

## A Study on Work Stress among Employees of the Andhra Pradesh State Road Transport Corporation in the Visakhapatnam Zone

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### ABSTRACT

Transport plays a vital role in economic development by facilitating the movement of people and goods; however, employees in this sector are increasingly exposed to significant levels of occupational stress due to demanding working conditions. This study examines the factors influencing work stress among employees of the Andhra Pradesh State Road Transport Corporation (APSRTC) in the Visakhapatnam Zone, analyzes its impact on employee well-being and job performance, and suggests suitable stress management measures. The study is based on primary data collected from 137 respondents, including drivers and conductors, using a structured questionnaire. The findings reveal that work stress among transport employees is moderate and primarily influenced by job-related, organizational, environmental, and personal factors such as long and irregular working hours, heavy workload, traffic congestion, inadequate rest, and limited organizational support. Statistical analysis shows that demographic variables such as age, education, salary, designation, and residence do not significantly influence stress levels. The study also identifies major consequences of work stress, including work-life imbalance, emotional instability, decreased work efficiency, reduced concentration, absenteeism, and increased accident risk. The study concludes that work stress has a significant negative impact on both employee well-being and organizational effectiveness, highlighting the need for improved working conditions, employee welfare measures, and structured stress management programs to enhance productivity and service quality in the transport sector.

**Keywords:** Work Stress, Transport Employees, APSRTC, Occupational Stress, Employee Well-Being, Job Performance, Stress Management.

### Introduction

Transport plays a vital role in the economic development of any nation by serving as the backbone of the economy through the movement of people and goods, thereby supporting trade, commerce, market expansion, and efficient utilization of labour and capital, while also reducing regional imbalances and promoting social integration. Public transport systems are essential for ensuring affordable and accessible mobility, and their effectiveness largely depends on the performance, commitment, and well-being of employees working in various operational units such as depots, workshops, and maintenance facilities. In the contemporary work environment, occupational stress has become a major concern, especially in labour-intensive and service-oriented sectors like transportation, where employees including drivers, conductors, technicians, and operational staff are exposed to long and irregular working hours, traffic congestion, passenger interactions, safety risks, and organizational

pressures. In addition, factors such as inadequate rest, job insecurity, financial constraints, and administrative demands further intensify stress levels among transport employees, leading to negative outcomes such as reduced productivity, burnout, absenteeism, decreased job satisfaction, and lower service quality. Therefore, understanding the nature, causes, and consequences of work-related stress in the transport industry is essential for improving employee well-being and enhancing overall organizational efficiency.

### **Concept of Stress**

The term “stress” originates from the Latin word *stringere*, meaning “to draw tight.” Stress is defined as the physical, psychological, and emotional response that occurs when individuals perceive that environmental demands exceed their coping abilities. It is a common human experience that can influence behaviour, performance, adaptability, and overall well-being in both personal and occupational contexts. Stress may arise from various sources, including physical, emotional, social, and environmental factors, and it significantly affects cognitive functioning, decision-making capacity, concentration, and an individual's ability to respond effectively to challenges. According to Lazarus, stress occurs when individuals appraise a situation as exceeding their available coping resources, thereby triggering a physiological “fight or flight” response that prepares the body for immediate action through hormonal and nervous system activation. This response can increase alertness and energy in the short term but may become harmful if it persists for a long duration. Stress is generally categorized into eustress, which is positive stress that enhances motivation, efficiency, and performance, and distress, which is negative stress that may lead to anxiety, fatigue, irritability, and various health-related complications. In addition, stress can be either acute or chronic depending on its duration and intensity. Acute stress is short-term and often temporary, while chronic stress persists over time and can have long-lasting effects on physical and mental health. While stress can sometimes act as a motivating force that encourages individuals to meet deadlines and improve productivity, prolonged or unmanaged stress can adversely affect both physical and psychological health, reducing overall quality of life and occupational effectiveness.

