



ADDIS ABABA UNIVERSITY
COLLEGE OF EDUCATION AND BEHAVIOURAL STUDIES
SCHOOL OF PSYCHOLOGY

**CELL PHONE USE AND STUDENTS' ACHIEVEMENTS: THE CASE OF
CHOLE SECONDARY SCHOOL STUDENTS, ARSI ZONE OF OROMIA
REGION, ETHIOPIA**

By:

Sefiya Adem

June, 2018
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**This Thesis is submitted to the School of Psychology in Partial Fulfillment of
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Approval of the Board Examiners:

1. Advisor

Name _____ Signature _____ Date _____

2. Internal Examiner

Name _____ Signature _____ Date _____

3. External Examiner

Name _____ Signature _____ Date _____

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Acronyms

AAU	Addis Ababa University
AGS	Average Grade Score
GPA	Grade Average Point
KII	Key Informant Interview
SMS	Short Message Service
SPSS	Statistical Package for Social Science
US	United States

Abstract

The main purpose of the study was to assess the effect of cell phones on student academic performance. The study was conducted in Chole Secondary Schools of Arsi Zone in Oromia Region. Stratified random sampling method was used to select the respondents of the study. Among the total of 1502 students enrolled in grades 9 and 10 during 2017/18 academic year, 75% of them were imagined to have mobile phone (1127 students). To select the required sample size (301) from 1127 target Chole Secondary School students enrolled in 2017/18 academic year, simple random sampling technique was employed. The quantitative data was gathered by the help of questionnaire from students and was analyzed by descriptive statistics that consist of percentage, mean and inferential by Pearson chi square test. The qualitative data gathered from interview was analyzed using narrative methods. Survey findings show that the negative perceived effect of mobile phone on academic performance is concerned, thorough analysis of the survey data revealed that to the average 34.12% of the students acknowledged that their mobile phone affect negatively their academic performance as 23.64 % affected positively. In other words, chi-square statistics revealed that level of mobile utilization have statistically significant association with the average grade score of students at less than 0.05. This implies that excessive mobile utilizations have significantly negative impact on the academic performance of secondary school students let alone the other things remain constant. Finally, the researcher likes to recommend that the majority of sample students are under “weak” of students’ academic achievement and too small number of sample students (3%) was among “excellent” group of students’ academic achievement. To curve the situation, the responsible bodies had better to be in a better position of helping students so as to improve their academic performance.

CHAPTER ONE

1. INTRODUCTION

1.1. Back ground of the Study

Today, in the era of globalization, tremendous number of people all over the world use mobile phone mainly for communication. For instance, Twum (2012) confirmed that about seven billion mobile connection worldwide and unique mobile subscriptions over 3.5 billion and very popular among young people and are common in educational institutions (Rabiu, muhammed, Umarand Ahmed, 2016). In addition, the availability of different kinds of affordable and inexpensive mobile phones made it very easy for the adolescents to have access to different types of social media and pornographic sites where they access, download, exchange and watch pornographic films of different sexual orientations from all over the world (Taylor & Harper, 2003).

Mobile phone is used as the carrier of information dissemination and exchange belong to the scope of technology. Therefore, the Mobile phone media has two sides of the impact on the students possess dual nature. Mobile phone media breaks the constraints of time and space, providing a wealth of information resources to facilitate student learning exchanges. Also, if the mobile phone medias in the improper application by secondary school students, students learning styles may also lead to alienation, physical decline, moral personality dislocation, language learning weakening and so on. Mobile phone media double impact on the students, especially negative impact on the students (Cui, 2014).

Some studies argued that excessive use of mobile has an influence on students' academic performance. For example, Sundari, (2015) argued that widespread use of social networking, texting and chatting on mobile phones is consequence in lower grades and poor academic performance of students. While people of various ages find mobile phones convenient and useful, younger generations tend to appreciate them more and be more dependent on them. Moreover, other researchers have proven that some students have the habit of keeping their mobile phones on during classes and studies, even in the library, thereby distracting others (Sundari, 2015).

Today, we see people who use cell phone in all kinds of situations, from the most private situations such as in bed to public places such as in the streets, on the bus, in shops, restaurants, offices, at work as well as leisure, while attending classrooms and so on. Mobile phones can be a source of great disruption in workplaces as well as in classrooms. Now almost every mobile phone provides individuals with access to texting, games, social media and the internet. So, they have condensed the consideration of students in classes and can therefore be unfavorable to learning. Many teachers have a zero-tolerance policy during the class time, since they assume that their students are using them to text friends or playing games or update their various social media sites (Miah, Hossain,&Rahman`, 2017).

From long years' experience, most students in Ethiopia used cell-phone especially for listening music, seeing movies and using for other purpose like calling to their friends/relatives and texting. These practices are also common in rural area where little or no control over them. In addition, in the study site most students who came from the surrounding rural areas need cell phone because they live out of their family by renting house and they live without family control. This may influence students' academic performance as well. Therefore, the purpose of this study is to look in to whether cell phone use affect high school students' academic performance or not.

1.2. Statement of the Problem

In the past one-decade, mobile phone was not widespread among users as compared to the present time, especially among secondary school students (Twum, 2012).The same author also stated that in developing countries like Ethiopia, the mobile phone is the most accessible technology that most students possess. Recently, mobile phone which comes in different types/models each having specific tasks/functions is one of the basic essential devices possessed by an average school student.

Furthermore, Jairus, Christian, Ogwuche & Thomas, (2017)reported that most of the time students are accustomed to use their mobile phone in their accesses, home and even in other area instead of concentrating on their education. The possession and unwise use of cell phone may have an influence on students' academic achievement. Hence, the intent of this thesis is to explore whether mobile utilization has an impact on students' academic performance or not in *Chole* Secondary

School, *Chole Woreda* of *Arsi Zone*, *Oromia Region*, Ethiopia. In addition, the researcher has two basic reasons for conducting the current research in *Chole Secondary School* in *Arsi Zone* of *Oromia region*. Firstly, despite the issue is cross cutting, still now there seems to be not adequate research work has been conducted targeting high school students' use of cell phone and its effect on academic performance in Ethiopia. Secondly, as the best of the researcher's knowledge, there is no empirical study on the effect of mobile utilization on high school students' academic achievement in the study area.

1.3. Objectives of the Study

1.3.1. General Objective

The general objective of this study was to assess the effect of cell phones on student academic performance in *Chole Secondary Schools*.

1.3.2. Specific Objectives

The specific objectives are to:

1. assess secondary school students' level of mobile Phone utilization in *Chole Secondary School* interims of:
 - Average time spent in using cell phone.
 - The most common purpose for which the cell phones are being used.
 - Gender difference in the level of use of cell phones.
 - Parental control in the use of cell phone.
2. Find out the perceived effect of cell phone use on the academic performance of secondary school students in *Chole secondary school*.

1.4. Significant of the Study

This study is expected to reveal the impact of the use of mobile phones on student performance in secondary Schools. So, the study is expecting to fill the knowledge gaps whether cell phone use affect students achievement or not. It will also expose the students to the implications of spending

too much time on their mobile phones. The concerned bodies also used as a foot steps to intervene on the problem.

1.5. Scope of the Study

Although exploring the association between high school students' mobile use and their academic achievements may be quite a burning issue in all high school students in Ethiopia, this study is entirely focus on one government school in one zone of *Oromiya* region of Ethiopia, particularly in *Arsi Zone of CholeWoreda* in *Chole* Secondary School. In addition to cell phone use secondary school students are limited to parent's related factor, school; teachers, peer influence, individual difference and etc were really limitation of the study.

1.6. Limitation of the study

It was very difficult for the researcher to undertake the study absolutely without any problem or limitation. It is difficult to generalize to all Ethiopia high schools because the study done only in one high school. It is worth keeping in mind that the sample size of the study was only derived from those students who have mobile phone on which their exact number was not known (i.e based on school principals' judgment). It would have been better and more effective if we know the number of students who have and have not mobile phone.

The researcher also felt that investigating the perceived effect of mobile phone from self-reporting might not provide actual effect. Therefore, the instruments that were used to gather data in this respect were subjected to subjectivity and bias. Thus, the findings of this study might not give us wide and deep insights into the perceived effect of mobile phone. Although, it is difficult to controlling confounding variable. Therefore, these and other similar problems could affect the quality of the study which in turn might have led to inconclusive results.

1.7. Operational Definition of Terms

Academic Performance: The average of all subjects' score in the first semester of 2017/18 academic year.

High school Students: students enrolled in grade 9th and 10th of *Chole* Secondary School.

Effect: The perceived impact of mobile phone use on student's academic achievement

Mobile phone: The usage of wireless connection for any purpose anywhere and anytime.

1.8. Organization of the Thesis

The study is organized into five chapters. The first chapter is the introductory part of the study which contains background of the study, statement of the problem, objectives of the study, significance of the study, scope of the study, limitation of the study, operational definition of key terms and organization of the study. The second chapter devotes to the presentation of literature reviews of related research.

The third chapter deals with research methodology of the study which presents the research design, data sources, instruments and procedures of data collection, sampling strategy and sample size, data analysis and presentation, validity and reliability, ethical considerations. The fourth chapter is the analysis and discussion of data collected. The final chapter concludes the results obtained from the findings and suggests the necessary recommendations; and finally attached lists of references and annexes relevant for the study.

CHAPTER TWO

REVIEW OF RELATED LITERATURES

2.1 Global Overview of Mobile Phone Usage

Now days, particularly from 2000 and beyond, access to reasonable digital devices has rose significantly like cell phones, tablets and laptops became part of the academic life from elementary school to graduate courses. Moreover, at the global level, in every colleges and universities, cell phones and tablets are more pervasive and frequently used by student in almost in every day and everywhere is in the class or in their free time. In fact, cell phone usage is too common among students that they tend to take too lightly the number of times they access their phones Felisoni and Godoi (2012). Duncan, Hoestra and Wilcox (2012) claimed that, to average, students acknowledged that, an access rate of cell phone of three times per class while the actual observed rate is close to stunning twenty-one times.

