

A Retrospective Study To Assess The Impact Of Commuting And Various Factors On Academic Performance Of Students At Sgt University, Gurugram (Haryana)

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Abstract

Introduction: The study explores the impact of commuting and other associated factors on the academic performance of students at selected University, Gurugram (Haryana). With the increasing number of students commuting long distances to attend college, it becomes crucial to understand the effects of commuting time, frequency, and associated factors such as stress, physical health, and time management on their academic achievements.

Objectives:

1. To find the relationship between commuting time and academic performance.
2. To find the impact of commuting duration on academic performance.
3. To find the association between commuting time and academic performance with their demographic variables.

Method: This retrospective study utilized both quantitative and qualitative data collection methods. A survey was conducted among 300 students from various departments of SGT University, with questions focusing on commuting time, frequency, mode of transport, and students' perceived academic performance. Academic records were also reviewed to compare performance indicators such as GPA, attendance, and participation in extracurricular activities. Statistical analysis was carried out to assess correlations between commuting factors and academic outcomes.

Results: The study found a significant negative correlation between long commuting times and academic performance. Students who commuted for more than 90 minutes per day reported lower GPAs and higher levels of stress. In contrast, students living on or near campus had better academic results and reported higher satisfaction levels. Additionally, time management and physical health were found to play substantial roles in influencing the academic success of commuters.

Conclusion: The findings of this study suggest that prolonged commuting negatively impacts academic performance due to factors such as fatigue, time constraints, and stress. Universities and policymakers should consider strategies to mitigate these effects, such as improving campus facilities, offering transportation assistance, and promoting effective time management strategies to help commuting students optimize their academic success.

Keywords: Commuting, Academic Performance, Student Health, Time Management, SGT University, Gurugram, Stress, Grade Point Average (GPA), Student Satisfaction.

INTRODUCTION

A commute is the regular journey from one's home to one's place of employment, according to Cambridge University.ⁱ There are both positive and bad effects on a person's well-being from the dynamic social milieu of commuting.ⁱⁱ

The manner you travel to university along with how long it takes you to get there from home are variables which can be used to categorize commuting behavior. Other factors that can be considered include the kind of transportation you use – such as a bus, bicycle or car – and the location in which you live.ⁱⁱⁱ

According to Dante et al. (2013), there exists a correlation between the probability of academic failure and residing more than thirty minutes far from the university campus, according to further studies examining

student outcomes. According to BIS (2014), students who lived at home during their studies had a 40% lower chance of achieving a first-class or upper-second-class degree compared to those who did not.

Various studies conducted in developed countries have repeatedly reported transportation to be a significant stressor among the general population ranging from workers to students, wherein poor transportation affects the academic performance not only leading to lower test scores^{iv} but also adverse effects on psychological health.^v Various studies have investigated the association of travel time, duration, lack of predictability^{vi}, and crowding with rising levels of stress and found a direct relationship between increased travel time and perceived poor sleep quality^{vii}, low enthusiasm, low self-rated health and aggressive mood.^{viii} Most of the studies have emphasized commute variability to be the strongest factor that influences commute strain.^{ix}

Research on commuting still revolves around the number, pattern of mobility, and characteristics of commuting. Few studies analyze the link between commuter workers and the health / quality of life of commuters and assess public health and safety aspects. These impacts need to be a concern of the government at this time because the phenomenon of commuter workers in India has become a daily portrait in major cities in India.^x

MATERIALS AND METHODS

Research design and setting: The research approach is a broad-based procedure for collecting data in a particular research situation. "In view of the nature of the problems and accomplish the objectives of the present study," Quantitative Research Approach was considered to be the most appropriate to assess the impact of commuting and various factors on academic performance among B.Sc. Nursing students of SGT University, Gurugram (Haryana).

The research design selected for this study was "Retrospective cross-sectional research design as the experimental research design by keeping the objectives of the study in mind."

The setting of the study is the physical location and condition in which data collection takes place. The study was conducted in Shree Guru Gobind Singh Tricentenary University, Gurugram (Haryana). Data was collected from nursing students who study in SGT University in Bachelor of Science in Nursing 2nd, 3rd, 4th Year students.

In the present study, purposive sampling technique is employed. The sample size for the present study will be 300 Population.

The inclusion criteria were: all B.Sc. Nursing Students commuting on daily basis, student belongs to 2nd, 3rd and 4th year and given consent to participate, those who have Android or iOS, students who have appeared in final examination and get results. And the exclusion criteria included: those who are living in hostel, those who are not available at time of data collection, those who are not from SGT University, those who are not willing to participate in the study.