### **Concept of Work Stress**

Work stress refers to the harmful physical and emotional responses that occur when job demands exceed an employee's capacity, resources, or control. It develops when individuals are unable to cope effectively with workplace pressures, responsibilities, and performance expectations over a sustained period of time. Cooper and Marshall (1976) explain that work stress arises when employees cannot manage job demands due to organizational constraints, inadequate support systems, and conflicting work requirements. Karasek's Job Demand–Control model (1979) further states that stress increases when high job demands are combined with low decision-making control, especially when employees have limited autonomy over how tasks are performed. In most occupational settings, work stress is associated with factors such as excessive workload, time constraints, role ambiguity, role conflict, and lack of job security. It may also result from poor communication, insufficient organizational support, and unclear job expectations. In service sectors like transportation, stress is further intensified by continuous public interaction, irregular working hours, traffic conditions, and high operational pressure. These factors collectively contribute to both mental and physical strain among employees. Thus, work stress is a multidimensional condition influenced by organizational, environmental, and individual factors that significantly affect employees' physical health, psychological well-being, job satisfaction, and overall performance.

### **Factors Influencing Work Stress among Transport Employees**

Work stress in the transport industry is a significant occupational concern due to the nature of services that require continuous movement of passengers and goods under time-bound and safety-critical conditions. Transport employees, including drivers, conductors, and operational staff, experience stress arising from job demands, organizational structure, environmental conditions, passenger interactions, and personal life challenges. These factors are deeply interconnected and collectively affect their physical health, mental well-being, and job performance.

**Job-related factors** are among the primary sources of stress in the transport sector. Employees are often required to work for long and irregular hours, including night shifts and extended duty periods. Strict schedules and time-bound operations create constant time pressure, especially in public transport services where delays are penalized or criticized. High workload, continuous driving, and

limited rest periods increase fatigue levels. Additionally, role ambiguity and role conflict occur when employees receive unclear instructions or conflicting expectations from supervisors, leading to confusion and reduced job satisfaction.

**Organizational factors** also contribute significantly to stress in the transport industry. Many employees experience inadequate managerial support, which limits their ability to handle operational challenges effectively. Poor promotion prospects and lack of career growth opportunities reduce motivation. Job insecurity, contract-based employment, and delayed salary payments in some cases create financial uncertainty. Furthermore, insufficient training and weak communication systems within transport organizations often lead to operational inefficiency and increased work pressure.

**Environmental factors** are particularly relevant in the transport sector due to the nature of road-based operations. Employees frequently deal with poor road infrastructure, heavy traffic congestion, and unexpected delays, which increase operational stress. Vehicle breakdowns, inadequate maintenance facilities, and mechanical failures add to work pressure and disrupt schedules. Continuous exposure to noise pollution, air pollution, heat, and adverse weather conditions further impacts the physical and mental health of transport workers.

**Passenger-related factors** also play a crucial role in increasing stress levels. Transport employees regularly interact with large numbers of passengers, some of whom may exhibit aggressive, impatient, or disrespectful behavior. Conflicts during boarding, ticketing, or travel disruptions are common in public transport systems. Employees are often required to manage complaints, arguments, and emotional situations calmly, which creates emotional labour and contributes to psychological exhaustion over time.

**Personal factors** further intensify stress among transport employees. Irregular working hours often disturb family life, leading to poor work–life balance. Health issues such as back pain, fatigue, and stress-related disorders are common due to prolonged sitting and continuous driving. Additionally, limited access to effective coping strategies, such as counseling support or stress management training, reduces their ability to handle occupational pressures effectively.

In addition, structural issues within the transport industry such as staff shortages, limited decision-making authority, and operational inefficiencies increase the overall burden on employees. These combined factors lead to high levels of mental fatigue, emotional exhaustion, reduced productivity, and increased risk of accidents. Work stress in the transport industry is the result of multiple interconnected occupational and personal factors. Addressing these issues requires improvements in working conditions, organizational support systems, infrastructure development, and employee welfare policies to ensure a safer, healthier, and more efficient transport workforce.

### **Impact of Work Stress in the Transport Industry**

Work stress in the transport industry is a significant occupational issue due to demanding schedules, extended working hours, irregular shifts, time pressure, and safety-sensitive responsibilities. Employees such as drivers, conductors, logistics personnel, and dispatch operators often work under continuous physical and mental strain, which adversely affects their health, behavior, and job performance. These stressors not only impact individual well-being but also influence organizational efficiency and public safety.

