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Effects of Vehicular Traffic on Employee: A Case of Scacom Ghana Limited

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ABSTRACT

Commuters in Accra, Tema and major cities of Ghana continue to suffer heavy vehicular traffic jams each working day, particularly during the peak hours, when most people travel to their work places or to school and back. Formal sector employees, including those from Scancom Ghana, are spared of the negative effects of this phenomenon which include loss of working time, lateness, commuting stress and fatigue among others. However, in order to avoid these negative effects of traffic jams mentioned earlier, some workers cut down on their sleep and get up very early to be able avoid the enormous traffic congestions. This also comes with loss of sleep and associated stress and fatigue. Similarly, some workers leave the office earlier than required to be able to "beat" the huge traffic congestion and reach home early. Through a survey, this study sought to find out how the traffic congestion in Accra and Tema affect employee productivity, particularly among workers who use the major streets to the Central Business Districts and Tema. Using employees of SCANCOM Ghana Ltd, the study also sought to evaluate workers' views on the extent to which traffic congestions affect employee productivity. The study findings revealed that while majority of the respondents agreed that vehicular traffic congestions moderately or seriously affected employee productivity, they were still able to meet their daily work targets, their productivity was not affected by the traffic jams they encountered.

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Introduction **Background of the study**

In Ghana, the increasing number of vehicles in major towns and cities coupled with limited expansion in road networks and other human factors have become a nuisance to commuters, causing heavy vehicular traffic especially during peak hours. The peak hours in many parts of the country are the early hours of the morning when most workers commute to work and late afternoon when they return to their homes. Studies have indicated that over 500,000 vehicles make over 270,000 daily trips in and out of the Central Business District. One of the key contributors to the ever growing traffic congestion in Accra is caused by people migrating from various commuters either rural or urban into Accra for various purposes. The worsening traffic situation has been off great concern to city authorizes who deploy officers into heavy vehicular traffic arrears to help reduce congestion and to curb any carriage. The traffic situation has been observed to affect lifestyles of workers. Especially in Accra it is common to find people who work in the central business district needing to cut down on their daily sleep in order to make up for losses in productive hours. There are also situations where workers have to leave their offices and jobs earlier than usual in order to reduce the stress of going through the heavy traffic. Those who deliberately decide to stay longer at work in order to escape traffic. One of the unattended problems relating to the traffic situation is the ever increasing rates of accidents especially in Accra which is often blamed on driver errors,

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In corporate organizations much attention is given to employee productivity as it impacts on organizational performance. The assessment of productivity of worker often considers in many cases the internal organizational issues that affect productivity with little or no attention being given to external factors such as traffic congestion.

This study therefore exams the issues of traffic congestion especially in and around the central business district (CBD) of Accra and Tema and how it affects the productivity of workers.

Statement of the Problem

The cities of Accra and Tema continues to be bedevilled by an increasing vehicular traffic congestions, especially along the major streets leading to the central business district (CBD) from different part of Accra/Tema and the Tema Motorway. According to Quarshie (2007), over 2.5 million passenger trips per day are estimated to enter or leave streets leading to the Accra Ring Road, the Tema motorway extension and Tema motorway itself alone. Armah et al (2010) argue that the situation is likely to get worse with population growth and increasing rates of car ownership are expected to increase the number of cars in the area from 181,000 in 2004 to over 1 million in 2023. Both Quarshie (2007) and Armah et al (2010) point out that 56% of daily passengers are carried by mini vans, and a further 15% by taxi, not talking about the huge of number of commuters who use their own private vehicles.

According to them, these vehicles are inefficient in terms of the amount of road space used, and congestion caused, to transport each passenger. Experts argue that commuters who go through these heavy traffic jams are likely develop commuting stress, fatigue and other health related diseases in addition to loss of precious working time.

The alternative is that in order to avoid lateness at work, workers may have to cut down on their sleep and get up very early to be able avoid the enormous traffic congestions especially around and within the central business districts. This often leaves workers getting to their offices tired or stressed up before the day's work begins. There are also situations where workers tend to leave the office earlier than required in order to avoid the heavy traffic congestion and to reach home quite early. The bigger problem is how these fallouts from traffic jams impact on the performance of workers and hence productivity of workers. Scancom Ghana Limited is a mobile and internet service provider which has over 1200 workers in its Head Office and Graphic Call Center in the Central Business District of Accra and Tema Call Center. Employees of the company are therefore not likely to be spared of the ever increasing traffic jams in the area, as they commute to and from the office. This study therefore examines into detail how the experiences of Scancom Ghana employees with traffic congestion impact on their productivity at work.

