Addis Ababa University
Department of EDPM

Thesis Submitted to Addis Ababa University
College of Education and Behavioural Studies

The Influences of Electronic Media on the Academic performance, Behaviour and Social Interactions of Students of Secondary Schools in Addis Ababa City Government

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Presented in Partial fulfillment of the requirements for the degree of Masters of Arts
In Educational Management and Leadership

December 2015
Addis Ababa, Ethiopia

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Acknowledgements

Several people have assisted me during my research work. Although it is not possible to mention all in a few sentences, I would like to thank those who have been particularly important to my work. It is my great pleasure to express my special thanks to my advisor Ato Akalewold Eshete for his invaluable comments and courage in the course of this study. I would also like to express my deepest gratitude to my sister Hana Wondimu for her remarkable support and advice in this study.

My particular gratitude also goes to the high schools' principals, teachers, and students of Higher 23 Preparatory School, South West Academy Preparatory School, Debre Hail Kidus Raguel Secondary School and Shimelis Habte Grade 9-10 School for their unreserved support and involvement throughout the research work. I am specifically grateful to Ato Teshome Dawit (Biology Teacher for Higher 23 Preparatory School School) for his continuous support, advice and facilitation of the FGD for Higher 23 Comprehensive Secondary School.

It is also a delight to express my appreciation to Dr. Husein Kedir who I had been inspired most during my stay in AAU for the program I am about to complete, who I always would like to give a big regard, whose remarkable scholarly challenges have always ignited a passion in my endeavor to strive for excellence in education, and created an unforgettable defining moment both in my educational and career life. His deeper insights and relevant comments on my work have been quite instrumental in shaping this work.

Finally, I would like to extend my sincere thanks to my family, particularly my wife, Wubit Teshome, for her patience and understanding of the inconveniencies she experienced during the process of the writing of the thesis.

TABLE OF CONTENTS

Content **Page**

List of Tables

List of Figures

Figures **Pages**

Acronyms and Abbreviations

CD-ROM- Compact Disk “read only memory”
CDMA- Code Division Multiple Access
DSTV- Digital Satellite Television
DVD-Digital Versatile Disc or Digital Video Disc
E-mail- Electronic Mail
ETA- Ethiopian Telecommunications Authority
ETB-Ethiopian Birr
ETC- Ethiopian Telecommunications Corporation
FGD- Focus Group Discussion
ICT- Information and Communications Technology
IM-Instant Message
ITU-International Telecommunication Union
MMOG -Massively Multiplayer Online Games
MMORPG-Massively Multiplayer Online Role Playing Games
MP3-Media Player 3
SIM-Subscriber Identity Module
UN-United Nations
WCDMA-Wideband Code Division Multiple Access

DEDICATION

I have dedicated this work to my beloved father the late Wondimu Debella who laid a profound foundation in my educational life but could not see the fruits of his effort and my mother W/ro Kidist Bedasso who has paid all the effort to help me realize the achievement and success in my higher education. I would like to quote a noble attorney and Child Development expert and my role model for envisioning and courageous leadership, Ato Shiferaw Woldemichael, for what he believes about mothers; he said, "If I have the power and authority to grant a Phd degree, I would grant it to mothers." I do believe in this and would like to honor my mother.

Abstract

This study has attempted to assess the influences of electronic media on the academic performance, behaviour and social interactions of the students of secondary schools and preparatory schools in Addis Ababa City Government, and the roles of high school community in contributing towards quality media consumption on the part of the students. Both quantitative and qualitative approaches were administered. Questionnaires, focus group and individual in-depth, key informant interviews were the instruments used to collect data from students and teachers, who were the focus of the study. In this study, multi-stage cluster sampling technique has been administered to identify the participants of the study. The data were analyzed using genres of SPSS 20. The result of the study has depicted that the majority of the students engage themselves in frequent electronic media environment and access quite a number of forms of electronic media. The students use the media for various reasons including getting educational information, entertainment, building relationships with people, get information and learn about the world, get pleasure and relax when they get tired, build self-confidence, get moral guidance, and resolve personal problems and difficulties. Although the schools provide educational programs to the students on ICT, the students' are seldom protected from getting involved in the electronic media communications. The schools and parents of the adolescents restrict the use of the media in one way or another but the implementations of the rules and regulations on various aspects of the use of the media are not consistent, and the consequences of failure to comply with the standards are not clear. Finally, the research showed that there is a strong need to direct priority to the effort that needs to be done in increasing the awareness of parents and teachers on how to help students engage themselves in productive media interactions and communications.

Chapter One

1. Introduction

1.1 Background of the Study

The youth are curious for information and entertainment. They are fast enough to adapt to new situation, new pieces of information, new technologies, etc. Feldman *et al* (2008) observe that technology and adolescents look for each other and that both are fast paced and ever changing. They claim that in previous generations, teens readily embraced new technologies, such as record players, TVs, cassette players, computers, and VCRs, but the past two decades have witnessed a virtual explosion in new technology, including cell phones, iPods, MP3s, DVDs, and PDAs (personal digital assistants).

Today, these young people use various features of their devices, such as calling and SMS/texting, taking and sending pictures, listening to music, playing games, downloading songs, going online, sending emails and downloading ringtones. The youth has been targeted as the primary consumer of these media products, and a frontline friend of the same. Roberts *et al* (2005) support this and claim that adolescents, especially the 8-18, comprise the primary audience for popular music.

The media has demonstrated potentially profound effects, both positive and negative, on children's and youth's cognitive, social, and behavioral development. Escobar-Chaves and Anderson (2008) attempted to present and evaluate research findings on the influence of electronic media on risk behaviors including physical inactivity, poor eating habits, smoking, alcohol use, sexual behaviors, and violence among adolescents. They emphasize that researchers have found modest evidence that media consumption contributes to the problem of obesity, modest to strong evidence that it contributes to drinking and smoking, and strong evidence that it contributes to violence.

The level of various forms of influences of electronic media on children and youth has become a global concern. Gigli (2004) has reported that in the last two decades, media for children and youth have become more of a global issue. She underscores that there have been recent outcries in industrialized countries over rising levels of aggression, obesity, substance abuse, eating disorders and unsafe sexual behaviour among youth, increasingly attributed to

commercial media aimed at children and youth. According to this report, in developing countries where resources limit domestic productions, a majority of programs for children and youth are imported. Much of the content contains characters and messages that, at best, are simply not relevant to local cultures, and at worst convey violent images and mass marketing messages. The prevalence of Television viewing and internet users among young people, for instance, has raised serious concerns about recent national and global trends in the television and the internet industry.

Youth unprotected participation in the electronic media environment has become quite a global concern. One key concern is that the rapidly increasing forms of electronic media penetration to homes and schools have given children and the youth a greater level of unprotected freedom to consume media products. Buckingham (2002) in his paper presented for UNESCO, focusing on the provision of media education for children and young people of school age, has attempted to provide an overall rationale for media education. He describes the views of what he calls protectionists. He emphasizes that while these protectionist views of media education have been far from superseded, there has been a gradual evolution in many countries towards a less defensive approach. According to him, protectionists view that media education is now no longer defined as a matter of automatic opposition to students' experiences of the media.

Media education, according to Bukingham's reflection, is seen not as a form of protection, but as a form of preparation. It does not aim to shield young people from the influence of the media, and thereby to lead them on to 'better things'. On the contrary, it seeks to enable them to make informed decisions on their own behalf. In broad terms, it aims to develop young people's understanding of, and participation in the media culture that surrounds them. In the process, it inevitably raises cultural, moral and political concerns; but it does so in a way that encourages an active, critical engagement on the part of students, rather than subservience to a predetermined position.

Gigli (2004) reports that sociologists and researchers in different regions have observed electronic media's adverse effects including but not limited to growing influence of entertainment media on youth style and identity, decreasing role of traditional sources of influence in family, school, community, religion, etc., appeal of individualism and personal, as opposed to collective or societal, achievement, more emphasis on the banal and trivial than

education, creativity and culture, and a tendency for young people to think less for themselves and to follow media-set agendas.

The African Population is estimated to be more than 1 billion people of which 60% are youth. This demographic sector has an estimated median age of 17.6. Members of African Union have agreed to invest on the youth and make "deliberate efforts to accelerate social development that gives high priority to youth empowerment and development." (AU: 2010). The Union (AU: 2006) , in its Youth Charter, has specifically stipulated that every young person shall have the freedom to seek, receive and disseminate information and ideas of all kinds, either orally, in writing, in print, in the form of art or through any media of the young person's choice subject to the restrictions as are prescribed by laws. This freedom plays a significant role in the media lives of the youth. This freedom coupled with the ever increasing movement of media producers targeting the youth kindles the fire for the needs of these youth to grip the media products and their pertinent effects.

Due to the western cultural influences, Africans are losing their identities. Mangwere et al (2013) complains that Africans have become less distinctive and the media have led to the denigration of the African culture. They have also emphasized that electronic media are potential threats to the value set by parents, educators, and other agents of social control and that the media have also moved Africa from its original platform diluting the African culture. Thus influence of electronic media in the lives of African youth cannot be underestimated.

Ethiopia is one of the developing countries which have opened a number of doors for the ever increasing number and multi-faceted types of electronic media. To enhance the quality of education at secondary level, the Ethiopian Government has laid out a strategy to provide ICT infrastructures to schools, especially at secondary levels, to receive satellite education transmission. (MOE: 2010). Apart from the possible opportunities provided at secondary schools, students have quite a number of possibilities to get the access to and spend a considerable time on the various electronic media, such as TV, varied channel radio programs, mobile sets, social media like Facebook, Skype, blogs, movies, etc. The flourishing number of internet cafes has increased the number of internet user students. It is noted that the rise in the number of subscribers in major cities throughout the country is mainly due to the increasing popularity of Internet cafés and CDMA technologies. However, the types and frequency of these media students spend their time, the contribution of these media to their

academic achievement, their influence on their social relations and individual behavior of the students all need to gain the desired momentum and a critical attention and the issues in question require all concerned to be well examined and followed up by the various stakeholders relating to these youth.

1.2 Statement of the Problem

The ever increasing types and forms of electronic media in the hands of many teenagers around quite a number of schools, the considerable amount of time they spend in exploring the mobile gadgets, the time they spend to exchange texts, visit a number of web pages and social media like Facebook and Tweeters, have all the power to capture the attention of many to closely look at how these youngsters and the various forms of the digital media have become friendly to each other.

High-school age youth spend a significant amount of their time in various cyber-cafes. This may increase the motivation to seek for real meanings to a number of burning issues regarding the interactions between the various forms of electronic media and the youth. The significant number of boys and girls sitting with their laptop computers and so many with their mobile phones in areas where they could easily get the access to WIFI's, motivate one to look into what is happening in the lives of the youth's daily life. Given the status of the current ICT infrastructure in Ethiopia, despite the relatively lower level of its internet penetrability, and lower status of the capacity of mobile phone subscription, the number and varieties of the forms of electronic media the youth are coming into contact triggers ones desire to closely look into a number of aspects of the relationship of the media and the youth and certain underlining patterns of behaviors they exhibit towards the media.

High school age students spend much time in exploring new electronic media technologies; they explore updates on media technology; they are interested to discover newer forms of media applications. They spend much time on the internet visiting a number of sites and contents, communicate via the electronic applications, and share electronic contents with one another. While they do these, they have the possibilities to be distracted from their educational priorities, to behave the same way they have observed in the media and may be influenced so much so that they relate to others depending on the amount of time they spend and the types of the electronic media content they have encountered. These

influences may have adverse effects on the personal behavior, relational life and the teaching-leaning process of high schools and hence needs attention.

There is a desperate need to find ways to optimize the role of media in our society, taking advantage of their positive attributes and minimizing their negative ones. We need to better understand how to reverse the negative outcomes of the media in question and turn them into more productive. It is also very important to see how educational policies and practices in the Ethiopian education system are influenced by this phenomenon, and also investigate the impact and various roles and responsibilities of parents, high school teachers and leadership, and other relevant actors in and around the school community, in managing the electronic media utilization of their students. Considering the increasing exposure of the youth to newer forms of media, it would be meaningful to focus on the effects of electronic media on students in the high schools.