- **Physical Effects:** Work-related stress in the transport sector frequently results in fatigue and chronic exhaustion due to prolonged driving hours and insufficient rest. Sleep disturbances are common among employees working night shifts or rotating schedules, leading to reduced alertness during duty hours. Stress also contributes to headaches, musculoskeletal pain, and posture-related disorders caused by long periods of sitting or driving. In severe cases, prolonged exposure to stress may increase the risk of cardiovascular diseases such as hypertension and heart-related complications, particularly among long-distance transport workers.
- **Psychological Effects:** Psychologically, transport employees may experience heightened levels of anxiety, depression, irritability, and emotional instability. Continuous pressure to meet deadlines, manage passenger expectations, and ensure safety can lead to emotional exhaustion and burnout. Over time, this reduces motivation, job commitment, and mental resilience. Cognitive functions such as attention, judgment, and decision-making may also be

impaired, which is particularly dangerous in transport operations where quick and accurate responses are essential.

- **Behavioural Effects:** Behavioral changes due to work stress include reduced concentration, forgetfulness, and decreased work efficiency. Employees may show increased absenteeism, frequent lateness, or withdrawal from work responsibilities. In extreme situations, some individuals may resort to unhealthy coping mechanisms such as substance use. These behaviors negatively affect discipline, reliability, and overall service quality in the transport system.
- **Organizational Effects:** At the organizational level, work stress leads to reduced productivity, increased operational errors, and poor service delivery. Employee morale and job satisfaction tend to decline, resulting in higher turnover rates. One of the most critical impacts in the transport industry is the increased risk of accidents due to fatigue, stress-induced distraction, and impaired decision-making. Additionally, poor employee performance can damage organizational reputation and reduce passenger trust and satisfaction.

### Review of Literature

Occupational stress among transport employees has been extensively studied in both national and international contexts due to its strong influence on employee health, performance, and organizational effectiveness. The transport sector is widely recognized as a high-stress occupation because employees are continuously exposed to time pressure, traffic congestion, passenger interactions, irregular working hours, and safety risks.

Sabarinathan and Shanmuga Saranya (2017) examined the determinants of occupational stress among transport employees and found that compensation, work environment, and management support are significant predictors of both stress levels and job satisfaction. Their study revealed that inadequate salary structures and poor organizational support systems increase emotional exhaustion and reduce employee commitment. In a similar study, Thirumaran and Baranitharan (2016) identified that environmental and operational factors such as poor road infrastructure, vehicle design issues, and unfavorable working conditions are major contributors to stress among transport workers, especially drivers who face continuous exposure to hazardous driving environments.

Gowthaman and Barnabapravin Raj (2015) emphasized the gap between labour legislation and its implementation in the transport sector. They noted that although several welfare measures and legal protections exist for transport employees, a lack of awareness and weak enforcement mechanisms limit their effectiveness. This results in continued exposure to stressors such as long duty hours, inadequate rest periods, and insufficient welfare facilities. Janakiraman and Saravanan (2014) further suggested that structured training programs, motivational strategies, and improved workplace facilities are essential in reducing occupational stress and enhancing employee productivity in transport organizations.

At the international level, Taylor and Dorn (2006) highlighted that professional drivers are particularly vulnerable to occupational stress due to extended working hours, irregular schedules, traffic congestion, and constant vigilance required for safe driving. They further noted that chronic exposure to such stressors can lead to fatigue-related performance decline and increased accident risk. Misra and Srivastava (2012) supported these findings in the Indian context, identifying aggressive passengers, poor road conditions, and traffic unpredictability as major stress-inducing factors affecting transport employees.

Studies conducted within the Kerala State Road Transport Corporation (KSRTC) provide more specific insights into organizational stressors. Joseph (2020) found that financial instability, irregular salary disbursement, and job insecurity are major sources of stress among KSRTC employees. Rajeevan (2021) further reported that organizational inefficiencies, poor workforce planning, and inadequate staffing levels increase workload pressure, leading to psychological strain and reduced job satisfaction. Mathew and Haridas (2022) also emphasized that administrative delays, lack of proper coordination, and excessive workload significantly contribute to occupational stress in public transport systems like KSRTC.