Objectives of Study

The main objective of the study is to examine the effects of vehicular traffic congestions on employee productivity at Scancom Ghana Ltd.

Specific Objective

The specific objectives are:

1. To identify the effects of traffic congestion on employees of Scancom Ghana Ltd.

2. To evaluate the views of Scancom Ghana employees on the extent to which traffic congestion generally affected employee productivity on the whole.

3.To determine if the traffic congestion encountered by employees of Scancom Ghana Ltd affected their individual abilities to meet their work targets.

Research Hypotheses

Hypothesis One

H0: There is no relationship between frequency of traffic congestion encountered by employees of Scancom Ghana Ltd and their productivity at work H1: There is a relationship between frequency of traffic congestion encountered by employees of Scancom Ghana Ltd and their productivity at work.

Hypothesis Two

Ho: There is no relationship between the means of transportation used by workers and the frequency of traffic congestion.

H1: There is a relationship between the means of transportation used by workers and the frequency of traffic congestion encountered.

Significance of the Study

This study would contribute to deepening the understanding of how traffic congestion affect the productivity of workers in urban areas of the country, particularly in and around central business districts. The study is also expected add up to the scholarly work on the study area. Since this study concerns employees of MTN Ghana, the findings, conclusion and recommendations could be used by the management of the company to improve upon the productivity of employees. Other companies and organisations could also adopt the recommendations and apply them to improve their work.

Finally, this study could also serve as a reference point for bigger study to ascertain the spread of the findings. It could also be used in teaching at various tertiary institutions.

Scope and Limitation of Study

This section explains both the population and geographical scope of the study as well as the limitation of the study.

Scope of Study

The study is designed to evaluate the effects and relationship between vehicular traffic congestion in the Accra and Tema Metropolises on workforce productivity and to offer some recommendations to stakeholders including the government and employers on what can be done about the situation. In finding answers to the research objectives, the study focused primary on employees of Scancom Ghana Ltd, operators of MTN Ghana. Bearing in mind that the company employs over 1200 persons, the researcher used staff from four departments within the customer care division. These are Clients Relations, Call Center, Post Paid and Quality Assurance departments.

Limitation of the Study

A limitation in undertaking this study was that because of the limited time available for data collection and willingness of respondents to promptly answer questionnaires, the researcher could not reach his target of interviewing over 100 respondents. Data collection for this research spanned a period of one month. As a result the researcher was only able to collect and analyse only 60 questionnaires from respondents. As such any interpretation and generation of the research findings should bear in mind the above.

Research methodology

Research Design

A survey is a non-experimental research method and represents one of the most common types of quantitative, social science research. Babbie (2001) explains that in surveys, data are commonly collected through the use of questionnaires. However, some researchers may directly interview subjects. The questionnaire may employ open-ended questions or forced- choice (closed ended) questions. Wimmer and Dominick (2011) add that the survey questionnaire can be a written document that is completed by the person being surveyed, an online questionnaire, a face-to-face interview, or a telephone interview. Survey research cannot be assigned to only one field but it can be employed by almost any discipline. According to Angus and Katona (1953, p. 15), "It is this capacity for wide application and broad coverage which gives the survey technique its great usefulness..."

Wimmer and Dominick (2011) identify two major types of surveys namely descriptive and analytical surveys. The descriptive type is used to discover and describe prevailing conditions or attitudes in the area under study while analytical survey is used to describe and explain why situations exist. In the analytical approach to surveys, two or more variables are usually examined to investigate research questions or test research hypotheses. The results allow researchers to examine the interrelationships. This study uses both the descriptive and analytical approaches to survey in conducting this research because the researcher wanted to ascertain if the key variables studied existed with Scancom Ghana Limited, while at the same time explore the extent of existence.

Population and Sample

The overall population of the study is all formal sector employees, working in and around the Central Business District of Accra and Tema. They include staff of the various Ministries, Departments and Agencies (MDAs) and private sectors organisations such as the telecommunication companies, financial institutions, factories and trading companies. The number of workers mentioned above runs into thousands. Out of these, employees of MTN Ghana were selected for the study.