It is possible that a study in this area might provide an important link between practice and theory based on what we are learning about the effect of media around the high school environment. Certainly, if the various stakeholders on the issue in question fail to clearly articulate the essence, effects and benefits of electronic media on and to students, things would possibly go out of their hands, and the teaching-learning process shall be in jeopardy. Therefore, it is imperative to seek solutions through research that will address this critical area.

1.3 Objectives of the Study

The purpose of this study is to get a clear picture of the influences of the media use on the academic performance of the students and other possible merits and demerits of the electronic media on the students, and the roles and responsibilities of high school teachers and leadership. The objectives of the study include the following:

1.3.1. General Objectives

The general objective of this study is to examine the level of influences of electronic media on the academic performance, behaviour and social interactions of students of secondary schools

1.3.2. Specific Objectives

1. To identify the types of electronic media high school students use.
2. To examine the level of use of electronic media on students' academic use.

3. To identify and assess the influences of electronic media on the academic performance, physical status, individual behavior and social relationship of high school students.

1.4 Research Questions

This study will specifically attempt to find answers to the following research questions:

1. What types of electronic media do high school students get involved?
2. What is the students' level of use of electronic media?
3. What are the influences of the uses of the electronic media on the academic performance, individual behavior and social relationship of high school students?

1.5 Significance of the Study

This work is significant in a way that it:

1. Contributes towards the effort to understanding the nature of students' interaction with and the relationship and communications patterns through the ever increasing types and forms of electronic media.
2. Identifies the types of behaviors and interactions associated with media use by students of selected high schools in Addis Ababa.
3. Proposes recommendations in the area of influences of electronic media, its pros and cons on students' academic performance and social interactions.
4. Points out strategic areas as to how schools and other relevant constituents may model productive electronic media use by students for quality academic performance.
5. Proposes issues that would inform the development of research, policy, and practices regarding media use, content, controls, and guidance are there for students in the high school?

1.6 Delimitation of the Study

The study is delimited to the exploration of the electronic media environment conducive for the high school age youth, the level of use of the various forms of electronic media, the influences of those media on the students' academic, behavioural and interpersonal relations, and to describe the roles and responsibilities of the high school teachers and leadership in modelling the behaviors of students and help them be able to consume media products for quality education. The area opted for the study is Addis Ababa Administrative region as the number and varieties of electronic media technology are much more abundant and the media infrastructure is more accessible to students than other places in Ethiopia. Moreover, time and financial constraints limit the boundary.

The schools under this study are two preparatory schools namely Higher 23 Preparatory School and South West Academy Preparatory School which are found in Nifas Silk Lafto Sub-city in Addis Ababa, Shimelis Habte in Kirkos Sub-city and Debre Hail Kidus Raguel High School in Addis Ketema Sub-city. The first three are located in the same cluster and are easily accessible to follow up the study and the last was selected because it is found in the vicinity of the big market (Merkato) in Addis Ababa where the electronic media technology is relatively more accessible than other places in Addis Ababa.

The subjects of this study are youth as they are the primary consumers of the electronic media products. Although the media is generally categorized into two, namely, print media and electronic media, this study looks at only aspects of the electronic media and the youth. In the study, a private preparatory school, one government preparatory school, a grade 9-10 government school and a faith-based secondary school in Addis Ababa are randomly selected.

1.7 Limitations of the Study

This study is affected by lack of local research and well-documented materials to serve as a baseline. Such a study needs an in-depth and independent study all by itself. Most of the literature treated in this work have come from western media studies and affected interpretation of local data. Therefore, lack of secondary sources on the subject has limited the opportunity to cross triangulate the findings of various researches outputs. Content analysis is also subject to bias due to methods of data collection and interpretation; as such analysis has a limiting factor in describing how media messages influence media consumers. Besides, the study did not include all students in the sampled group because of financial and time constraints. These limitations may also lack comprehensiveness and be, of course, impeding factors in exhaustively looking at many features and characteristics of the study and may affect the strength of the generalizability of the study.

1.8 Operational Definitions of Terms

Academic performance: the academic achievement of students measured in their yearly cumulative average of the scores of the subjects they have taken during the course of a given year.

Cumulative yearly grade: the yearly average grades of all subjects scored by a student

Faith based school: School established under the umbrella of a given religious sect whose primary activity is providing academic service to people.

Rank: Students' yearly academic cumulative rank from class in 2015 academic year.

Youth: the population between 15-24 years of age

Chapter Two

2. Review of Related Literature

2.1. Introduction: Electronic Media and Communication

New technology has many social and educational benefits, but parents/caregivers and educators have expressed concerns about the dangers young people can be exposed to through these technologies. To respond to this concern, Feldman *et al* (2008) highlight that some states and school administrations have, for example, established policies about the use of cell phones on school grounds and developed policies to block access to certain websites on school computers. They emphasize also that many teachers and caregivers in some countries have taken action individually by spot-checking websites used by young people, such as Myspace.

Business Dictionary generally defines Media as a communication channel through which news, entertainment, education, data, or promotional messages disseminated. Media includes every broadcasting and narrowcasting medium such as newspapers, magazines, TV, radio, billboards, direct mail, telephone, fax, and internet. Media in which communication serves for a wider society is referred to as mass media. The Mass Media is the organized technologies which make mass communication possible and can be classified as print media, Broadcast media and the internet or as traditional media and new media. The communication functions of electronic media are especially popular among adolescents. Kaveri Subrahmanyam and Patricia Greenfield (2008) underscore that teens are heavy users of new communication forms such as instant messaging, e-mail, and text messaging, as well as communication-oriented internet sites such as blogs, social networking, photo and video sharing sites such as YouTube, and interactive video games. They are also convinced that questions are raised on issues relating as to how such online communication affects adolescents' social development, in particular their relationship to their peers, romantic partners, and strangers, as well as their identity development, a core adolescent developmental task.

In this section, the types and forms of electronic media widely used by the youth, the purpose they use the media, the types of contents they are mostly interested to frequently visit, the amount of time they spend on the media, and how much the users are influenced by the media, shall be the underlining points of discussion.

2.2. Electronic Media Environment

Generally, media may be divided into subsections and may deal with screen media (TV, videos/DVDs -both self-recorded and commercially produced, and movies), print media (books, magazines, and newspapers**)**, audio media (radio, tapes, CDs, and MP3s), and interactive (digital) media (computers and video games). Electronic media environment, according to Robert et al (2005) can be divided into the physical media environment and the social media environment. The physical environment defines what kinds of media young people may access in their homes. The social environment includes family norms, policies, and general household orientation toward various media (especially TV). Business Dictionary defines electronic Media as to refer to broadcast or storage media that take advantage of electronic technology. They may include television, radio, Internet, fax, CD-ROMs, DVD, and any other medium that requires electricity or digital encoding of information. Radio, television (TV), movies, video games, cell phones, and computer networks have assumed central roles in the youth's daily lives.

The spectrum of high school students' access to the media environment, in the developing countries like Ethiopia, may be reasonably wider than expected, but, from my observation, a substantial number of the high school youth in Ethiopia have at least the access to TV, radio, mobile phones, and laptop computers. Modern technology has changed the way we watch television, broadcasting news and entertainment in high definition across the globe. Setzer (2001) argues that the television has the most negative point with relation to education in that the latter demands the student's attention and activity, mainly when one considers that education should have as one of its main goals of the development of the capacities of imagining and of mental creation. Setzer insists that television does exactly the opposite: the constant deluge of millions of images makes the viewer lose his imagination and creativity. That is especially preoccupying regarding children and youth, who are precisely developing those abilities (in an adult that already has them, their partial loss may be regrettable, but much worse is never being able to develop them). Setzer concludes that television can be used as a means for conditioning, but not for educating. For him, television represents in many aspects the antithesis of education. It should only be used in education for illustration purposes, with videos of short duration, so that the teacher can repeat images and discuss with her students what they watched, preferably only at high school or college.

Mobile phones enable their users to make wireless phone conversations, send and receive emails and basic text messaging, pictures and recorded videos. Bluetooth technology has further increased the communicative value of cell phones, allowing talkers to carry on their conversations hands-free with the use of a small, one-sided headset. A laptop is a mobile computer. When laptops were first introduced, they were little better than glorified calculators. Today's high-end machines have the same functionality as desktop computers, including Internet access that permits the use of various communications tools such as instant messaging, email and video conferencing. Popular models are manufactured by Dell, Apple, Gateway and Toshiba.

2.3. Forms of Electronic Media

2.3.1. Electronic Mail

Methods of electronic media communications may come in various forms (Jacobson and Forste : 2011). We refer to these methods of communications to the forms of electronic media which allow the media consumers to get and exchange information, enjoy entertainments, interact with others and so on. According to Jennifer (2008), Electronic Email was the first method of communication utilizing the Internet, and remains the most popular. Users can choose from a multitude of free email providers, including Yahoo, Google Mail and Hotmail, and sometimes their Internet provider will offer an address using their domain name.

Email offers (usually) instantaneous delivery of messages to their recipient, a single or list of other email users. Attachments can be made to emails to share photos, document files or audio files, though there is usually a limit to the size of these attachments. Starks (2008) emphasizes that there are innovative ways of accessing this tool remotely and without the usage of a computer. Many Personal Digital Assistants (PDAs) and cell phone services offer access to email, with the capability of sending and receiving messages from the devices themselves. A PDA, also known as a palmtop computer, or personal data assistant, is a mobile device that functions as a personal information manager.

Emails can be extremely helpful for those who must stay in constant communication with family members, co-workers or other acquaintances without being bound to larger computers or laptops. They also allow people to send and receive instant messages (also

known as IMing), in the form of an ongoing conversation. Instant messaging is a less cumbersome form of email as well as a faster way of facilitating complete conversations in real time. MSN, Yahoo, Facebook and America starks Online (AOL) Windows Live messenger, G-mail chat and Skype messenger are a few of the services that offer messaging tools and programs for their users.

2.3.2. Listserv and Discussion Boards

Discussion boards popped up early in Internet development as a means for people to discuss topics and interact, though not in real time. As a member of a given board, one can post new topics and replies (subject to the site's regulations), which will remain on the board for others to respond to at their leisure.

2.3.3. Real-Time Sharing/Collaboration

Real-Time, according to Wikipedia dictionary, is a narrative technique in which the events depicted take place entirely within the span of the depiction, and at the same rate. Many people utilize real-time methods for coordinating long-distance projects and employees. Raacke and Jennifer (2008) refer to some of the Real Time media such as Google and Skype. Google offers a suite, including Wave and Documents that allow one to share and update files, discuss improvements and create tests, all from one interface.

2.3.4. Social Networking

A social network is a social structure made up of a set of actors (such as individuals or organizations) and the dyadic ties between these actors. A social networking service is an online service, platform, or site that focuses on facilitating the building of social networks or social relations among people who, for example, share interests, activities, backgrounds, or real-life connections. Most social network services are web-based and provide means for users to interact over the Internet, such as e-mail and instant messaging. Social networking sites allow users to share ideas, activities, events, and interests within their individual networks.

The main types of social networking services are those that contain category places (such as former school year or classmates), means to connect with friends (usually with self-description pages), and a recommendation system linked to trust. Popular methods now combine many of these, with According to Wikipedia, a web dictionary, American-based services such as Facebook, Google+, tumbler and Twitter widely used worldwide Facebook, MySpace and Twitter offer a multitude of features, combining all of the above

into a single personal profile one can set up to showcase themselves, their business or their ideas. Twitter is a popular social networking site created in 2008.

While the concept is not unlike similar social sites such as MySpace and Facebook, Twitter is unique in that users can write (or "tweet") messages from either their computer or cell phone in short, concise updates, as often as they please. The concept of Twitter revolves around the idea that people can stay updated on the events of others' lives without spending a lot of time sifting through extraneous information or more elaborate weblogs. Another perk is the fact that Twitter is completely free and requires no special software. The primary idea is for networking with friends and family, but many of these sites can now be used for numerous purposes.

2.3.5. WhatsApp

WhatsApp is an instant messaging application for smartphones that operates under a subscription business model. The proprietary, cross-platform application uses the internet to send text messages, images, video, user location and audio media messages. Forbes staff Parmy (2015) reported that in January 2015, WhatsApp was the most globally popular messaging app with more than 600 million active users. In April 2015, WhatsApp reached 800 million active users. In September 2015 the user base has grown up to 900 million. Forbs (2015) has reported that currently WhatsApp has more than 700 million people using it at least once a month, sending more than 10 billion messages a day. At its current rate of growth it should pass the 1 billion user mark before the end of 2015. The company doesn't push through many updates. While other messaging apps like WeChat, Kik and Facebook Messenger host content and e-commerce services to become all-encompassing platforms, WhatsApp has limited its new features to communications.