Further research has established the consequences of occupational stress on employee performance and organizational outcomes. Sonnentag and Frese (2013) explained that prolonged exposure to work-related stress leads to burnout, reduced motivation, absenteeism, and increased

likelihood of workplace accidents. They also noted that stress negatively affects cognitive functioning, decision-making ability, and emotional stability, all of which are critical for transport employees.

In terms of coping mechanisms, Lazarus and Folkman (1984) proposed the transactional model of stress, which explains that stress can be managed effectively through problem-focused and emotion-focused coping strategies. Building on this, Cooper and Quick (2017) highlighted the importance of organizational interventions such as employee assistance programs, counseling services, stress management training, and supportive leadership in reducing occupational stress. Additionally, practices such as yoga, meditation, and relaxation techniques have been found effective in improving psychological well-being among transport workers.

Overall, the literature consistently indicates that occupational stress in the transport sector is multidimensional, arising from a combination of organizational, environmental, and social factors. The reviewed studies also emphasize the need for both organizational reforms and individual coping strategies to effectively manage stress and improve employee well-being and performance.

### **Need for the Study**

The transport sector is a vital part of a country's infrastructure as it supports public mobility, trade, and overall economic development. In India, organizations such as KSRTC play a key role in providing public transportation services. However, employees in this sector, particularly drivers and conductors, experience high levels of occupational stress due to long and irregular working hours, heavy workload, traffic congestion, strict schedules, and continuous interaction with passengers. In addition to these operational challenges, issues such as financial instability, delayed salaries, staff shortages, inadequate rest facilities, and limited organizational support further increase stress levels. These conditions not only affect the physical and mental well-being of employees but also reduce their efficiency and job satisfaction. Work stress in the transport sector leads to several negative consequences, including fatigue, hypertension, anxiety, emotional exhaustion, and reduced concentration, which may increase the risk of accidents and absenteeism. Therefore, it is important to study the factors contributing to stress among transport employees, especially in organizations like KSRTC. This study is needed to understand the major sources of stress, examine their impact on employee health and performance, and analyze the coping strategies adopted by workers. The findings will help in suggesting appropriate measures to improve working conditions, enhance employee well-being, increase productivity, and ensure better service quality in the transport sector.

### **Statement of the Problem**

The present study focuses on examining work stress among transport employees and its impact on their job performance and overall well-being. Work stress in the transport sector has emerged as a significant occupational concern due to the complex and demanding nature of the job. Employees are required to perform under continuous pressure, manage time-sensitive schedules, and ensure passenger safety while dealing with unpredictable road and traffic conditions. These responsibilities often create a highly stressful working environment that can negatively influence both physical and mental health. Transport employees are regularly exposed to multiple stress-inducing factors, including long and irregular working hours, shift duties, inadequate rest periods, excessive workload, and strict time constraints. In addition, external factors such as traffic congestion, road safety risks, passenger behavior, and climatic conditions further intensify occupational stress. Organizational issues such as lack of adequate staffing, limited decision-making autonomy, insufficient financial incentives, and poor managerial support also contribute significantly to employee stress levels.

In particular, employees working in public transport organizations such as KSRTC experience heightened stress due to operational pressures, financial instability, and high public service expectations. These stressors often result in fatigue, emotional exhaustion, reduced concentration, irritability, and declining job satisfaction. Over time, such conditions may lead to decreased productivity, increased absenteeism, and higher turnover intentions, thereby affecting the overall efficiency of transport services. Despite the critical role played by transport employees in ensuring smooth mobility and public service delivery, insufficient attention has been given to understanding their psychological and occupational challenges. Therefore, it becomes essential to systematically identify the major sources of work stress, evaluate its impact on employee performance, and analyze the coping mechanisms adopted by employees to manage occupational stress effectively. The findings of this study are expected to provide

valuable insights for improving workplace conditions and enhancing employee well-being in the transport sector.

### **Research Questions**

The following research questions are framed:

- What are the factors influencing work stress among employees of the Andhra Pradesh State Road Transport Corporation in the Visakhapatnam Zone?
- How do employees perceive the impact of work stress in the Andhra Pradesh State Road Transport Corporation in the Visakhapatnam Zone?
- What measures can be suggested to reduce work stress among employees of the Andhra Pradesh State Road Transport Corporation in the Visakhapatnam Zone?

