



## **Factors Influencing Educational Achievements of the Students: A case study of University of Peshawar, Pakistan**

**Muhammad Ijaz<sup>1\*</sup>, Rida Batool<sup>2</sup>, Syed Muhammad Asim<sup>3</sup>**

<sup>1\*</sup>Department of Mathematics and Statistics, University of Haripur, Haripur, Pakistan

<sup>2,3</sup>Department of Statistics, University of Peshawar, Peshawar, Pakistan

Emails: [ijaz.statistics@gmail.com](mailto:ijaz.statistics@gmail.com); [smasim@uop.edu.pk](mailto:smasim@uop.edu.pk); [ridab795@gmail.com](mailto:ridab795@gmail.com)

### **Abstract**

The main goal of the paper is to determine the factors affecting the student's academic achievements at the University of Peshawar. This study would help the students and teachers to identify the factors that improve the academic achievements of the students. A descriptive type of questionnaire was designed to gather information from 264 students studying in various departments at the University of Peshawar, Pakistan. The study focuses on different factors including socio-economic factors, teacher's effectiveness and methodology of their teaching, social media, and the use of mobile phones, and parental factors. Chi-square statistics were used to study the impact of factors affecting the student academic achievements. The analysis concluded that except for the gender under socio-economic factors, teacher experience under teacher effectiveness factors, parent relationship with the student and their family income under parental factors, and the use of social media and mobile phones all the factors have an impact on the student academic achievements.

**Keywords:** Students; socio-economic factors; parental factors; teacher effectiveness; social media; mobile phones

### **1. Introduction**

No one should argue that a country's well-trained graduates have a key role to play in its economic stability and social growth. The universities are responsible for delivering the highest educational standard and producing well-trained graduates. The universities should undertake research studies to highlight the factors influencing the academic achievements of the students, thereby placing the students on the right track and the students themselves to earn good grades in order to catch incentives and meet business demands. Many research studies were conducted to highlight the factors influencing student academic achievements, for example, Abubakar & Oluwatoyin [1] worked on the effects of teacher motivational techniques on students and academic achievements. The strategies for motivation included scholarship, awards, lesson assessment, encouragement, good guidance and counseling, and teaching skills. The study concluded that a significant relationship exists between teaching strategies and academic success between students. Akahome, Rilwani, & Gbakeji [2] outlined the factors affecting the regional attrition of secondary school students. The study of Akiri [3] determined that the teacher effectiveness is not only the factor to influence the student grades. Alos & David [4] concluded that the teacher-based variables are strongly related to student success relative to research behaviors and student parental influences. Ayuba & Mohammed [5] considered course curriculum, department role, and support facilities to study its effect on academic performance among students. The study revealed that departmental position is highly linked to academic achievements of students. For a more detailed studies we refer to see [6-14].

The current study focuses on the factors effecting the student academic achievements of the University of Peshawar. There are four types of factors are included in the study such as socio-economic factors, teacher related aspects, social media and mobile use, and parental factors.

## **2. Methodology**

The data were collected through a well-defined descriptive type questionnaire from total of 264 respondents consisting of male and female students. The data were gathered on various factors, in socio-economics, the factors are including gender of the respondent, study program, marital status, interest field, relax in co-education, and class regularity. Teacher related aspects are the teaching methodology, teaching methodology effect, teacher experience, and class environment. The parental and family factors are including parent education, parent involve in their child education, student relation with their parents, and family income. The last factors are the social media and the use of mobile phones. The data were analyzed through SPSS software.

## **3. Research Objectives**

The following are the fundamental goals of the research study

1. To study the impact of socio-economic factors on student academic achievements
2. To explore the impact of Teacher related aspects on student academic achievements
3. To identify the impact of parental factors on student academic achievements
4. To study the relationship of the social media and mobile phones on student academic achievements

## **4. Research Hypothesis**

The current research study will focus on the following research hypothesis

1. There is an insignificant relationship between the socio-economic factors and student academic achievements
2. There is an insignificant relationship between the Teacher related factors and student academic achievements
3. There is an insignificant relationship between the Parental factors and student academic achievements
4. There is an insignificant relationship between the use of social media and student academic achievements

## **5. Limitations**

The limitation of the research work is the cooperation of the respondents which is out of control of the researcher. Secondly, the concerned topic is so vast and is difficult to include all students from different universities of Pakistan. In this study, the students of BS (4th, 6th, 8th) semester studying in various departments of university of Peshawar are consulted. So the results are restricted and limited to the students of University of Peshawar.

