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## Commuting Stress Impact on Employee turnover of Information Technology Small and medium-sized enterprises, Chennai

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### ABSTRACT

*Small and Medium-sized Enterprises (SME) are playing an essential role in revenue generation and employment size in Indian economy. However, increased rate of employee turnover has been a significant problem faced by Indian IT SME. Failure to address turnover causes is one of the reasons for the business failure of Indian SME's. One of the leading causes of employee turnover is commuting stress. Therefore, the objective of this paper is to examine the significant relationship between commuting stress and employee turnover in IT SME's Chennai. A structured questionnaire was developed and sent to 46 IT SME's in Chennai. 122 valid responses (24.4% response rate) were received and considered for data analysis. Multiple regression revealed a positive and significant relationship between commuting stress and employee turnover of Chennai IT SME's.*

**KEYWORDS:** *Employee turnover, commuting stress, small and medium-sized enterprises, information technology industry, and multiple regression analysis.*

### INTRODUCTION

The substantial contribution to GDP often specifies the prominence of SME sector, concerning the number of companies, the total number of employees, and the total value of shipments (Gamage, 2014). SME's are considered as the backbone of Indian economy. According to MSME report (2015), the number of Indian SME is estimated to be at 42.50 million, registered & unregistered together with a staggering 95% of the total industrial units in India. Moreover, SME offered employment of 40% (106 million) workforce next to the agricultural sector. Likewise, Indian SME produces more than 6000 products. The total GDP contribution is around 6.11% of the manufacturing and 24.63% of the Service sector. Furthermore, SME share in total export is about 40%. Overall, SME maintained an average growth rate of over 10% in the financial year 2015 (MSME report, 2015). Therefore, SME is considered as the backbone of Indian economy. Undoubtedly, SMEs are playing a significant role in revitalizing the local economy and increasing employment opportunities (Sato, 2013).

Gamage (2014) claimed that SMEs have no longer been a thriving source of growth. Gamage added that the profitability and investment of SMEs had declined significantly and business registration of SMEs has been on the decline. One of the core reason cited for SME decline is high employee turnover problem. Quality of human resource is the base for successful business management of SMEs (JASMEC, 2001). Therefore, retaining high-quality personnel are the key factor for the growth of SME. However, it has been argued that Indian SME holders are paying less attention to retain employees (JASMEC, 2001). One of the reasons cited by the researchers

for employee turnover is commuting stress. Literature sources revealed that commuting stress has not been paid significant attention or paid less attention considering their importance on employee turnover intention. Therefore, the core objective of this study is to examine the relationship between commuting stress and employee turnover in the IT SMEs in Chennai city.

## LITERATURE REVIEW

Chennai is one of the central software center of India like Bangalore, Hyderabad, Kolkata, and Delhi. There are 7.60 lakhs registered MSMEs in Tamilnadu, employing 52.99 lakhs employees with a total investment of more than Rs. 39,438 Crores as on 31.03.2012. The 4<sup>th</sup> All India Census for MSMEs states that Tamil Nadu accounts for the most significant number of MSMEs in the Country (15.07%). Further, Tamilnadu has the second largest number of Medium Enterprises (12.51%) and the third largest number of Small Enterprises in the country (9.97%). Cheap IT labor is one of the main factors that has attracted a multitude of multi-billion-rupee foreign software companies such as Microsoft to establish their business in the Chennai city.

Chennai also one of a business location for a massive number of Information technology (IT) Small and medium size enterprises (SME's). Commuting becomes a specific feature of employee stress especially those working in IT SME's. The reason behind the scenario is the remote location of IT SME's. Larger companies can provide staff bus. Conversely, IT SME's are incapable of providing staff bus concerning employee size and higher cost.

Moreover, the average commute time increases dramatically with the increased volume of vehicles for employees work in remote areas. The mode of transportation varies, with the overwhelming majority commuting by private vehicle alone. 4.4 percent people in India, spend 1.45 to 2 hours traveling to work (one-way travel). On an average commuter in India spend around 3 to 4 hours a day or 15-20 hours a week getting from home to work and then back (Wageindicator, 2018). Therefore, commuting stress becomes a severe issue among IT SME's at Chennai.

Commuting stress has been well documented, and literature sources have primarily focused on attributes and antecedents of the commuting experience that contributes to commuting stress (Sposato, Roderer, & Cervinka, 2012). However, literature sources have been paid less attention to identify the impact of commuting stress on employee turnover. Furthermore, the limited research on this topic has produced inconsistent results. Therefore, this research aims to test the direct relationship of commuting stress with employee turnover of IT SME's in Chennai.