In addition, currently, people who are living all over the world seen incredible changes, alteration and advancement in the area of communication. With the advent of mobile phone, people are now participated in sending and receiving information across continents without ups and dawn (Felisoni and Godoi, 2017). Effective use of cell- phones in varies primary economic activities (like agriculture, fishery and forestry), in secondary economic activities (like industries and construction) and in tertiary economic activities (like trade and transportation) have forced research to be done to participate and extend its use to formal education sector. Most effective pre-service instructors use cell phones as video recording devices or as digital camera capturing episodes of their lessons that illustrate the impact of their teaching on students' education (Ferry, 2008).

2.2 Mobile phone Utilization in Developing Countries

The most unexpected development in almost in all developing nations today is accessing mobile phone than having electricity or clean water. For instance, by2000 G.C about 4% of people who

are living in developing nations had access to cell phones. As mobile phone networks spread to cover all rural areas, we have the chance to affect the lives of people who need the help most, making big changes to how people handle money, work, learn and participate in government (Ferry, 2008).

In addition, a study done, in Tanzania by Kafyulilo (2014) and Gibbons *et al.* (2017) dictated that mobile phone use is both widespread within youths in Tanzania and there are both potential educational opportunities and dangers associated with them.

2.3 Mobile Phone Utilization Among Students

Duncan, Hoestra and Wilcox (2012) suggest that, on average, students report an access rate of three times per class while the actual observed rate is close to stunning twenty-one times. Recently, psychologists have warned that smart phone users are particularly in danger for turning into enthusiastic about their devices. Their research findings indicated that youths touch their cell phones more than 34 times per day.

People may check their phones out of habit or compulsion, but habitually checking may be how to avoid interacting with individuals. Some youngsters can expertise withdrawal symptoms usually associated with misuse, like depression, restlessness, insomnia, and anxiety, when they are not with their mobile phones. Youngsters who use their cell phones to text are more likely to sleep with their phones than cell-owning teens that don't text. Moreover, youths who are cell-phone are more likely to have a boy or girl friend that their counter parts (Pasha, 2006).

Not with standing cell-phones usage is an independent individual apparatus, it has made one of the most serious problems associating with the essential space is the creation of a everlasting addiction to use it, a reduction physical activity and total disregard to personal safety, avoiding major life activities in order to spend more time on the network, affecting sleeping hours, decreasing socialization, neglecting of family and friends, not wanting to spend a long time without cell phone are among the greatest significant symptoms of mobile addiction (Ameli, 2006).

2.4 Predictors to the Academic Performance of Students

Academic performance has become relevant in all levels of education, that is, from kindergarten (KG) to University. For instance, in kindergarten, primary and secondary school levels of education, students are given report cards to inform their parents on how they are doing. After high school this pattern also continues in different form. Of course several factors contributed to the academic performance of students. For example, Pasha(2006) and, Shala & Seif (2002) reported that economic, social, individual, family and educational factors are influence the academic achievements of students, but, unfortunately, it is not being paid attention as such. Here, dominant indispensable point is that there are several hidden factors which, indirectly, effect on the academic success or lack of success of individuals. Factors like the job and economic stats of parents, test anxiety, motivation and interest, individual talent and ability, etc. are effective on the academic achievement.

However, Most scholars are stated the significance of average academic score as a predictor of students achievement. They argued that in every circumstance students are judged as per their average grade score (AGS). For instance, to get scholar ship, to earn funds or financial aid, to promote to the next higher grade level, to pursue their education and to elite, the critical and fundamental base is students' average grade score or GPA (in colleges and universities). Of course, it is often a flawed system, but grading as a measurement has been used by some colleges and universities as early as the 1860s (Bluemle, 2002). Felton and Koper (2005) also reported that as the educational establishment requires inevitable strategies of evaluating students' academic achievement, the focus of the effort should be on grades since other forms of assessment are subject to the same limitations and political pressures that generate inflated grades. Other forms of assessment will be no less corrupt than grades and would be redundant if relatively meaningful grading standards were in effect.

2.5 The Effect of Mobile phone Utilization on Students' Academic Performance

Even though the use of technology, especially portable devices, may provide a set of applications that influence students' academic achievements, studies claimed that cell-phones are both primarily created for learning rather than for communication and entertainment. Therefore, when students use their mobile phones in school compounds, in the classroom, in the library and laboratory without any connection to their education, it is more likely that students may be unfocused during lectures or activities, as they always miscalculate their capability for the various activities (Ophur, Nass and Wagner, 2009), which eventually leads to academic deficit.

In this context, it is reasonable to question that either the advantages of cell phone usage are overcome by the harm of distraction and mis-use of time, leading to academic underperformance. Therefore, excessive use of cell-phones among students may result in the state of bad to worse in their academic performance than those who used their cell-phones in moderation or low level. In this regard, a journal article produced by Roghaye, Behnem, and Mohammed (2009) entitled on the relationship between use of cell-phones with academic achievement in female students in Iran using Pearson correlation coefficient displayed that there is a significant and poor negative relationship observed between cell-phone utilization rate and educational achievement of students.

Felisoni and Godoi (2017) conducted a research on cell phone usage and academic performance using experimental design among students in business school of São Paulo, Brazil and found that, under the assumption of *ceteris paribus*, the position of students in rank decreased by 6.3 points when students used their mobile phone about hundred minutes per day. This result is expected to be very high if students used their cell-phones while learning comparing to their leisure time. In tandem to this, it has been observed that students decreased in nineteen positions in the entrance examination ranking and a thorough test on all major academic subjects when they were ten minutes used their phone while learning.

The available literature displayed that there is a significant undesirable association between portable devices usage and academic performance. The more frequently students use their cellphones, resulted in declining their educational rank. This showed that mobile phone utilization contribute a lot for the loss of concentration in part of students. For instance, Felisoni and Godoi's (2017) experimental regression model, based on a sample of 43 students, demonstrated that expressive and statistically substantial undesirable association was observed among mobile phone users and cumulative grade points (GPA). On the contrary of the above findings, the results of the research by Hassanzadeh and colleagues (2010), in their research entitled on the relationship between the extreme use of technology and addiction to the internet and SMS and the educational and mental condition of students showed that there is no significant relationship between extreme use of SMS and academic achievement.

This might be attributed to the methodology, the sampling and study subjects of the research as well as they have entirely focused on traditional uses only like texting and calling. For instance, Jacobsen and Forste (2011) conducted a research on the effect of call and text messages among Canadian students. Their study showed that a negative relationship between the mobile usage and academic performance. However, their study were not included the effect of the different social medias, internet as well as plying gams in which their effect was expected to be more significant than texting and calling.

On the same (Hong, Chiu & Hong, 2012) line, found similar conclusions when analyzing texting and calling effects among Taiwanese female students. Likewise, Subramanian and Rajesh (2015) undertook a research on the impact of smart phone usage among college students in India. Their study conveyed in conclusion of there existed health hazards involved with smart phone, users should restrain from excessive usage and apply due precautions to get rid of negative effects on users' health.

Regarding the wellbeing grievances of students using the smart phone, most of the time students' constraints were found to be:

1) 79 percent of students faced severe head ache problem due to persistent usage, and 51 percent became anxious due to continuous mobile utilization, 47 percent of students loss their focus on

studying ,35 percent of them faced sleeping problem, 43 percent of them constraints neckline& limb pain, 54 percent had eye pain while using phone (Subramanian and Rajesh, 2015).

2) Chung (2017) from the University South korea have found among 916 subjects with smart phone usage, 8.3percent of subjects were diagnosed with dry eye disease. In addition, smart phone compulsion was distinguish as customary and obsessive collaborative as well as thoughtful mental constraints (Abbey et al., 2007). 3) Students were asked about the key utilization of their cell-phone when they log in to (personal, office, social network & all the three) were used as the answer options. The result shows 71% of students answered all the above. 4) According to the study of survey on use of the smart phone, the concept of “ use it or lose it “the principle in psychology, a question is designed feeling on missing the phone for a day, the maximum students answered communication is cut (65 percent) and lonely (15percent).

One recent study conducted by Thomee (2011) on University students in Colombia indicated that usage of cell-phone for receiving and sending text messages were found to be a statistically significant negative effect on accountability, communication and parental relationships within children and adolescent group of students. Moreover, he further explained that tension, sleeping constraints and signs of sadness were found to be strong association with students who are using their mobile use at regular basis. Withdrawal symptoms without cellular phone use” as a typical psychological reaction in adolescents to the removal of cell phone access (Yen et al., 2009). More recent work forwarded by Aamna (2018) on mobile phone addiction among youth and its disadvantage displayed that most youngsters use their cell phones in more frequent manner, leads to addicted with their cell-phone and wants to use in every time and anywhere. These behaviors might be resulted in series health constraints.

To the contrary of the above negative impacts of mobile phone, some researchers claimed that mobile phone has positive impact on students' academic performance. For example, Srivastava (2005) clearly explained the positive effect of mobile phone on learning in the following ways: cell-phone enabled students to collaborate student on sick leave or miss college for some reason, it assisted students to share their homework, assignments and projects, it enabled to access unclear meanings and concepts, it also enabled students to do online questions and received up to date information and so on. In tandem to this, Ezemenaka (2013) claimed that students especially at the

tertiary level can enhance and increase their knowledge through accessing the significant materials that are more related to their learning. However, still now, the probable effect of cell phone on education and their impression on the permanent learning chances is still unclear and is an evolving arena of study (Kukulska-Hulme, 2007). The above contrasting findings indicated that, the existing literatures aimed to understand the impacts of cell phone usage over academic performance of students are in consistent about their relationships.

Chapter Three

3. Research Methodology

3.1. Research Design

In this study, the researcher employed a cross-sectional study design in which survey questionnaire is at the center of the design. Survey involves collecting numerical data to answer the research objective through the use of structured questionnaires. Although mixed research method was applied.

3.2. Study Area

This study had conducted in *Oromiya* region, *Chole* district of *Arsi* zone. It is 222KM far from the capital city of Ethiopia, Addis Ababa and 126KM far from the capital of Oromiya region, *Adama* town. It is bordered in the South by *Guna* district, in the East *Gololcha* district, in the west *Guna* and *Sude* districts and in the North by *Sude* and *Amigna* districts. The communities live by agricultural activity. It has five secondary schools. Among these, *Chole* secondary school is where this research was be conducted.