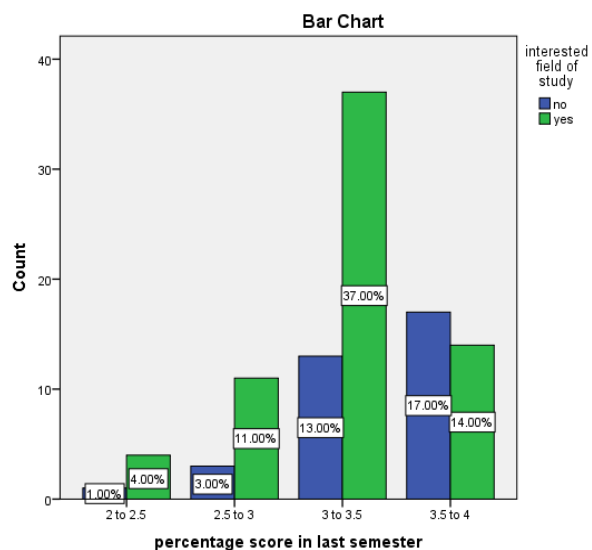
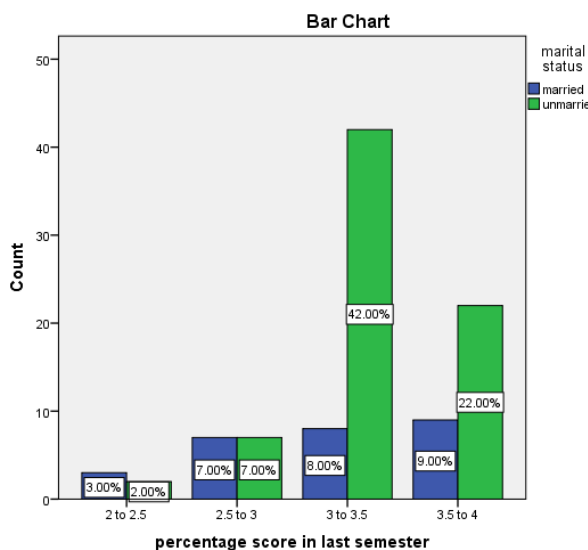
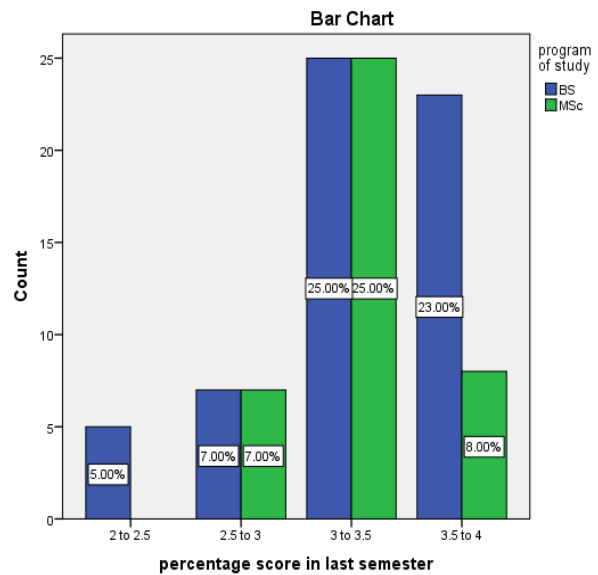
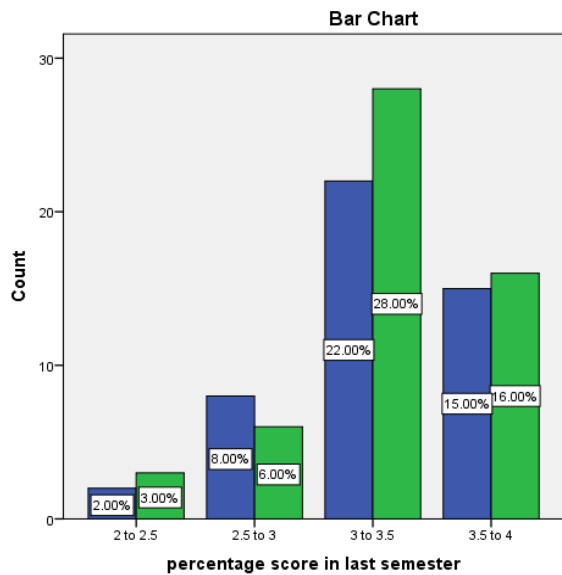
## **6. Results and Discussion**