## Employee Turnover

Abassi and Hollman (2000) assert employee turnover as the rotation of workers around the labor market. In other words, employee resignation and replacement are called as turnover (Bruce, 2005). Turnover is classified into voluntary and involuntary. When an employee chooses to leave for own reason, it is called voluntary turnover. Whereas, involuntary turnover means the layoffs, retrenchment and similar actions by an employer. In general, a certain amount of turnover is unavoidable (retirement, a death of an employee) facilitate to bring new blood into the organization with new ideas and a fresh perspective. However, a considerable number of voluntary turnover can ruin a company.

Despite employee turnover is such a severe problem, scholars are lamenting over the dearth of studies investigating it; especially studies using causal variables are rare (Gamage, 2014). Commuting stress also one of a causal variable that affects employee stay intention in an organization. However, only a few researchers have focused on the effects of commuting stress as an antecedent of turnover.

### **Commuting stress**

Stress can be either biological or psychological terms. According to Lazarus & Folkman (1984, pg. 19) Psychological stress is a relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being. Commuting stress also similar kind of stress results when the commuter appraises the environment and conditions of commuting exhausting his or her resources and endangering his or her well-being.

In a job market employer concentrates the cheap availability of the skilled workforce. Employers are usually ignorant of the commuting problem. This is especially the case of IT SME's in Chennai city. In a developing economy, the network of transportation is less advanced or almost primitive is the typical scenario. In such case living closer to the workplace is not probable for all the employees since there are limited residential options around workplaces. In the long run, a commuter individual is likely to change job or to be in search of a new residence, both in some instances (Gottholmseder et al., 2009). Therefore, the employee chooses to change job in a failure of getting proximity.

Literature sources revealed commuting stress influences job dissatisfaction and job search behavior (Novaco, Stokols, & Milanesi, 1990). In the work domain, commuting stress have direct links to employee turnover intention and job satisfaction (Koslowsky & Krausz, 1993), negative mood upon arriving to work (Wener & Evans, 2011) and aggression in the workplace (Hennessey, 2008). Long distance commuting can readily be associated positively with tardiness. Commuting stress with its external effects lays on the top of environmental concerns (Kluger, 1998). Moreover, wasting time and money leads to stress, affects productivity, and drives dissatisfaction towards job (Koslowsky, 1997). However, longer distances may be compensated by lower housing prices in the suburbs, by the employer as higher wages in some instances (White, 1988).

Commuting stress issues mainly arise from the unreliability of services and delays especially among the users of public transportation. Public transport users report physiologic symptoms such as tiredness, stiffness in muscles and joints, lower back pain, and various psychological symptoms such as anger, nervousness, tension, negative mood, and difficulty in focusing attention. Similarly, use of personal vehicles and traveling longer distances in vain generates additional carbon emissions, driving stress, health issues, and congestions. Above and beyond, Long commuters experience problems related to the quality of daily life and health (Emre & Elci, 2015).

A study in the United States report that 48 % of working adults reported their job dissatisfaction as an impact of commuting, 32% took commuting into consideration when deciding their current job. Similarly, 15% of the respondents reported they would change their jobs for a shorter

commute (Road Wage Survey, 2011). Following the argument that commuting behavior is related to the functioning of labor, housing and transportation markets (Rouwendal&Nijkamp, 2004), the employee might want to compensate the reduced utility from any of these markets in the other markets. Also concerning helping employees avoid rush hour traffic, employers could interchangeably schedule employees for early hours in the morning(Road Wage Survey, 2011).Allowing workers flexible starting and quitting times, might eliminate urgency and lower the levels of perceived driving stress (Lucas & Heady,2002).

Most IT SME's offers company cars as a fringe benefit for employees to ease the commuting (Puigarnau, 2011).However, car users also face similar problems liketraffic volume and driving behavior of other roadusers (Koslowsky, Aizer, &Krausz, 1996; Lyons & Chatterjee, 2008). Moreover, most companies are encouraging ride sharing by car-pooling or vanpooling to initiate environmentally conscious commuting programs such as mass transit methods, bike commuting and walking by providing guides for commuters (Michigan Department of Transportation, 2012).Considering the significant causes of commuting stress the researcher proposes the following hypothesis:

**Hypothesis:** Commuting stress has a significant positive relationship with employee turnover

## METHODOLOGY

Commuting stress was the independent variable, and employee turnover was the dependent variable. A structured questionnaire was developed as a data collection instrument. The questionnaire consists of twenty-seven questions each ten for IV and DV with seven demography questions. The questionnaire was developed in English then translated into Tamil to make respondents better understand it. 500 questionnaire was distributed randomly among 46 IT SME's in Chennai. 122 valid responses were received and taken for data analysis. Data were analyzed by using SPSS version 22.0. Descriptive statistics were used to understand the characteristics of the IT SME's employees. Multiple regression was used to examine the direct relationship between commuting stress and turnover intention.