2.3.6. Skype

Skype is downloadable software that enables users to make free phone calls and send messages via the Internet. The service also offers video phone calling, allowing users to watch each other in real time while they speak. Use of Skype's free features requires a broadband Internet connection as does its paid features. Both businesses and private individuals have benefited from the convenience and immediacy of Skype's communication tools. Skype is gaining popularity as a personal and professional Internet-based audio and video chat program, and continually adds features to allow for more depth in distance communication.

Kaveri *et al* summarize some of the forms of communications, the electronic hardware that supports them, and the functions that they make possible, as in Appendix IV of this work. The distinctions of these media are getting more and more blurry as a result of the continuous advancement of the technology. For instance, e-mail, which was originally supported only by the computer, can now be accessed through cell phones and other portable devices, such as personal digital assistants (PDAs), Apple's iPhone. Other communication forms such as YouTube and Flickr are similarly accessible on portable devices such as cell phones with cameras and cameras with wireless. Text messaging can be administered with cell phones. Adolescents use these communication forms for various purposes. They use them to interact with friends, relatives and strangers alike. They use social networking sites to keep in contact with their peers from their offline lives, both to make plans with friends whom they see often and to keep in touch with friends whom they see rarely. They use blogs to share details of everyday happenings in their life.

Kaveri Subrahmanyam and Patricia Greenfield (2008) attempt to categorize these Electronic communication forms in terms of the extent to which their content is public or private and in the extent to which users can keep content private. Public chat rooms and bulletin boards are perhaps the least private. Communication through e-mail, instant messaging, and text messaging is apparently the most private.

According to Kaveri Subrahmanyam and Patricia Greenfield (2008), communication forms such as blogs and social networking utilities, users have complete control over the extent to which their entries or profiles are public or private. Blog entries and MySpace profiles, for instance, can be either freely accessed on the web by anyone or restricted to friends of the author. Recently, MySpace has restricted the ability of users over age eighteen to become friends with younger users. Facebook gives users a variety of privacy options to control the profile information that others, such as friends and other people in their network, can see. For example, users can block particular people from seeing their profile or can allow specific people to see only their limited profile.

Searches on the Facebook network or on search engines reveal only a user's name, the networks they belong to, and their profile picture thumbnail. Facebook used to be somewhat "exclusive," in that members had to have an ".edu" suffix on their e-mail

address; the idea was to limit the site to college and university students. That requirement, however, has recently changed, making Facebook less "private" and more public. Most photo sharing sites allow users to control who views the pictures that they upload; pictures can be uploaded for public or private storage and users can control who views pictures marked private. YouTube, a very public communication forum, allows registered users to upload videos and unregistered users to view most videos; only registered viewers can post comments and subscribe to video feeds.

These privacy measures have given adolescent users a great deal of control over who views their profiles, who views the content that they upload, and with whom they interact on these online forums. And young users appear to be using these controls. Kaveri Subrahmanyam and Patricia Greenfield (2008) assert that a recent study of approximately 9,000 profiles on MySpace found that users do not disclose personal information as widely as many fear: 40 percent of profiles were private. In fact only 8.8 percent of users revealed their names, 4 percent revealed their instant messaging screen name, 1 percent included an e-mail address, and 0.3 percent revealed their telephone number.

Privacy controls on networking sites also mean that adolescents can restrict parental access to their pictures, profiles, and writings. In fact, on Facebook, even if teens give their parents access to their profiles, they can limit the areas of their profile that their parents can view. Monitoring and controlling youth access to these communication forms is growing ever more challenging, and it is important for parents to inform themselves about these online forms so they can have meaningful discussions about them with their adolescents.

2.4. Purposes of Uses of Electronic Media

Recorded music, television, movies, magazines, and the Internet are part of the daily environment for nearly all young people currently growing up in industrialized countries and increasingly in developing countries as well. Adolescents use media as source of information for craving their identity and autonomy to meet the problems and difficulties aroused in their developmental changes during adolescences. Arnett (2007) holds that the period of adolescence is marked by a number of physical, cognitive, and social changes that interact to create a number of developmental needs specific to their age group. As adolescents seek to define themselves independently of their parents, they often turn to

media as sources of self-socialization and of messages about their identity in terms of gender, sexuality, and ethnicity. In connection with this, Arnett (2010) mentions possible positive media use such as entertainment (for purposes of fun, amusement, and recreation), identity formation (for the development of a conception of one's values, abilities, and hopes for the future), high sensation (for enjoying novelty and intensity of sensation), Coping (to relieve and dispel negative emotions), and Youth Culture Identification (for being connected to a youth culture or subculture that is united by certain youth-specific values and interests).

According to Gross (2004), adolescents use these communication forms for many different purposes to interact with friends, acquaintances, and strangers alike. Teens use instant messaging mainly to communicate with offline friends. Likewise, they use social networking sites to keep in contact with their peers from their offline lives, both to make plans with friends whom they see often and to keep in touch with friends whom they see rarely. The sites may also be used by teens in establishing interpersonal connections—both those with peers, such as friendships and romantic relationships, and those with parents, siblings, and other adults outside the family. These connections have been found to be one of the most important developmental tasks of adolescence.

Freedman (2006) observes that teens use blogs to share details of everyday happenings in their life. Roberts' *et al's* (2005) study indicates that, during 1999 and 2004, slightly over half of U.S. 8- to 18-year-olds (54%) report using the computer for recreational purposes on any given day, and 28% report spending more than one hour daily engaged in recreational computer use. According to them, in spite of the fact that teens are increasingly using these electronic communication forms to contact friends and family, the digital landscape continues to be populated with anonymous online contexts such as bulletin boards, massively multiplayer online games (MMOG), massively multiplayer online role playing games (MMORPG), and chat rooms where users can look for information, find support, play games, role play, or simply engage in conversations.

Of the frontline purposes of making use of electronic media is found looking for sexual contents in the media. Cooper (1998) views that sex is the most searched topic on the Internet. Citing Kaiser Family Foundation report (2001), Lerner and Steinberg (2004) assert that Seventy percent of 15-17-year-old computer users reported inadvertently encountering

pornographic content online. They emphasize that when adolescents use media, incidental exposure to substantial amounts of information about sex frequently occurs.

Lerner and Steinberg (2004) summarize the purposes of the uses of adolescents media use into the following 5 categories recommended by Dominick (1996). They establish their synopsis from an extensive list of specific objectives satisfied by the media identified by a uses and gratifications research. The objectives include entertainment, tension relief, staying current with popular culture, learning about the world, sensation seeking, escape from loneliness, and many others. One of several distillations of the literature suggests five categories of uses and gratifications. The first one is Diversion which involves seeking pleasure, relaxation, escape from boredom or worries, and mood management; this is frequently labeled the entertainment function and tends to dominate adolescents' stated reasons for using media. The second one is referred to as Cognition. This entails seeking or acquiring information, ranging from monitoring current events via news media to learning the alphabet from Sesame Street or norms for 492 Adolescents and Media various aspects of human behavior from entertainment content. It is important to note that much of the information acquired is incidental—neither intentionally sought nor produced to teach or inform (e.g., screen portrayals of violence; so-called thin ideal depictions of women).

Lerner and Steinberg term the third one as Social Utility which refers to facilitating relationships with family, friends, or desired social groups; a social lubricant; a source of "conversational currency" (Dominick, 1996); an outlet for "parasocial interaction". They call the fourth Withdrawal which is establishing barriers between the self and others to avoid conflict, ensure uninterrupted attention and focus, or simply obtain solitude. Their last category is termed as Personal Identity which refers to helping to establish a sense of self through the auditioning of potential roles and identities; building self-confidence; seeking moral guidance, social acceptance, or status.

2.5. Electronic Media and Schools

What are the various electronic media used by high school age students? How does the patterns of media they use differ from when they do it anywhere else than the school environment? How do schools respond to the increasing presence of electronic media in the lives of today's youth? What does the status of school infrastructure look like in terms of providing an environment for electronic media? How do schools respond to the various

types of electronic media uses and patterns of behaviors demonstrated by students? Such and other issues may be dealt with when electronic media and the youth are talked about in relation to each other. News reports suggest that some schools have responded by blocking the use of electronic media in schools, in particular text messaging, cell phones, iPods, and video games. Kaveri Subrahmanyam *and Patricia Greenfield* (2008) suggest that many school computer systems block access to websites popular among teens such as those that provide access to instant messaging, e-mail, blogs, and social networking utilities. They also point out that school authorities argue that these media are distracting, isolating, and disruptive and that they facilitate cheating (as when cell phone cameras are used to copy exams) and other illegal activity (as when cell phones and pagers are used in drug and gang activity).

2.6. Electronic Media and Students' Academic Performance

Students are often observed to text their friends, write messages on the Facebook while class is ongoing. They are often distracted at home by a TV or a radio program while studying or doing their assignment. They may not hesitate even to respond to calls while studying in a deep silent library. Levine et al (2007) has concluded that students who instant message (IM) more than others show more distractibility during academic tasks. Bowman et al (2010), in an experiment regarding multitasking, found that students took longer to read a passage if they were IMing at the same time.

Combining previous research findings with their own, Jacobson and Forste (2011) concluded that electronic media use is negatively associated with student's grades. They also found that about two-thirds of the students reported using electronic media while in class, studying, or doing homework. This multitasking likely increased distraction, something prior research has shown to be detrimental to student performances. These researchers, on the other hand, have found that electronic media like mobile phone (cellular phone) communications give students greater access to social situations in general. They provide students with additional mechanisms for meeting new people and keeping in touch with friends.

2.7. Theoretical Framework of the Study

In this study, a theoretical framework is used to help look into what purpose electronic media consumers use the media in question, what effect the media have on the users, how

their relationship and behaviors are affected. To this effect, I have been convinced that the Uses and Gratification theory and the Media Dependency theory are fundamental in explaining electronic media in the lives of high school students and the level of influence on them. The Media Dependency theory is mentioned in this study with an intention to explain the mobile dependency of the youth as nearly all the target group of this study are likely to use mobile phones more frequently than the other electronic media devices.

2.7.1. Uses and Gratification Theory

Glenn Sparks (2006) holds that the uses-and-gratifications theory was formalized by Elihu Katz, Jay Blumler and Michael Gurevitch and was designed to impart deep understanding of "the ways that people use media to meet their needs". Different kinds of media satisfy different kinds of needs. Straubhaar and LaRose (2006) underscore that users are active in trying to find media which gratify their needs in terms of cognitive, social interaction and diversion. According to them, interpersonal communication is one of the important gratifications that people expect of the internet. However, behavior related to media use changes with the passage of time and the satisfactions we try to find from the media follow suit. Unlike other theories concerning media consumption, Uses and Gratification theory gives the consumer power to discern what media they consume, with the assumption that the consumer has a clear intent and use. This contradicts previous theories such as **mass society theory**, that states that people are helpless victims of mass media produced by large companies; and **individual differences perspective**, which states that intelligence and self-esteem largely drive an individual's media choice.

Katz et al (2000) synthesized that Uses and Gratification approach was focused on "the social and psychological origins of needs, which generate expectations of the mass media or other sources, which lead to differential patterns of media exposure (or engagement in other activities), resulting in need gratifications and other consequences, perhaps mostly unintended ones. According to their research, there were five components comprising the Uses and Gratifications Approach. The issues dealt with in the components include arguments such as the audience is conceived as active; in the mass communication process, much initiative in linking gratification and media choice lies with the audience member; the media compete with other sources of satisfaction; methodologically speaking, many of the goals of mass media use can be derived from data supplied by individual audience members themselves, and that value judgments about the cultural

significance of mass communication should be suspended while audience orientations are explored on their own terms.