### **Objectives of the Study**

- To identify the factors influencing stress among employees of the Andhra Pradesh State Road Transport Corporation in the Visakhapatnam Zone.
- To examine employees' perceptions regarding the impact of work stress in the Andhra Pradesh State Road Transport Corporation in the Visakhapatnam Zone.
- To suggest suitable measures to reduce work stress among employees of the Andhra Pradesh State Road Transport Corporation in the Visakhapatnam Zone.

### **Scope of the Study**

The present study is confined to the employees of the Andhra Pradesh State Road Transport Corporation working in the Visakhapatnam Zone. It covers drivers and conductors to understand occupational stress in a comprehensive manner. The study primarily focuses on identifying the factors influencing work-related stress, examining employees' perceptions regarding its impact, and exploring suitable measures for effective stress management and reduction. However, the scope of the study is restricted to APSRTC employees in the Visakhapatnam Zone and does not extend to other zones or transport organizations.

### **Hypothesis**

The following null hypothesis was framed and tested. **H<sub>01</sub>**:

There is no significant difference in the factors influencing work stress among employees of the Andhra Pradesh State Road Transport Corporation in the Visakhapatnam Zone with respect to their demographic characteristics.

### **Sampling Design**

The Visakhapatnam Zone of the Andhra Pradesh State Road Transport Corporation consists of several strategically located depots across Visakhapatnam city and its surrounding regions to ensure efficient transport operations. Major depots include Visakhapatnam City Depot, Gajuwaka, Maddilapalem, Simhachalam, Madhurawada, and Autonagar, while regional depots such as Anakapalle, Narsipatnam, and Vizianagaram support inter-district and long-distance services. These depots collectively manage urban, suburban, and industrial routes, including key operational corridors such as Gajuwaka and the Steel Plant area. In the first stage, 30 percent of depots, namely Visakhapatnam City, Gajuwaka, and Maddilapalem were selected using simple random sampling. In the second stage, 25 drivers and 25 conductors were chosen from each selected depot using convenience sampling. Thus, the final sample consisted of 150 transport employees. This sampling design ensured a balanced representation of both drivers and conductors, thereby enabling a comprehensive analysis of work stress among APSRTC employees.

### **Data Collection Tools**

The study is empirical in nature and is based on the survey method. Primary data were collected through a structured questionnaire developed with reference to existing literature on work stress. The questionnaire consisted of closed-ended items measured using a Likert scale ranging from strongly disagree to strongly agree. Secondary data were obtained from published sources, including books, journals, research reports, and online databases. A total of 150 questionnaires were distributed, of which

137 usable responses were received, resulting in a response rate of 91.33%. The collected data were systematically tabulated for further analysis.

### Data Analysis

#### Factors Influencing Work Stress among Employees

Understanding work stress among transport employees is essential for improving efficiency and occupational well-being. In the case of transport employees, factors such as workload, time pressure, job responsibility, working conditions, organizational support, safety concerns, and service demands significantly influence their stress levels. Therefore, transport organizations must evaluate the factors influencing work stress among employees to ensure better performance and a healthier working environment. This section examines the relationship between employee demographics and factors influencing work stress.

**Table 1: Age of Respondents and Factors Influencing Work Stress**

Age (Years)	No. of Respondents	Mean	SD	CV (%)
Up to 30	26	72.04	09.63	13.37
31-40	63	74.60	09.69	12.99
41-50	25	75.52	12.01	15.90
Above 50	23	74.00	11.95	16.15
Total	137	74.18	10.47	14.11

Source: Primary Data

#### Relationship between Age and Factors Influencing Work Stress

Source	SS	DF	MS	F Value	Result
Between Groups	176.157	3	58.719	0.530	Not significant
Within Groups	14742.281	133	110.844		
Total	14918.438	136			

The analysis of age-wise distribution of respondents and factors influencing work stress reveals that the mean stress levels are fairly similar across all age groups, with only minor variations. Respondents aged 41-50 years recorded the highest mean score (M = 75.52, SD = 12.01), followed by those aged 31-40 years (M = 74.60, SD = 9.69), above 50 years (M = 74.00, SD = 11.95), and up to 30 years (M = 72.04, SD = 9.63). The coefficient of variation indicates moderate variability among the groups, with the highest variation observed in the above 50 years category. The ANOVA results further show that there is no statistically significant difference in work stress across different age groups (F = 0.530, p > 0.05). Hence, it can be inferred that age does not significantly influence work stress among the respondents, and employees across all age groups experience nearly similar levels of occupational stress.