### **1. socio-economic Factors Affecting student academic achievements**

Table 1 demonstrates the Chi-square analysis of the socio-economic factors and its impact on student academic achievements. The result showed that there is no significant relationship between the gender ( $\chi^2 = 0.881, p = 0.830$ ), co-education ( $\chi^2 = 2.638, p = 0.451$ ), and student academic performance at 5% level of significance. It means that there is no role of the gender and co-education in improving the student academic achievements. However, the program of study that is Bs or Ms ( $\chi^2 = 8.602, p = 0.035$ ) marital status ( $\chi^2 = 9.655, p = 0.022$ ), field of interest ( $\chi^2 = 8.848, p = 0.031$ ), and class regularity ( $\chi^2 = 11.808, p = 0.008$ ) shows a significant relationship with the student academic achievements at 5% level of significance which implies that these factors play a key role in improving the grades of the students.

Table 1: Socio-economic Factors Affecting student academic achievements

Variable	$\chi^2$	P-value	Sig/Insig
Gender	0.881	0.830	insignificant
Program of study	8.602	0.035	significant
Marital status	9.655	0.022	significant
Field of interest	8.848	0.031	significant
Co-education	2.638	0.451	insignificant
Class regularity	11.808	0.008	significant



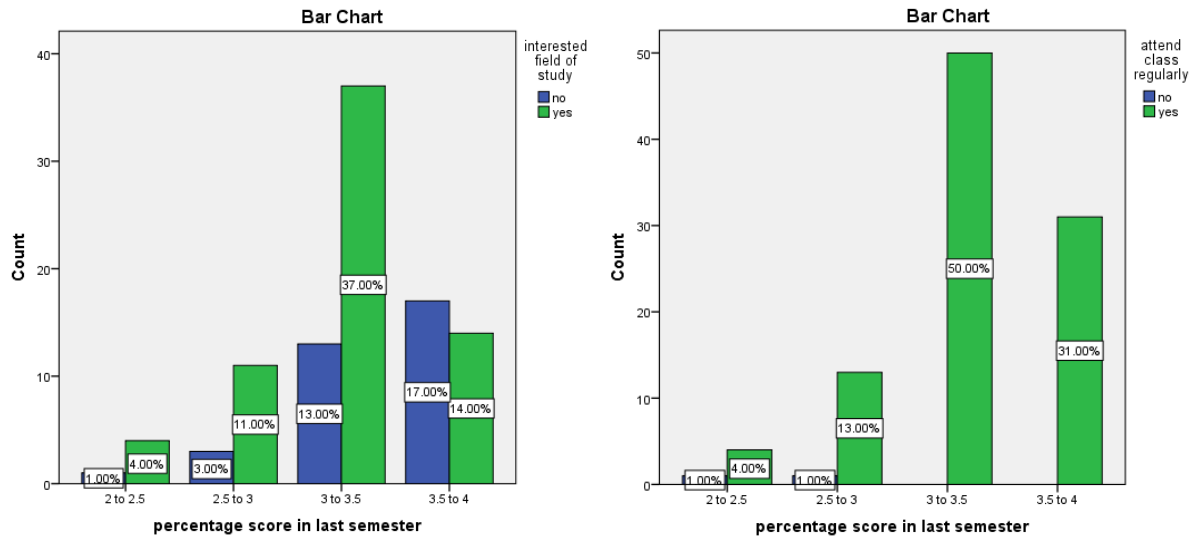


Figure 1: Charts of percentage score vs Socio-economic Factors

Figure 1 defines the percentage score of the respondents with different socio-economic factors.

## 2. Teacher related Factors Affecting student academic achievements

Table 2 defines the impact of teacher related factors on the student grades. Among others the teacher experience ( $\chi^2 = 0.709, p = 0.871$ ) shows an insignificant relationship with the performance of the students at 5% level of significance. Whether the teacher is less experienced or more but if their teaching methodology is easy to understand then this will improve the grades of the students. While the teaching methodology ( $\chi^2 = 15.557, p = 0.001$ ), effect of teaching methodology ( $\chi^2 = 9.058, p = 0.029$ ), and class environment ( $\chi^2 = 9.134, p = 0.028$ ) play a significant role in improving the student grades. In the University of Peshawar, most of the teachers even in numerical sciences use multimedia for teaching due to which the students face many problems in their theoretical work. This is the main reason that the students of this discipline gain low grades and those students who are engaged with lectures presented on a white-board gain high grades.