Target population/ Study Subjects

The target population of the study consisted of all grades 9 and grade10 students who have mobile phone in *Chole* Secondary School.

3.3. Sample Size Determination

To determine the minimum number of high school students to be included in the study, two stages stratified sampling techniques was employed. At the first stage, at the bases of school principals judgment (vice director and main unit leader), students were stratified in to those who have mobile phone and not. Then, in doing so, according to their judgment, among the total 1502 students enrolled in grade 9 and 10 during 2017/18 academic year, 75% of them were supposed to have mobile phone (1127 students). At the second stage, to select the sample students, the standard statistical procedures and assumptions proposed by Mark Wood (1992) was used: The level of confidence of the study will be 95%, which gives $Z_{\alpha/2}$ have a value of 1.96, under normal

distribution, the margin of sampling error assumed to be 5%, the proportion of students affected by mobile used are assumed to be 50% because absence of previous study.

Since the study population is less than 10,000 (1127) it was adjusted using the finite population correction factor:

$$f_{pn} = \frac{n \cdot N}{n + (N - 1)} = \frac{384 \cdot 1127}{384 + (1127 - 1)} = 286.6 + 14.33 \text{ (5\% for non-response)}$$
$$= \underline{301}$$

N= total population size =1127, n= estimated sample size calculated first=384.

3.4. Sampling Procedure

Among five secondary schools found in *Chole* district, the researcher purposefully selected *Chole* Secondary School because *Chole* secondary school is found inside the town where more students are expected to have the mobile phones. To select the required sample size (301) from 1127 target *Chole* Secondary School students enrolled in 2017/18 academic year, simple random sampling technique by lottery method was employed.

3.5. Research Instruments

In this research the researcher intends to use structured survey questionnaire, semi-structured key informant interviews and documentations. These instruments believed to generate primary data from the respondents and help to address the objectives of the study.

Survey Questionnaires

A questionnaire was prepared and used to gather information from the participants of the study. The questionnaire was included the socio-demographic variables of students, average time in using mobile phone, main purpose of mobile phone, and parental control. It was used to get necessary information about the effect of mobile phone usage on students' academic achievements. The questionnaire was prepared first in English, and then had been translated in to local language *afan oromo*. Then, it had also translated back to English. Almost all of the questionnaires were closed ended questionnaires to express the issue raised quantitatively.

Key Informant Interviews (KII)

Conducting key informants interviews is also very important to dig out the effect of mobile phone on academic performance of students and to tackle the issues that are not answered by questionnaire. Semi-structured guidelines for KIIs had been prepared first in English and then, translated in local language, *afan oromo*. Finally, it had been translated back into English. A total of five key informants had been interviewed: one school vice director, guidance and counselor, unit leader, gender club coordinator, members of parent-teacher association and two home room teachers from each grade level. This is so because the researcher believed to get valuable information regarding the issue raised from such population.

3.6. Reliability and Validity of Instruments

Reliability and validity of the instrument deal with the quality of data and appropriateness of the methods used. Kayrooz and Trevitt (2006) indicated that reliability refers to the degree of consistency in results derived from repeated observations of the same phenomenon under the same circumstances. It is the extent to which any instrument produces the same results on repeated trials. Validity, on the other hand, stands for the degree to which the research measures what it supposed to measure.

Then, the reliability of the instrument, especially the internal consistency of this study was checked by Cronbach's alpha methods. On the other hand, the validity of the instruments checked by pilot test method. To do this, the researcher was randomly select 12 students while the researcher sitting nearby until no question is raised. Therefore, the validity of the instrument was assessed just like this.

3.7. Procedures of Data Collection

In the process of collecting the actual data, the following procedures were employed. Firstly, subject professional was judge the validity of the research tools. Secondly, to assess the accuracy of the tool have preliminary understanding of the problem, with tool and establish the reliability of the tool, pilot study had been conducted with 10 students. Based on the feedback obtained from the

pilot study, the necessary modification was made. Thirdly, before the actual data is collected, four male data collectors who had completed at least their secondary education was trained on the essence, purpose, method and significance of data collection for one day by the main researcher. Because female are busy in domestic works. Fourthly, data collectors were collected the required information from the study subjects with close supervision with the main researcher. Finally, the collected questionnaire was checked for completeness and accuracy.

3.8. Data Processing and Method of Data Analysis

Following the data collection in the field using various instruments, data entry and data cleaning processes of all questionnaires was carried out. Data collected from the survey had been entered in to the computer for analysis mainly using Statistical Package for Social Science (SPSS) version 23 and data collected from key informant interview was analyzed in narrative ways. Specifically, to address the objectives of this study, both descriptive (percentages and mean) and inferential statistics (Pearson chi square test) had been used. For instance, to address the first objective of the study (i.e to assess secondary school students' level of mobile phone utilization in terms of average time spent in using cell phone, the most common purpose for which the cell phone are being used, parental control in the use of cell phone, gender difference in the level of cell phones use) descriptive statistics (percentages and mean) and chi-square test applied accordingly.

The second objective of the study (i.e to find out the perceived positive and negative influence of cell phone use on academic performance of students in secondary school) can be analyzed using percentage. In addition, to look into the association between students' academic achievements (using GPA) and mobile use, chi-square test statistics was used.

3.9. Ethical Considerations

Before collecting the required data from the study subjects, informed consent should be confirmed. To do so, letter from AAU, school of psychology, college of education and behavioral studies was made communication with the school director possible and easy. Then, the basic intent of the study was clearly explained to the respondents. Privacy, confidentiality, freely response and voluntarism had been assured on the sides of respondents for addressing the whole questionnaires. The respondents' name and their behavior never been mentioned forever.

CHAPTER FOUR RESULTS AND DISCUSSION

4.1. Results of the Study

This section presents data analysis and interpretation of the findings of the study related to the effect of mobile phone use on the academic performance of secondary school students in *Chole* Secondary school, Arsi zone of *Oromiya* region.

These include the provision and analysis of data with respect to the average time spent in using cell phone, the most common purpose for which the cell phones are being used, parental control in the use of cell phone, and gender difference in the level of cell phones use.

4.1.1. Background Characteristics of Respondents

The survey revealed the following data related to of socioeconomic and demographic characteristics of respondents, and socio-economic characteristics of their parents.

Table 1. Percentage Distributions of Respondents by Selected Background Characteristics.

Characteristics	Male (No. 130)		Female (No. 171)		Total (No. 301)	
	Number	Percent	Number	Percent	Number	Percent
Age						
14-16	27	9	59	19.6	86	28.6
17-19	99	32.9	110	36.5	209	69.4
>20	4	1.3	2	0.7	6	2.0
Place of living						
Rural (out of town)	59	19.6	77	25.6	136	45.2
Town	71	23.6	94	31.2	165	54.8
Grade Level						
9	55	18.3	95	31.6	150	49.8
10	75	25	76	25.5	151	50.2
Did you get money per month?						
Yes	81	26.9	107	35.5	188	62.5
No	49	16.3	64	21.2	113	37.5
Living arrangements						
Alone	27	9	26	8.6	53	17.6
Parents	84	27.9	130	43.2	214	71.1
Friends	19	6.3	18	8.4	34	11.3

Source: Survey Data, 2018

In this study, the sex distribution of respondents showed that 43.2 % and 56.8% of respondents were males and females, respectively. Out of the total respondents who have mobile phone, 136 respondents (45.2 percent) have urban background while 165 respondents (54.8percent) have rural background. The survey data showed that large proportions of respondents were in the age group of 17-19 years (69.4 percent). Significant number of respondents (28.6 percent) were in the age group 14-16 years and only 6 students (2%) acknowledged that their age was greater than 24 years. In terms of religious denominations, the majority of the respondents were Orthodox (80.1 percent) followed by Muslims (16.9%).

Out of 301 respondents who have mobile phone, 150(49.8 percent) and 151 respondents (50.2 percent) were grade 9 and 10 students, respectively. Respondents were also asked whether they got money per month or not. Consequently, 188 students (62.5 percent) reported that they got money from their relatives or anybody else whereas 113 students (37.5 percent) of students reported that they did not get any money per month permanently. With regard to living arrangements, 27

students (9 percent) were living alone in rented houses. Two hundred fourteen students (71.1 percent) and 34students (11.3 percent) were living with parents and friends, respectively. This implies that as members of the target population were high school students, most of them are living with their parents, mostly with their mother and father.

4.1.2. Socio-economic Characteristics of Respondents' Parents

The socio-economic status of parents has tremendous importance on the overall success as well as entire life of students. Cognizant of this fact, in this sub-section, an attempt was made to assess the socio-economic status of sample students.

Table 2.Percentage Distributions of Respondents by Socio-economic Characteristics of Parents.

Characteristics	Male (No. 130)		Female (No. 171)		Total (No. 301)	
	Number	Percent	Number	Percent	Number	Percent
Parents marital status						
Currently married	104	34.6	132	45.5	241	80.1
Divorced	8	2.7	19	6.3	27	9.0
Separated	12	4	8	2.7	20	6.7
Widowed	6	2	7	2.3	13	4.3
Father occupation						
Farmer	97	32.2	134	40.5	231	76.7
Merchant	15	5	19	6.3	34	11.3
Government employee	13	4.3	5	1.7	18	6.0
Pensioners	1	0.3	9	3	10	3.3
Day laborer	1	0.3	1	0.3	2	0.6
Others	2	0.7	0	0	2	0.7
Mother occupation						
house wife	104	34.6	127	40.2	131	76.8
Farmer	17	5.6	27	9	44	14.6
Merchant	6	2	6	2	12	4.0
Government employee	3	1	11	3.7	14	4.7
Father education						
Illiterate	18	6	23	7.6	41	13.6
Read and write	63	20.9	104	34.6	167	55.5
Primary	11	3.7	14	4.7	25	8.3
Secondary	31	10.3	21	7	52	17.3
Above Secondary	7	2.3	9	3	16	5.3
Mother education						
Illiterate	32	10.6	38	12.6	70	23.2
Read and write	62	20.6	82	27.2	144	47.8
Primary	27	7.6	22	7.4	45	15.0
Secondary	13	4.3	25	8.3	38	12.6
Above Secondary	0	0	4	1.3	4	1.3

Source: Survey Data, 2018

The findings of this study depicted that from the total respondents who have mobile phone, 80.1 percent of them (241 students), 9 percent (27 students), 6.7 percent (20 students) and 4.3 percent (13 students) were reported that they parents had currently married, divorced, separated

and widowed/widower parents, respectively. This indicates that the parents of the majority of students are currently married parents.