Data Collection Tool/ Instrument: Data collection tool/ Instrument help the researcher to gather the necessary information from the subjects. The present study used 2 tools for this purpose.

1. Structured questionnaire (Demographic variables and Factors affecting Academic performance Questionnaire).
2. Previous Academic Results.

Tool:1 Structured Questionnaire: The Structured Questionnaire consists of 2 sections including Demographic and factors affecting academic performance.

SECTION -A : Demographic information is collected for the identification of the participants including serial no., Age, Gender, Program, year of study, type of family, type of society.

SECTION -B : Factors affecting Academic Performance including primary mode of transportation, one way commuting time, frequency of commuting, frequency of missing classes due to commuting, experience of traffic congestion while commuting, frequency of feeling stressed or overwhelmed, health issues faced due to commuting, average sleep hours per night, frequency of exercise per week, frequency of participation in extracurricular activities, frequency of self study hours per day, supportiveness of family regarding academics,

managing time effectively, how often did you get your me time, average time for use of social media.

Tool:2 Previous Academic Results: Academic result of participants from last semester divided on the basis of their scores:

KNOWLEDGE LEVEL SCORE RANGE	
9 above SGPA	Excellent
7 to 9 SGPA	Good
5 to 6 SGPA	Average
Below 5 SGPA	Poor

Content validity was that the degree to which an instrument measures what it's purported to measure it's the sampling adequacy of the content being measured (Polit and Beck, 2015).

The tool was validated by 7 experts to ensure content validity (Child Health Nursing, Community Health Nursing, Medical Surgical Nursing, Obstetrics and Gynecological Nursing). The experts are requested to give their opinions and verify the items for their relevancy, accuracy, and appropriateness. Suggestions and recommendations given by the experts are accepted and necessary corrections are made.

Reliability of the tool is obtained by administering the tools to the 30 participants. Reliability was calculated for self-structured questionnaire tool. Reliability is calculated of the tool is done by test – retest and Cronbach alpha. It is a measure of reliability obtained by administering the same test twice over a period of time to a group of individuals. In this present study test-retest reliability was established by administering the tool to the 30 participants who were selected for the study with a gap of 1 hour. The calculated test – retest and Cronbach alpha reliability score for the self-structured questionnaire tool was found 0.78.

Data Collection

Pilot study was conducted after formal administrative approval obtained from Dean of Faculty of Nursing, SGT University, Gurugram (Haryana) on 25/12/2024 to find out the feasibility of conducting pilot study. Total 30 students were selected from B.Sc. Nursing students of SGT University using Purposive Sampling Technique and they were divided into one group only. Introduction of the self and about the study were given to nursing students. Informed consent was taken and confidentiality assurance was given to the nursing students. On same day only data was collected from nursing students using structured questionnaire.

Ethical considerations were diligently followed in this study. This study was carried out from 26/12/2024. Although, the respected institute has given data collection period from 26/12/2024, but due to limited availability of samples during the data collection time, the study period was extended till 31/12/2024. Prior to participation, informed consent was obtained from the subjects, and they were selected on the basis of inclusion and exclusion criteria.

Ethical Consideration

This research project adhered to ethical guidelines and obtained the necessary permissions and approval. Formal written permission is obtained from the Dean of the Faculty of Nursing, SGT University, Gurugram (Haryana). Participant selection followed specific inclusion and exclusion criteria, and efforts are made to establish a rapport with the subjects, ensuring they are fully informed about the study's purpose and procedures. Informed consent are obtained from subjects who fulfilled the inclusion criteria, emphasizing their voluntary participation and the freedom to withdraw from the study at any time.

Plan for Data Analysis

Data was analyzed according to the objectives, hypothesis of the study and opinion of the experts. It was planned to organize, tabulate and interpret the data by using both descriptive and inferential statistics by SPSS software.

Descriptive statistics: For description of data, frequency and percentage distribution, mean, median, standard deviation and range was used in analyzing the scores.

Inferential statistics: For drawing inferences, independent 'T.' Paired 't' Pearson coefficient correlation and test were used.

Analysis and interpretation of data was done according to the objectives using descriptive and inferential statistics. The level of significance chosen was at $p \leq 0.05$.

RESULTS

The analyzed data was organized according to the objectives and presented under the following sections:

SECTION A: Frequency and percentage distribution of participants according to demographic profile.

SECTION B: Frequency and percentage distribution of factors influencing academic performance.

SECTION C: Relationship between commuting time and academic performance.

SECTION D: Impact of commuting duration on academic performance.

SECTION E: Association between demographic variables and academic performance.

SECTION F: Association between factors influencing academic performance and academic outcomes.