**Table 2: Education of Respondents and Factors Influencing Work Stress**

Education	No. of Respondents	Mean	SD	CV
Up to H.Sc	26	74.10	11.58	15.63
Diploma	69	75.96	8.82	11.61
UG & above	42	73.21	9.53	13.02
Total	137	74.18	10.47	14.11

Source: Primary Data

#### Relationship between Education and Factors Influencing Work Stress

Source	SS	DF	MS	F Value	Result
Between Groups	122.115	2	61.058	0.553	Not Significant
Within Groups	14796.323	134	110.420		
Total	14918.438	136			

The analysis of education and factors influencing work stress among transport employees reveals that diploma holders reported the highest mean score (M = 75.96, SD = 8.82), followed by employees with higher secondary education (M = 74.10, SD = 11.58), and those with undergraduate and above qualifications (M = 73.21, SD = 9.53). The overall mean score of 74.18 (SD = 10.47) indicates a

moderate level of work stress across all educational groups. The coefficient of variation shows comparatively higher consistency among diploma holders, while higher secondary respondents exhibited greater variability in their responses. The ANOVA results further indicate that there is no statistically significant difference in work stress based on educational qualification ( $F = 0.553, p > .05$ ), suggesting that education does not significantly influence the level of work stress among transport employees. Hence, it can be inferred that organizational or occupational factors may have a more prominent role in determining work stress than educational background.

**Table 3: Respondents' Monthly Salary and Factors Influencing Work Stress**

Monthly Salary (Rs.)	No. of Respondents	Mean	Standard Deviation	CV
Upto 25000	29	74.23	12.57	16.93
25001-50000	39	73.46	8.51	11.58
Above 50000	69	75.83	11.77	15.52
Total	137	74.18	10.47	14.11

Source: Primary Data.

**Relationship between Monthly Salary and Factors Influencing Work Stress**

Source of Variation	Sum of Squares	DF	Mean Square	F Value	Result
Between groups	114.218	2	57.109	0.517	Not significant
Within groups	14804.220	134	110.479		
Total	14918.438	136			

The analysis of respondents' monthly salary and factors influencing work stress shows that employees earning above ₹50,000 reported the highest mean stress score ( $M = 75.83, SD = 11.77$ ), followed by those earning up to ₹25,000 ( $M = 74.23, SD = 12.57$ ), while respondents in the ₹25,001–₹50,000 category recorded the lowest mean score ( $M = 73.46, SD = 8.51$ ). The overall mean stress score of all respondents was 74.18 ( $SD = 10.47$ ), indicating a moderate level of work stress across all salary groups. The ANOVA results further indicate that there is no statistically significant difference in work stress based on monthly salary  $F(2, 134) = 0.517, p > .05$ . Hence, it can be inferred that monthly salary does not significantly influence work stress among transport employees, suggesting that other occupational and organizational factors may have a greater impact on stress levels.

**Table 4: Designation of Respondents and Factors Influencing Work Stress**

Designation	No. of Respondents	Mean	Standard Deviation	CV
Drivers	70	73.00	08.27	11.33
Conductors	67	75.31	12.17	16.16
Total	137	74.18	10.47	14.11

Source: Primary Data.

**Comparison of the Acceptance of Drivers and to the Factors Influencing Work Stress**

Calculated Vale	Table Value at 5% Level	DF	Result
1.296	135	1.978	Not significant

The analysis of designation and factors influencing work stress among transport employees shows that conductors ( $M = 75.31, SD = 12.17$ ) reported slightly higher work stress compared to drivers ( $M = 73.00, SD = 8.27$ ), while the overall mean stress score was 74.18 ( $SD = 10.47$ ). The coefficient of variation indicates relatively higher variability among conductors ( $CV = 16.16\%$ ) than drivers ( $CV = 11.33\%$ ). The independent comparison revealed that the calculated t-value (1.296) was lower than the table value (1.978) at the 5% level of significance with 135 degrees of freedom, indicating that there is no statistically significant difference in work stress between drivers and conductors. Therefore, designation does not significantly influence work stress among the respondents.