Scancom Ghana Limited has over 1,200 workers at its head office in Ridge in Accra and other offices in Accra and Tema such as the Graphic Road Call and Tema Centers. However, this study narrowed its sample population to only 60 employees of Scancom Ghana, selected from four departments within the Customer Care Division. These departments are located at the Ridge Head office, Graphic Road Call Center and Tema Call Center.

Sampling Technique

The multi-stage sampling technique was used to subgroup the population based on the various divisions within the company. These are Customer Care, Corporate Affairs, Technical, IT, Marketing, Sales, Finance and Administration, and Human Resource Divisions. Out of this, Customer Care Division was randomly sampled. Following the selection of the Customer Care Division, the researcher randomly sampled respondents for the questionnaires, using the database of emails of staff of the division. In all hundred potential respondents were picked. The next stage was to find out of from the selected staff, through text messages, if they encountered staff congestions as they commuted to and from the office. 60 respondents were finally selected by simple random out of the 80 employees who responded that they encountered traffic congestion.

Sources of Data

Relevant data for this research was collected from only primary sources, who are the workers, through the use of structured questionnaires. The outcome of the field investigations (i.e. questionnaire administration) was thoroughly discussed in chapters four and five. The whole data collection exercise of this work lasted for a period of one month.

Method of Data Collection

As indicated earlier, the data for the study was collected through questionnaires administration. The reasons have already been outlined. The questionnaires was delivered to the respondents by the researcher and administered directly or through self-administration depending on the preference of the respondents.

Data Collection Instrument

A questionnaire was developed to collect data from the respondents, who are staff of the Customer Care Division of Scancom Ghana Ltd. The questionnaires involved specific and carefully worded questions, covering all three specific objectives of the study as well as the research hypotheses.

Data Collection Procedure

The questionnaires administration was undertaken over a period of 15 days. Prior to the start of data collection, contact was established with the Human Resource department of Scancom Ghana and management of the Customer Care Division to seek their permission for the study to be conducted and solicit their cooperation and support. The respondents were informed about the nature of the study and once, they agreed to take part in the study, the questionnaires was forwarded to them by mail.

Data Analysis and Presentation

Data generated from the field for this study was analysed using both descriptive and inferential statistics. The researcher used statistical package for social sciences (SPSS) to analyse the data collected. By descriptive methods of summarizing information, the researcher employed techniques such as: bar graphs, pie charts, frequency tables and others to summarize the raw information gathered from the field.

Analysis of the data started with ascertaining the frequencies for all the key questions asked through the questionnaire, find out how many of the respondents answered which question. As indicated earlier, the frequencies were shown using graphs to give a one-off pictorial view of the trends. In some cases, tables where used. At the same time, the researcher also explained in detail what the various graphs and tables meant to the research.

Following the analysis of the frequencies of the various questions, the researcher tested the two null hypotheses through a cross-tabulation of the key variables in those hypotheses. Following the cross-tabulation, the research used the Pearson's Chi Square to reject or accept the null hypotheses.

Data Presentation and Analysis

Demographic Characteristics of the Population

For the purposes of the study a population sample of sixty (60) respondents was used. Out of this number, 22 respondents representing 36.7% were males whereas 38 respondents representing 63.3% were females.

Table 1. Gender of Respondents						
	Frequency	Percent	Valid Percent	Cumulative Percent		
Valid Male	22	36.7	36.7	36.7		
Female	38	63.3	63.3	100.0		
Total	60	100.0	100.0			

The population sample included personnel from four departments within the Customer Care Division of Scancom Ghana Limited. These departments were Client relations, Post Paid, Quality Assurance and Call Centre. Data collected indicated that out of the total of 60 respondents used for the study, 18 respondents representing 30% were from Clients relations department, 10 respondents representing 16.7% were from the Quality Assurance departments, 24 respondents representing 40% were from Call Center; and 8 respondents representing 13.3% were from the Post Paid department (see table 2 below).

Table 2. Department of Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Clients'	18	30.0	30.0	30.0
Quality Assurance Call Center Post Paid Total	10 24 8 60	16.7 40.0 13.3 100.0	16.7 40.0 13.3 100.0	46.7 86.7 100.0

Respondents and Means of Transport

As part of the study the researcher wanted to ascertain how workers in the company communed to and from work. The data collected revealed that majority of workers (43.3%) communed to and from work through public transportation such as trotro or taxis. Eleven (11) respondents representing 18.33% communed to work in their own vehicles or cars, twenty-one (21) respondents representing 35% communed to work by means of the Metro Mass transport systems and two (2) representing 3.3% communed to work by means of motorbikes.