SECTION A: FREQUENCY AND PERCENTAGE DISTRIBUTION OF PARTICIPANTS ACCORDING TO DEMOGRAPHIC PROFILE

Data presented in Table 4.1 shows that the age of the participants is 20-22 years old (62%) and 17-19 years old (31%), where a very small proportion is 23-25 years old (7%) and 26 years & above (1%).

With regard to the gender of the participants, 36% are male, while 64% are female, indicating a higher female representation.

Almost all respondents are enrolled in B.Sc. Nursing (96%), while GNM/ANM (4%) makeup the rest. Other programs, such as M.Sc. Nursing or NPCC, have no participants.

Most participants are in their 2nd year (60%), while 3rd- and 4th-year students each comprise 20% of the sample. There are no first-year students.

Data on type of family showed that 68% are nuclear families, and the remaining 32% are staying in joint families.

With regard to the society, participants come from urban areas (59%), and the remaining come from rural areas (41%).

SECTION B: FREQUENCY AND PERCENTAGE DISTRIBUTION OF FACTORS INFLUENCING ACADEMIC PERFORMANCE

The data presented in table 4.2, showing that most students travel by bus (50%), using other modes (22, %). Use car/cab (21%), while rely on bicycles/walking (7%).

Data regarding commuting travel time, more than 60 minutes (35%), indicating a significant commuting burden. Take 31-60 minutes (29%), while commute in 16-30 minutes (21%). Only (15%) have a short commute (<15 minutes).

Data on frequency of commuting, majority students commute daily (83%). Commute twice a week (10%), while travel more than twice a week (7%). A negligible (1%) never commutes.

Data regarding missed classes due to commuting, students sometimes miss classes (38%), another rarely miss classes (38%). Always miss classes (7%), while never (17%) face this issue.

Data on traffic congestion experience sometimes (43%), while deal with it always (26%). Rarely encounter congestion (21%), while never (10%) experience it.

Data regarding stress due to commuting, students feel stressed always (30%) and experience it sometimes (42%). Rarely feel stressed (42%), while never (12%) do.

Data on health issues due to commuting 50% students suffer from headaches, making it the most common issue. Report backaches (18%), experience vomiting/nausea (7%), and face other health problems (25%).

Data on sleep duration, students sleep for 5-7 hours (61%), while 20% get less than 5 hours. Sleep 8-9 hours (16%), and (2%) get more than 9 hours.

Data regarding exercise frequency, students exercise regularly (37%), while 28% do so sometimes. Rarely exercise (22%), and never (14%) engage in physical activities.

Data on extracurricular participation 55% experience headaches, and report backaches (23%). Experience vomiting/nausea (12%), while face other issues (10%).

Data on self study hours per day, dedicate 1-2 hours (59%), and study less than an hour (26%). Study for 3-4 hours (12%), while only 3% exceed 4 hours.

Data regarding family support for academic 66% find their family very supportive, while 16% consider them somewhat supportive. 17% feel their family is neutral, and 1% report very unsupportive families.

Data on time management ability, students manage time sometimes (51%), and (25%) do so always. Rarely (15%) manage their time, while 9% struggle completely.

Data on "Me Time" availability, students personal time sometimes (37%), and 20% always have it. Rarely (25%) get "me time" while 18% never do.

Data on daily social media, students daily spend 30-60 minutes on social media (38%), and 34% exceed 60 minutes. Use it for 15-30 minutes (22%), while only 5% stay below 30 minutes.

Data regarding academic performance 37% students perform at an average level, while 34% do well. 25% have poor academic performance, and only 5% excel.

SECTION C: RELATIONSHIP BETWEEN COMMUTING TIME AND ACADEMIC PERFORMANCE

Here is the fig. 4.1 that shows the relationship between **commuting time and academic performance** using the given SGPA categories. A sample distribution provides a basis for the data, which represents the several performance categories (Excellent, Good, Average, and Poor).

SECTION D: IMPACT OF COMMUTING DURATION ON ACADEMIC PERFORMANCE

Here is the fig. 4.2 that shows how the duration of **commute impacts on academic performance**. **Academic performance** gradually decreases as commuting time increases from 0 to 90 minutes, showing that longer commutes may result in less time for studying, exhaustion, or lack of focus.

SECTION E: ASSOCIATION BETWEEN DEMOGRAPHIC VARIABLES AND ACADEMIC PERFORMANCE

Data presented in Table 4.3 shows there is **no significant association** ($p=0.322$) between age and academic performance. Students of different age groups show similar academic performance distributions.