**Table 5: Residence of the Respondents and Factors Influencing Work Stress**

Residence	No. of Respondents	Mean	SD	CV
Urban	94	76.12	10.57	13.89
Rural	43	73.30	10.36	14.13
Total	137	74.18	10.47	14.11

**Comparison of Factors Influencing Work Stress between Urban and Rural Employees**

Calculated Value	DF	Table Value	Result
1.468	135	1.978	Not Significant

The analysis of residence and factors influencing work stress among transport employees shows that urban respondents (M = 76.12, SD = 10.57, CV = 13.89) reported slightly higher work stress compared to rural respondents (M = 73.30, SD = 10.36, CV = 14.13). Although there is a marginal difference in the mean scores, the variation within both groups is relatively similar, indicating comparable levels of dispersion in stress factors among urban and rural employees. The coefficient of variation further suggests that rural employees exhibit slightly higher relative variability in stress compared to urban employees. However, the independent sample test result shows that the calculated value (1.468) is lower than the table value (1.978) at 135 degrees of freedom, indicating that the difference is not statistically significant. Therefore, it can be inferred that residence does not significantly influence the factors contributing to work stress among transport

**Table 6: Impact of Work Stress on the Respondents**

Impact	No. of Respondents	Percentage
Physical health problems	41	29.93
Mental health issues	47	34.31
Fatigue and exhaustion	49	35.77
Low job satisfaction	51	37.23
Absenteeism from work	54	39.42
Employee turnover	56	40.88
Reduced concentration level	64	46.72
Decreased work efficiency	69	50.36
Emotional instability	78	56.93
Work–life imbalance	87	63.50
Poor passenger handling	42	30.65
Reduced motivation and morale	37	27.00
Poor decision-making ability	59	43.07
Reduced job performance	29	21.17
Increased accident risk	32	23.36

Source: Primary Data.

The findings on the impact of work stress among respondents show that it significantly affects both employees and organizational performance. The most reported impact is work–life imbalance (63.50%), followed by emotional instability (56.93%), decreased work efficiency (50.36%), and reduced concentration level (46.72%), indicating strong effects on psychological well-being and productivity. A notable proportion of respondents also reported poor decision-making ability (43.07%), employee turnover (40.88%), absenteeism (39.42%), and low job satisfaction (37.23%), reflecting issues related to workforce stability and commitment. In addition, fatigue and exhaustion (35.77%), mental health issues (34.31%), and physical health problems (29.93%) highlight the adverse health effects of stress. Operational concerns such as poor passenger handling (30.65%) and increased accident risk (23.36%) point to safety and service quality issues. Although reduced motivation and morale (27.00%) and reduced job performance (21.17%) are relatively lower, they still contribute to inefficiency. Overall, work stress negatively impacts employees' health, psychology, efficiency, and organizational effectiveness in multiple dimensions.

**Findings**

- Work stress among respondents is moderate overall and fairly consistent across different groups.
- Age does not significantly influence work stress, although employees aged 41–50 years show slightly higher stress levels.
- Educational qualification has no significant impact on work stress; diploma holders report marginally higher stress.

- Monthly salary does not significantly affect stress levels, even though employees earning above ₹50,000 show slightly higher stress.
- Designation (drivers and conductors) does not significantly influence work stress, though conductors report marginally higher stress.
- Residence (urban and rural) shows no significant difference in stress levels, with urban employees reporting slightly higher stress.
- Work stress has a strong negative impact on employees' personal and professional lives.
- The most common effects include work–life imbalance, emotional instability, decreased work efficiency, and reduced concentration.
- Stress also leads to poor decision-making, absenteeism, employee turnover, and low job satisfaction.
- Health-related impacts include fatigue, mental health issues, and physical health problems.
- Operational issues such as poor passenger handling and increased accident risk are also observed.
- Overall, work stress significantly affects employee well-being, productivity, and organizational performance.