Table 2: Teacher related Factors Affecting student academic achievements

Variable	$\chi^2$	P-value	Sig/Insig
Teaching methodology	15.557	0.001	significant
Effect of teaching methodology	9.058	0.029	significant
Teacher experience	0.709	0.871	insignificant
Class environment	9.134	0.028	significant

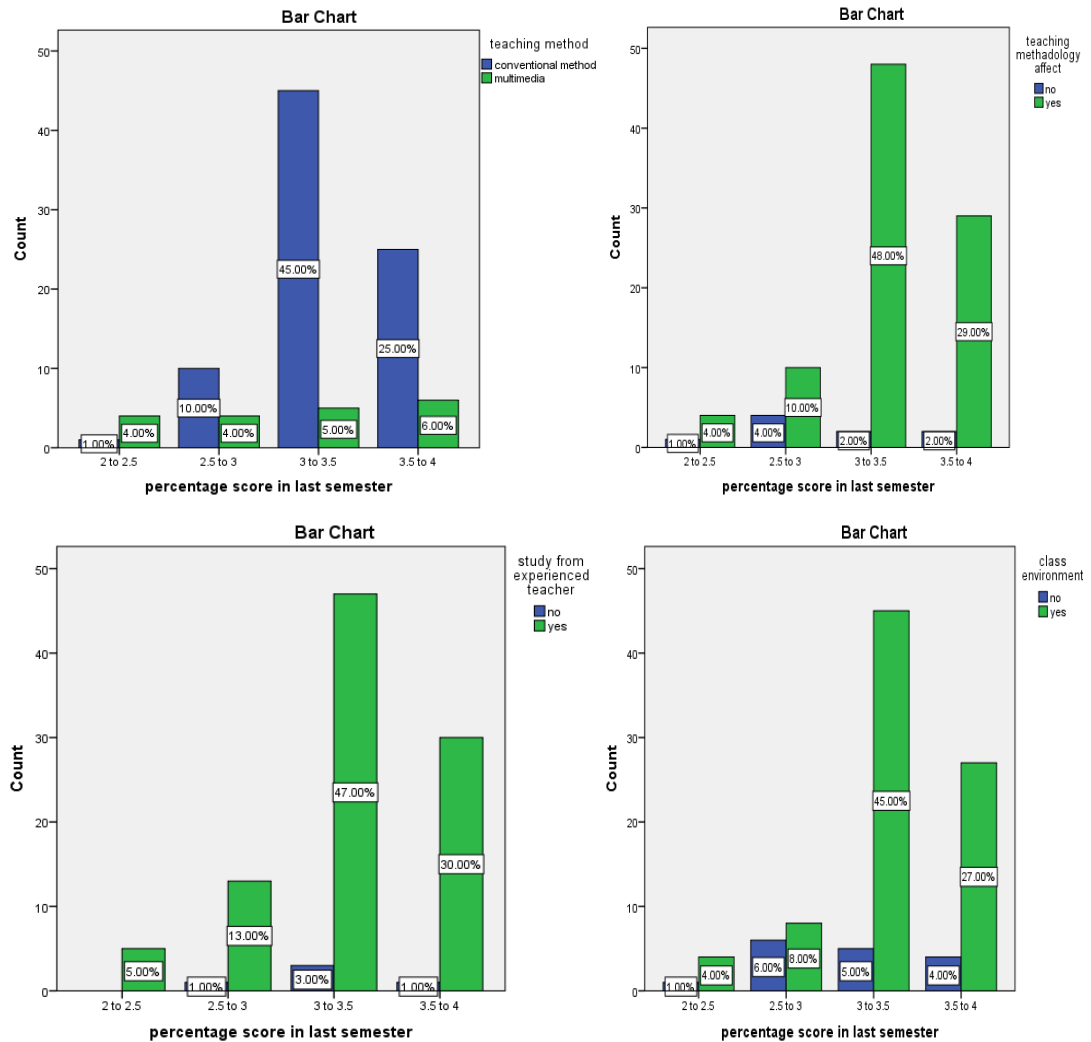


Figure 2: Charts of percentage score vs Teacher related Factors

Figure 2 defines the percentage score of the respondents with respect to teacher related factors.