Out of the total respondents, 231 (76.7 percent) and 34 (11.3 percent) respondents reported that their fathers' occupation were farmers and merchants, respectively 18 students (6.0%), 10 students (3.3 percent) and 4 students (1.3 percent) also acknowledged that their father occupation were government employees, private employees and pensioner, respectively. This clearly showed that, more than three-fourth of my respondents' father were farmers whose livelihood was entirely dependent on agriculture.

Data on the educational status of respondents' father indicated that, among the sample respondents who have mobile phone, 13.6 percent (41 students), 55.5 percent (167 students), 8.3 percent (25 students), 17.3 percent (52 students), and 5.3 percent (16 students) of respondents reported that their father was illiterate, able to read and write, primary, secondary and above secondary educational level, respectively. In other words, 86.4 % of respondents who have mobile phone had literate father. Likewise, educational status of respondents' mother indicated that, 23.2 percent (70 students), 47.8 percent (144 students), 15 percent (45 students), 12.6 percent (38 students), and 1.3 percent (4 students) of respondents reported that their mother were illiterate, able to read and write, have primary, secondary and above secondary educational level, respectively. In other words, 76.8 % of respondents who have mobile phone had literate mother though lower than their father educational status.

4.1.3. Respondents' Mobile Phone Usage Analysis

The researcher tried her best to assess the general mobile utilization as well as how they access it. To do these; respondents who have mobile phone were asked to state their mobile utilization and accessibility.

As it can be seen in Table 3. More than two-third of students (66.8%) got the mobile phone from parents. Close to one-third (28.9%) and only 4.3% of the respondents access their mobile phone by themselves and friends, respectively. Similarly, 80.1 % and 19.9% of the respondents reported that they know and they did not know the various function of mobile phone, respectively.

Regarding the type of mobile phone respondents had, the study revealed that more than half of the respondents (59.5 %) reported that they had smart phone mobile that has different applications and functions. On the other hand, 40.5% of the respondents reported that they had basic or ordinary type mobile phone having limited application and function. To know whether students' close friends had a mobile phone or, respondents were asked to state the status of their close friends' mobile phone accessibility. Consequently, the findings showed that 83.1 % of the sample students acknowledged that their close friends had mobile phone. On the contrary, only 16.9% of the respondents reported that their close friends did not have mobile phone.

Table 3. Respondents' Mobile Accessibility and Utilization

Description	Categories	Percent	Number
How do you get mobile phone?	By my Own	87	28.9
	From Parents	201	66.8
	From Friends	13	4.3
Do you close friends have mobile phone?	Yes	250	83.1
	No	51	16.9
Do you know the different use of mobile phone?	Yes	241	80.1
	No	60	19.9
The types of Mobile phone you have?	Ordinary	122	40.5
	Smart phone	179	59.5

Source: Survey Data, 2018

4.1.4. Students' Academic Achievement

Most scholars stated the significance of average academic score as a predictor of student's achievement. They argued that in every circumstance students are judged as per their average grade score (AGS). For instance, to get scholar ship, to earn funds or financial aid, to promote to the next higher-grade level, to pursue their education and to elite, the critical and fundamental base is students' average grade score or GPA (in colleges and universities).

Acquainted with the above facts, in this sub-section, to get pertinent and authentic data, the researcher cross checked the average grade score of students with the registrar office of the school and the necessarily correction have been made.

Table 4. Percentage Distributions of Respondents by their Academic Achievements

Characteristics	Male (No. 130)		Female (No. 171)		Total (No. 301)	
	Number	Percent	Number	Percent	Number	Percent
Average Grade Score						
Weak(50-59)	19	46.3	48	15.9	67	32.2
Adequate(60-70)	29	9.6	44	14.6	73	24.3
Good (71-80)	26	8.6	42	14	68	22.6
Very good(81-90)	20	6.6	34	11.3	54	17.9
Excellent (91-100)	6	2	3	1	9	3
Total	100	43.2	171	56.8	271	100

Source: Survey Data, 2018

Table 4 depicted that close to the majority (32.2%) of the respondents had weak average grade score classification or their average grade score was less than 60. Nearly one-fourth (24.3%), 22.6%, and 17.9% of the sampled respondents were found to be under adequate, good and very good academic achievements, respectively. More surprisingly, only 3% of the sample students were under excellent academic performance. This clearly indicated that the majority of the respondents' had an average grade score of less than 60 which is too critical and should be point of discussion for the stakeholder. To the opposite few students (6 male and 3 female students) academic performance were excellent.

4.1.5. Purpose of Mobile Utilization

Cell phone, as it is one of the tools of information and communication all over the world which, for many students, has become a vital utensil having multi-purposes. Hence, students in different grade level used their cell-phone for various purposes in line with their intent, motivation and habit. In this sub-section, the different purposes of cellphone used by sample students are discussed in brief and concise manner. To know the reality and confirm the above premises, the sample respondents were asked to rank order the main purpose of using their cellphones. Consequently, the analysis of the survey data showed that 94% of respondents (283responses) were reported that “calling” is their number one purpose of mobile use. In addition, 69.7%(210responses), 60%(180responses), 55%(165responses) and 41%(123responses) of

respondents acknowledged that “ *to see movies*”, *to listen audio*, *to send SMS* and *to play game* were found to be their 2nd, 3rd, 4th and 5th purpose of their cell-phone use, respectively.

The sample respondents were also asked about the average time they spend in using mobile phone. Consequently, the sample respondents spent 40.8minuts for face book, 34.5 minutes for audio and 29 minutes for games. Over all, the survey data showed that to the average 20.04minute per day were spend by the sample respondents.

In tandem to the above survey findings, interviews with the school principal (vice director of the school) and homeroom teachers assured that students use their mobile phone for multitask like calling, login face book, text messages, games, audio and movies.

Table 5. Respondents’ purpose of Mobile Use and Average Time Spend

Mobile use type	Number	Percent	Rank	Average time spent per day in minute
Call	283	94	1	10.4
Facebook	79	26	8	40.8
Whatsup	81	26.9	7	17
Imo	72	23.4	12	21
Twitter	79	26	8	14.9
Instagram	64	21	11	18.5
Viber	77	25.5	10	14.6
Game	123	41	5	29
e-mail	95	32	6	11.5
SMS	165	55	4	12.3
Audio	180	60	3	34.5
Movies	210	69.7	2	16
Average				20.04

Source: Survey Data, 2018

4.1.6. Cross Tabulation of Respondents’ Mobile Utilization by Gender

As can be seen in Table 6, though Chi-square test showed that statistically significant association was not observed between mobile calling and gender, more female students are involved in calling than male students. The frequency distribution of mobile use for calling across male and female students revealed that, among 271 sample respondents who used their mobile phone for calling, about 115 (42.4%) and 158 (57.6%) of them were male and female students, respectively

However, information from the key informants (school vice director and parent-teacher association) confirmed that more boys have mobile phone than girls because boys even can buy mobile phone than girls.

Table 6. Cross Tabulation of Mobile utilization by Gender

Mobile use type	Response	Male (130)		Female (171)		χ^2 Value	P-value
		Number	Percent	Number	Percent		
Calling	Yes	115	42.4	156	57.6	0.6	0.273
	No	15	50	15	50		
Facebook	Yes	39	49.4	40	50.6	1.66	0.12
	No	91	41	131	59		
Whats up	Yes	33	40.7	48	59.3	0.271	0.35
	No	97	44.1	123	55.9		
Imo	Yes	31	42.5	42	57.5	0.02	0.498
	No	99	43.4	129	56.6		
Twitter	Yes	37	46.8	42	53.2	0.58	0.264
	No	93	41.9	129	58.1		
Instagram	Yes	30	42.9	40	57.1	0.04	0.5
	No	100	43.3	131	56.7		
Viber	Yes	28	39.4	43	60.6	0.53	0.274
	No	102	44.3	128	55.7		
Game	Yes	52	42.3	71	57.7	0.07	0.442
	No	78	43.8	100	56.2		
e-mail	Yes	42	46.7	48	55.3	0.63	0.252
	No	88	41.7	123	58.3		
SMS	Yes	89	53.9	76	46.1	17.2	0.000
	No	41	30.1	95	69.3		
Audio	Yes	95	52.8	85	47.2	16.78	0.000
	No	35	28.9	86	71.2		
Movies	Yes	100	47.6	110	52.4	5.55	0.012
	No	30	33	61	67		

Source: Own survey, 2018

As shown in Table 6, mobile phone use for Facebook has no statistically significant association with gender. However, the table depicted that among the sample students who used their mobile phone for Facebook during the survey period, 49.4% and 50.6% of them were male and female students, respectively.

The findings of the study also showed that sample respondents differ in their use of mobile phone for SMS by gender. Chi-square test revealed that the relationship between SMS use and gender of students was statistically significant at 0.00 level of significance ($\chi^2=17.2$, $p=0.000$). The analysis depicted that among the sample students who used their mobile phone for SMS text during the survey period, 53.9% and 46.1% of them were male and female students, respectively. This implies that obviously more male students used their mobile for SMS than their female counter parts.

Regarding the use of mobile phone for audio visual purpose, respondents were asked about their usage of their mobile phone for listening audio. As can be seen in Table 6, Chi-square test confirmed that the relationship between audio use of mobile phone and gender of students was statistically significant at 0.00 level of significance ($\chi^2=16.78.2$, $p=0.000$). The thorough investigation of analysis showed that among the sample students who used their mobile phone for listening any audio during the survey period, 52.8% and 47.2% of them were male and female students, respectively. This implies that noticeably more male students were listening audio through ear phone than their female counter parts.

The study population also spent more time by watching and listening movies because of interesting and admirable features than audio. Hence, chi-square test statistics revealed that the relationship between watching movies by mobile phone and gender of students was statistically significant at 0.05 level of significance ($\chi^2=5.56$, $p=0.05$). The findings of the study also showed that among the sample students who used their mobile phone for watching movies during the survey period, 47.6% and 52.4% of them were male and female students, respectively.

