

ANALYSING THE ASSOCIATION BETWEEN COMMUTING TIME AND HEALTH & WELL BEING

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Abstract:

In the recent past, an ever-increasing component of time for most employees is the commuting time, as an increase in commuting time may decrease the time available for other activities. The well-established literature in this domain area, shows that various studies have made an attempt in linking it with different behavioral variables. Commuting has the potential to affect wellbeing in different ways. It can be stressful and adversely affect mood during and after the journey. It may consume time and money that workers would rather spend on other activities. The present study also, tried to investigate the association between the commuting time and health and well-being of the employees who work with various higher educational institutions in twin cities of Telangana state. The results of the survey exhibit that revealed that there is an association between the commuting time and health and well-being of the employees.

KEY WORDS: *Commuting time, Health and well-being, Stressful.*

1. INTRODUCTION:

Commuting is periodically recurring travel between one's place of residence and place of work, or study, and in doing so exceed the boundary of their residential community. It sometimes refers to any regular or often repeated traveling between locations, even when not work-related. A distinction is also often made between commuters who commute daily or weekly between their residences to work place, and are therefore considered respectively local or long-distance commuters. Commuting between place of work and place of residence plays a significant role in deciding the overall well-being of an employee. Generally, time and distance are two important components used to measure the impact of commuting between work and home.

Bikes, cars, buses and railways run like veins through populated parts of the world. People travel along these paths every day in order to reach the locations at which they conduct their daily activities. Commuting, travel between home and work, is one of the most common reasons for travelling along these networks. The present paper was initiated to analyse how Commuting time is playing a major role in health and wellbeing of an employees working with higher technical institutions, as most of these institutions are in the outskirts of the twin cities of the Telangana state and employees are spending quite good time in commuting every day.

2. REVIEW OF LITERATURE:

LORENZ OLGA (2018), the study found that, Commuting in general is associated with a lower life satisfaction. Rather, it appears that longer commutes are only related to lower satisfaction with particular life domains, especially family life and leisure time. Time spent on housework, child care as well as physical and leisure activities mediate the association between commuting and well-being. CHATTERJEE.K, CLARK.B, MARTIN.A, DAVIS.A, (2017), The findings from the Commuting & Wellbeing study indicate that longer journeys to work have adverse subjective wellbeing effects, particularly through loss of free time. On the other hand, longer commute times were not found to have a large impact on life satisfaction overall.

ROBSON TIGRE, BRENO SAMPAIO (2017), the study has been confined that the longer commuting time effects the mood of the commuters with respect to stress. KWESI AMPONSAH (2016), commuting stress was positively related to burnout and turnover intention but had no direct relationship with job satisfaction. In addition, commuting stress was indirectly related to job satisfaction and turnover intention via burnout.. These results were found to be invariant for men and women.

Kristoffer Mattisson(2016), This study was conducted to associate between health and wellbeing of employees in Scania in the year 2016, perceived sleep, everyday stress exhaustion, mental health are the outcomes of the study. Allison Milner, et al., (2016), the findings of the study suggests that commuting over 6 hours per week was associated with a small decrease in mental health. We also found evidence that people working in jobs with low levels of control experienced considerably greater declines in mental health scores when they spent longer amount of commuting. Ixuan Sun (2014), the study was conducted in order to know how commuting effects the professional life of an employee and it's impact on their personal life balance and family conflicts. This study, a case of Beijing, investigated the relation from commuting time to work-to-family conflict, the partial mediation effect through commuting stress, and the moderation effect of gender on those relationships. Strong evidence was found that long commuting time positively leads to work-to-family conflict, which is partially through commuting stress. However, there is no significant gender difference on this process.

Rowden Peter J, Herbert c (2011) the findings confirm the multidimensional nature of stress in the context of driving a motor vehicle. Of particular note is the impact that factors extraneous to the driving environment may have on driving behaviour, highlighting the need for a holistic approach when considering road safety and associated interventions. O'regan & Buckley (2003), the study has been conducted in order to know how much extent commuting is stressful, and they concluded that the commuting experience of the respondents to be more stressful for 79% of the respondents. And the remaining were also felt stressful but not up to larger extents.

Richard Wiener (2000), The study concluded that i. the persons who travel on the new midtown direct service will experience less stress and be more satisfied with their commute to work. And ii. Women will experience more commuting stress than men. Tony Cassidy (2013), as the commuting time and distance increases, the commuters feel more congested and feel towards more stress, the study revealed that commuting time and distance are directly proportional in lowering the health of the employees .Jessica flyinn (2017),The research results says that there is a relationship between commuting and work life balance of the employees, i.e., travelling through different commuting

modes will help the employees in engaging with many people so that they may feel lighter while commuting by interacting with them. Annemarie Künn- Nelen (2015), The study focused on subjective and objective health of long time commuting employees and revealed that the objective health got barely effected whereas the subjective health is clearly lowered for long time commuting employees. Gerald Mathews, et al(2011), The study endeavoured to quantify these effects in terms of the relative impact of various stress sources and provide a conceptual model to guide future research in this area. To this end, the findings confirm the multidimensional nature of stress in the context of driving a motor vehicle. Of particular note is the impact that factors extraneous to the driving environment may have on driving behaviour, highlighting the need for a holistic approach when considering road safety and associated interventions.