According to McQuail (2010), goals for media use can be grouped into five uses. The audience wants to be informed or educated, identify with characters of the situation in the media environment, simple entertainment, enhance social interaction, and escape from the stresses of daily life

Uses and Gratifications Attached to Various Electronic Media

1. Uses and Gratifications Attached to Mobile Phone Usage

Mobile phones, a comparatively new technology, have many Uses and Gratifications attached to them. Due to their nature of mobility, constant access, and options to both add and access content, this field is expanding with new research on the motivations behind using mobile phones. Leung (2000) observes that people use mobile phones for the Uses and Gratifications including affection/sociability, entertainment, instrumentality, psychological reassurance, fashion/status, mobility, immediate access. Uses and Gratifications do, however, differ based on location and audience in that using mobile phones on buses, cars, and trains is related to the Uses and Gratifications of mobility and immediate access, talking to business partners is related to the Uses and Gratifications of instrumentality; talking to family members is related to the Uses and Gratifications of mobility and affection.

Grellhesl and Carter (2012) describe that the specific function of text messaging has been studied to find its Uses and Gratifications and explore any potential gender differences. The researchers proposed seven aspects of Uses and Gratifications; when listed from highest to lowest rank according to the study results, they can be put as accessibility/mobility, relaxation, escape, entertainment, information seeking, coordination for business, socialization/affection seeking, status seeking. The results also displayed gender differences (in an undergraduate population): women scored the Uses and Gratifications of accessibility/mobility, relaxation and escape, and coordination higher than the men did.

Grellhesl (2012) holds that these results may imply social and societal expectations for females around independence but connected to family and friends and/or a tendency for women to rely more on detailed conversation in text messaging than men. Since many

now use their mobile phones as devices to connect to the internet and both contribute and retrieve content, researchers have investigated the Uses and Gratifications of smart devices which engage multiple media. The uses and gratifications for contributing to mobile contents differ from those for retrieving mobile contents.

2. Uses and Gratifications Attached to Social Media Usage

Leung (2013) looked at social networking services, personal and subject-based blogs, and internet forums put together to study the Uses and Gratifications in posting social content, the relationship between gratifications and narcissism, and the effects of age on this relationship and these gratifications. Users have motivations of Social and affection, need to vent negative feelings, recognition, entertainment, and cognitive needs. According to Leung, forums were found to be the main media for venting negative feelings, potentially due to the fact that comparatively, they are more of a one-way street. Similar to the variables of gender, location, and audience as previous research has found, the Uses and Gratifications differed by category of narcissism.

3. Uses and Gratifications Attached to Visiting Friend-Networking Sites

Raacke (2008) observed that socialization motivates use of friend-networking sites such as MySpace and Facebook. Particulars under socialization might be finding old friends, making new friends, learning about events, creating social functions, and feeling connected. Wang et al's (2012) exploration has demonstrated that although emotional, cognitive, social, and habitual drives are motivational to use social media, not all uses are consistently gratified.

Park et al (2009) summarized the results of a research examining Facebook groups users' gratifications in relation to their civic participation offline on college students to indicate their specific reasons for using Facebook groups, including information acquisition about campus/community, entertainment/recreation, social interaction with friends and family, and peer pressure/self-satisfaction. The results showed that there were four needs for using Facebook groups, "socializing, entertainment, self-status seeking, and information."

4. Uses and Gratifications Attached to Twitter Usages

Chen (2011) indicated that there is a positive correlation between active time spent on Twitter and the gratification of a need for "an informal sense of camaraderie"—connection—with other users. Furthermore, the frequency of tweets and number of replies and public messages mediated the relationship between Twitter users. This helped increase both use and gratification of the media by satisfying the need for connection.

5. Uses and Gratifications Attached to Instant Messaging

Leung (2001) describes that as with text messaging, similar uses and gratifications were studied with instant messaging, or participating in an "online chat," and these results were also mitigated by gender relaxation, entertainment, fashion, inclusion, affection, sociability, and escape. Again, differences were found based on amount of use and gender. Those who used the instant messaging service frequently ("heavy users") were found to be most motivated by affection and sociability; those who did not ("light users") were most motivated by fashion. Women chatted longer and for sociability; men chatted for less time per session and for entertainment and relaxation.

6. Uses and Gratifications Attached to Entertainment Media

Bartsch and Viehoff (2010) indicated that a research had shown that media taken in for entertainment purposes (i.e., movies, songs, television, etc.) have a wide range of uses and emotional gratifications, and that these are not mutually exclusive but can overlap with each other. In line with the Use and Gratification theory, the use as consumers of the electronic media, is active, have a clear intention and the power to clearly discern what the media they use and, in fact are goal-oriented what forms of electronic media to use. Hence, they have clear purposes of accessing to various forms of electronic media.

2.7.2. Media Dependency Theory

Ball-Rokeach and DeFleur (1976) proposed a dependency model of mass media effects to understand mass media impacts on their audiences. DeFleur and Ball-Rokeach (1989) hold that mass media audiences depend on media to satisfy their daily information and socialization needs, utilize information both in news and entertainment forms to make sense of themselves and society, to interact with others, and to understand cultures, values, and norms.

Unlike Blumer and Katz's (1974) Uses and Gratifications approach to examine the relationship between the needs of audiences and the use of the mass media, the Media Dependency Theory examines the interrelationship among audiences, mass media, and society (Ball-Rokeach, 1985). Ball-Rokeach and DeFleur argue that audiences develop dependency on mass media in several ways, such as: depending on mass media to understand their social world, learn how to act meaningfully and effectively in the social world and escape their daily problems and tensions in the social world.

1. **Mobile media dependency in public spaces**

   DeFleur and Ball-Rokeach (1989) underscore that people use media information to interpret other people, culture, and events, as well as themselves. Mobile media researchers and scholars found that mobile media users utilize their media to understand themselves and their societies by using both mobile media content and the devices.

2. **Self-understanding Mobile Media Dependency in Public Spaces**

   According to DeFleur & Ball-Rokeach (1989), self-understanding media dependency refers to "mass media relations that expand or maintain individuals' capacities to interpret their own beliefs, behaviors, self-concepts, or personalities". Mobile media are used to document what is going on at public places for personal reflection.

3. **Social Understanding Mobile Media Dependency in Public Spaces**

   DeFleur & Ball-Rokeach (1989) hold that social understanding media dependency developed "when individuals utilize media information resources to comprehend and interpret people, cultures, and events of the present, past, or future". Mobile media users used their devices to seek location information and to read books, magazines, and news; to update their social network statuses and call or text their social networks to comprehend their social life. For instance, Pavlik (2013) mentioned that Twitter users receive the breaking news of the U.S. killing of Osama Bin Laden in 2011 before U.S. President Barack Obama officially announced it and twenty minutes before the news was featured on television news channels.

4. **Action Orientation Mobile Media Dependency in Public Spaces.**

   According to DeFleur & Ball-Rokeach , action orientation refers to a multitude of ways in which individuals establish dependency relations with the media in order to obtain guides to specific behaviors of their own. Examples included dependencies "on the

media for information concerning goods and services, recreation, everyday coping behavior, crisis behavior, and self-defense".

5. Solitary Play Mobile Media Dependency in Public Spaces

DeFleur & Ball-Rokeach discus solitary play media dependency as referring to instances when aesthetics, enjoyments, stimulation, or relaxation properties of the media content itself are the attraction. Media users engaged in solitary play activities including those designed to "obtain pleasure, aesthetic enjoyment, excitement, or relaxation directly from exposure to a media message".

In summary, mobile media users depend on their devices to play, to learn, to connect, to communicate, and to escape in public spaces, to make personal or institutional decisions, either by themselves or with their social networks. It follows from the above observations and studies, we can conclude that mobile consumers depend on mobile solutions for all aspects of their everyday life.

2.8.Electronic Media-Ethiopian Contexts

2.8.1. Telephone System

According to CIA Fact Sheet (2012) a general assessment indicates that Ethiopia has inadequate telephone system with the Ethiotelecom maintaining a monopoly over telecommunication services. The country has open-wire, microwave radio relay, radio communication in the HF, VHF, and UHF frequencies, and 2 domestic satellites providing the national trunk service.

The number of fixed lines and mobile telephones is increasing from a small base; combined fixed and mobile-cellular tele density is roughly 15 per 100 persons. For the purpose of international service, it has an open-wire to Sudan and Djibouti; microwave radio relay to Kenya and Djibouti; satellite earth stations - 3 Intelsat (1 Atlantic Ocean and 2 Pacific Ocean).

2.8.2. Broadcast Media

One public TV station broadcasting nationally and 1 public radio broadcaster with stations in each of the 13 administrative districts; a few commercial radio stations and roughly a dozen community radio stations (2009)

2.8.3. Internet and Mobile Users

Internet World State (January 2013) announced that Ethiopia with a population of 87,302,819 (2012) has 960,331 Internet users on June 30, 2012, 1.1% of the population, and a Facebook users of 902,440 people on December 31, 2012, 1.0% penetration rate.

Table 2-1 Comparison of Internet Users and Facebook Subscription in Four Selected Countries in Africa

Countries	Population	Internet users	Facebook subscribers	Broadband download speed
EGYPT	88,487,396 (2015); Capital city: Cairo-259,461 (2012)	43.7% of the population, per MCIT	12,173,540 on Dec 31/12, 14.5% penetration rate.	2.66 Mbps March 2015, per Net Index
ETHIOPIA	99,465,819 (2015); Capital: Addis Ababa-3,480,229 (2012)	1.9% of the population, per IWS (Dec 31, 2014)	1.0% (Dec 2012)	6.91 Mbps March 2015, per Net Index
KENYA	45,010,056 (2014); Capital: Nairobi-3,476,632 (2012)	47.3% per CCK (Dec 31, 2013)	4.8% (Dec 31, 2012)	7.67 per Net Index (March 2015)
TANZANIA	49,639,138 (2014) Capital: Dar Es Salaam 3,461,008 (2012)	14.0% per ITU. (Dec 31, 2013)	1.5% penetration rate (Dec 31, 2012)	5.02 Mbps (March 2015) per Net Index

On the other hand, the FDRE Ministry of Foreign Affairs in its July 2012 news desk has reported that the Ethiotelecom had indicated that the number of mobile subscribers in Ethiopia went up to 17 million. (FDRE Ministry of Foreign Affairs).This raises the rate to 19.5%. Although latest reports can be hardly accessed to the rate in Addis Ababa (population 3,480,229, in 2012), being the capital of the country where infrastructure is much better than the rest of the country, where the products of science and technology are made available much more abundantly than the rest of the cities in the country, it cannot be difficult to accept that most of the internet and mobile users are the residents of Addis Ababa.

According to the Ethiopian Telecommunication Corporation (ETC), the average rural inhabitant of Ethiopia has to walk 30 kilometers to the nearest phone. The ETC announced 7 September 2006 a program to improve national coverage, and reduce the

average distance to 5 kilometers. Since 2008 CDMA and WCDMA are made available in certain areas of the country. Local prepaid SIMs are also available at small shops, Ethio Telecom Kiosks and hotels. Sodere Ethiopian Social Media Network (October 2012), quoting from the country's Communication and Information Technology Minister, announced that the Ethiopia's government would be signing a two-year contract with Huawei Technologies Co and ZTE Corp. It also added that the companies would finance a project that includes more than doubling the number of mobile-phone users to 40 million by mid-2015.

The Ethiopian Proclamation 761/2012 on Telecom Fraud Offences stipulates the freedom to use Voice Over Internet Protocol (VOIP) services like Skype, Google Talk and similar services. The Ministry of Ethiopian Foreign Affairs (2012) clarified to the public that the law was aimed at controlling service providers that operate illegally to generate revenues through these services. We can, thus, see that Ethiopia needs to work harder in improving both the quantity and the quality of its telecom and internet services in order to achieve the intended goals in the national growth and transformation plan in line with ICT. However a significant portion of the population, especially the youth, is aware of the fast moving media technology and users of the same. The situations described above prompt one to make a relevant research on the level, frequency, and impact of the uses of these electronic media by the high school youth in Addis Ababa.

2.9. Amount of Time to Use Electronic Media

An area which is hardly touched and has not sufficiently been studied is the relationship between the patterns of behavior of youth engaged in electronic media communications and the amount of time spent on the fast increasing varieties of online communications. The California State University Professors Kaveri Subrahmanyam and Professor Patricia Greenfield (2008) spent a meaningful time and did a remarkable work in the area of Children's Digital Media. They attempt to explore possible relationship between time spent in online communication and face-to-face communication. They ask whether the time spent in online communication comes at the expense of time spent in face-to-face communication, or time spent online simply substitutes for time that would have been spent on the telephone in earlier eras. They claim that research has shown that over the past century adolescence has become more and more separated from adult life; most adolescents today spend much of their

time with their peers. An equally important question is whether adolescents' online communication is changing the amount and nature of interactions with families and relatives.