Figure 2. Respondents and Means of Transportation to work

Evaluation of Frequency and Intensity of Traffic

As part of investigating the likely impact of vehicular traffic congestion on the productivity of employees of Scancom Ghana Ltd, the researcher sought to find out the frequency with which respondents encountered traffic and the intensity of the traffic situation (See Figure 3)



Source: field survey, 2014

Figure 3. Frequency of Traffic Congestion

From Figure 3, 15 out of the 60 respondents representing 25 % indicated that they encounter very frequent traffic situations to and from work while 21 respondents representing 35% mentioned that they encounter frequent traffic jams. The number of respondents who mentioned that they go through occasional traffic situations amounted to 24 representing 40% of the total number of respondents.

 Table 6. Average time respondents stayed in traffic to the office

onnee					
	Frequency	Percent	Valid	Cumulative	
			Percent	Percent	
Valid 30 min to 1	23	38.3	38.3	38.3	
hour					
1 to 2 hours	25	43.3	43.3	81.7	
Over 2 hours	11	18.3	18.3	100.0	
Total	60	100.0	100.0		

In terms of the average time spent in traffic congestions to and from work, as indicated in table 6 above, only 11 respondents representing 18.3 mentioned that they spent over two hours. 25 respondents representing 43.3 said they spent between an hour and two in traffic jams while 23 respondents representing 38.3 said spent an hour or less in traffic.

 Table 7. Average Time Spent by the Respondent to the House After Work

House Alter WOIK					
	Frequency	Percent	Valid	Cumulative	
			Percent	Percent	
Valid less than 1 hour	8	13.3	13.3	13.3	
1 to 2 hours	35	58.3	58.3	71.7	
Over 2 hours	17	28.3	28.3	100.0	
Total	60	100.0	100.0		

From Table 7 above, 35 persons representing 58.3% of the respondents said they spent an average of one to two hours in traffic from their way from the office to the house as a result of traffic congestion. Eight persons representing 13.3% said they spent less than an hour to the house from work. 17 persons representing 28.3% indicated that they spent over two hours to the house after work.

Likely Impact of Vehicular Traffic Congestion on Respondents

The effects of traffic congestions according to the literature reviewed are seen in the duration of working and effects on the employees' physical beings. In terms of working time, employees may be forced to adjust their working time, either by reporting early to avoid being caught up in traffic or maintain the status quo and be late to work. On the other hand, they may have to leave the office being closing time or late after closing time to avoid being caught up in traffic or maintain the status quo and suffer congestions.





According to Figure 4, as many as 40 respondents representing 66.7% indicated that they did not have to make adjustment to their work time. 20 respondents representing 33.3% made adjustment to their working time in order to be able to meet the required number of hours of work for employees of Scancom Ghana Ltd.

Table 8. Effects of vehicular traffic congestion on th	e
respondents during their working hours	

	Respo repor work due to Traff	ondent t to late o ic	Traff make respo stress	fic es ondent sed ou	Respo looses conce due to morni	ondents ntratio o early ing	Respo gets a leasily early morn	ondent ingry due to ing	Respo looses concer due to thougl	ndents ntration hts of
					comm stress	uting	commuting stress		after-work traffic	
	Freq	% ^{age}	Freq	% ^{age}	Freq	% ^{age}	Freq	% ^{age}	Freq	% ^{age}
Usually	2	3.3	4	6.7	4	6.7	0	0	9	15.0
Once a while	17	28.3	45	75.0	43	71.7	31	51.7	30	50.0
Isolated cases/ Never	38	63.3	3	5.0	11	18.3	25	41.7	19	31.7
Total	57	95.0	52	86.7	58	96.7	56	93.3	58	96.7
Missing	3	5.0	8	13.3	2	3.3	4	6.7	2	3.3
	60	100	60	100.0	60	100.0	60	100.0	60	100.0

Source: Field Survey, 2014

Table 8 contains findings of the study on effects of vehicular traffic congestion on the respondents during their working hours. Five questions were asked respondents in this area. The first question under this area solicited the views of the respondents on whether the traffic congestion they encountered made them late to work. 57 out of the 60 respondents representing 95% answered this question. Only two respondents representing 3.3% mentioned that they were always late to the office due to the traffic. 17 respondents representing 28.3% mentioned that they, once-a-while, went to the office late while 38 representing 63.3% mentioned that they have been late to work on isolated cases or never being late.