### **Suggestions**

Based on the study, the following detailed suggestions are proposed to reduce and manage work-related stress among transport employees, particularly those working in the transport sector:

- Transport employees often work long hours under physically and mentally demanding conditions. Ensuring clean, safe, and comfortable working environments, along with proper seating and basic facilities like drinking water and sanitation, can significantly reduce fatigue. Mandatory and well-regulated rest breaks between shifts should be implemented so employees can recover physically and mentally, improving concentration, safety, and efficiency during duty hours.
- Organizations should establish regular stress management initiatives, including counseling services provided by trained psychologists. These programs should help employees identify stress factors and develop coping strategies such as relaxation techniques, mindfulness, breathing exercises, and time management skills. Confidential and accessible counseling support should be ensured so employees can seek help without hesitation or stigma.
- Continuous training helps reduce job-related stress by improving employee confidence and performance. Training programs should include defensive driving, customer handling skills, emergency response procedures, and updates on transport technologies and digital systems. Skill enhancement improves efficiency and reduces anxiety caused by lack of knowledge or fear of errors in critical situations.
- Effective and transparent communication reduces misunderstandings, conflicts, and dissatisfaction at work. Management should conduct regular meetings and feedback sessions to discuss operational issues, employee concerns, and suggestions. An open-door policy can further encourage employees to express issues freely, making them feel respected and involved.
- Employees often experience stress due to lack of recognition or unfair promotion systems. Organizations should adopt a transparent, performance-based appraisal system. Clear criteria for promotions, incentives, and rewards should be communicated. Timely recognition of good performance enhances motivation, job satisfaction, and morale among transport staff.
- Excessive workload and irregular working hours are major stress factors. Proper duty scheduling, workload balancing, and systematic shift rotation should be implemented. Shift timings should ensure adequate rest between duties. Limiting overtime and following working-hour regulations help prevent fatigue-related stress and improve well-being.
- Well-maintained vehicles and improved infrastructure are essential to reduce operational stress. Regular servicing, timely repairs, and fleet upgrades should be prioritized. Improving road

conditions and safer routes reduces delays, accidents, and breakdowns, thereby lowering stress among drivers and conductors.

- Financial stability strongly influences mental health. Timely salary payments must be ensured. Providing job security and reducing employment uncertainty can significantly lower anxiety. Long-term benefits and social security measures should also be strengthened.
- Inadequate staffing increases workload and stress. Recruiting sufficient personnel ensures proper duty distribution and reduces overtime dependency. Adequate staffing also maintains service quality and improves organizational efficiency.
- Involving employees in decision-making enhances ownership and responsibility. Participation in planning and policy formulation allows employees to share field insights. This inclusion improves satisfaction, reduces frustration, and fosters a positive organizational culture.
- A strong welfare system with health insurance, medical facilities, retirement benefits, and emergency support is essential. An efficient grievance redressal mechanism should address complaints promptly and fairly, building trust and reducing dissatisfaction.
- Workplace wellness initiatives such as yoga, fitness activities, recreational events, and awareness programs should be conducted regularly. These help employees relax, improve health, and reduce mental fatigue, supporting long-term stress reduction and productivity.

These comprehensive measures, if effectively implemented, can significantly reduce occupational stress among transport employees. They will also enhance job satisfaction, improve safety, increase productivity, and promote overall well-being in the transport sector.

#### **Limitations of the Study**

- The study is restricted to APSRTC employees in the Visakhapatnam Zone; hence, findings may not be generalizable to other regions.
- Responses are based on self-reported data, which may be subject to bias or personal opinion.
- Some respondents may not have provided accurate or complete information due to work pressure and lack of time.

#### **Conclusion**

Occupational stress among transport employees, particularly in APSRTC, is a major concern influenced by workload, time pressure, job insecurity, and organizational inefficiencies. Continuous exposure to these factors negatively affects employees' physical and mental health, reduces job satisfaction, and impairs performance, thereby impacting the overall efficiency of public transport services. The study concludes that work stress in the transport sector is a significant challenge that requires immediate attention. Effective stress management can be achieved through both individual coping strategies and organizational support systems. Improving working conditions, ensuring financial security, regulating shift patterns, and promoting employee welfare can help reduce stress levels. Transport organizations should implement employee-friendly policies, stress management programs, and initiatives that support mental well-being. A balanced approach focusing on both employee welfare and organizational efficiency is essential for developing a healthier, more satisfied, and productive workforce, leading to a more effective and sustainable public transport system.

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