The professors assert that research has not yet even consistently documented the time spent by adolescents in different online communication venues. One difficulty in that effort is that the multitasking nature of most online communication makes it harder for subjects to provide a realistic estimate of the time they spend on different activities. Recall errors and biases can further distort estimates. These scholars underscore also that researchers have tried to sidestep this problem by using diary studies and experience-sampling methods in which subjects are beeped at various points throughout the day to record and study their activities and moods. But current diary studies of teen media consumption do not address the questions of interest here. The rapidly shifting nature of adolescent online behavior also complicates time-use studies. For instance, on the blogging site Xanga, an average user spent an hour and thirty-nine minutes in October 2002, but only eleven minutes in September 2006. Similarly, recent media reports suggest that the once-popular Friendster and MySpace sites have been supplanted by Facebook among adolescents. These shifts in popularity mean that data on time usage quickly get outdated; clearly new paradigms are needed to study these issues.

Donald F. Roberts and Ulla G. Foehr (2008) are researchers who spent more than thirty years conducting research and writing about youth and media. Focusing on trend media, they examined how both media use and media exposure vary with demographic factors such as age, race and ethnicity, and household socioeconomic status, and with psychosocial variables such as academic performance and personal adjustment. They emphasize that questions about media use and exposure are not easily answered. The first difficulty, according to them, is measurement issues. There is good reason to question the accuracy both of older children's self-reports of media exposure and of parental estimates of the time younger children devote to media. Hence, a continuous effort needs to be exerted to have much clearer picture regarding the relationship that exists between media use and exposure and the amount of time spent. This situation becomes even more difficult given the trend in the rapidly changing of digital media technology. Stenberg (2009) stresses that the problem in interpreting studies of media use and adolescents development is that it is extremely difficult to disentangle cause and effect, because adolescents choose which mass media they are exposed to.

2.10. Electronic Media Influences

2.10.1. Views of Media Influence on Adolescent Development

Steinberg (2009) states that there are three basic schools of thought concerning the media's impact (or lack thereof) on adolescent development. He summarizes them as Cultivation Theory, Uses and Gratification Approach and the Media Practice Model. Cultivation theory argues that adolescents are influenced by the content of which they are exposed, with respect to their knowledge about the world, their attitude and values, and their behavior. According to this view, the media shape their interests, motives, and beliefs about the world. The Uses and Gratification Approach emphasizes that adolescents choose the media to which they are exposed. According to this view, any correlation between what adolescents are exposed to and what they do or think is due not to the influence of the media, but to the fact that individuals with particular inclinations choose media that are consistent with their interest. According to this view, adolescents deliberately choose the media they use, either for entertainment, information, bonding with others, or developing a sense of identity.

According to Media Practice Model, the links between adolescents' preferences, on the one hand, and their media exposure on the other, are reciprocal (affect each other); adolescents not only choose what they are exposed to but interpret the media in ways that shape their impact. Steinberg is convinced that it is almost impossible to say for sure whether media exposure genuinely affects adolescent development. He concludes that the only cause and effect where media influence is concerned is to conduct an experiments, which he believes are rare, in which people are randomly assigned to be (or not to be) exposed to the medium of interest and see how it affects them. Hence, the caution to view and claim about the presence or absence of media influence on adolescent development.

2.10.2. Adolescents Behavior

Kaveri Subrahmanyam and Patricia Greenfield(2008) base John Hill's (1983:1-21) claim and draw their theoretical framework that adolescent behavior is best understood in terms of the key developmental tasks of adolescence—identity, autonomy, intimacy, and sexuality—and the factors, such as pubertal and cognitive changes, and the variables, such as gender and social class, that influence them. Extending his ideas, they propose that for today's youth, media technologies are important social variables and that physical and virtual worlds are psychologically connected; consequently, the virtual world serves

as a playing ground for developmental issues from the physical world, such as identity and sexuality. They conclude, therefore, that understanding how online communication affects adolescents' relationships requires one to examine how technology shapes two important tasks of adolescence—establishing interpersonal connections and constructing identity.

2.10.3. Health Risk Behaviors

Escobar-Chaves and Anderson (2008) have built a confidence on the possibility that many observers have raised questions about whether one important source of the risk behaviors could be adolescents' escalating exposure to electronic media. They relate, for instance obesity with the amount of time spent and the level of exposure to TV. They underscore that marketing of unhealthful foods through advertisements of TV, movies and internet has significantly affected the eating habits of adolescents and caused the obesity on the adolescents. They emphasize researchers' hypothesis and claim, for instance, that the link between obesity and television use in children and adolescents is a result of young people's decreased metabolic rates while watching TV, their decreased physical activity as a result of spending time in front of the screen, and their increased caloric intake, either because they eat while watching TV or because they eat in response to food advertisements on TV. Other media, such as video games, may be linked to obesity through the same pathways. They underscored that also each day adolescents aged thirteen to seventeen see an average of thirty-five minutes of TV advertising, which includes an average of seventeen food advertisements.

Escobar *et al* (2008) attempted to draw a relation between the level of susceptibility to smoking cigarettes and the exposure of adolescents to certain electronic media such as TV, movies, and internet and conclude the following:

> *The media bring billions of impersonations of glamorized smoking to millions of youth through TV, movies, video games, music, the Internet, and advertisement in general. Longitudinal, experimental, and cross-sectional studies provide clear and strong evidence that youth are more susceptible to viewing smoking favorably and to becoming smokers as a result of exposure to smoking in the media. Additional research is needed on the effects of portrayals of smoking on the internet and in video games and music.*

They also made a thorough examination of various researches and concluded that the research strongly suggests that exposure to alcohol advertising and to electronic media that portray alcohol use increases adolescents' alcohol use. They have however underscored that additional research is needed for video games, the Internet, and music, but the existing studies, especially longitudinal ones, strongly support a causal link between alcohol portrayal in TV and movies and later alcohol use.

2.10.4. Sexual Behaviors

A specific treatment of the effects of media and sexual behavior of adolescents has also been made by the same researchers. They infer to studies which have examined the association in a cross-sectional fashion, which does not permit inferences to be made about a causal connection but does allow assessments of whether media is at all associated with sexual early initiation. Those few studies, however, suggest that media exposure can increase early sexual behavior.

2.10.5. Violence

Aggressive and violent behaviors have also been issues treated to have been caused by electronic media exposure. Escobar et al (2008) built their confidence on the research evidences that media violence is a causal risk factor for aggressive and violent behavior. There is considerably less evidence concerning violent crimes, but the few cross-sectional and longitudinal studies that included violent crime measures also found similar links with media violence. They provide a portrait of the situation as depicted in Fig 1 below which illustrates best estimates of several risk factors for youth violence. The figure does not include the longitudinal violent video game effect because the one relevant study did not include a specific measure of violence that is comparable to the other factors. Furthermore, it is likely that overall media violence exposure has a somewhat larger effect than any individual type of media violence. In any case, the figure makes clear that media violence exposure has a larger effect on later violent behavior than does substance use, abusive parents, poverty, living in a broken home, or having low IQ.

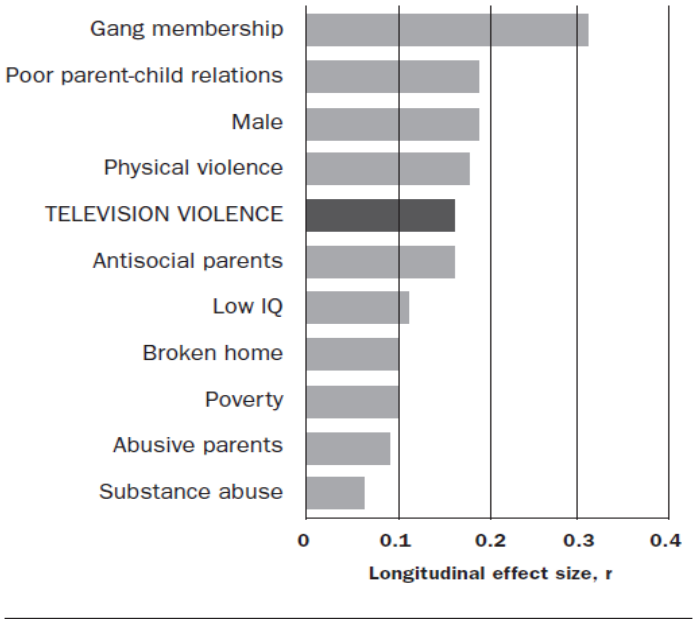

Figure 2-1: Risk Factors for Youth Violence, Based on Longitudinal Evidence

The authors mention the note by Douglas Evans' article and emphasize that electronic media have been used in positive ways, leading to positive health behavior outcomes. Based on this, they conclude that channeling creative energy into positive mass media content could well help to reduce the health risk behavior rates, particularly among adolescents. A thorough understanding of the nature of the media impact on health and well-being is a vital component of the public health agenda in the United States.

Kiros (2013) noted that the mushrooming of foreign videocassettes and films in Ethiopia is believed to negatively affect the personality of today's youth in particular. He complains also that being left with low or no access to recreational centers or to leisure time activities, a number of youth are flooding to video shows most of which are full of violent, immoral and pornographic acts. He claims that it is not uncommon to observe immoral acts the youth often emulate from the film-shows. According to him, the youth spend much of their time on watching films and practicing other socially undesirable activities, they fail to regularly attend their classes and acquire proper knowledge.

2.11. Conclusion of the Review of Literature

Electronic media are especially popular among adolescents. They are heavy users of communication forms such as instant messaging, e-mail, and text messaging, as well as communication-oriented internet sites such as blogs, social networking like Facebook and Tweeter, photo and video sharing sites such as YouTube, and interactive video games. As continuous advancement of the electronic media technologies have created more and more blurry distinctions amongst the media, forms of media such as e-mail, text and instant messaging, both online and offline videos, etc., originally supported only by the computer, can now be accessed through cell phones and other portable devices such as Apple's iPhone. Adolescents use these communication forms for various purposes. They use them to interact with friends, relatives and strangers alike. They use social networking sites to keep in contact with their peers from their offline lives, both to make plans with friends whom they see often and to keep in touch with friends whom they see rarely. They use them to download news, movies, and sexual contents. They use blogs to share details of everyday happenings in their life.

Numerous theories deal with the forms and purposes of electronic media teenagers and young students engage themselves in communicating and interacting with others, and the influences and impacts these media have on them. To get a crystal clarity of what relevant theories have to deal with about the framework for what purpose electronic media consumers use the media in question, what effect the media have on the users, how their relationship and behaviours are affected, I have found that the Uses and Gratification theory and the Media Dependency theory are fundamental in explaining electronic media in the lives of high school students and the level of influence on them. The Media Dependency theory is mentioned in this study with an intention to explain the mobile dependency of the youth as nearly all the target group of this study use mobile phones more frequently than the other electronic media devices. Elihu Katz's Uses-and-Gratifications theory emphasizes that users attempt to find media which gratify their needs in terms of cognitive, social interaction and diversion. Pioneers and supporters of this theory argue that consumers of media are active and are able to decide which media content meet their need and choose that media. Researchers such as Grellhesl and Carter (2012) describe that the specific function of text electronic media have been studied to find their uses and gratifications.

The uses and gratifications attributed to these media may include accessibility/mobility, relaxation, escape, entertainment, information seeking, coordination for business, socialization/affection seeking, status seeking. On the other hand, Ball-Rokeach and DeFleur, in line with their Dependency theory, argue that audiences develop dependency on mass media in several ways, such as depending on mass media to understand their social world, learn how to act meaningfully and effectively in the social world and escape their daily problems and tensions in the social world. These researchers examined the interrelationship among audiences, media, and society. In summary, both theories provide the notion that media consumers depend on and use the media to satisfy their need, actively respond to the contents and goals of the media contents and purposes and ultimately gratify their individual needs and interpret their social world.

