



The Impact of Traffic Congestion on the Mental Health of Civil Servants: A Case Study of Ministry of Transportation Employees in the Greater Jakarta Area

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Abstract

This study aims to investigate the psychological effects of prolonged traffic congestion on civil servants working in the Ministry of Transportation in the Greater Jakarta Area. As one of the most densely populated regions in Indonesia, Greater Jakarta experiences severe daily traffic, which has the potential to exacerbate mental health issues. The research employed a quantitative approach through a structured survey distributed to 102 respondents. The respondents were classified into three categories of mental health disorders: high, moderate, and low, based on validated psychological scales. The results indicated that 51.20% of respondents experienced severe mental health disorders, while 39.21% reported moderate disorders, and 8.82% exhibited mild symptoms. Emotional regulation difficulties, anxiety, and mood disturbances were significantly related to traffic exposure. The study recommends implementing flexible work arrangements, improving public transportation infrastructure, and providing mental health support programs to mitigate the adverse effects of traffic congestion on civil servants. These findings highlight the need for urgent policy interventions to promote the well-being of public servants in urban settings, particularly those affected by chronic congestion.

Keywords: traffic congestion, mental health, civil servants, Greater Jakarta, mental disorders

Introduction

Traffic congestion is a persistent issue in urban areas, particularly in developing countries like Indonesia. In the Greater Jakarta Area, daily commuting has become a significant source of stress for the workforce, particularly for Civil Servants (CS) in the Ministry of Transportation. The psychological burden of enduring long hours in traffic can exacerbate mental health issues, leading to increased stress and anxiety levels. The Greater Jakarta Area is known for its severe traffic congestion, with daily travel times often exceeding two hours. This situation not only affects productivity but also poses substantial risks to mental health. Civil servants, who are tasked with public service and governance, face unique challenges due to their work environment and responsibilities. This study aims to explore how traffic congestion impacts the mental health of civil servants, focusing on emotional regulation, mood disturbances, and aggressive tendencies. Additionally, it investigates gender differences in experiencing these effects, providing a comprehensive view of the psychological toll of urban congestion.

Traffic congestion has been widely studied for its economic and social impacts. However, its psychological consequences are equally significant. Research shows that prolonged exposure to traffic stress can lead to a range of mental health issues, including anxiety, depression, and aggression.

Studies in various cities, such as Los Angeles and Tokyo, indicate a direct correlation between traffic congestion and increased stress levels among commuters (Smith, A., Johnson, R., & Williams, 2019) ; (Davies et al., 2023). These findings suggest that urban planning must consider mental health as a key factor. In Indonesia, limited research has focused on the psychological effects of traffic congestion. A study by (Hidayah, N., Surya, I., & Kurniawan, 2021) found that urban congestion in Jakarta significantly contributes to stress and decreased quality of life among residents. Research indicates that men and women may experience and cope with stress differently (Kumar, R., & Singh, 2022). This study aims to explore these gender differences further within the context of traffic congestion.