With regards to the gender there is **not significant association** ($p=0.101$). Both male and female students have similar academic performance across the four categories.

Data among program enrolled there is **no significant association** ($p=0.528$) between the program students are enrolled in and academic performance. Academic performance is similar across different programs (e.g., B.Sc. Nursing, GNM/ANM).

Data among year of study is **significant association** ($p=0.002$). Students in their first year tend to have more "poor" academic performance, whereas performance improves in the second and third years.

Data among type there is **no significant association** ($p=0.313$) between family type (nuclear or joint) and academic performance. Students from both family types show similar academic results.

With regards to the society, students belong to (rural or urban) society there is **significant association** ($p=0.045$). Urban students tend to perform better academically compared to rural students, with "better" and "average" performances in urban areas.

SECTION F: ASSOCIATION BETWEEN FACTORS INFLUENCING ACADEMIC PERFORMANCE AND ACADEMIC OUTCOMES

Data presented in Table 4.4 shows there is **no significant association** ($p=0.971$) between the primary mode of Transportation and academic performance. Whether students travel by car, bus, bicycle, or walking, their academic performance does not vary significantly.

Data among one way commuting time, this is **not significantly associated** ($p=0.976$). Students with varying commute times (from less than 15 minutes to more than 60 minutes) show similar academic performance.

With regards to frequency of commuting there is **no significant association** ($p=0.748$) between how frequently students commute (daily, twice a week, or never) and their academic performance.

Data among missing classes due to commuting, this is **not significantly** affect academic performance ($p=0.054$), indicating that students who miss classes occasionally or rarely still have a range of academic performance.

Data among traffic congestion this is **not significantly associated** ($p=0.456$) with academic performance. Regardless of traffic issues, students perform similarly.

With regards to feeling stressed or whelmed due to commuting, there is **no significant association** ($p=0.093$) between feeling stressed due to commuting and academic performance. Students' perceived stress from commuting doesn't correlate with academic outcomes.

Data among health issues faced due to commuting (vomiting/nausea) has a **significant association** ($p=0.020$) with academic performance. Students who face vomiting or nausea due to commuting have a higher tendency to perform poorly.

Data among average hours of sleep per night, there is **no significant association** ($p=0.351$) between the average hours of sleep per night and academic performance. Sleep duration does not appear to influence students' academic outcomes significantly.

With regards to frequency of exercise per week, this is **not significantly** affect academic performance ($p=0.602$). Students who exercise regularly or rarely show similar academic performance.

Data among frequency of participation in extracurricular activities, there is **no significant association** ($p=0.496$) between participating in extracurricular activities and academic performance. Extracurricular involvement does not strongly correlate with academic outcomes.

With regards to frequency of self-study hours per day, this is **not significantly** associated ($p=0.938$) with academic performance, meaning the amount of time spent on self-study does not have a direct impact on academic performance.

Data among the level of family support, this is **not significantly** affect academic performance ($p=0.948$). Whether a student's family is very supportive, somewhat supportive, or unsupportive, academic outcomes do not vary much.

Data among the ability to manage time effectively, this is **not significantly associated** ($p=0.553$) with academic performance. Students who report being able to manage time well have a similar academic performance as those who struggle with time management.

Data among "Me Time" availability, there is **no significant association** ($p=0.532$) between having personal "me time" and academic performance.

With regards to social media usage, this is **not significantly** affect academic performance ($p=0.866$). Whether students use social media for less than 30 minutes or more than 60 minutes daily, it does not have a significant relationship with their academic outcomes.

DISCUSSION

The present study examine the relationship between the duration of commute, related lifestyle factors (including stress and sleep), and academic performance among nursing students.

In the present study, there were 300 nursing students involved.

Based on Demographic Profile

According to the age, the majority of the participants were 20-22 years old (62%), followed by 17-19 years

old (31%), which indicates a population mainly in early adulthood. This age distribution is typically consistent with normal patterns of enrollment in undergraduate nursing programs, where students generally begin their studies immediately after secondary school. Comparable age groups have been described in previous research on nursing education, suggesting that this group is at an early stage of professional and academic development (Salamonson & Andrew, 2006).

According to the gender, 36% of participants were men and 64% were women, indicating an established tradition in nursing education that the field continues to be occupied by women. This gender difference is consistent with national and international research (Alzayyat & Al-Gamal, 2014), suggesting that female students could experience difference academic and commuting experience compared to their male students, although this research, although this research was unable to detect any correlation between gender and academic performance.