The respondents were also asked if the traffic encountered made them stressed out. 43 individuals representing 71.7 % of the respondents mentioned that once a while, they became stressed out by the time they got to the office due to the traffic they encountered. Four persons representing 6.7% of the respondents respectively mentioned that they always got to the office stressed out. 11 persons representing 5% of the respondents mentioned that they had never arrived at the office stressed out.

Also, 43 persons representing 71.7% of respondents mentioned that due to the traffic congestion they encountered on their way to the office, they once-a-while loose concentration due to the commuting stressed they developed.11 persons representing 18.3 % mentioned that they have never lost concentration due to early morning commuting stress while 4 persons representing 6.7% said they usually lost concentration due to early morning stress. Two persons did not answer this question.

Again, the researcher asked the respondents if the early morning traffic congestion made them angry at the office. 31 persons representing 51.7% mentioned that they once-a-while get angry at the office due to the early morning commuting stress. 25 persons representing 41.7 said they had never gotten angry at the office as a result of early morning commuting stress. Four persons representing 6.7% did not answer this question.

Finally, the researcher asked the respondents if the thought of going through traffic after work made them loose concentration at work. 30 persons representing 50% of the respondents said they once-a-while loose concentration at the thought of going through traffic after work. 19 persons representing 31.7 % said have never lost concentration at the

office at the thought of going through traffic after work. Nine persons representing 15% said they usually lost concentration at work at the thought of going through traffic after work. 2 persons did not answer the question.

Table 9. Time 1	respondents	usually	leave th	he office	after
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work

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Official closing time	54	90.0	90.0	90.0
1 hour after work	3	5.0	5.0	95.0
Over 1 hour after work	3	5.0	5.0	100.0
Total	60	100.0	100.0	

Source; field survey, 2014

From table 9 above, 54 respondents representing 90% mentioned that they left the office for the house right after the official closing time. 3 persons representing 5 % said they usually left the office for the house an hour after closing while the remaining 5% also said they wait for more than an hour before leaving for the house.

Effects of staying long in traffic after work on respondents sleeping pattern and impact on their work

From Figure 5 below, 9 respondents representing 15.0% indicated that they always slept late because the traffic they encountered on their way back home from the office. 13 respondents representing 21.7% mentioned that they occasionally slept late due to the traffic encountered on their way back to the house; and 36 respondents representing 60% revealed that they never slept late because they arrive home early enough.



Figure 5. The number of respondents who sleep late because they arrive home late.

Following from the question on whether respondents slept late because they arrived home late, the researcher also asked the respondents on their views on the effects on sleeping late on their ability to wake up early and get to the office on time the following day. The responses are contained in tables and graphs below.

From Figure 6 above, as many as 26 persons representing 43.3% of the total number of respondents indicated that they occasionally woke up late because of sleeping late. 25 persons representing 41.7% mentioned that irrespective of the time they slept after work, they were able to wake up early for work the next day. Nine persons representing 15% did not answer the question.



Figure 6. The number of respondents who wake up late in morning because they sleep late.

On the views of respondents on whether they have less sleep because of the traffic congestion they encounter on their way back home, 14 persons representing 23.3% indicated that they always have less sleep during the weekdays as indicated in Figure 7 below. 13 persons representing 21.7% said they occasionally had less sleep while 18 persons representing 23.3% said they have never had less sleep. 15 persons representing 25% of the respondents did not answer the question.



Figure 7. A pie chart showing the number of respondents who have less sleep during the weekdays due to the traffic they encounter

According to Figure 8 below, 22 of the respondents constituting 41.51% indicated that their sleeping patterns have been affected due to the traffic congestions they encountered to and from the office. 31 respondents representing 58.49% said their sleeping patterns have not been affected, with seven persons not answering the question.



Figure 8. The number of respondents who said their sleeping pattern has been affected by the traffic congestions encountered

19 respondents representing 31.6% indicated that they, once a while, went to work late because they did not sleep early after work the previous night. However, 38 respondents representing 63.3% said they have never been late to the office because of sleeping late in the office. 5 respondents did not answer the question as contained in table 10 below.