4.1.7. Parental control over the use of Students' Mobile phone

With regard to parental control over the use of mobile phone, students were asked about how their parents were look forward to.

Table 7. Parents' Controlling Mechanisms of Excessive Mobile Use

No.	Controlling Mechanisms of Excessive Mobile use	Number	Percent	Rank
1	Limiting mobile calling	158	52.4	1
2	Prohibiting Facebook	86	28.6	4
3	Prohibiting Whatsup	71	23.6	10
4	Prohibiting Imo	58	19.3	12
5	Limiting twitter	73	24.2	8
6	Prohibiting Instagram	54	18	7
7	Prohibiting Viber	81	27	5
8	Prohibiting games	72	24	6
9	Limiting e-mails	54	18	8
10	Limiting SMS	67	22.3	11
11	Prohibiting audio	96	32	2
12	Prohibiting movies	95	31.6	3
	Total response	965		

Source: Own survey, 2018

The study yielded that parents have different mechanisms of controlling on the use of mobile phone by their children or direct their children how and when they use their mobile phone. To this end, Table 7 displayed that among the total responses of parents' controlling mechanisms of excessive mobile use; limiting call is number one mechanism by which parents control their children. Moreover, the analysis of this study shows that prohibiting audio, movies, Facebook, Viber and game were found to be 2nd, 3rd, 4th, 5th and 6th mechanisms of controlling excessive use of mobile by school children. This might be because spending more time in mobile calling, listening audio, seeing movies, communicate through Facebook, Viber connection and playing games may result in addiction and less focus on education.

4.1.8. Perceived Effect of Mobile Phone on Students' Academic Achievement

It is obvious that mobile phone has its own positive and negative effect on the users, yet it is possible to claim that the benefits outweigh the shortcomings if we use appropriately. Hence, in this subsection results related to the perceived effect of mobile phone use on students' academic performance are presented.

The researcher of this thesis tried to point out the possible perceived effect of mobile use on academic performance of student by classifying it in to negative and positive effects.

4.1.8.1. Perceived Negative Effect of Mobile Use

As long as the negative perceived effect of mobile phone on academic performance is concerned, thorough analysis of the survey data revealed that to the average 34.12% of the students acknowledged that their mobile phone affect negatively their academic performance.

Table 8. Negative perceived effect of Mobile Phone

	Perceived negative effect indicators	Number	%
1	I do not want to have my mobile phone while studying	101	33.55
2	I usually get motivated to respond to calls while studying	80	26.57
3	I often tend to write texts, play games and enjoy with social media while studying	72	23.92
4	I may not get focused while studying if my phone is close to me.	111	36.87
5	I feel that unnecessarily spend my time in using mobile phone during class work & homework	131	43.52
6	I usually lack concentration on studying after receiving calls or text messages while studying	119	39.53
7	I feel that possessing mobile phone has somehow affected my academic performance.	105	34.88
	Average		34.12

Source: Own Survey

Regarding the negative effect of mobile phone coupled with the school policy, one of the key informants mentioned that by considering and anticipating the negative effect of mobile phone use on academic in the school compound, class room, library and laboratory, the school policy strictly forbidden for bringing as well as using mobile phone in the school. Those students who break the school policy would be penalized through the collection of their mobile phones which would remain in the vice director office for about 3 months. After that their parents will be called and their son's/daughter's mobile phone will be given under series warning and signature.

4.1.8.2.Perceived Positive contribution Effect of Mobile Use

Table 9.Positive perceived effect of Mobile Phone

	Perceived positive effect indicators	Number	%
1	I often do not get distracted by phone calls while studying.	73	24.25
2	often use my mobile phone to get support from my friends to clear difficulties and ambiguities while studying	76	25.24
3	use dictionary/ thesaurus/ to get the meaning of words using my mobile phone	87	28.90
4	Often use calculator in my mobile phone to make even simple calculation.	73	24.25
5	I usually use mobile phone to download important texts or documents for learning purpose	64	21.26
6	My academic performance has increased due to the use of mobile technology	54	17.94
	Average	301	23.64

As long as the positive perceived effect of mobile phone on academic performance is concerned, in-depth analysis of the survey data shown that to the average 23.64% of the students acknowledged that their mobile phone affect positively their academic performance.

In addition to the above survey findings, discussion with school vice director, as a key informant, has been presented as follows:

“Before this academic year (2017/18) bringing and using mobile phone were not forbidden. But, by the end of last year academic period, we thoroughly discussed with teacher- parent association, student representatives, and district educational experts about the advantages and dis advantages of bringing mobile phone to school compound and used in the class, in the library and laboratory. Consequently, we designed and implemented sschool policy that prohibits bringing mobile phone in school compound as well as using in the class, library and laboratory. Those students who violated the rule and regulation of school would be punished by asking them to put their mobile phone under the control of main school principal for 3 months. The policy has been implemented since this year”.

Association between Mobile Phone Utilization and Students’ Academic Achievement

In this subsection an attempt was made to investigate the relationship between use of cell phone and academic achievements of high school students using person chi-square test. For the sake of simplicity, first academic achievement of students is grouped in two five categories as stated earlier. Second the average time students ‘use their cell mobile was calculated using summation and classified as low (those who used their mobile phone less than an hour per day), medium those who used their mobile phone 1-2 hour per day), high(those who used their mobile phone 2-3 hour per day), and very high those who used their mobile phone more than hours per day).

Table 10. Cross Tabulation of levels of mobile utilization and Students’ Academic Achievement

Average Grade Score		Levels of Mobile Utilization								Chi-square	P-value
		Low		Medium		High		Very high			
	No.	%	No.	%	No.	%	No.	%			
	Weak	40	35.1	22	22.7	26	42.6	9	31	27.7	0.012
	Acceptable	26	22.8	23	23.7	12	19.7	12	41.4		
	Good	17	14.9	32	33	13	21.3	6	20.7		
	Very good	27	23.7	15	15.5	10	16.4	2	6.9		
	Excellent	4	3.5	5	5.2	0	0	0	0		
	Total	114	100	97	100	61	100	29	100		

Source: Own Survey, 2018

The findings of the study indicated that level of utilization of mobile phone per day has a significant effect on the academic achievement of the study subjects in the study site. In other

words, Chi-square statistics revealed that level of mobile utilization has statistically significant association with the average grade score of students ($\chi^2=27.7$; $p<0.05$).As shown in Table10, Chi-square test revealed that, among sample respondents who used their mobile phone more than 3 hour per day (i.e. under very high utilization group), 31%, 41.4%, 20.7% and 6.9% of them were found to be under weak, acceptable, good and very good academic achievement classification, respectively. More interestingly, no one of mobile users who used his/her mobile more than 3 hour per day was under excellent academic performance.

The analysis of cross-tabulation of mobile utilization and students' academic performance (i.e. average grade score in this study) also showed that from the respondents who used their mobile phone from 2-3hour per day (i.e. under high utilization group), the majority (42.6%), 19.7%, 21.3% and 16% of them were found to be under weak, acceptable, good and very good academic achievement classification, respectively. Like very high mobile utilization group, , no one of mobile users who used his/her mobile phone 2 to 3 hour per day was found to be under very good academic performance.

Table 10 depicted that from the respondents who used their mobile phone from 1-2hour per day (i.e under medium utilization group), 22.7%, 23.7%, 33%, 13.5% and 5% of them were found to be under weak, acceptable, good, very good and excellent academic achievement classification, respectively. Similarly, among the respondents who used their mobile phone from less than an hour per day (i.e. under low utilization group), 35.5%, 22.8%, 14.9%, 23.7% and 3.5% of them were found to be under weak, acceptable, good, very good and excellent academic achievement classification, respectively.

Thorough analysis of cross-tabulation of mobile utilization and students' academic performance (i.e. average grade score in this study) clearly disclosed that low and medium level of mobile user respondents' had better academic achievement than their counter parts (i.e. high and very high mobile utilization).

In tandem to the above survey findings, almost all of the key informants (vice director, unit leader, representative of parent-teacher association and home room teacher) clearly explained the negative effect of mobile phone on the academic performance of students because most of the students did not use their mobile phone for academic purpose rather they spend more time in playing games, listening audio, watching movies, sending and receiving text messages, missed calling and etc. The vice director and representative of parent-teacher association further added that the above mentioned reasons forced us to design and implement new school policy towards bringing mobile phone and used.

4.2. Discussions

In this chapter an effort was made to discuss the main findings of the study related to the previous research findings in brief and concise manner. The overall interpretations of the major findings of the study and the possible reasons why the existing findings are so also treated in this chapter.

Average time spent in using cell phone

This study found that the average time spend by sample respondents were 20.04minuts for face book, 34.5 minutes for audio and 29 minutes for games. Over all, the survey data showed that to the average 20.04 minute per day were spend by the sample respondents. This might be because as my sample respondents were young students in which they spend most of their time in using their phone for chatting in Facebook, playing games and listening audio. Additionally, the findings of Felisoni&Godoi, (2017) conducted a research on cell phone usage and academic performance using experimental design among students in business school of São Paulo, Brazil and found that, under the assumption of citrus paribus, the position of students in rank decreased by 6.3 points when students used their mobile phone about 100 per day and every additional 10 minutes spent (on average per day) using a cellphone device. Furthermore, another finding was reported by Jimmy (2013), students were spending much time dealing with phones than with studies and learning concentration is shifted away from studies.

The most common purpose for which the cell phone are being used

The finding of this study revealed that 94% of respondents (283responses) were reported that “*calling*” is their number one purpose of mobile use. In addition, 69.7%(210responses), 60%(180responses), 55%(165responses) and 41%(123responses) of respondents acknowledged that “ to see movies”, to listen audio, to send SMS and to play game were found to be their 2nd , 3rd ,4th and 5th purpose of their cell-phone use, respectively. This might be because to the reality most people used their mobile phone for calling and as the target population were young students in which most of them are listing audio, watching movies and playing games as an entertainment. A similar finding was reported by (Nadia&Lamia, 2017) in Egypt the most common purpose of

using mobile phone among high school children is playing game, listening to music calling, chat, watching video clips and browse internet.