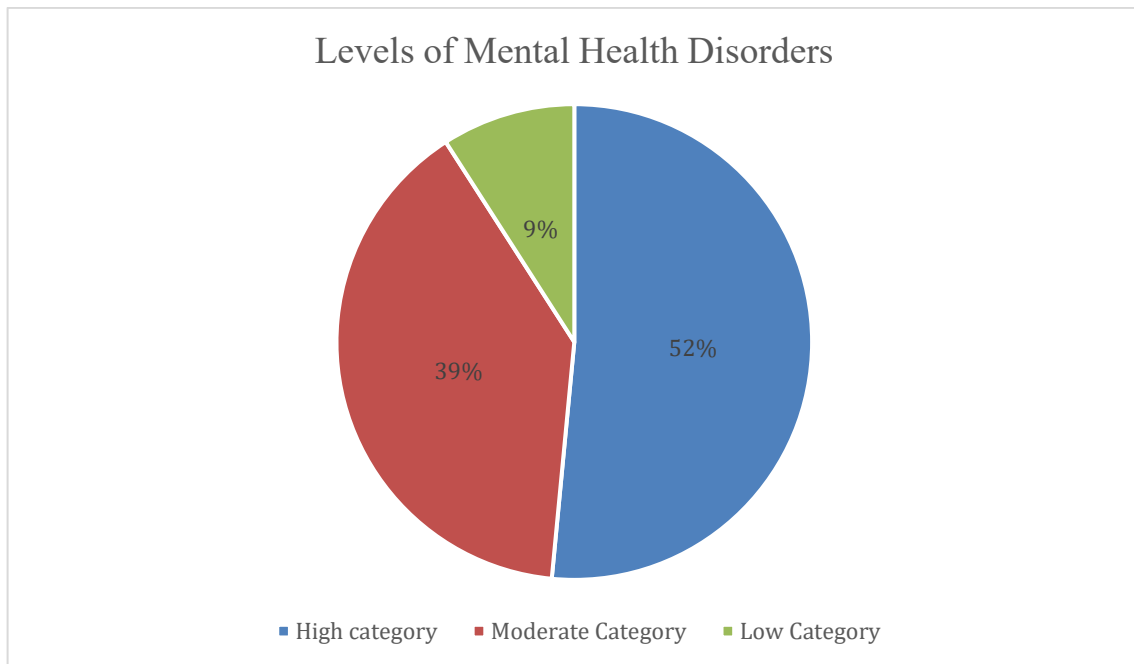
Research Methods

This study employs a quantitative research design utilizing survey methods to collect data from civil servants in the Ministry of Transportation. A total of 102 respondents were selected using simple random sampling techniques. The sample comprised 67.6% male and 32.4% female civil servants. The research instrument consisted of a structured questionnaire, including validated scales for measuring mental health disorders, emotional regulation, mood disturbances, and aggressive tendencies. Data were analyzed using descriptive statistics, including frequency distributions and percentages, to examine the relationship between traffic congestion and mental health. Respondents were classified into three levels of mental health disorders: high, moderate, and low, based on a validated scale. Data analysis was conducted using frequency distribution and percentages to describe the impact of traffic congestion on civil servants' mental health.

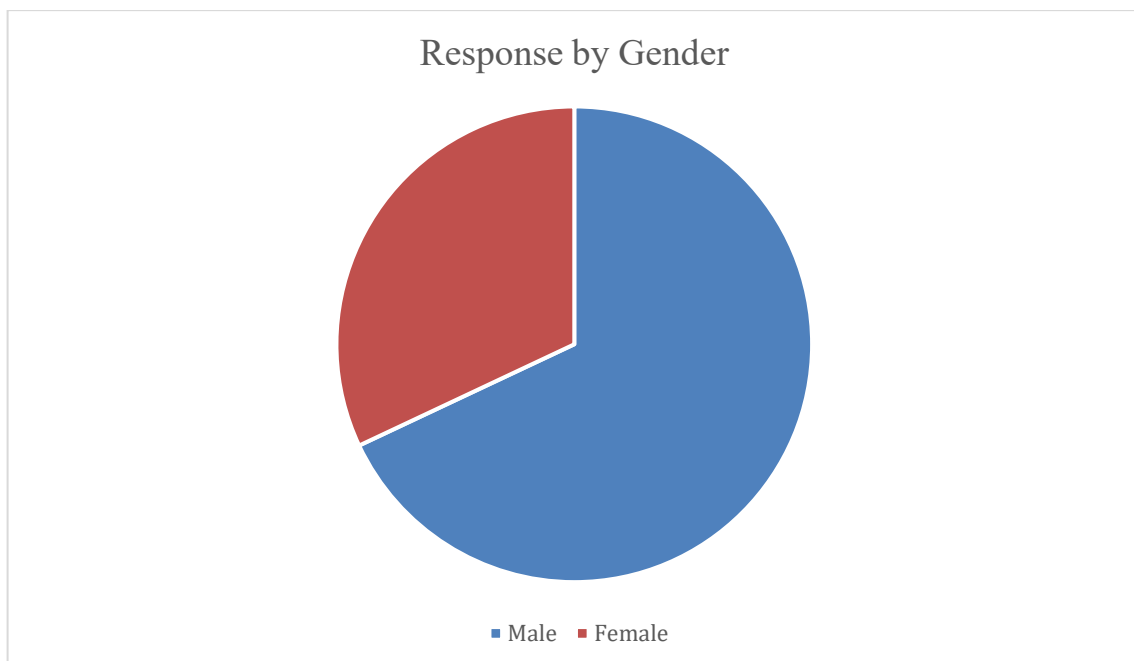
Results and Discussion

The study's findings show that most civil servants in the Greater Jakarta Area experience mental health issues due to traffic congestion illustrated on these pie diagram:

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1. Levels of Mental Health Disorders
 - a. High category: 53 respondents (51.20%)
 - b. Moderate category: 40 respondents (39.21%)
 - c. Low category: 9 respondents (8.82%)



2. Respondents by Gender
 - a. Male: 67.6%
 - b. Female: 32.4%

Furthermore, the interview results indicate that traffic congestion significantly impacts the mental health of respondents, particularly in terms of emotional regulation, mood disturbances, and aggressive behavior. Among the 102 respondents, the majority experienced notable difficulties in managing their emotions while stuck in traffic.

3. Difficulty in Emotional Regulation

The data reveal that 90 respondents (87.25%) reported difficulties controlling their emotions when facing congestion. This indicates that traffic congestion is not merely a physical problem but also an emotional one that affects mental well-being. Such difficulties can lead to feelings of frustration, anger, and heightened anxiety, which may disrupt work productivity and social interactions outside of traffic situations.

4. Unpleasant Mood

The findings also show that 89 respondents (87.25%) felt uncomfortable, with some reporting feelings of fear and anxiety while stuck in traffic. This discomfort may stem from a loss of control over the situation often encountered on the road. This condition has the potential to trigger more serious psychological disturbances if not properly addressed.

5. Anxiety and Worry

82 respondents (80.39%) reported significant issues of anxiety and worry. This anxiety could be attributed to various factors, including uncertainty regarding arrival times at destinations and the impact of congestion on job responsibilities. Such feelings can affect people's thinking and decision-making processes, negatively impacting professional performance.

6. Aggressive Behaviour and Anger

More than half of the respondents (63.72%) reported a tendency to become easily angry when caught in congestion. Aggressive or destructive actions were noted by 34.31% of respondents. This suggests that congestion can trigger non-constructive behaviours, both toward themselves and others. Such aggressive actions not only pose risks to safety on the road but can also worsen interpersonal relationships at work and in social environments.

7. Implications for Mental Health

Overall, the interview results demonstrate that the impact of traffic congestion on the mental health of civil servants in the Ministry of Transportation is significant. The high levels of difficulty in emotional regulation and tendencies toward aggressive behaviour may indicate a greater risk for long-term mental health disorders. This highlights the urgent need for attention from relevant parties to implement programs that can support the mental well-being of civil servants

Discussion

The findings of this study underline the significant psychological impact of traffic congestion on civil servants in the Greater Jakarta Area. Over half of the respondents

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reported severe mental health disorders, reinforcing the link between urban congestion and psychological distress explained below:

a. Emotional Regulation

The high percentage of respondents struggling with emotional regulation suggests that traffic congestion acts as a chronic stressor, diminishing their ability to cope with everyday challenges.

b. Mood and Aggression

The prevalence of mood disturbances and aggressive tendencies highlights the urgent need for interventions to address mental health within this demographic. The psychological strain of traffic congestion can lead to increased tensions in the workplace and decreased quality of public service.

c. Gender Dynamics

While the study did not find significant differences between genders in mental health outcomes, future research should explore these nuances more deeply, as previous studies suggest that coping mechanisms may vary significantly across genders.

Conclusion

This study concludes that traffic congestion in the Greater Jakarta Area negatively impacts the mental health of civil servants in the Ministry of Transportation. Most respondents experience moderate to high levels of mental disorders, with key symptoms including difficulties in emotional regulation, anxiety, and mood disturbances.

Therefore, intervention from the government and relevant institutions is needed to address this issue, such as through the implementation of flexible work policies, improved traffic infrastructure, and mental health support programs for civil servants.

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