 Table 10. Number of respondents who report to work

 late because they did not sleep early

fute because they are not steep carry					
	Frequency	Percent	Valid	Cumulative	
			Percent	Percent	
Valid Once a while	.19	31.6	31.6	31.6	
Isolated cases or Never	38	63.3	66.7	100.0	
Total Missing System Total	57 3 60	95.0 5.0 100.0	100.0		

The study also examined whether the nature of traffic encountered influenced sleep and tired of respondents. Out of the sixty respondents questioned, 14 persons representing 24.56% of revealed that they always reported to the office already tired and stressed owing to the less sleep resulting from traffic congestions. 28 persons representing 49.12% said they occasionally reported to the office already stressed and tired while 15 persons representing 26.32% said never as can be observed from figure 9 below.

Vehicular Traffic and impact on Work Productivity

The researchers as part of objectives wanted to ascertain whether vehicular traffic encountered by workers in Accra did have any impact on their work productivity. Respondents were asked whether they believed traffic congestion did influence their ability to meet work targets. Data collected and analyzed indicated no respondents saying that they strongly agreed with the view that traffic congestion affected meeting of work targets. However, 26.7% of respondents agreed with the view but the larger majority (56.7%) of respondents disagreed with the view that traffic congestion did affect a workers ability to meet work targets (see table 11 below).



Figure 9. Impact of traffic on health of employees

Respondents were also asked to indicate the extent to which traffic congestion influenced their productivity. As can be observed from table 12, as many as 25 persons representing 41.7% of respondents believe traffic congestions workers go through to a high extent has general impact on employee productivity.

Table 11. Traffic congestion and ability to meet work targets

	Frequency	Percent	Valid Percent	Cumulative Percen
Valid I agree				
	16	26.7	26.7	26.7
I disagree	34	56.7	56.7	83.3
Not sure	10	16.7	16.7	100.0
Total	60	100.0	100.0	

21 respondents representing 35 % believe that traffic congestions encountered by employees moderately affect employee productivity. On the other hand 10 respondents representing 16.7% indicated that the impact was to a low extent while two persons representing 3.3% mentioned that they did not believe that there was any impact at all. However, two respondents did not provide any answer.

 Table 12. Extent to which traffic congestions impact on productivity

		Frequency	Percent	Valid	Cumulative
				Percent	Percent
Valid	high	25	41.7	43.1	43.1
extent moderate exte	ent	21	35.0	36.2	79.3
low extent		10	16.7	17.2	96.6
not at all		2	3.3	3.4	100.0
Total		58	96.7	100.0	
Missing Syste	em	2	3.3		
Total		60	100.0		

Means of Transport and Frequency of Traffic Congestion H0:There is no relationship between the means of transportation used by workers and the frequency of traffic congestion.

H1:There is a relationship between the means of transportation used by workers and the frequency of traffic congestion encountered.

Table 13. Means of Transport and Traffic Congestion

Means of transport	tFrequency of traffic			
	Very Frequent	Frequent	Occasional	
Private Car	9	2	0	11
Trotro or taxi Mass Transport Bus	1 5	11 8	14 8	26 21
motor bike Total	0 15	0 21	2 24	2 60

6 cells (50.0%) have expected count less than 5. The minimum expected count is .50

X2 = 28.879 df = 6 P = .000

Table 13 was developed to help test the second assumption which suggested that there is likely to be no relationship between the means of transportation used by employees to and from work and the frequency of vehicular traffic congestion encountered. Given that the means of transport used by staff to and from work determined which route a commuter uses and the time to set off from the house or work, they are likely are likely to influence how whether you encounter traffic congestion on one's route or not. People who use their own private vehicles can leave their houses to the offices and vice versa at a convenient time which would enable them avoid heavy vehicular traffic jams. They also have the luxury of avoiding certain routes which may contain heavy traffic jams. However, workers who use the public transportation, whether taxi, trotros or metro mass bus, do not have such luxury. They don't have control over the route the driver uses and thus are unable to dodge traffic jams. They also have to wake up early to be able to catch the early taxi, trotros or bus to avoid being caught up in traffic. However, commuters who decide to hire the taxi, trotros or bus, may

enjoy the benefits that commuters who drive their own vehicles have.

The data presented in Table 12 above seem partially to suggest a likely relationship between the means of transportation used by workers and the frequency of traffic congestion encountered. When the data was subjected to a statistical test, the Pearson chi-square test produced a value of 28.879, degrees of freedom of 6, and a probability of 0.000. The level of significance is less than the 0.05 set for the study, which means a rejection of the null of hypothesis that there is likely to be no relationship between the means of transportation used by workers and the frequency of traffic congestion. The research hypothesis that there is likely to be a relationship between the means of transportation used by workers and the frequency of traffic congestion encountered is therefore supported by the data gathered.