Gender difference

The findings of the study revealed that sending and receiving SMS ($\chi^2=17.2$, $p<0.000$) and listening audio ($\chi^2=16.78.2$, $p<0.000$) were found to be statistically significant association with gender of respondents in favor of male students however, female students were in favor of watching movies ($\chi^2=5.56$, $p<0.05$) than their male counter parts. This could be because male are more accustomed to listening radio to hear news, sports and music, and they send text messages to their relatives and friends for exchanging information. On the other hand, female students are more engaging in watching dramas, puzzles and music through their phone. These findings were consistent with previous researchers work. For instance, the results of the research by Hassanzadeh and his colleagues (2010), in their research on the relationship between the extreme use of technology and addiction to the Internet and SMS showed that the rate of extreme use of SMS in females is more than boys; Khan *et al.* (2014) in their research entitled on “the impact of mobile phones on the performance of university students” indicated that female students use mobile phone more than male students, and the parents of female students feel easy with mobile phone to contact and control over their daughters

Parental control in the use of cell phone

The study found that limiting call is number one mechanism by which parents control their children. Moreover, the analysis of this study shows that prohibiting audio, movies, Facebook, Viber and game were found to be 2nd, 3rd, 4th, 5th and 6th mechanisms of controlling excessive use of mobile by school children.

Interviews with key informants indicated that both parents tend to control mobile use of their sons and daughters and instruct them when, how and why they use mobile, even for whom to call and from whom they respond calls. However, those students who lived alone in renting house and with their friends, parental control over the use of mobile phone was less likely.

This might be because spending more time in mobile calling ,listening audio, seeing movies, communicate through Facebook, Viber connection and playing games may result in addiction and less focus on education. Regarding parental controlling over students there is no adequate research.

Perceived effect of using cell phone

As long as the negative perceived effect of mobile phone on academic performance is concerned, thorough analysis of the survey data revealed that to the average 34.12% of the students acknowledged that their mobile phone affect negatively their academic performance. This might because of an inappropriate use of mobile phone use.

This implies that excessive mobile utilizations have significantly negative impact on the academic performance of secondary school students let alone the other things remain constant.

This might because of inappropriate use mobile phone. As similar finding was reported there is a significant and poor negative relationship between cell- phone use and academic achievement of students by Roghayeet al.(2014)on their study on the relationship between use of cell-phone with academic achievement in female students. Jackson et al. (2014) also opined that mobile phones' usage is negatively impacting students' academic performance.

The other finding by Jairus and his colleagues (2017) reveals that mobile phone technology has the significant influence on academic performance among secondary school students with the different parental background in Oju local government area in Nigeria.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

In this chapter, based on the objective of the study, a conclusion of the research findings that has been discussed and analyzed in detail in the previous chapters is briefly presented. In addition, general conclusions that are highly related with the research objectives are presented as well. Then, based on the major findings and conclusions of the study, possible recommendations are forwarded.

5.1. Conclusions

The main objective of this thesis was to assess the effect of mobile phone use on secondary school students' academic performance in *Chole* Secondary Schools, *Arsi* zone of *Oromia* region, Ethiopia. To achieve this objective, survey research design and stratified random sampling techniques were adopted.

The analysis of the study revealed that large proportions of respondents were in the age group of 17-19 years (69.4 percent). And 43.2 % and 56.8% of respondents were male and female students, respectively. Out of the total respondents who have mobile phone, 136 respondents (45.2 percent) had town background and 165 respondents (54.8percent) had rural or out of town background. In terms of religious denominations and grade level, the majority of the respondents were Orthodox (80.1 percent) followed by Muslims (16.9percent). And, out of 304 respondents who have mobile phone in the study area, 136 respondents (49.8 percent) and 165 respondents (50.2 percent) were grade 9 and 10 students, respectively.

The analysis of the socio-economic features of respondents' parent showed that from the total respondents who have mobile phone, 80.1 percent of the them (241 students), 9 percent (27 students), 6.7 percent (20students) and 4.3 percent (13students) were reported that they had currently married, divorced, separated and widowed/widower parents, respectively. Likewise, out of the total 301respondents who had mobile phone, 231 (76.7 percent) and 34 (11.3 percent)

respondents reported that their fathers' occupation were farmers and merchants, respectively. Significant number of respondents who have mobile phone (18 students), 3.3 percent (10 students) and 1.3 percent (4 students) also acknowledged that their father occupation were government employees, private employees and pensioner, respectively.

Regarding the educational status of respondents' father and mother, among the sample respondents' who had mobile phone, 55.5 percent (167 students) of respondents' father and 47.8 percent (144 students) of respondents' mother abled to read and write.

The result of the study found that slightly more than two-third of students (66.8%) accesses the mobile phone through parents. Close to one-third (28.9%) and only 4.3% of the respondents access their mobile by themselves and friends, respectively. Similarly, 80.1 % and 19.9% of the respondents reported that they know and they did not know the various function of mobile phone, respectively and 83.1 % of the sample students acknowledged that their close friends had mobile phone.

The study found that close to three-fourth (74.1%) of the respondents had an average grade score of 50-75. Only 25.2% and 0.6 % of the sampled respondents achieved grade score of 75 and above, and less than 50, respectively. This clearly indicated that the majority of the respondents' had an average grade score between 50-75 which is somewhat satisfactory though inadequate to become excellent achiever. The study also revealed that 94% of respondents (283 responses) were reported that "*calling*" is their number one purpose of mobile use. In addition, 69.7% (210 responses), 60% (180 responses), 55% (165 responses) and 41% (123 responses) of respondents acknowledged that "*to see movies*", "*to listen audio*", "*to send SMS*" and "*to play game*" were found to be their 2nd, 3rd, 4th and 5th purpose of their cell-phone use, respectively.

The analysis depicted that every individuals or students spend to the average about 20.04 minutes per day in using mobile phone for various duties. The result of chi-square test confirmed that sending and receiving SMS ($\chi^2=17.2$, $p<0.000$) and listening audio ($\chi^2=16.78.2$, $p<0.000$) were found to be statistically significant association with gender of respondents in favor of male students however, female students were in favor of watching movies ($\chi^2=5.56$, $p<0.05$) than their male counter parts.

The study found that relatively the majority of sample students (32.5%) were found to be under “weak” of students’ academic achievement and too small number of sample students (3%) was among “excellent” group of students’ academic achievement. The researcher of this thesis concluded that excessive use of mobile phone in any aspect by secondary school students leads to lack of concentration on studying and disturbed by calling while studying. The study confirmed that limiting mobile calling, prohibiting audio, movies, face book, viber and game were found to be 1st, 2nd, 3rd, 4th, 5th and 6th in rank order mechanisms of parents’ controlling mechanisms of excessive use of mobile by school children.

The findings of this study using chi-square test statistics revealed that level of mobile utilization have statistically significant association with the average grade score of students ($\chi^2=27.7$; $p<0.05$). The study found that no one of mobile user students who used his/her mobile more than 3 hour per day was under excellent academic performance. In other words, let alone the other things remain constant, cross-tabulation of mobile utilization and students’ academic performance (i.e average grade score in this study) clearly disclosed that low and medium level of mobile user respondents’ had better academic achievement than their counter parts (i.e high and very high mobile utilization). This implies that excessive mobile utilizations have significantly negative impact on the academic performance of secondary school students let alone the other things remain constant.

5.2. Recommendation

Based on the findings of the study and the conclusions derived, the following suggestions are forwarded:-

1. Since slightly more than two-third of students (66.8%) accessed the mobile phone by their parents, parental and teachers control had better be comprehensively, systematically and persistently applied on the types of phone students had, how and for what purpose they used their mobile phone.
2. The majority of sample respondents (83.1 %) acknowledged that their close friends had mobile phone. So, in the view of an inevitability of peer influences series and persistent advice had better be given to the students by the stakeholders.
3. “*Calling*”, “*seeing movies*”, “*listening audio*”, “*sending and receiving of SMS*” and “*playing game*” were students 1st, 2nd, 3rd, 4th and 5th purpose of their cell-phone use, respectively. To make these ranked purposes of mobile use in the appropriate scheme, parental as well as their big brothers and sisters should be in responsible manner by giving awareness and advice of shaping their children and little brothers and sisters, respectively.
4. The study found that as every individuals or every sample students spend to the average about 20.04 minutes per day in using mobile phone for various duties, students’ had better be in a great commitment of adjusting their precious time with using their mobile phone. Even the cost of using mobile phone for various purposes should be under series consideration as most of the students means of income are parents.
5. Sending and receiving SMS, and listening audio were found to be more among male students than female students, the cost incurred and time spend, and health problem of text message and health problem of listening audio should be clearly explained to the students by the nearby relatives as well as the health professionals. In the same way, female students were watching movies more than their male counter parts, excessive watching of movies might lead to eye vision and ear problem. Hence, the concerned bodies are in a position to give persistent advice on the issue.

6. Limiting mobile calling, prohibiting audio, movies, face book, viber and game were found to be 1st, 2nd, 3rd, 4th, 5th and 6th in rank order were found to be parents' controlling mechanisms of excessive use of mobile by school children, these had better be strengthened everywhere if possible
7. Relatively the majority of sample students are under "weak" of students' academic achievement and too small number of sample students (3%) was among "excellent" group of students' academic achievement. To curve the situation, the responsible bodies had better to be in a better position of helping students so as to improve their academic performance.
8. As using Mobile phone were found to affect 34.12% of students' academic performance negatively, teachers, parents, Parent-teacher associations and school principals shall give comprehensive and persistent advice about the negative academic effect of excessive use of mobile phone.

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APPENDIES A

ADDIS ABABA UNIVERSITY COLLEGE OF EDUCATION AND BEHAVIORAL STUDY SCHOOL OF PSYCHOLOGY

Survey Questionnaire

Dear respondents! The purpose of this questionnaire is to collect data for the study entitled “*The effect of Mobile phone on students’ academic achievement in Chole Secondary School, Arisi Zone Oromya Region* ”. The study is one of the requirements for the completion of Masters of Arts degree in counseling psychology at Addis Ababa University.