According to program enrollment, 96% of the students were enrolled in the B.Sc. Nursing program, compared to 4% in GNM/ANM courses and 0% in M.Sc. Nursing or NPCC programs. The participating college's selection procedures or institutional structure are probably the cause of this difference. The majority of B.Sc. Nursing students provided a reliable sample for assessing their academic performance throughout a comparable program.

According to the year of the study, 60% of participants were in their second year, with an equal percentage in their third and fourth years (20% each). No first-year students participated, mainly because they were not part of the sample or because they were new with academic evaluation at the time of data collection. In particular, a strong relationship between academic performance and study year was found ($p = 0.002$), showing that as students participate in the program, their academic performance improves. This is confirmed by other studies showing that as fourth-year student's progress through the program, they usually develop better study methodologies, ways of coping, and clinical thinking (Jeffreys, 2007).

According to the family structure, 68% were from nuclear families and 32% from joint families. This variable did not have any significant relationship with studies, suggesting that the type of family might not directly influence academic performance. This is supported by results from comparable education studies where emotional support, not family composition, is a more important factor in academic success. Al-Qahtani (2015) discovered in previous research that although the family environment is important for psychological health, academic achievement was not directly related to the structural type of family (nuclear vs. joint). Whereas Sharma & Kaur (2014) concluded that the emotional environment of the family, especially parental involvement, support, and motivation, also had a greater impact on student performance than the nuclear or joint nature of the family.

According to societal background, 41% of students came from rural areas and 59% from urban areas. Students from urban backgrounds performed better academically, and there was a significant correlation between societal background and academic performance ($p = 0.045$). Through previous research that was conducted by Yadav & Yadav (2017), this could be due to urban students having more access to educational resources, better infrastructure, less difficulty traveling, and more usage of digital learning tools.

Based on factors influencing Academic Performance

According to mode of transportation, did not substantially correlate with performance result either. These findings correspond with previous research by Trowbridge et al. (2013) that found that although commuting can lead to more physical and mental stress, students frequently adopt coping mechanisms like better time management and peer support networks to lessen academic deterioration.

According to commuting duration, the duration of the commuting, whether it was less than 15 minutes or more than 60 minutes, did not significantly correlate with academic achievement ($p = 0.976$). This finding is consistent with Van Tienoven et al.'s (2015) previous studies, which observed that longer commutes did not always turn into poor academic performance among college students, but they did result in more exhaustion and less time for relaxation and self-study. Therefore, Mitra et al. (2014) observed that students ultimately get used to long commutes, especially when structured schedules for classes and collaboration are provided.

According to Missed classes due to commuting were analyzed as a separate factor. Although some students reported occasionally or rarely missing classes, this variable also did not show a statistically significant impact on academic performance ($p = 0.054$). However, this is borderline and could indicate a potential trend worth exploring further with a larger sample size or a more granular analysis of attendance records. Prior studies, such as those by Azizeh et al. (2017), emphasize that frequent absenteeism—not merely occasional lateness—can negatively influence academic engagement and outcomes.

According to commuting-related health issues, particularly among students reporting vomiting, nausea, and headaches during travel. This factor showed a significant association with lower academic performance ($p = 0.020$). This supports findings from Omoruyi (2014), who demonstrated that physical health challenges related to stressful commuting conditions can impair cognitive focus, increase absenteeism, and reduce study efficiency.

CONCLUSION

The study concluded that commuting time alone does not significantly affect academic performance among nursing students. **However**, commuting-related health issues **such as headaches and nausea were significantly associated with poor performance**. Additionally, students in higher years of study and those from urban areas performed better academically. Other demographic and lifestyle factors showed no significant impact. These findings highlight the need to focus on student wellness and support systems rather than just commuting duration.

TABLE 4.1: FREQUENCY AND PERCENTAGE DISTRIBUTION OF PARTICIPANTS BY DEMOGRAPHIC VARIABLES

(n= 300)		
S. No.	Demographic Variables	Frequency (%)
1	Age	
	17-19 years	92(31%)
	20-22 years	185(62%)
	23-25 years	20(7%)
	26 years & above	3(1%)
2	Gender	
	Male	109(36%)
	Female	191(64%)
3	Program enrolled	
	M.Sc. Nursing	0(0%)
	NPCC	0(0%)
	B.Sc. Nursing	287(96%)
	GNM/ANM	13(4%)
4	Year of study	
	1 st year	0(0%)
	2 nd year	180(60%)
	3 rd year	61(20%)
	4 th year	59(20%)

5	Type of Family	
	Nuclear	205(68%)
	Joint	95(32%)
6	Societal background	
	Rural	123(41%)
	Urban	177(59%)

TABLE 4.2: DISTRIBUTION OF PARTICIPANTS BY FACTORS INFLUENCING ACADEMIC PERFORMANCE

(n= 300)