### 3. Parental Factors Affecting student academic achievements

The results given in table 3 shows that there is no effect of the student parents relation ( $\chi^2 = 3.883, p = 0.275$ ) and family income ( $\chi^2 = 5.256, p = 0.511$ ) on the academic achievements of the students. Meanwhile, the parent education ( $\chi^2 = 40.17, p = 0.000$ ) plays a significant role in improving their children education performance. Similarly, those students got more grades whose parents are involved in their children education ( $\chi^2 = 12.97, p = 0.005$ ) activities. The performance of the students whose families are well-educated and their parents are involved in their children academic activities are better than of those who families are illiterate.

Table 3: Parental Factors Affecting student academic achievements

Variable	$\chi^2$	P-value	Sig/Insig
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Parent education	40.17	0.000	significant
Parent involve in their children education	12.97	0.005	significant
Student parents relation	3.883	0.275	insignificant
Family income	5.256	0.511	insignificant

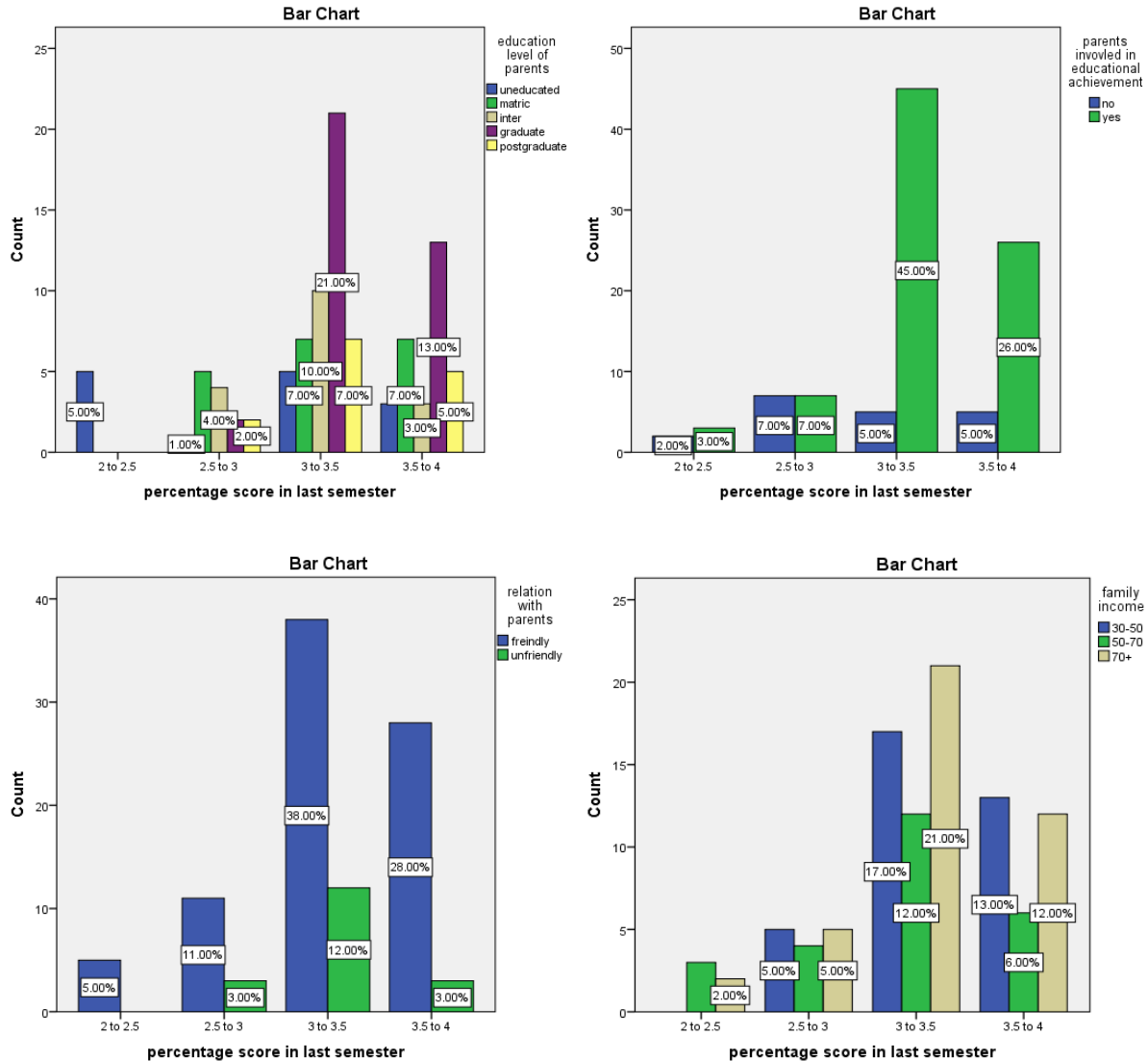


Figure 3: Charts of percentage score vs Parental Factors

Figure 3 defines those parental factors which may influence the student’s academic performance.

