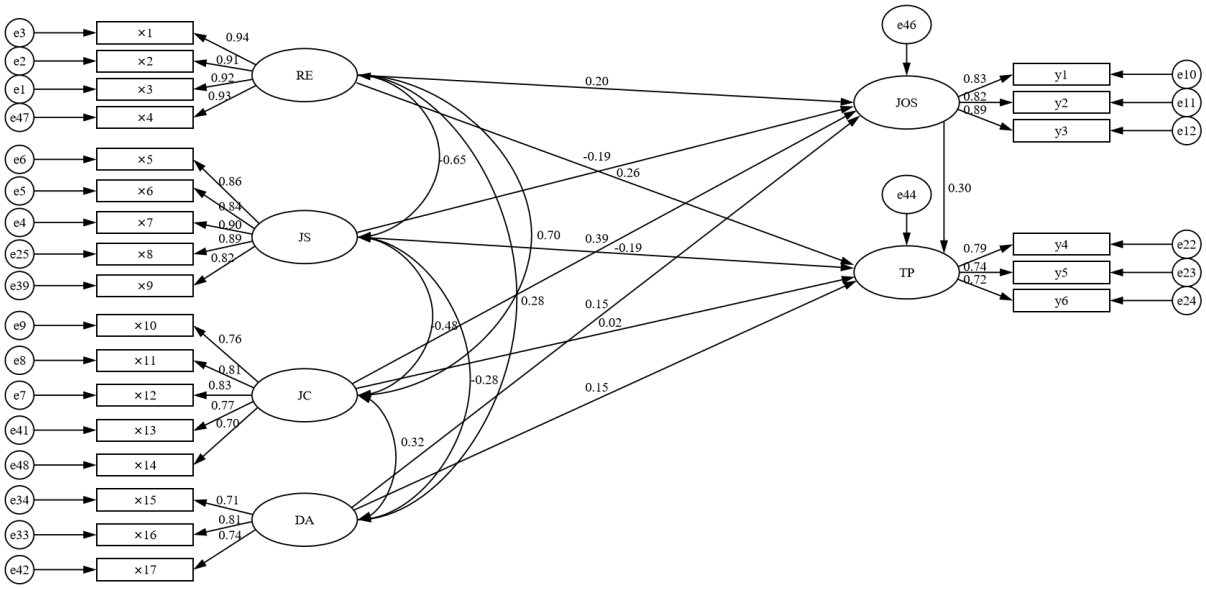

Figure 2. Standardization path of overall model

Notes:Chi-square=294.512, DF=215, Chi/DF=1.370, CFI=0.982, TLI=0.979, RMSEA=0.038.

H1 (Rewards → Job Satisfaction) = 0.20

H2 (Job Stress → Job Satisfaction) = -0.19

H3 (Job Characteristics → Job Satisfaction) = 0.39

H4 (Dispositional Affect → Job Satisfaction) = 0.15

H5 (Job Satisfaction → Transport Performance) = 0.30

Table5. Standardized path analysis results

Y		X	standard Estimate	unstandard Estimate	S.E.	C.R.	P
JOS	<---	RE	0.195	0.182	0.081	2.256	0.024
JOS	<---	JS	-0.186	-0.192	0.072	-2.683	0.007
JOS	<---	JC	0.385	0.418	0.089	4.710	***
JOS	<---	DA	0.149	0.147	0.059	2.503	0.012
TP	<---	RE	0.257	0.214	0.080	2.673	0.008
TP	<---	JS	-0.191	-0.177	0.072	-2.453	0.014
TP	<---	JC	0.022	0.021	0.092	0.229	0.819
TP	<---	DA	0.149	0.132	0.059	2.228	0.026
TP	<---	JOS	0.303	0.272	0.082	3.323	***

Figure 2 shows a chi-square to degrees of freedom ratio of 1.370, indicating good model fit. Fit indices, including RMSEA, SRMR, TLI, and CFI, confirm strong fit. Modification indices suggest no additional paths are needed, confirming the model's optimal and parsimonious fit.

The standardized path coefficients presented in Table 5 reveal statistically significant relationships among the variables under study. The coefficient for the reward system (RE) on job satisfaction (JOS) is 0.195 ($p < 0.05$), confirming a significant positive relationship. Job stress (JS) shows a coefficient of -0.186 ($p < 0.05$), indicating a negative effect. Job characteristics (JC) have a coefficient of 0.385 ($p < 0.05$), reflecting a positive influence. Personality traits (DA) show a coefficient of 0.149 ($p < 0.05$), supporting a positive effect. Job satisfaction (JOS) also positively influences transportation performance (TP) with a coefficient of 0.303 ($p < 0.05$), confirming the hypothesis.

A Bootstrap analysis showed significant indirect effects ($p < 0.05$), indicating that job satisfaction fully mediates the impact of personality traits on transportation performance and partially mediates the effects of rewards, job stress, and job characteristics.

5. Discussion and conclusions

Against the backdrop of the rapidly expanding global logistics industry, the challenges of job stress and high turnover rates among long-haul truck drivers have emerged as critical concerns in human resource management for transportation companies. The unique characteristics of the long-haul trucking profession—marked by prolonged periods away from home, high work demands, and limited social support—significantly influence both job satisfaction and transportation performance. The increasing demands of global logistics have made it urgent for organizations to adopt strategies that motivate, retain, and enhance the performance of long-haul truck drivers, highlighting this challenge as a key managerial issue.