As the teens and youth are the significant portion of electronic media consumers' population, they are exposed to a number of media influences on the various aspects of their lives. Issues including health and safety concerns potentially related to the use of electronic media by adolescents, health benefits related, behavior-related maladies (obesity, violence, drug use), threats to physical health (injury, and cancer), violence and substance use are areas to be given due place by parents, caregivers, religious institutions, schools, government, and other relevant constituents.

Chapter Three

3. Research Design and Methodology

3.1. Research Design

The objective of this study is to examine the influences of electronic Media on the academic performance, behaviour and social interactions of students of secondary and preparatory schools in Addis Ababa. The research design opted in this research is descriptive survey and used multiple methods approach in which both quantitative and qualitative approaches are employed. Tashakkori and Teddlie (2003) argue that multiple methods are useful if they provide better opportunities to answer research questions and where they allow the opportunity to better evaluate the extent to which the research findings can be trusted and inferences are made from them. As multiple method approach involves the use of two or more independent sources of data or data collection methods to corroborate research findings within a study, it makes triangulations easier as in such an approach. Besides, correlational research was also used to assess the relationship between academic performance and other selected variables of the study.

In the study, there is a need to ensure generalizations of the level of electronic media use of students, the amount of time they spend and the number and types of media contents they are exposed to. On the other hand, an in-depth description of the influences of the media on the individual behavior, their interpersonal relationship with others and the media impact on their academic performance are also considered as a relevant aim of the study.

3.2. Source of Data

In this study, the researcher used primary and secondary data types as a main source of information. The primary data are collected by means of administering questionnaire, individual in depth interviews, focus group discussions and researchers observations. The secondary data were gathered from books, journals (articles), internet resource and other printed materials.

3.3. Sample Size and Sampling Procedure

The study takes multi-stage cluster sampling approach, which involves dividing the population into discrete groups prior to sampling (Henry 1990). Youth are recognized as likely to be capable of providing deep and detailed descriptions of the topic, since they are heavily immersed in digital culture and engaged in active information behaviors embedded in digital media creation practices. Considering the fact that high school youth are the subjects of this study, these students are also in the same grade category (9-12), and the fact that electronic media is the subject of the study for these same youth, I have considered these youth group as homogenous group. My intention is to approach three types of high schools, namely, a government, faith based and a private one. In my attempt to find a government school in which all grade 9-11 students are found, I chose Higher 23 Preparatory School though it consisted of respondents in grades 11 and 12. This was because this school is one of the most senior schools having very experienced teachers who have deep knowledge and experience of the school.

In order to get a variety of pictures regarding the research issues under consideration, I have chosen the schools such that one of them is a government high school named Higher 23 Preparatory School (11-12), the second one is also a government school (9-10), the third one is a private school named South West Academy, a private preparatory school (9-12), and the fourth one is a faith based school named Debre Hail Kidus Raguel High School. The nature of the schools helps me uniquely examine my research quests, and compare and contrast how students with various socio-economic status and learning in various institutional views behave towards the media in question.

3.4. Sampling

The Target groups constitute students, teachers and school leadership of selected government, private and faith-based high schools in Addis Ababa. In this study, multi-stage cluster sampling technique has been administered as the students populations, areas of the study and the schools selected are dispersed and hence are discrete. This method helps choose a limited number of smaller geographic areas in which simple or systematic random sampling can be conducted. In this case, the following stages are considered.

Stage 1: Addis Ababa is randomly selected from the cities of Ethiopia and the 10 sub-cities in Addis Ababa were considered as 10 clusters. Of these clusters, three sub-cities namely, Nifas Silk Lafto, Kirkos and Addis Ketema sub-cities are randomly selected.

Stage 2: From the three clusters, four schools were randomly selected, namely Higher 23 Preparatory School and South West Academy from Nifas Silk Lafto, Debre Hail Kidus Raguel High School from Addis Ketema sub-city, and Shimelis Habte Grade 9-10 school from Kirkos sub-city.

Stage 3: From the four schools, 120 students who were key informants were randomly selected. In this case, 8 sections of grades 9 to 12, two sections per grade, were randomly selected from Debre Hail Kidus Raguel High School and South West Academy each. Similarly, 4 sections of grades 9 and 10, two sections per grade from Shimelis Habte High School and 4 sections of grades 11 and 12, two sections per grade from Higher 23 Secondary and Preparatory School were selected. Based on the actual 2014-15 enrolment data information collected from the schools, out of a total of 960 grade 9-12 high school students from the randomly selected sections, a sample 120 students were selected.

Table 3-1: Respondents Sampling

Name of High School	Grades	No of Sections Randomly Selected	Actual Number of Male Students	Actual Number of Female Students	Actual Total Number of Students	Sample Male Students	Sample Female Students	Total Sample
Shimelis Habte High School	9-10	4	82	102	184	10	13	23
Higher 23 Secondary and Preparatory School	11-12	4	80	120	200	10	15	25
South West Academy	9-10	4	150	170	320	11	3	14
	11-12	4				18	8	26
Debre Hail Kidus Raguel High School	9-10	4	121	135	256	8	3	11
	11-12	4				14	7	21
Total			433	527	960	54	66	120

3.5. Instrument and Procedure of Collecting Data

The research has employed a four- stage design which allowed inferences amongst the stages or the stages are linked to one another in such a way that one would offer a lead or draw inferences from the other. These three stages are described below.

3.5.1. Instruments of Collecting Data

a. Observation

To help generate the data for the questionnaire, I made an observation guided by a self-developed checklist. The primarily purpose of the observation was to see the actual physical setup of the media infrastructure in the schools under study. The observation list consisted of issues directly related to the infrastructure, media devices, the internet bandwidth of the ICT's of the schools, the IT personnel capacities, backup strategy of the ICT's, the general status of social media network of the schools.

b. Questionnaires

A self-administered questionnaire was used to gather information from the selected students. The questionnaire was carefully reviewed by my advisor, and re-checked by the two principals of the two selected high schools, friends and selected students before it was distributed randomly for the respondents grouped through stratified sampling technique.

c. Data Collection Procedure

The questionnaire was designed mainly to answer the research questions. The questionnaires were administered by the researcher and a volunteer senior high school teacher. The overall purpose and entire contents of the questionnaire were thoroughly explained to the students to clear possible grey areas and misunderstandings both before and during administering the questionnaire.

d. Focus Group Discussion

Kumar(1987) describes focus group discussion (FGD) as a rapid assessment, semi-structured data gathering method in which a purposively selected set of participants gather to discuss issues and concerns based on a list of key themes drawn up by the researcher/facilitator. Debus (1988) holds also that FGD provides a fast way to learn from the target audience. The FGD instrument was carefully reviewed and commented by my advisor. The instrument has been a good tool for me in facilitating a group of purposively selected, information rich teachers in order to cover the number of topics and keep track of the discussion. Kruger (1988) holds this

is a reality in administering an FGD. To help get a deeper understanding of the issues in question, I attempted to listen to the teachers of the primary respondents-the students, and used Focus Group Discussion **(**FGD**)** technique. The FGD questions were developed upon completing the administration of the questionnaires and understanding what relevant areas should have been discussed with the teachers. The FGD instrument was also designed in such a way as to support the questionnaire. The instrument was reviewed Kumar's position, in this regard, is that FGD addresses a dimension of understanding that often remains unaddressed or inaccessible by other data collection tools like questionnaire. I have clearly observed this in my study.

I have conducted the FGD for South West Academy, Higher 23 Comprehensive Secondary School and Debre Hail Kidus Raguel High School. The teachers participated in the FGD were 7 from Higher 23 Comp Sec School whose service years range from 3 to 33 years, 8 from South West Academy whose service years range from 2 to 7 years, and 6 from Debre Hail Kidus Raguel High School whose service years range from 6 to 9 years; their roles include Amharic, Geography, Civics, Biology, Chemistry, IT, Plasma Technician, Technical drawing and, Theology. This procedure was used believing that it makes respondents increasingly willing to speak up even when topics of less interest are entertained.

While conducting the FGDs I myself acted as a moderator to lead the sessions. All the focus group discussions were recorded using a mini-recorder. During the focus group discussions, participants were encouraged to speak-up. While FGD's were conducted the recording device was kept at a close range enough to capture the speaker's points as clearly as possible and make the transcribing easier.

e. Individual In-depth Interviews

Combining different tools for gathering data contributes to the completeness of the reliability of a study. Strelitz (2005: 127) underscores this notion and underscores that using individual in-depth interviews as a "follow up to focus group interviews" is both important and enhances the completeness and reliability of a study. Shroder et al (2003: 153) holds that it eases the burden of the researcher as it is a one-on-one communication; they emphasize that it helps obtain in-depth information and reveals certain matters which are too sensitive to openly discuss in groups.

Under this study individual in-depth interviews were held with the principals of Higher 23 Comprehensive Secondary School and South West Academy, with the Counselling and Guidance Officer of Debre Hail Kidus Raguel High School and the ICT Administrator of South West Academy. The in-depth individual interviews with the officers in question were conducted to get a clearer picture of ICT infrastructure, the roles and responsibilities in ensuring user-friendly media environment to students and help them leverage the use of electronic media for quality learning process and good behavior. Purposive sampling has been put to use at this stage. However, in order to make an informed selection of interviewees, the researcher did make use of the experience he derived from the focus group interviews. It was hoped that the participants so identified would be able to express themselves freely, motivated, communicative and, of course, conversant with the media contents in focus.

3.5.2. Procedure of Collecting Data

a. Data Quality

Using self-adapted questionnaire, the data collection tool was pre-tested. Each questionnaire was manually cleaned up for completeness, missed values and inconsistent of responses, frequencies and cross tabulations were used to check missed values and variables. The observation was prepared by the researcher. This is done to fulfill the gap of the expertise on the field of the studies

b. Pilot Testing

A self-developed questionnaire, focus group discussion questions and interview was thoroughly reviewed, commented and validated by my advisor. A pilot testing was also made in South West Academy to test and fit the questionnaire with the high schools setting in Addis Ababa. All the instructions of this instrument were translated in plain Amharic to avoid any confusion of terms in the sphere of electronic media. As a result, 20 students participated in the pilot test. The Cronbach alpha coefficients of all the items were considered for reliability test. The values acceptable with the coefficient were found 0.70. This indicates that the questionnaire was reliable.

c. Ethical Consideration

Throughout all the research stages, the researcher has kept most of the ethical issues. Some of ethical issues that were implemented in this research were giving official letter for the concerned body, asking permission from the stake holders, informing all the participants about the objective and keeping their confidentiality. In order to

preserve their privacy, the researcher has tried to keep the anonymity of the participants, and made effort to avoid sensitive issues like mentioning whether they use sexual contents, and whether they were drug addicted as a result of using electronic media.

d. Data Analysis

Both quantitative and qualitative analyses methods were administered for data analysis. The collected data were entered on double entries using Epi Info version 7.0 software and cleaned by validating the entries. Data again further cleaned and analyzed by using Statistical Package for the Social Sciences (SPSS) version 20 for Windows. Odds Ratio (OR) with 95% confidence interval used to measure degree of association. $P< 0.05$ was regarded as statistically significant. In the cases of data where 5 stages (Likert scales) are involved, namely, "Disagree", "Strongly Disagree", "Agree", "Strongly Agree" and "Not Sure", etc., the sum of the two most positive responses, like "Agree" and "Strongly Agree" are considered as mean value and standard deviations are not valid measurements, and that these sums help provide the highest possible occurrence of the variables under discussion.

Qualitative data were transcribed, similar ideas grouped together and main themes were identified. Then descriptions were made based on the identified thematic areas and the results were presented in narrative form. Tapes transcriptions and Focus Group Discussion report notes were sources for the focus group discussion write-up. All the documents were analyzed thematically by the researcher.

Chapter Four

4. Presentation, Analysis and Interpretation of Data

The study attempts to examine the level of influence of electronic media on the academic performance, behaviours and social interactions of high school students in Addis Ababa. This chapter presents the data and the corresponding analysis in view of the literature discussed in chapter two of this study, the responses given by the participants in the questionnaire and the focus group discussion, as well as in the individual interviews. Thus, the chapter discusses the data collected through questionnaires, focus group discussions, individual in-depth, and analyzes the findings of the study addressing the basic research questions of the study.

4.1. Socio-Demographic Characteristics of Participants of the Study

This section provides with the attributes of the participants. Based on the data, respondents' age ranges between 14 to 20 years, most of who are between 16 and17.