#### 4. Social Media and Mobile Phones Affecting student academic achievements

The results given in table 4 implies that there is no relationship between social media ( $\chi^2 = 2.103, p = 0.551$ ) and the use of mobile phones ( $\chi^2 = 2.870, p = 0.420$ ) with the student academic performance at the 5% level of significance. The use of social media and mobile phones would not guarantee the students low grades but the time spent on it which is not included in this study. Those students are going to bear low grades that have spent more time on social media and Smartphone.

Table 4: Social Media and Mobile Phones Affecting student academic achievements

Variable	$\chi^2$	P-value	Sig/Insig
Social Media	2.103	0.551	insignificant
Mobile Phones	2.870	0.420	insignificant

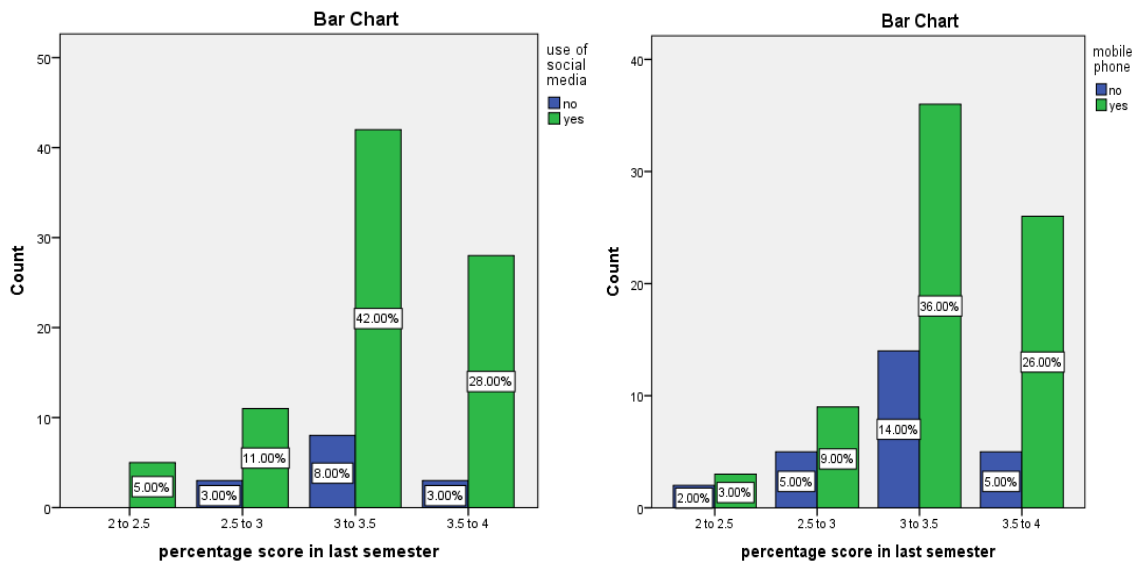


Figure 4: Charts of percentage score vs Social Media and Mobile Phones

Figure 4 explore the most important factors that has an impact on the student performance.

### 7. Conclusion

The result of the analysis can be summarized as follows.

1. The study program, marital status, area of interest, and class regularity are the significant determinants of the academic achievements of the student in socio-economic factors.
2. In teacher related factors, teaching methodology, effect of teaching methodology, and the class environment are the reasons which upgrades the student performance.
3. Those students got high grades whose parents are well-educated and who are also active in educational activities for their children.
4. Based on current data, social media and mobile phone use have no impact on academic performance of the students.

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