3. NEED FOR THE STUDY:

Globalization has made the world to work 24/7 and has created a situation where people have to travel hours together just for going to work and reaching home. This commuting of employees of any higher educational institute after a hectic work schedule creates a lot of health problems in long run which in return lowers the health and wellbeing of the employees. This creates a need to research on this problem and solve it to improve both employee's health and well-being and also their productivity in terms of their performance.

4. RESEARCH METHODOLOGY:

The current study was initiated to know the commuting mode and duration of the employees and to analyse the health and well-being of the respondents. The study also focussed on understanding the strategies adopted by respondents in order to overcome the commuting stress.

Hypothesis of the study:

H0: There is no association between Commuting time and health and wellbeing of employees.

H1: there is an association between commuting time and health and wellbeing of employees.

The study focuses on analysing health and wellbeing of long time commuting employees who work with higher educational institutions in twin cities of Telangana state. The results may not be generalised to other organizations.

Primary and secondary data are to be used in this study. Primary data was collected through well designed questionnaire and the secondary data is gathered from the official publications, records, text books, magazines, journals, and published materials. A convenient sampling is used for the study and 119 employees who work with various higher educational institutions in twin cities of Telangana state constitute to the sample size for the study. The data is analysed using percentage analysis, descriptive statistics and correlation.

5. RESULTS AND DISCUSSION:

Well-designed questionnaire was designed in order to collect the data required to meet the objectives. Few questions were multiple choice, whereas health and well-being was measured on a five point rating scale. The collected data is represented in the tables and are interpreted thereafter.

Table-1: The mode of commuting

MODE OF TRANSPORT	NO OF RESPONSES	PERCENTAGE OF RESPONSES
Bike	15	13
Car	18	15
Organization's transport	72	61
Public	11	9
Others	3	2
Total	119	100

The table-1 is the representation of the modes of commuting chosen by the respondents. It is observed that the large number of respondents, i.e., 61%, are using organization's transport and there are other modes like car (15%), bikes (13%) and public transport are also used by the employees for commuting.

Table-2: Time taken for by the employees for commuting

TIME	NO. OF RESPONDENTS	PERCENTAGE
<= 1 hr	33	28
1.1-1.5 hrs	43	36
1.5-2 hrs	27	23
2 hrs	16	13
Total	119	100

It is evident from the above table that the most common commuting time is 1.1-1.5 hrs (36%), followed by less than or equal to one hours (28%). From the sample considered, 23% are travelling for 1.5-2 hrs and 13% for 2 hours. It can be inferred that the majority of the respondents are travelling more than one hour.

Table-3: Impact of commuting on health and well being

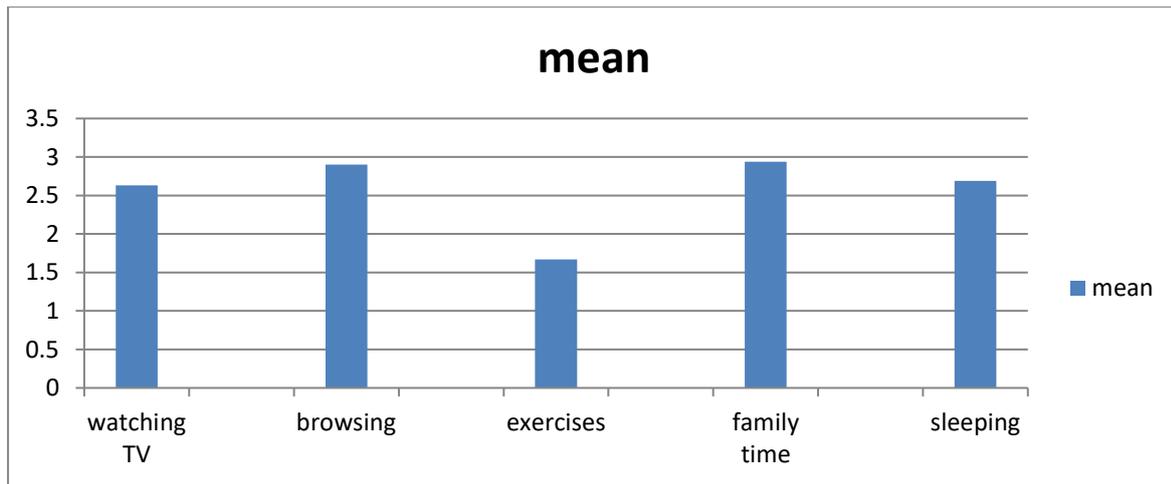
PARTICULARS	Very often	Often	Sometimes	Rare	Never	Mean	Std.dev
Back pain	15	25	38	20	21	3.05	1.26
Headache	13	12	42	31	21	3.29	1.19
Higher blood pressure	6	10	13	27	63	4.10	1.19
Weight gain	11	16	21	26	45	3.65	1.34
Tensed feel	4	23	32	31	29	3.48	1.15