Table 4-1: Socio-Demographic Characteristics of Participants of the Study

Variable	Frequency	Percent
Gender of Students (n=120)		
Male	76	63.3
Female	44	36.7
Total	120	100
Age Group of Students (n=120)		
14-15	21	17.5
16-17	55	45.8
18-19	40	33.3
>=20	4	3.4
Total	120	100
Grade (n=120) , 2015 Academic Year		
9th	28	23.3
10th	18	15.0
11th	35	29.2
12th	39	32.5
Total	120	100.0

As can be seen from Table 4-1 most of the participants (79.1%) of the study are between the age 16 and 19; most of them (61.7%) are in grades 11 and 12.

4.2. The Status of ICT Infrastructure in the Schools

4.2.1. ICT Resources of the Schools

There are a total of 1,732 students in Higher 23 Preparatory School. The school has 3-ICT labs which do not provide an internet service for the students. There were 60 computers 44 of which were made available for the students and the rest for the academic staff. Four to Five students sit on a single computer during ICT classes. Of the total number of the computers, 15 of them were assigned for the academic staff; these computers are networked with internet service with a bandwidth of 100MB. A 3G Wi-Fi often suffering from a poor connectivity problem was made available for students. The school's overall electronic media infrastructure is not conducive for students to spend on the media for academic purposes.

There were 320 students in South West Academy Preparatory School. Sixteen computers were available for both the students and the teachers. Its ICT center had internet connectivity available for users. This school has an IT system administrator. A Wi-Fi is also available in the compound for teachers. This school has a TV, tape recorders, and few educational DVDs which are not that much used by teachers; there was a plasma program which was not well functioning. The school had automated the process of assessment and grading of tests and examinations of its students. All teachers were given training on how to administer automated system; they were given authorization to get access to the system, enter grades and other academic attributes of their respective students, and manage the system as appropriate. On the other hand, in Debre Hail Kidus Raguel High School, there were 980 students. There were 60 computers in the ICT center of the school. Internet connectivity was available in the ICT center only. There was no Wi-Fi available. There were 3-ICT teachers and an ICT administrator.

4.2.2. Rules and Regulations of ICT Uses

Though Higher 23 and South West Academy Preparatory Schools had Wi-Fi, students were not eligible for the service. There were no clear guidelines on how to use the ICT infrastructure in these schools. On the other hand, in South West Academy, the students could have the opportunity to get an access to internet facilities of the ICT only upon request of their teachers on behalf of them. While attempting to get access to sites in the internet, they were coached and protected in using the internet. Coaching the students and leveraging the level of their access to certain web sites and visiting contents were very

useful in preventing the students from being driven to unhealthy contents. But students had been given the access to the school's academic online system to be able to get all the relevant reports belonging to them any time they would like to do so. Each student had his/her own personal login address and password with which to access the system. Parents could also manage the system and learn all about they want to learn about the academic achievement and conduct of their respective children. This school had specific rules and regulations on how and when to use ICT media devices and equipment.

4.3. Level of Use of Electronic Media by Students

This section is committed to dealing with the types of electronic media students use to interact with others, the forms of electronic media they engage in, the purpose the media serve the students, and the amount of time they spend on these media. Tables 4-2 to 4-14 provide the data for these variables.

4.3.1. Electronic Media Devices Students use

Students involve themselves in various electronic media via the use of electronic media devices which include television, radio, and mobile phones with internet connectivity, CD-ROMs, DVD, and others. Radio, television, cell phones, and computer have assumed central roles in the students' daily electronic media lives.

Table 4-2: Types of Electronic Media Devices Students Use

Types of Electronic Media Devices (n=120) Fre=Frequency	**Higher 23 Preparatory School**				**Shimelis Habte Grade 9-10**				**South West Academy Preparatory School**				**Debre Hail Kidus Raguel High School**				**Total**			
	Yes		No		Yes		No		Yes		No		Yes		No		Yes	No	Yes	No
	Fre	%	Fre	%	Fre	%	Fre	%	Fre	%	Fre	%	Fre	%	Fre	%	Fre	%	Fre	%
Mobile phone	22	18	3	3	21	18	2	2	39	33	1	1	30	25	2	2	112	93	8	7
Tablets (e.g. iPad or Samsung)	9	8	16	13	2	2	21	18	24	20	16	13	14	12	18	15	49	41	71	59
TV	24	20	1	1	23	19	1	1	38	32	1	1	31	26	1	1	116	97	4	3
Radio	24	20	1	1	23	19	0	0	32	27	8	7	30	25	2	2	109	91	11	9
Desktop Computer/Laptops	13	11	12	10	11	9	12	10	39	33	1	1	25	21	7	6	88	73	32	27
CD-ROMs	10	8	15	13	7	6	16	13	20	17	20	17	15	13	17	14	52	43	68	57
DVDs	22	18	3	3	21	18	2	2	32	27	8	7	28	23	4	3	103	86	17	14
MP3s	16	13	9	8	7	6	16	13	30	25	10	8	24	20	8	7	77	64	43	36
iPods	6	5	19	16	5	4	18	15	25	21	15	13	11	9	21	18	47	39	73	61
Flash disks	16	13	9	8	15	13	8	7	35	29	5	4	25	21	7	6	91	76	29	24

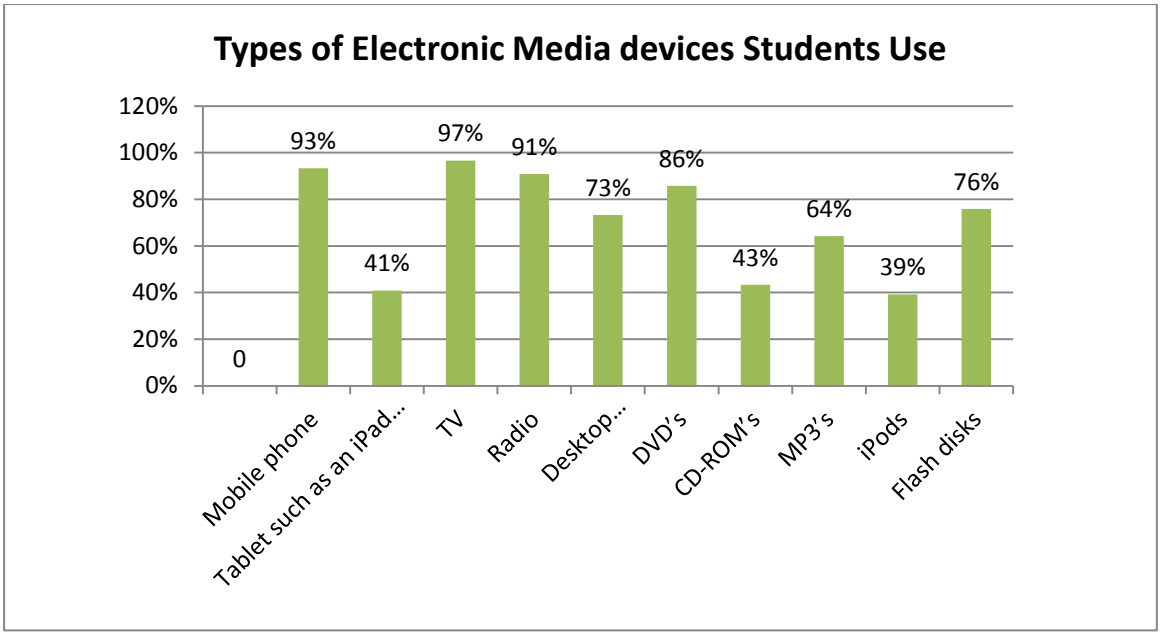

Figure 4-1: Types of Electronic Media Devices Students Use

According to Table 4-2, 97% of the students spend time in watching TV. The FGD participants indicated that there were some students who have even access to DSTV programs at home. A significant percentage of the students are also users of DVD's (86%) and MP3 (64%). Apart from the TV, 91% listen to radio programs. Most of the students (93%) use cellphones. According to the teachers participated in the three focus group discussions (FGD), their students mostly use mobile phones ranging from cheaper (ETB 300) and lower qualities to those smart phones like Samsung, galaxy, iPhone 4 and 5 (ETB 7000)- especially grades11 and 12 students.

Though the types and qualities of the mobile phones the students own greatly depend on the income status of their families, the participants of the FGDs underscored that there are a number of students coming from a relatively lower income families owning expensive smartphones especially girls. One of the principals of the schools, during an interview, was complaining that some students who were not even able to cover the annual tuition fee (ETB 150) were found to own smart phones whose cost was as high as ETB 7,000. Most of the students (73%) use desktop computers or laptops. A meaningful number of students have also been able to use tablets such as an iPad or Samsung (41%) and iPods (39%). Hence, most of the students have access at least to mobile phones, radio, and TV.

4.3.2. Forms of Electronic Media Students Use

Students use electronic media in various forms such as emails, text messages, Facebook, tweeter, games, videos, blogs, etc. Under this section, attempt is made to describe the various forms of electronic media students interact to one another. Table 4-3 provides the respondents rate to this variable.

Table 4-3: Forms of Electronic Media Students Use

Forms of Media (n=120)	Yes		No	
	Frequency	Percent	Frequency	Percent
E-mail	64	53%	56	47%
Instant messaging	59	49%	61	51%
Text messaging	107	89%	13	11%
Chat rooms	66	55%	54	45%
Blogs	21	18%	99	83%
Facebook	98	82%	22	18%
Tweeter	41	34%	79	66%
WhatsApp	61	51%	59	49%
Online games	29	24%	91	76%
Offline Video games	77	64%	43	36%
Computer videos like YouTube	77	64%	43	36%

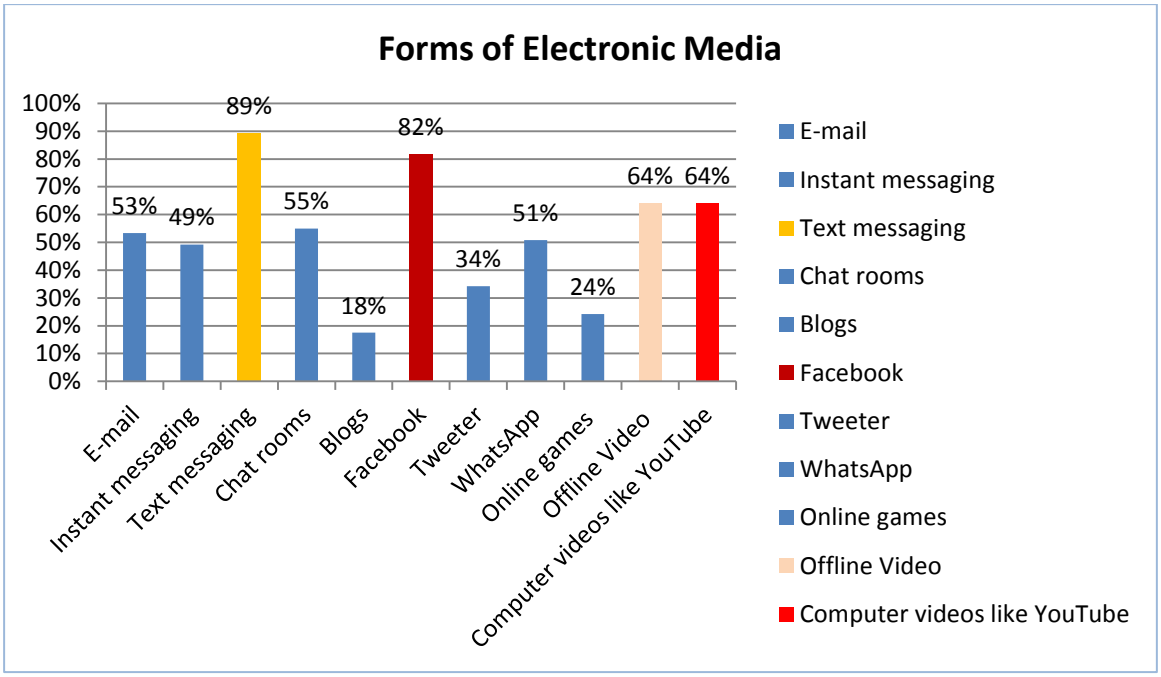

Figure 4-2: Forms of Electronic Media Students Use

Of these forms of media, text messaging (89%) takes the largest portion. Most of the students indicated that they interact through Facebook (82%). Most of them involve in chatting (55%). Teachers indicated that their students chat even during classes while a teacher is delivering a subject matter. There were students who used to chat using WhatsApp (51%). A substantial number of the respondents involve in Emailing (53%). Teachers indicated that boys were usually interested to spend time on the internet more frequently than girls in playing games, developing soft wares in some case, looking for new technologies; while girls spend more time in the social media like Facebook, exchanging emails, instant messaging, and involving in Facebook.