-	-	-
	Symmetric	: Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.694	.000
Cramer's V		.491	.000
N of Valid Cases		60	

With degrees of freedom of 6, a Cramer's V was used to test the strength of association. A Cramer's V value of 0.491 is closer to 0 than 1 suggests a weaker association between the two variables tested in the hypothesis. This leads the researcher to conclude that the degrees of means of transportation and frequency of traffic congestion are independent of each other.

Frequency of Traffic and Employee Productivity

H0: There is likely to be no relationship between frequency of traffic congestion encountered by employees of Scancom Ghana Ltd and their productivity at work.

H1: There is likely to be a relationship between frequency of traffic congestion encountered by employees of Scancom Ghana Ltd and their productivity at work.

Table 14. Frequency of traffic and meeting work

Frequency of traff	cEffects of traffic on meeting targets			
	Agree	Disgree	Not sure	
(Very) Frequent	12	19	5	36
Occasional	4	15	5	24
Total	16	34	10	60

X2 = 2.157 df = 2 P = .340

Table 14 was developed to help test the second assumption which suggested that there is likely to be no relationship between frequency of traffic congestion encountered by employees of Scancom Ghana Ltd and their productivity at work. Given that there is a high incidence of traffic congestion encountered by employees on their way to the office, they are also more likely to be late for work or leave early for the house and/or develop commuting stress and become tired. This may affect their ability meet their work target especially when their job description is time bound and they do not have the flexibility of working outside the office.

When the data, as summarised in table 14, was subjected to a statistical test, the Pearson chi- square test produced a value of 2.15, degrees of freedom of 2, and a probability of 0.340. The level of significance is more than the 0.05 set for the study, which means an acceptance of the null of hypothesis that there is likely to be no relationship between frequency of traffic congestion encountered by employees of Scancom Ghana Ltd and their productivity at work. The research hypothesis that there is likely to be a relationship between frequency of traffic congestion encountered by employees of Scancom Ghana Ltd and their productivity at work is therefore not supported by the data gathered.

	Valu	eApprox. Sig.
Nominal by Nominal	Phi.190	.340
Cramer's V	.190	.340
N of Valid Cases	60	

Symmetric Measures

With degrees of freedom of 2, a Cramer's V was used to test the strength of association. A Cramer's V value of 0.190 is closer to 0 than 1 suggests a weaker association between the two variables tested in the hypothesis. This leads the researcher to conclude that the degrees of frequency of traffic congestion encountered by employees of Scancom Ghana Ltd and their productivity at work are independent of each other.

Summary of Findings

A major finding of this study was that majority of the respondents especially those coming from the Tema Call Center commuted to work and back using public transportation. They constituted 78.3% of the total respondents. The specific means of public transportation in order of which was most used by the respondents were taxis and trotros, followed by the Metro Mass Transport buses. The study found out that in terms of the usage of the Metro Mass Transport buses, the management allowed the staff to, on their own, arrange for the buses. As such the buses picked staff from strategic locations in Accra and transports them to the call center in Tema with very few commuting by motorbikes.

The study showed that majority of the respondents encountered frequent traffic congestion as they commuted to the office and back while a sizeable number also encountered occasional congestion. On the average, only a few spent over two hours commuting to the office, but majority spent between an hour and two hours from their homes to the office. The study also revealed that a size number also spent less than an hour to the office. Significantly, the study revealed that while the number of respondents who spent less than an hour back home from the office was far less (13.3%) than those spent the same duration from the house to the office. There was also a considerable increase in the number of employees who spent between an hour and two, and over two hours respectively. This gives an indication that employees of Scancom Ghana Ltd encountered a more intense traffic when going home from work than in the reverse situation.

In terms of likely impact of vehicular traffic congestion on respondents, the study findings showed that even though workers spent much longer time commuting to the office, majority of the respondents did not report making adjustment to their work time in order to meet the required number of hours of work per day. That notwithstanding, the 33.3% which reported making an adjustment is worth noting. This probably explains why as many as 86.7% of the respondents said they, once-a-while, have been late to the office. The respondents explained that this usually occurred when their hired buses delayed due to un-anticipated traffic obstruction or bus broke down. They mentioned that when this happened management was informed instantly so that the necessary measures are put in place to reduce the impact of the lateness. However, the finding revealed that majority of the respondents once-a-while became stressed out by the time they got to the office depending on the traffic encountered. Only a few said they were always stressed by the time they got to the office.

