

A Study on the Factors Affecting Cognitive Health of Public Transit Bus Drivers in South Tamil Nadu

Richard Jesu Daniel R, Dr. Kamala V, Vishtnu Kumar R

College Of Engineering Guindy, Anna University, Chennai, India

*Corresponding author's email id: richardjesudanielr@gmail.com

ABSTRACT

Enhancing Public Transport Resilience through Driver Well-Being: Insights from South Tamil Nadu. The mental health and well-being of public transport bus drivers are pivotal for ensuring safe, efficient, and sustainable urban mobility. This study explores the factors influencing bus drivers' mental health in South Tamil Nadu using the SPEE-GO framework, which integrates socio-demographic, psychological, environmental, ergonomic, and organizational dimensions. Data from 50 bus drivers were assessed using the General Health Questionnaire-28 (GHQ-28), measuring somatic symptoms, anxiety/insomnia, social dysfunction, and severe depression. The findings revealed that 34% of drivers were mentally unhealthy, with key contributors including fatigue, poor seating ergonomics, and dissatisfaction with work schedules. Stressors such as heavy traffic, organizational challenges like inadequate managerial communication, and environmental factors significantly impacted mental health. CART (Classification and Regression Tree) analysis identified fatigue and dissatisfaction with route assignments as the primary predictors of adverse outcomes. By tackling these critical issues, transport corporations can enhance driver well-being, reduce stress, and improve service quality, contributing to a more sustainable and resilient public transport ecosystem.

Keywords: Cognitive health, SPEE-GO framework, GHQ-28.