The study is indispensable in appraising the perceived effect of students’ mobile phone utilization on their academic achievements. Questions included in this instrument enable the researcher to get information pertaining to the different social Medias utilization, on the one hand and students’ academic achievement, on the other hand. Thus, your information will be managed confidentiality, only for research paper and contribute to improve the quality of academic environment and improvement in school compound as well. To this end, I kindly ask you to respond to these questions.

Section I. Back Ground Information

A. Personal information

Item no.	Questions	Coding categories	Code no.
101	How old are you?	___ age in complete years	
102	Sex	Male Female	1 2
103	What is your religion?	Orthodox Christian Islam Protestant Catholic Others	1 2 3 4 5
104	Former place of residence	Living in town Living in out of town	1 2
105	In which grade are you?	Grade 9 Grade 10	1 2
106	Your section and roll number?	_____ and _____	
107	Do you get money per month? (from your family/relatives or else)	Yes No	1 2
108	How much money per month on the average do you get?	_____ Ethiopian Birr	
109	With whom are you living?	Alone (in rented house) With parents With friends	1 2 3

B. parent's information

110	Are your parent's (mother and father) alive?	Yes, both are alive Father alive Mother alive None of them are alive	1 2 3
111	What is your parent's marital status?	Married Divorced Separated Widowed	1 2 3
112	What is your father's occupation?	Farmer Merchant Government employee Private employee Pensioner Daily laborer Other (specify)	1 2 3 4 5 6 7
113	What is your mother's occupation?	House wife Farmer Merchant Government employee Private employee Daily laborer Other(specify)	1 2 3 4 5 6 7
114	What is your father's educational status?	Illiterate Read and write Primary education(1-8) Secondary education(9-12) Above secondary	1 2 3 4 5
115	What is your mother's educational status?	Illiterate Read and write Primary education(1-8) Secondary education(9-12) Above secondary	1 2 3 4 5

Section II-Information about Mobile Use

201	Do you have mobile phone?	Yes No	1 2
202	How do you get access to it?	Own/personal Parents Friends	1 2 3
203	How old are you when you had mobile phone for the first time?	_____years old	
204	What type of mobile phone do you have now?	Basic/ordinary phone Smart phone I don't know the type of phone I use	1 2 3
205	Do you know the different uses of mobile phone?	Yes No	1 2
206	For which of the following uses do you often use your mobile phone? Please put in rank order?	Call Facebook Whats up Imo Twitter Instagram Viber Game e-mail SMS Audio Movies	
207	What is the average time (in minute) you spend with your mobile phone per day for: <ol style="list-style-type: none"> 1. Call 2. Facebook 3. Whats up 4. imo 5. Twitter 6. Instagram 7. Viber 8. Game 9. e-mail 10. SMS 11. Audio 12. Movies 	<ol style="list-style-type: none"> 1. _____ minutes 2. _____ minutes 3. _____ minutes 4. _____ minutes 5. _____ minutes 6. _____ minutes 7. _____ minutes 8. _____ minutes 9. _____ minutes 10. _____ minutes 11. _____ minutes 12. _____ minutes 	

208	Did you use mobile phone in Classroom & library?	Yes No	1 2
209	Is the use of mobile phones in the school premises allowed?	Yes No	1 2
210	Is there parental control over your mobile use?	Yes No	1 2
211	How do your parents control over your mobile utilization? Put in rank order?	By limiting mobile call By prohibiting face book By prohibiting what sup By prohibiting Viber By prohibiting Instagram By limiting Twitter By prohibiting games By limiting Twitter By limiting SMS By limiting e-mail By prohibiting audio By prohibiting video	
212	Among your close friends, is any one has a mobile phone?	Yes No	1 2

Section III. Students' Academic Performance

Instruction: Here under are questions related to students' academic performances. Read carefully each question and among the given alternatives put tick mark (“√”) on your choice of academic indicators.

Item no.	Questions	Rarely [1]	Sometimes[2]	Often[3]
301	How often do you miss classes?			
302	How often do you go to school late?			
303	How often do you respond to teacher's questions?			
304	How often do you ask your teacher about issues that are not clear to you?			
305	How often do you participate in school activities?			
306	How often do you work on your assignments and projects?			
307	How often do you pass quizzes or exams?			
308	How often are you addicted in mobile usage?			
309	How many hours do you spend on studying per day? Write your answer in full hour _____			
310	Your last year average mark (score) _____			
311	Your Average Mark (score) in first semester?_____			

Section IV. Perceived Effect of Mobile Phone

Instruction: In this section, there are questions related to self-perceived effect of mobile phone on the user him/her-self. Read each question carefully and put tick mark (“√”) under yc

Item No.	Questions	Never (0)	Strongly disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
401	I do not want to have my mobile phone while studying.					
402	I usually get motivated to respond to calls while studying					
403	I often tend to write texts, play games and enjoy with social media while studying					
404	I may not get focused while studying if my phone is close to me while working on homework and assignments.					
405	I feel that I unnecessarily spend my time in using mobile phone during class work & homework					
406	I sometimes chat or exchange text messages with my friends and others while the teacher is teaching.					
407	I often use my mobile phone in the library while studying					
408	I usually lack concentration on studying after receiving calls or text messages while studying					
409	I feel that possessing mobile phone has somehow affected my academic performance.					
410	I often do not get distracted by phone calls while studying.					
411	I often use my mobile phone to get support from my friends to clear difficulties and ambiguities while studying					
412	I use dictionary/ thesaurus/ to get the meaning of words using my mobile phone.					
413	I often use calculator in my mobile phone to make even simple calculation.					
414	I usually use mobile phone to download important texts or documents for learning purpose					
415	My academic performance has increased due to the use of mobile technology					

APPENDICES B

Section III-Information on the effect of mobile use in academic performance

Guide-lines for key informant interviews

1. Do students allowed to bring their mobile phone in school?
Are they used in the school compound?
Are they used in the class?
Are they used in the library? Why?
2. What is the school policy towards mobile usage? To what extent and how this policy is realized?
3. Which group of the students has a mobile phone: those who came from town or out of town (rural)? Boys or girls? High achievers or low achievers?
4. How do you evaluate the mobile utilization of students in this School? In terms of time? Purpose (like Call, Real chat, Game play, e-mail/SMS or audio/movies)?
5. Is there parental control over students' mobile phone utilization? If no, what do you think is/are the reason/s? What is the level of parental control?
6. How do you see the effect of mobile use on student's academic performance?
7. What do you want to say about over all mobile phone utilization of students?

Univarsiitii Addis Ababaatti
Kolleejii Qo'annoo barnootaa fi Amalaa
Damee Saaykoloojii

Gaaffilee Qorannoo

Kabajamtoota hirmaattotaa qo'annoo kanaa! Kaayyoon gaaffilee kanaa mataduree miidhaa fayyadamni bilbila mobaayilii qabxii barattootaa irratti qabu irratti mana baruumsa Collee sadarkaa 2ffaa kan Naannoo Oromiyaa Godina Arsii Aanaa Collee kessatti argamurraa, odeeffannoo qo'annoo walitti qabuufi. Qo'annoon kun immoo barbaachisummaan isaa digrii lammataa (MA) yuunivarsiitii Addis Ababaa irraa kaawunsiliing saaykoloojiidhaan guuttachuufi:-

Dabalataan immoo qo'annoon kun barbaachiisummaan isaa faayidaa fi miidhaa haalli itti fayyadama mobaayilii qabxii barattootaa irratti qabu wal madaalchisuufi.

Gaaffileen kunniin dhiibbaa feesbuukii (miidiyaa hawaasummaa) akkasumas bilbilli mobaayila fayyadamuun qabxii barattootaa foyyessuuf qabu irratti odeffannoo sirrii ta'e argachuuf /walitti qabuuf qorattuu qo'annoo kanaa gargaara.

Kanaaf odeffannoo yoo kennitan icciitiin keessan ni eegama. Qorannoon kunis qorattuudhaaf odeffannoo sirrii akka argattu gargaara; qorannichis qulqullina barnootaa akkasumas kan mana baruumsa kanaa fooyyessuuf ni fayyada.

Dhumarattis, gaaffilee kana akka naaf guuttan kabajaan isin gaafadha.Galatoomaa.

Kutaa I odefannoo seenduubee

A. Odefannoo namootaa

Lakk	Gaafii	Qoqqooddii Koodii	Lakkoofsa koodii
101	Umriin kee meqa?	umrii waggaan_____	
102	Saala	Dhi Dha	1 2
103	Amantiin kee maali?	Ortodooksii Muslima Piroteestaantii Kaatoolikii Ka biraa	1 2 3 4 5
104	Iddoo jireennaa	Magaalaa keessa Baadiyyaa	1 2
105	Kutaa meeqaffaa baratta	9ffaa 10ffaa	1 2
106	Daree keetiifii lakkoofsakee	___fi__	
107	ji'aan mallaqa argattaa? (firarraa/maatirraa/kabirarraa)	Eeyyeen lakki	1 2
108	Yoo argatta ta'ee jiddugaleessaan qarshii meeqa argatta	Birrii Itoophiyaa_____	
109	Eennu waliin jiraatta?	Kophaa (kireefadhee) maatii waliin hiriyyoota waliin	1 2 3

B. Odeeffannoo waa'ee maatii

110	Matiin kee lubbun jiranii (haadha fi abbaan)	- Ee lachuun ni jiru - Abbaan koo jira - Haati koo jirti - Lachuu hin jiran	1 2 3 4
111	Haalli gaa'ila haadhaafi abbaa keetii akkami?	- Waliin jiraatu - Kan wal hiikan - Kan gara gara jiraatu - Haati ykn abbaan hin jiran	1 2 3 4
112	Abbaan kee maal hojjatee jiraata?	- Qotee bulaa - Daldalaa - Hojjataa moottumma - Hojjataa huunfaaaa - Kansoorama bahe - Hojjataa guyyaa - Kanbiraa (ibsi)	1 2 3 4 5 6 7
113	Haatee maal hojjattee jiraatti?	- Haadha /manaa/ - Qottee bultuu - Daldaltuu - Hojattuu mootummaa - Hojjattuu dhunfaa - Hojjattuu guyyaa - Kanbiraa (ibsi)	1 2 3 4 5 6 7
114	Sadarkaan barumsaa abbaa keetii akkami?	- Dubbisuu fi barreessuu hin danda'u - Kan dubbisuufi barreessuu danda'u - Sadarkaa 1ffaa (1-8) - Sadarkaa 2ffaa (9-12) - Kanneenii oli	1 2 3 4 5
115	Sadarkaan barumsaa haadha teetii akkami?	- Dubbisuu fi barreessuu hin dandeettu - Kan dubbisuufi barreessuu dandeettu - Sadarkaa 1ffaa (1-8) - Sadarkaa 2ffaa (9-12) - Kanneenii oli	1 2 3 4 5