S. No.	Factors influencing academic performance	Frequency (%)
1	Primary mode of transportation	
	Car/Cab	62(21%)
	Bus	150(50%)
	Bicycle/Walking	22(7%)
	Other	66(22%)
2	One way commuting time	
	Less than 15 min	44(15%)
	16-30 min	63(21%)
	31-60 min	88(35%)
	More than 60 min	105(35%)
3	Frequency of commuting	
	Daily	248(83%)
	More than twice	20(7%)
	Twice a weekly	31(10%)
	Never	0(0%)
4	Missing classes due to commuting	
	Always	22(7%)
	Sometimes	114(38%)
	Rarely	114(38%)
	Never	50(17%)
5	Traffic congestion experience	
	Always	77(26%)
	Sometimes	129(43%)
	Rarely	64(21%)
	Never	30(10%)
6	Feeling stressed due to commuting	

	Always Sometimes Rarely Never	89(30%) 125(42%) 51(17%) 35(12%)
7	Health Issues during commuting	
	Vomiting/Nausea Headache Backache Other	21(7%) 150(50%) 55(18%) 74(25%)
8	Average hours of sleep per night	
	Less than 5 hour 5-7 hour 8-9 hour More than 9 hour	61(20%) 183(61%) 49(16%) 7(2%)
9	Exercise frequency per week	
	Always Sometimes Rarely Never	111(37%) 83(28%) 65(22%) 41(14%)
10	Participation in extracurricular activities	
	Vomiting/Nausea Headache Backache Other	37(12%) 164(55%) 70(23%) 29(10%)
11	Self study hours per day	
	Less than 1 hour 1-2 hour 3-4 hour More than 4 hour	77(26%) 176(59%) 37(12%) 10(3%)
12	Family support towards academics	
	Very supportive Somewhat supportive Neutral Very supportive	196(66%) 47(16%) 52(17%) 4(1%)
13	Ability to manage time	
	Always Sometime Rarely Never	75(25%) 153(51%) 44(15%) 28(9%)

14	"Me Time" Availability	
	Always Sometime Rarely Never	60(20%) 112(37%) 74(25%) 54(18%)
15	Daily social media usage	
	Less than 30 min 15-30 min 30-60 min More than 60 min	16(5%) 66(22%) 115(38%) 103(34%)
16	Overall Academic performance	
	Excellent Good Average Poor	14(5%) 102(34%) 110(37%) 74(25%)