The resultant effect of the occasional commuting stress encountered by the respondents is occasional loss of

concentration and easy loss of temper, with majority of them reporting these respectively. Only half of the respondents mentioned that the thought of going traffic jams after work made them occasionally loose concentration during late afternoons, when closing time was getting nearer. However, 15% who mentioned that they always loose concentration is also worth noting. The study revealed that none of the respondents left the office before closing time. However, a few spent an hour or two after to work so that the traffic situation would ease a bit before going home.

Again, even though as many as 86.6% of the respondents spent hours commuting back home, the study revealed that only a few of the respondents slept late. This is because majority of the respondents worked from 7 am to 3 pm, thus arrived home a bit early if they did not branch anywhere. However, a good number of them mentioned that the stress encountered back home made them wake up late occasionally and affected their sleeping patterns. Even with this situation, none of the respondents indicated that they frequently went to work late. But the number that reported going to work stressed out and tired cannot be ignored, with 23.3% and 46.7% revealing that they arrived at the office stressed always or occasionally respectively.

Finally, the data collected by the researcher supported the hypothesis that there is likely to be a relationship between the means of transportation used by workers and the frequency of traffic congestion encountered. However, the second hypothesis that there is likely to be a relationship between frequency of traffic congestion encountered by employees of Scancom Ghana Ltd and their productivity at work was therefore not supported by the data gathered.

Even though it was obvious from the study findings that employees of Scancom Ghana encountered severe to moderate traffic jams as they commuted to and from the office, the evidence provided in the study also indicated that the traffic congestions did not affect their ability to meet their work targets. This researcher deduces from the data collected that this is due to a minimal of flexitime was adopted by management of the company which ensures that 'late comers' extend their closing time to accommodate for the time lost . When staff came to work late as a group because their hired Metro Mass bus was caught up in traffic, their closing time was also adjusted to accommodate the time lost. However, by the nature of job performed by the sampled respondents, which demands their physical presence at the office between specific time frame when many customers want services rendered to them, it would be impossible for a full flextime to be implemented. This researcher also concede that some arrangement could also be made between management and the employees to change their working time to suit their personal conditions such as pregnancy, nursing of babies etc, but they must still be present at the office for specific hours. Conclusions

Based on the responses of the majority of the respondents, this study concludes that the major effects of traffic congestions on the employees of Scancom Ghana Ltd include reporting to work stressed out or tired, change in sleeping patterns and occasional loss of concentration due to thoughts of going through traffic after work. Others are isolated cases of reporting to work late, loss of concentration in the morning and occasionally getting angry due to the commuting stress encountered on the way to the office.

The study concludes that even though there is a relationship between vehicular traffic congestions and employee productivity as indicated in the literature reviewed, in the particular case of Scancom Ghana Ltd, there is a minimal effect on employee productivity. It is important to note that while majority of the respondents agreed that vehicular traffic congestions moderately or serious affected employee productivity, they were able to meet their work targets. This was because of some minimal form of flexitime that the company operated which allowed staff to make up for any lost time due to traffic congestion. At the same time, staff were not allowed to leave the office before closing time.

Recommendations

Based on the findings and conclusions, the following recommendations are made:

The minimal form of flexible work scheduling adopted by Scancom Ghana has been yielding results and reduced absenteeism as suggested by (Casey and Grzywacz, 2008) and ensured the meeting of daily employee targets. Other employers, whether public sector or private sector could learn from the experience of Scancom Ghana and employ similar working schedule. This way, employees would not be scared that they are late and therefore decide not to go to work.

It also appears that a lot more employees are getting stressed and tired even before they start work. Management of Scancom Ghana Ltd and other organisations must be cognizant of these things which affect productivity of their employees and develop stress reliving antidotes for their employees especially those who deal a lot with customer care.

On a larger scale, the relationship established, in both literature and findings from this study, between vehicular traffic congestions and employee productivity must be explored on a broader scale and investigated by all relevant stakeholders. This would enable them take the necessary painstaking measure to combat this rot from escalating to the level that would become very difficult if not practically impossible to resolve. Government, the National Labour Commission and the Ghana Employers Association, in particular, have to recognize the importance of further research on the subject to increase understanding of the full-scale impact of congestion on employee productivity and productivity on the whole **References**

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