Kutaa II odeeffannoo waa'ee itti fayyadama mobaayilii ilaalchisee

201	Bilbila mobaayilii qabdaa?	- Ni qaba - hin qabu	1 2
202	Bilbilaa mobaayilii haala kamiin argatte?	- Kiyya - Ka maatiiti - Ka hiriyyootaati	1 2 3
203	Bilbila mobaayiliitti fayyadamuu yoo jalaqabdu at waggaa meeqa turte?	Waggaa _____	
204	Bilbilii amma ittifayyadamaa jirtu kan akkamiiti?	- Kan barame (xiqqoo) - Bilbila ammayyaa (smart phone) - Gosa isaa hin beeku	1 2 3
205	Faaydaalee garagaraa kan bilbilli mobaayilii qabu beektaa?	- Ni beeka - Hin beeku	1 2
206	Kanneen armaan gadii keessaa bilbilakee kan yeroo heddu fayyadamtuuf maal fa'a? Tartiibaan kaa'i.	- Bilbiluuf - Feesbuukiif - Waasaappiif - Iimoof - tiwitariif - inistaagiraamiif - vaaybariif - Taphootaaf	

		<ul style="list-style-type: none"> - iimeeliif - ergaa gabaabaaf (sms) - sagalee (sirba, faaruu, fikkf) caqasuuf - suur-sagalee ykn viidiyoof 	
207	<p>Jiddugaleessaan guyyatti bilbila mobaayilii keetii yeroo hagamiif fayyadamta (daqiiqaan)?</p> <ul style="list-style-type: none"> - 1 Bilbiluuf - 2 Feesbuukiif - 3 Waasaappiif - 4 Iimoof - 5 tiwitariif - 6 inistaagiraamiif - 7 vaaybariif - 8 Taphootaaf - 9 iimeeliif - 10 ergaa gabaabaaf (sms) - 11 sagalee (sirba, faaruu, fikkf) caqasuuf 12 suur-sagalee ykn viidiyoof 	<ul style="list-style-type: none"> - 1 Daqiiqaa _____ - 2 Daqiiqaa _____ - 3 Daqiiqaa _____ - 4 Daqiiqaa _____ - 5 Daqiiqaa _____ - 6 Daqiiqaa _____ - 7 Daqiiqaa _____ - 8 Daqiiqaa _____ - 9 Daqiiqaa _____ - 10 Daqiiqaa _____ - 11 Daqiiqaa _____ - 12 Daqiiqaa _____ 	
208	<p>Bilbila mobaayilii kutaa fi mana-kitaabaa keessatti fayyadamtaa?</p>	<p>Ni fayyadama</p> <p>Hin fayyadamu</p>	<p>1</p> <p>2</p>
209	<p>M/b kessatti bilbila mobaayilii fayyadamun eeyyamamaa?</p>	<ul style="list-style-type: none"> - Ni eeyyamam - Hin eeyyamamu 	<p>1</p> <p>2</p>

210	Haala fayyadama mobayilii keetii ilaalchisee maatiin kee si too'atanii?	<ul style="list-style-type: none"> - Ni too'atu - Hin too'atan 	1 2
211	Haala itti fayyadama mobaayilii ilaalchisee haala maatiin kee ittiin si too'atan yoo jiraate sadarkaan kaa'i.	<ul style="list-style-type: none"> - Bilbila bilbiluu daangessuun - Feesbuukii fayyadamuu dhoorguun - Vaaybarii fayyadamuu dhoorguun - Insistaagiraamii fayyadamuu dhoorguun - Tiwiitarii fayyadamuu daangessuun - tapha dhoorguun - ergaa gabaaba daangessuun - iimeelii daangessuun - sagalee dhageeffachuu dhoorguun - viidiyoo laaluu dhoorguun 	
212	Hiriyyaa sitti aanu keessaa namni bilbila mobaayilii qabu jiraa?	<ul style="list-style-type: none"> - ee nijira - lakki hinjiru 	1 2

Kutaa III. Qabxii barattootaa ilaalchisee

Ajaja:kan armaan gadii, gaafilee qabxii barattootaatiin wal qabateedha. sirritti eega dubbiftee, kan keebii keetiin wol simu jalatti malattoo “✓” ka

Lakk gaafii	Gaafilee	Dabree dabree	Yeroo tokko tokko	Yeroo baay'ee
301	Kutaarraa haftaa?			
302	Mana-barnootaa barfattaa?			
303	Gaafii barsiisaa deebiftaa?			
304	Waan ifa siif hin ta'in haala kamiin gaafatta?			
305	Sochii m/b keessatti hagam hirmaatta ?			
306	Pirojeektii fi assaaymantii siif kenname hagam hojjatta?			
307	Battallee fi qormaata sii kenname dabartaa/hojjattaa?			
308	Araada bilbila mobaayilii keetitti fayyadamuu hin qabdaa?			
309. Guyyatti sa'aatii meeqaaf qu'atta? Sa'aatii _____ f qu'dha.				
310. Qabxiin kee ka bara darbee jiddu-galeessa (avreejii) hagami? _____				
311. Qaxii jiddu-galeessa (avreejii) seemiistera lffaa _____				

Kutaa 4ffaa – miidhaa billbilli mobayilii geessa jedhamee yaadamu.

Qajeelfama: kutaa kana keessatti gaafiwwan miidhaa bilbilli mobaayilii itti fayyadama barataa dhunfaa irratti qabaatuu mala jedhamee yaadamuun ka wal qabte. Qalbiin erga dubbiftee booda, filannoo kee irratti mallattoo “✓” ka’i.

Lakk	Gaafilee	Tasumaa (0)	Guutuma an guututti hin amanu (1)	ni morma (2)	Itti amana (3)	Sirritti Amana (4)
401	Yeroo qu’adhu, bilbila mobaayilii kiyya qabachuu / na bira akka taa’u hin barbaadu.					
402	Yeroo heddu osoo qu’ataa jiru yoo bilbilame kaasuu barbaada/fedha.					
403	Yeroo hedduu wayta qo’adhu; ergaa gabaabaa, taphoota/games/ fi miidiyaa hawaasaa ni fayyadama.					
404	Yeroo hojii manaa fi abbaltii hojjadhu, bilbilli mobaayilii kiyya nabira jiraannaan xiyyeffannoo itti kennee hin hojjadhu.					
405	Wayta huj-manee fi abbaltii hojjadhu, mobaayilii fayyadamus,garuu sirrii miti jedhee yaada.					

406	Yeroo tokko tokko osoo barsiisaan barsiisaa jiru hiriyyootaa kiyyaa fi namoota biraa waliin bilbilaan barreessuu/chat/ ykn ergaa gabaabawaa fayyadama					
407	Yeroo baay'ee osoon m/kitaabaa kessatti yoo qu'adhu bilbila mobaayilii ni fayyadama.					
408	Yeroo tokko tokko osoo qu'adhuu yoo naa bilbilame ykn ergaan gabaabaan/SMS/'n yoo naa ergame na jeeqa.					
409	Bilbila mobaayilii qabaachuun kiyya barnoota kiyyarratti dhiibbaa waan narraan gaye natti fakkaata.					
410	Yeroo baay'ee yoo qu'adhu, bilbilli bilbilamullee hin jeeqamu.					
411	Yeroo hedduu odoo qu'adhuu waan naa hin galle hiriyyoota kiyya irraa bilbilaan gaafadhee qulqulleeffadha.					
412	Galmees jechootaa bilbila mobaayilii kiyyaatitti fayyadamee hiikaa jechootaa argadha.					
413	Yeroo hedduu herreega sassaalphaafillee kaalkuleetara mobaayilii kiyyaatitti fayyadama					
414	Mobaayilii kiyya fayyadamee dokumantoota barnootaaf na fayyadan intarneeta irraa buufadha/download godha/					
415	Teeknoolojii mobaayiliititti erga fayyadamuu jalqabee, barnoota kiyyaan fooyya'ee jira.					

APPENDIES D

Kutaa 5ffaa odeffaannoo dhiibbaa bilbilli mobaayilii qabxii barattootaa irratti qabu.

Qajeelfama hirmaattota af-gaafii qo,annootiif.

1. Barattoonni akka bilbila mobaayilii isaanii akka mana barnootaa fidanii dhufaniif hayyamamaafii?
Dallaa mana barumsaa keessatti itti fayyadamuun danda'anii?
Daree barnootaa keessatti hoo?
Mana kitaabaa keessatti hoo?Maaliif?
2. Itti bulmaanni m/barmootaa haala itti fayyadama mobaayilii ilaalchisee maal jedha? Seerri kun hagam takka hujjirra oola?
3. Barattoota akkamiittu bilbila mobaayilii fayyadama? Worra baadiyaa dhufan moo ka magaalaa? Dhiira moo shamarran? Ijoollee barnootaa ciccimtuuti moo warra kaani?
4. Haala itti fayyadama mobaayilii barattoota m/barmoota kanaa akkamiin madaalta? Yeroo itti fayyadamiinsaatiin walqabatee?
Dhimma itti fayyadama mobaayilaa ilaalchisee (fkn bilbiluu, interneetaan haasauu, tapha/geemii/ taphachuu, iimeelii/SMS ykn sagalee fi viidiyoo fa'a.)
5. Itti fayyadama mobaayilaa ilaalchisee maatiin barattootaa isaan toowatanii? Yoo hin toowannee sababni isaa maal sitti fakkaata? Yoo toowatan taye hagam takka toowatan?
6. Dhiibbaa itti fayyadamni mobaayilii qabxii barattootaa irratti qabu akkamitti laalta?
7. Haala itti fayyadama mobaayilii barattootaan ilaalchisee woli galatti maal jechuu barbaadda?