To address these challenges, this study utilizes structural equation modeling (SEM) to comprehensively investigate the link between job satisfaction and transportation performance in the context of long-haul trucking. Additionally, the analysis explores the influence of job stress, reward mechanisms, job design attributes, and individual personality traits on both job satisfaction and transport outcomes. The results highlight job satisfaction's crucial mediating role in transportation performance, offering valuable theoretical insights and practical recommendations for enhancing human resource strategies in the transportation sector.

5.1. Implications for Theory

This study introduces a new theoretical approach by systematically combining reward system theory, job stress theory, job characteristics theory, and personality orientation theory, and analyzing their collective impact on job satisfaction and transportation performance among long-haul truck drivers using structural equation modeling (SEM). The findings show that job satisfaction fully or partially mediates the relationships between job stress, reward systems, job characteristics, personality traits, and transportation performance, enhancing our understanding of its impact and providing a solid foundation for future research.

The negative relationship between job stress and job satisfaction supports job stress theory in the trucking industry, while the positive effect of reward systems on job satisfaction reinforces equity theory, emphasizing the importance of fair compensation and promotion in enhancing retention and performance, particularly in high-turnover sectors. Additionally, the favorable moderating effect of personality traits extends the applicability of personality orientation theory, highlighting the essential role of individual psychological attributes in coping with high-stress occupational settings, especially in roles characterized by extended periods of autonomous work.

This study contributes by highlighting task sameness as a potential hindrance, suggesting that the repetitive aspects of long-haul trucking may diminish job engagement. It extends the job characteristics model to the transportation sector, proposing that role enrichment strategies—such as diversified routes, targeted training, and skill-building programs—can alleviate the adverse effects of task monotony. The findings confirm the moderating role of personality traits, showing that individuals with a positive affect and internal locus of control report higher job satisfaction. These results underscore the need for human

resource management strategies that align job design with personality characteristics. Specifically, recruitment and retention strategies should prioritize individuals who exhibit resilience, intrinsic motivation, and adaptability, as these traits mitigate occupational stress and foster sustained job satisfaction.

5.2. Managerial Implications

This study provides actionable recommendations for logistics firms to enhance job satisfaction and transportation performance among long-haul truck drivers. Primarily, job stress emerges as a key factor influencing job satisfaction, necessitating the implementation of effective stress management strategies for drivers. This includes fostering a more supportive work environment, facilitating continuous communication with family members, and addressing the challenges associated with prolonged absences and high-intensity work through psychological support programs and employee care initiatives. Additionally, establishing mentorship programs where experienced drivers guide new recruits can accelerate workplace adaptation and alleviate work-related stress.

Secondly, incentive structures serve as a critical lever for fostering driver motivation and improving overall performance outcomes. Companies should ensure that compensation and benefits are equitably aligned with transport performance, while further incentivizing drivers through performance-based reward systems. Moreover, clear career advancement pathways are particularly important in high-turnover industries. Providing opportunities for drivers to transition into management roles not only enhances employee retention but also creates long-term value for the organization.

Finally, personalized benefits and flexible work arrangements should be introduced to meet individual driver needs and enhance job satisfaction. Tailoring work schedules and leave policies to accommodate family obligations and career aspirations, alongside targeted training and skill development programs, can support continuous career growth. These initiatives not only boost job satisfaction but also strengthen motivation and organizational commitment.

Through the adoption of these strategic management interventions, logistics firms can significantly enhance both job satisfaction and performance levels among long-haul truck drivers, ultimately enhancing operational efficiency and promoting sustainable industry development. A driver-centric management approach, grounded in systematic and evidence-based policies, can foster a mutually beneficial outcome where employee well-being aligns with enterprise productivity.

5.3. Limitations and Directions for Future Research

This study offers valuable insights into factors influencing job satisfaction and transportation performance among long-haul truck drivers. However, several limitations warrant attention.

The analysis focused on four key constructs—reward systems, job stress, job characteristics, and personality traits—that explain a significant portion of the variance in job satisfaction. Future research could incorporate additional theoretical frameworks to broaden the understanding of these dynamics. However, future research could enhance these findings by incorporating alternative theoretical frameworks, such as expectancy theory, to more comprehensively explore the dynamic interactions between motivational factors and performance outcomes in the trucking sector. Expectancy theory posits that motivation is driven by an individual's expectation of outcomes and effort-reward perception, offering a novel perspective on understanding drivers' work behavior and performance.

Second, sample size limitations restricted this study's ability to examine differences across driver subgroups. For instance, experienced and novice drivers may exhibit significant variations in job satisfaction and performance, which future research could investigate using larger and more diverse samples. Additionally, future studies should explore other potentially influential variables, such as work experience, skill level, and mental health, which may interact with job satisfaction to further impact transport performance.

Additionally, the use of self-reported data in this study may introduce common method bias. To address this limitation, future studies should integrate objective data sources, such as driver logs, telematics data, and formal performance assessments, to validate and corroborate self-reported information. Additionally, given the unique nature of the long-haul trucking industry, comparative studies across various transportation companies could offer valuable insights into how organizational culture and management practices affect job satisfaction and performance outcomes.

This study highlights job satisfaction as a key mediator in driving performance, while also recognizing the influence of other factors. External variables—including traffic conditions, road infrastructure quality, and weather-related disruptions—also exert considerable influence on transport performance. Future research should therefore expand the analytical model to include these contextual variables, enabling a more holistic examination of the multifaceted determinants of driver effectiveness.

Future research incorporating organizational and environmental factors can provide actionable insights to improve operational efficiency and driver well-being.

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