FIGURE 4.1: PIE CHART SHOWING THE RELATIONSHIP BETWEEN COMMUTING TIME AND ACADEMIC PERFORMANCE

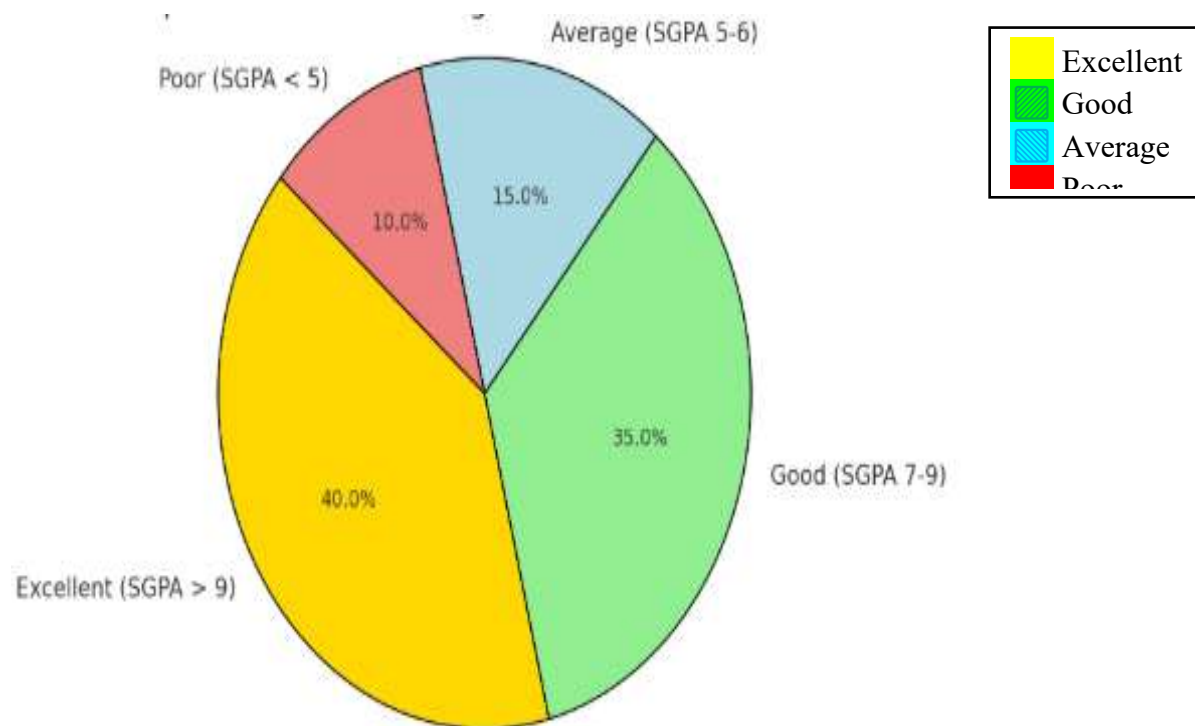


FIGURE 4.2: CHART SHOWING THE IMPACT OF COMMUTING DURATION ON ACADEMIC PERFORMANCE

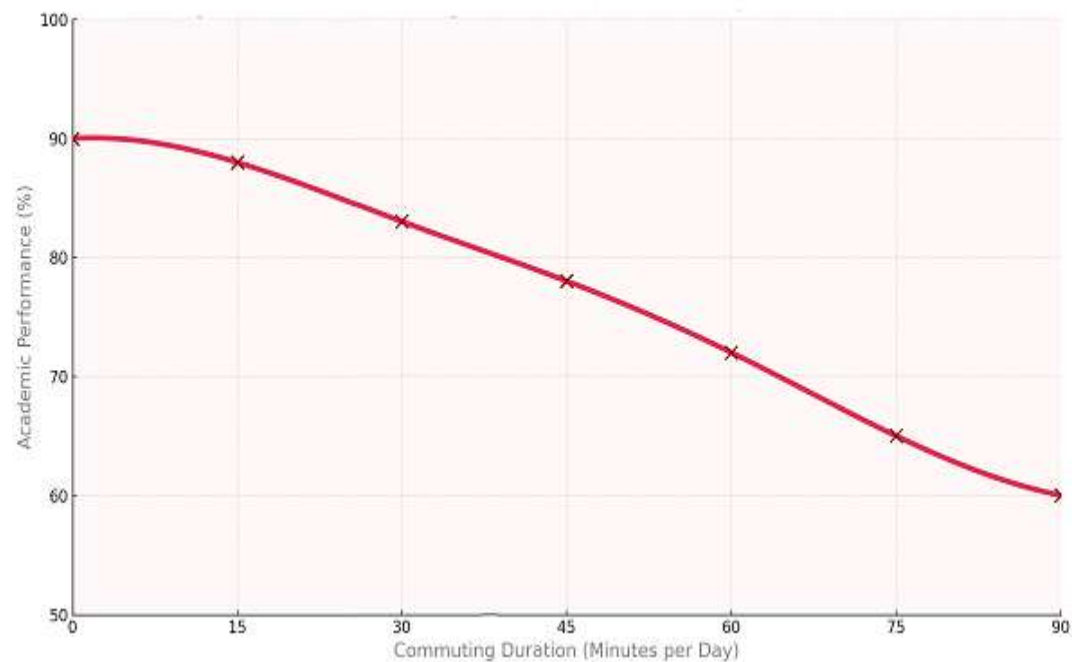


TABLE 4.3: CHI-SQUARE TEST RESULTS BETWEEN DEMOGRAPHIC VARIABLES AND ACADEMIC PERFORMANCE

(n= 300)

Variables	Options	Chi-Square Test	P value	Df	Table value	Result
Age	17-19 years 20-22 years 22-25 years 26 years & above	10.365	0.322	9	16.919	Not Significant
Gender	Male Female	6.236	0.101	3	7.815	Not Significant
Program Enrolled	M.Sc. Nursing NPCC B.Sc. Nursing GNM/ANM	2.219	0.528	3	7.815	Not Significant

Year of Study	1 st year 2 nd year 3 rd year 4 th year	20.953	0.002	6	12.592	Significant
Type of family	Nuclear Joint	3.560	0.313	3	7.815	Not Significant
Societal background	Rural Urban	8.032	0.045	3	7.815	Significant

p ≤ 0.05 level of significance

TABLE 4.4: CHI-SQUARE TEST RESULTS BETWEEN FACTORS INFLUENCING ACADEMIC PERFORMANCE AND ACADEMIC OUTCOMES

(n= 300)