Can't focus much on household activities	12	21	35	31	20	3.06	1.21
Poor sleep quality	12	28	22	30	27	3.26	1.31
Negative effect on work performance	0	10	27	36	46	3.99	0.97
Time spending with family becomes less	22	24	30	21	22	2.97	1.36
Anxiety	4	17	40	23	35	3.57	1.15
Depression	2	11	29	39	38	3.84	1.033

The above table-3 represents the impact of commuting on health and well-being. The most common physical and mental issues arise because of long time commuting have been identified from the related literature and five point rating scale was used to get the required data.. The mean value of 3 and above indicate that, the respondents have suffered from those health and well-being issues For majority of the employees higher blood pressure, negative effect on work performance and depression are common complaints because of longer commuting time. Few employees have also expressed that they are suffering from problems like back pain, head ache, tensed feeling.

Table-4 : Strategies adopted by respondents to overcome stress after/before commuting

STATEMENT	MEAN
watching TV	2.63
browsing	2.9
Exercises	1.67
Family time	2.94
sleeping	2.69



The above graph represents the strategies adopted by the respondents after commuting. Most of the respondents involve in browsing and exercises in order to overcome stress after commuting.

In order to see the association between the commuting time and health and well being, correlation is used.

Hypothesis testing (correlation) :

The considered hypothesis are as followed:

H0: There is no association between Commuting time andv health and wellbeing of employees.

H1: there is an association between commuting time and health and wellbeing of employees.

		Correlations												
		Q8	Q9A	Q9B	Q9C	Q9D	Q9E	Q9F	Q9G	Q9H	Q9I	Q9J	Q9K	Q9L
Q8	Pearson Correlation	1	.091	.019	-.038	.138	.100	.116	.141	-.019	.243**	.087	-.050	.074
	Sig. (2-tailed)		.327	.840	.681	.134	.279	.208	.126	.836	.008	.347	.586	.425
	N	119	119	119	119	119	119	119	119	119	119	119	119	119

Most of the significance values are positive and supporting the alternate hypothesis.

Therefore, reject the null hypothesis (H0) and accept the alternate hypothesis (H1) .i.e., The two variables commuting time and health and wellbeing of the employees are correlated.

CONCLUSION:

Commuting between place of work and place of residence plays a significant role in deciding the overall well-being of an employee. Generally, time and distance are two important components used to measure the impact of commuting between work and home. The present study aimed at understanding the health and well-being of long time commuting employees working in Higher Educational Institutions. The study revealed that the respondents are using organizational transport, beside few using personal vehicles like cars and bikes. The minimum time travelled by majority is 1-1.5 hrs and commuting distance is 15-20 kms. Negative effect on work performance, depression Back pain, Head ache and frustration are common complaints that the employees have expressed.

There are few employees who expressed that because of long commuting time they are unable to spend quality time with their family members. In order to overcome the boredom while commuting, the commuters are engaged in listening music and sleeping. To overcome the commuting stress, employees are adopting strategies like watching TV and spending time with family members.

References

1. Allison Milner, et al., (2016) "Psychosocial job stressors and Suicidality: A Meta-Analysis and systematic review" Melbourne school of population health.
2. Annemarie Künn-Nelen (2015) "Does Commuting affect Health?" *Journal of Transport & Health*.
3. Chatterjee.k, Clark.b, Martin.a, Davis.a, (2017) "The Commuting and Wellbeing study: Understanding the impact of commuting on people's lives". project report. University of the west of England. Economic and social research council.
4. Gerald Mathews, et al (2011), "Emotional Intelligence, Health, and Stress" *The Handbook of Stress and Health: a guide to research and practice*, pp.312-326.
5. Jessica Flynn (2017) "how commuting affects employees' wellbeing and work-life balance: the perspective of full-time employees commuting within the greater dublin area" school of electronics and computer science.
6. Kristoffer Mattisson(2016) "Modelling the association between health indicators and commute mode choice: a cross-sectional study in southern Sweden" *journal of transport and health* 11, p-110-121 12p.
7. Kwesi Amponsah (2016) "Do Personality and Organizational politics predict workplace victimization? A study among Ghanaian employees" *journal of work force behavioural health* vol 31
8. Lorenz Olga (2018) "Commuting and Sickness Absence" *Journal of Transport Geography*
9. O'Regan & Buckley (2003) "Stressor and Personal variables in the commuting experience" *International Journal of Manpower*
10. Robson Tigre, Breno Sampaio (2017) "The Impact of Commuting Time on Youth's school performance" *Journal of regional science* vol 57
11. Richard e.Wener (2000) "A morning stroll: levels of physical activity in car and mass transit commuting" Sage publications, volume: 39 issue: 1,

12. Rowden Peter j, Herbert c (2011) *“The relative impact of work-related stress, life stress and driving environment stress on driving outcomes” centre for accident research and road safety – Queensland*
13. Yixuan Sun (2014) *“Urban traffic accident time series prediction model based on combination of arima and information granulation svr” journal of transport information and safety.*
14. Tony Cassidy (2013) *“Commuting-related stress: consequences and implications” Employee counselling today, vol. 4 issue: 2, pp.15-21,*