### Reliability and validity of the questionnaire

Cronbach's alpha coefficient is used to measure the reliability of the survey instrument. According to Sekaran (2005), an instrument alpha value higher than 0.7 is said to be acceptable. The internal consistency reliability coefficients (Cronbach's alpha) for all the study scales are well above the level of 0.8.Alpha values range from 0.820 – 0.844, got more than 0.8 alpha values which are well above the norms and thus are acceptable for data analysis. A Shapiro – Wilk's normality test has been used to know the distribution of scale scores. Shapiro- Wilk's normality test shows that commuting stress ( $0.067 > 0.05$ ) and employee turnover ( $0.086 > 0.05$ ) is approximately normally distributed. Hence, the researcher was satisfied with the reliability and validity of the study scale.



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## RESULTS

Regression analysis is used to describe the statistical relationship between one or more predictor variables and the response variable. Table 1 shows the model summary of multiple regression outcomes of the study hypothesis. The regression model explained 41.3% (41.3) of the total variance on employee turnover and the model as a whole was significant ( $F = 24.697$ ,  $p = .000$ ). Multiple R (17.1%) is the correlation coefficient for the degree of association between the commuting stress (independent variable) and employee turnover (dependent variable). The beta coefficient was 41.3%, and the t-test value 4.970 shows a positive and significant relationship between the commuting stress and employee turnover. Therefore the relationship between the commuting stress and employee turnover was positive and significant. Therefore, the study hypothesis was accepted.

**Table: 1 Model summary of multiple regression results**

• Scales	• Output
• R	• 0.413
• R <sup>2</sup>	• 0.171
• F value	• 24.697
• P value	• .000
• Beta	• 4.970

Source: Data generated for the research

## DISCUSSION

This study focused the direct and significant relationship between commuting stress and employee turnover. Not surprisingly with earlier studies, this study also establishes a positive and significant relationship between commuting stress and employee turnover. Therefore, the author proposes that commuting stress influence employee stay intention and might turn as actual turnover in future. Therefore, owners/managers of IT SMEs who are concerned about high employee turnover rates try to eliminate the problem of commuting stress to enhance employee retention.

## IMPLICATIONS, LIMITATIONS, AND DIRECTIONS FOR FUTURE RESEARCH

As a practical implication, this study discussed issues related to daily commuting stress. Organizations try to limit the negative impact of daily commuting stress. Leaders can eliminate commuting stress in several ways. One such method to limit commuting stress is to let employees engage in job crafting. Job crafting enhances employees to eliminate the stress and strain built up from daily work tasks that may lead to either negative or positive repetitive thoughts. Moreover, Flexible working hours and compressed work weeks would help workers to allocate their relatively more productive time to work. Business managers need to consider city

structure along with the job market while deciding the business location. The 'work from home' concept has also helped to get rid of commuting stress, especially among IT groups.

Further studies should consider the concepts of burnout upon investigating relationships that are affected by commuting. Future research should seek to examine other potential outcomes of commuting stress, as the present study examined only one proximal outcome during the commute. Examining other potential distracting mechanisms that emanate from one's job while commuting (e.g., cell phone use, higher fuel prices, parking issues) could provide insight as to the potential seriousness that work can have on one's safety outside of work.

## CONCLUSION

This study is crucial as it brings the topic of commuting stress to the attention of IT SME management and organizational domains. Commuting deserves more attention than it already has in management and organizational behavior domain. Avoiding a lengthy commute is possible if an employee changes residence or workplace. Moreover, an individual suffering from a long commute will plan to switch jobs or will probably face more dramatic situations especially in job markets with higher unemployment levels. Even in the markets with lower unemployment rates, fixed investments of an employer towards his or her job will be an essential factor in deciding to switch jobs or stay. Therefore, as the study highlights, it is essential to eliminate employee commuting stress to reduce employee turnover.

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