Variables	Options	Chi-Square Test	P value	Df	Table value	Result
Primary mode of Transportation	Car/Cab Bus Bicycle/Walking Other	2.822	0.971	9	16.919	Not Significant
One way Commuting Time	Less than 15 min 16-30 min 31-60 min More than 60 min	2.657	0.976	9	16.919	Not Significant
Frequently of Commuting	Daily More than twice Twice a weekly Never	5.921	0.748	9	16.919	Not Significant
Miss classes due Commuting	Always Sometimes Rarely Never	16.670	0.054	9	16.919	Not Significant
Traffic Congestion experience	Always Sometimes Rarely Never	8.804	0.456	9	16.919	Not Significant
Feeling stressed due to commuting	Always Sometimes Rarely Never	14.910	0.093	9	16.919	Not Significant
Health issues during commuting	Vomiting/Nausea Headache Backache Other	19.694	0.020	9	16.919	Significant
Average hours of sleep per Night?	Less than 5 hours 5-7 hour 8-9 hour More than 9 hours	9.999	0.351	9	16.919	Not Significant
Exercise frequency per Week	Always Sometimes Rarely Never	7.336	0.602	9	16.919	Not Significant
Participation in Extracurricular activities	Always Sometimes Rarely Never	8.380	0.496	9	16.919	Not Significant
Self-study hours per day	Less than 1 hour 1-2 hour 3-4 hour More than 4 hours	3.551	0.938	9	16.919	Not Significant

Family support Towards academics	Very supportive Somewhat supportive Neutral Very unsupportive	3.368	0.948	9	16.919	Not Significant
Ability to manage time	Always Sometimes Rarely Never	7.813	0.553	9	16.919	Not Significant
“Me time” availability	Always Sometimes Rarely Never	8.020	0.532	9	16.919	Not Significant
Daily social media usage	Less than 15 min 15-30 min 30-60 min More than 60 min	4.625	0.866	9	16.919	Not Significant
Overall academic performance	Excellent Good Average Poor	N/A				

REFERENCES

- ⁱ Alkhadra WA. Euro-Med Ministerial Conclusions on Strengthening the Role of Women in Society: Impact in Jordan. Madaba, Jordan; 2015.
Available from: <https://www.researchgate.net/publication/312954411>
- ⁱⁱ Bissell D. Understanding the impacts of commuting: research report for stakeholders [Internet]. Canberra: The Australian National University. 2015.
Available from: <https://openresearch-repository.anu.edu.au/server/api/core/bitstreams/228d9543-a71b-4764-99f0-c5be060ed86a/content>
- ⁱⁱⁱ Available from: [http://file:///C:/Users/Dell/Downloads/The effect of commuting on achievements.pdf](http://file:///C:/Users/Dell/Downloads/The%20effect%20of%20commuting%20on%20achievements.pdf)
- ^{iv} Humayun A, Saleem H, Raza R. Transportation difficulties faced by female students of Karachi Medical and Dental College (KMDC) and university of Karachi (UoK). Ann AbbasiShaheed Hosp Karachi Med Dent Coll [Internet]. 2017;22(2):144–51.
Available from: <http://dx.doi.org/10.58397/ashkmdc.v22i2.118>
- ^v OMugoro J. Transport problems for students and their effects on attendance in community secondary schools in Dar es Salaam city, Tanzania. 2014
Available from: http://repository.out.ac.tz/757/1/JOHANES_MUGORO.pdf
- ^{vi} Gottholmseder G, Nowotny K, Pruckner GJ, Theurl E. Stress perception and commuting. Health Econ [Internet]. 2009;18(5):559–76.

Available from: <http://dx.doi.org/10.1002/hec.1389>

7. ^{vii} Shenvi DN, Singhal A. Sleep, sleepiness and medical college students: a comparative study among medical and paramedical students of a tertiary care teaching hospital from a West Indian metropolitan city. *Ann Med Health Sci Res*. 2017;7(2):85-91.
Available from: <https://www.amhsr.org/articles/sleep-sleepiness-and-medical-college-students-a-comparative-study-among-medical-and-paramedical-students-of-a-tertiary-care-teachi.html>
8. ^{viii} Cesaroni G, Badaloni C, Porta D, Forastiere F, Perucci CA. Comparison between various indices of exposure to traffic-related air pollution and their impact on respiratory health in adults. *Occup Environ Med* [Internet]. 2008;65(10):683-90.
Available from: <http://dx.doi.org/10.1136/oem.2007.037846>
9. ^{ix} Concerto C, Patel D, Infortuna C, Chusid E, Muscatello MR, Bruno A, et al. Academic stress disrupts cortical plasticity in graduate students. *Stress* [Internet]. 2017;20(2):212-6.