The teachers suggested that the fact that girls spend time in chatting, text messaging and exchanging messages, pictures and other web contents via Facebook is because they want more freedom to share personal ideas amongst themselves than the boys. Playing offline games (64%) and watching computer videos and movies through the application called YouTube (64%) also found in the highly used forms of media. They also watch videos, films even within the school compounds.

Regarding using the application YouTube, a teacher who participated in the focus group discussion for teachers of Higher 23 Preparatory School said:

> *Most of the students use YouTube to watch soccer. I can say without exaggeration that 80% of the boys are interested to watch soccer and other videos using YouTube.*

These forms of electronic media share common features in that all of them expose the students to spend more private time than public. Laphey(2007) notes that the advent of media technologies had ultimately shifted people's leisure-time from public to semi-public or private activities. Though there are few students who opt to use the electronic media for purely academic purpose, the teachers during the focus group discussion underscored that most of their students spend time on social media like Facebook, tweeter, YouTube, and WhatsApp. According to the teachers, there were many instances the boys were observed to take pictures of beautiful girls, how they dress, what type of dress they had put on, pictures of teachers during the class; they record voices of their own teachers during class and post them in their group Facebook pages every week, and

enjoy sharing the same amongst one another. Teachers can have access to these sorts of information.

Table 4-4: Potential Sites/Areas Where Students Use Electronic media

Areas where I use the electronic media	Yes		No	
	Frequency	Percent	Frequency	Percent
At video centers	36	30.0	84	70.0
At school computer rooms (ICT Center)	70	58.3	50	41.7
At Internet Cafes	77	64.2	43	35.8
At school libraries	31	25.8	89	74.2
In restaurants (hotels, cafes, etc.)	53	44.2	67	55.8
Near institutional sites where Wi-Fi is easily accessible	53	44.2	67	55.8
At own home	99	82.5	21	17.5
Anywhere (on my personal mobile phone, with CDMA/Evido gadgets)	79	65.8	41	34.2

Though the students get access to forms of media through various ways, personal mobile phones are the primary source in which they get access to these forms of media. The places where they are most comfortable and easily get access to these opportunities vary depending on the level of accessibility to the place, their economic capacity at the time of access, the affordability of the entrance to the places, the signal strength of the internet connectivity of the places, and the level of restriction of the places. Of the potential sites the students visit, as can be seen from Table 4-4, their homes (82.5) are found the most easier and comfortable to get the access, internet cafes (64%), school computer rooms or ICT centres (58%) and places near institutional sites where Wi-Fi is easily accessible (44%) come next. School libraries (26%) are the least accessible.

Table 4-5: Frequency of Utilizing Electronic Media

Electronic media Activities Fre=Frequency	Daily		Weekly		Daily + Weekly		Once a month		Never		Total	
	Fre	%	Fre	%	Fre	%	Fre	%	Fre	%	Fre	%
Watching movies	70	61	30	26	100	88	12	11	2	2	114	100
Playing games	37	31	49	42	86	73	20	17	12	10	118	100
Keeping in touch with various people such as friends, relatives, girlfriend/ boyfriend, strangers and others	67	58	15	13	82	71	15	13	18	16	115	100
Instant Messaging /Chatting on a specific issue	51	44	26	23	77	67	11	10	27	24	115	100
Searching for Information to educate myself on a given issue.	37	32	27	24	64	56	37	32	14	12	115	100
Gathering news to update myself	39	33	25	21	64	55	24	21	29	25	117	100
Uploading and downloading news, files, reports	32	28	31	27	63	55	23	20	29	25	115	100
Studying and learning online	17	15	17	15	34	29	25	22	57	49	116	100
Searching for scholarship	5	4	13	11	18	16	30	26	66	58	114	100
Emailing	13	12	0	0	13	12	47	43	49	45	109	100

Taking the sum of “Daily” and “Weekly”, in Table 4-5, and considering this sum as a measure of highest frequencies, we can see that the respondents spent their time most frequently on watching movies (88%); playing games (73%) takes the second place, keeping in touch with various people such as friends, relatives, girlfriends/ boyfriends, strangers and others (71%) the third place, and instant messaging or chatting (67%) comes the fourth. A meaningful frequency has also been exhibited in utilizing their time in searching for information to educate themselves on a given issue, i.e. to get knowledge on a given subject (56%), upload and download news files and reports (55%). On the other hand, the study indicated that only few students were frequent users of the electronic media for academic purpose such as studying and learning online (29%) and searching for scholarship (16%). From the responses on frequency and amount of time obtained, we can learn that watching movies, playing games, keeping in touch with various people (Facebook taking the lead form of media), text messaging, and downloading news from online resources are the frontline media activities the students spend most of their time but lower interests are shown on spending satisfactory time on academic matters.

Spearman's rho was used to make a bivariate analysis between Age of Students and the ordinal variables Watching Movies, Doing Instant Messaging/Chatting and Searching for Information to Educate Oneself. Accordingly, it was found out that, Age of Students had no statistically significant relationship with Frequency of Watching Movies (r=-0.045, p=0.638), frequency of Doing Instant Messages/Chatting (r=0.103, p=0.271), and frequency of Searching for Information to Educate Oneself (r=-0.119, p=0.206). Similarly, it was found out that there is no a statistically significant relationship between Grade Level and frequency of Watching Movies (r=-0.058, p=0.541), and Grade Level with frequency of Searching for Information to Educate Oneself (r=-0.08, p=0.408). But there exists a positive, weak and statistically significant relationship between Grade Level and frequency of Doing Instant Messages/Chatting (r=0.222, p=0.017).

Hence, the students, regardless of their ages, spent significant time to watch movies, exchange instant message/chat and search for information to educate themselves. They also spend significant time to watch movies and search for information to educate regardless of their grade levels. However, the frequency of exchanging instant messages or chatting somehow varies with students' grade levels. In this case, the study has indicated that, grades 11 and 12 do more instant messaging/chatting than grades 9 and 10.

Kruskal-Wallis test was conducted to check the difference among the three type of schools, and the result is presented in Table 4-6. Accordingly, it has been found out that there exists a statistically significant difference in the frequency of Watching Movies (chi-square =7.151, p=0.028) and frequency of Doing Instant Messages/ Chatting (chi-square =18.009, p<0.01) among the three school types where private school students were found to spend time more frequently on watching movies and doing instant messages/ chatting than their counterparts in other schools. There is no statistically significant difference among the three school types on frequency of Searching for Information to Educate Oneself (chi-square =5.827, p=0.054).

Table 4-6: Comparisons of Selected Variables with School Types

Variable	Categories	Mean Rank	Chi-Square	Asymp. Sig. (2-tailed)
Frequency of watching movies	Government school	49.46	7.151	0.028
	Private school	66.20		
	Religious based school	59.05		
Frequency of doing instant messages/ chatting	Government school	47.21	18.009	0.000
	Private school	75.43		
	Religious based school	52.47		
Frequency of searching for information to educate oneself	Government school	66.00	5.827	0.054

4.3.3. Purposes of Use of Electronic Media by Students

In this study, a list of potential purposes of using electronic media by high school students was taken to initiate the responses of students to indicate for what purpose they often use the media. However, the researcher has found it relevant to indicate the various electronic media contents the students often visit and address the purposes they intended to meet. Teens and school age youth have numerous objectives and needs in mind when using electronic media, visiting internet sites, and retrieving and uploading electronic media contents. Although their core business, according to the teachers, is being highly engaged in their academic matters and though most parents are cautious about the exposure and influences of the media on their children and attempt to take measures, young students are often observed to crave for and spend much more time in looking for non-academic contents. The youth are attracted to new technologies, news, sexual contents, etc. In fact, Roberts *et al* (2005) describe the adolescents as comprising the primary audience for popular music, forming important niche audiences for TV, movies, and video games. Table 4-7 provides the extent to which the students were exposed to various electronic media contents.

Table 4-7: Students' Exposure to Electronic Media Contents

Media Contents	Never		Rarely		Sometimes		Usually+Always	
	Freq	Per	Freq	Per	Freq	Per	Freq	Per
Music	0	0.0	11	9.6	6	5.2	98	85
Technology related issues	0	0.0	11	9.2	13	10.9	95	80
Games	0	0.0	12	10.1	15	12.6	92	77
Educational issues	0	0.0	16	13.6	17	14.4	85	72
Movies, dramas, etc.	1	0.8	11	9.2	30	25.0	78	65
Sport news	27	22.7	16	13.4	25	21.0	51	43
World news	0	0.0	14	11.8	61	51.3	44	37
Sexual	61	50.8	30	25	15	12.5	10	8.3
Politics	75	64.7	15	12.9	18	15.5	8	7

We see that 85% of the students indicated that they usually or always interested to spend time listening to music. Most of them (80%) are interested in technology products. Individual analysis for boys and girls indicated that 80% of the total number of boys indicated they had been interested in technology products while 77% of the girls indicated they had been interested in the same. A larger number of them (77%) are interested in various games.

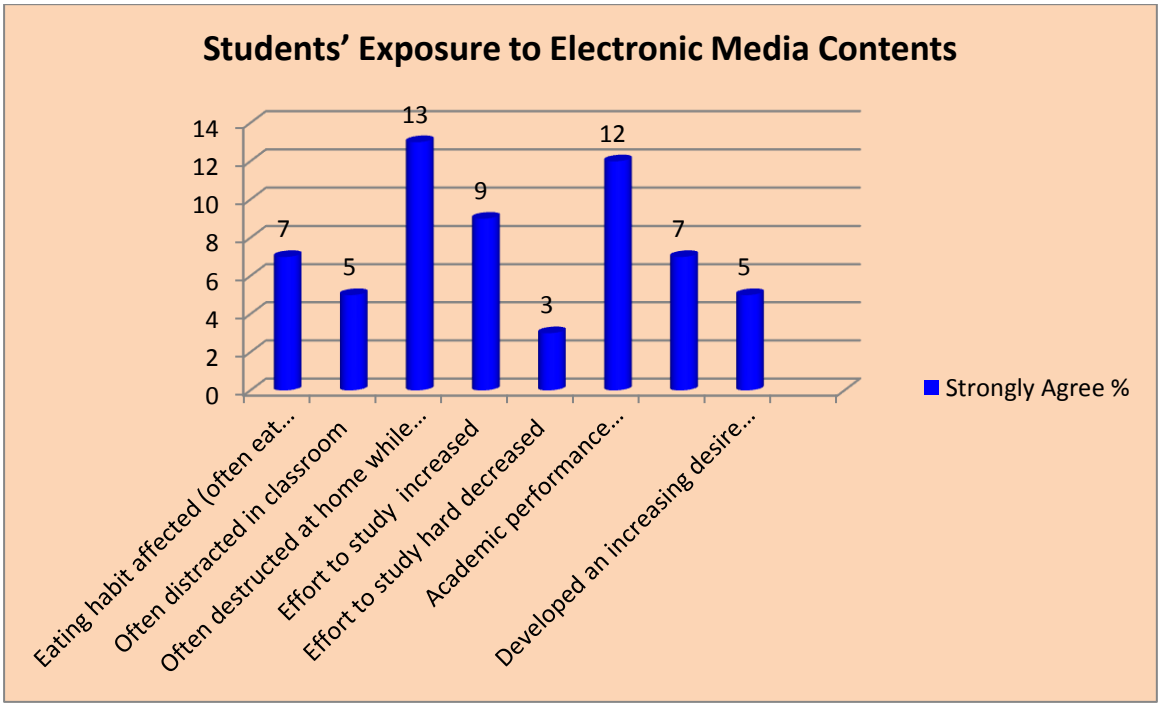

Figure 4-3: Electronic Media Contents Exposure

While further analysing the response rates for boys and girls, it was observed that boys (80%) and girls (70%) had shown nearly the same interest to look for game contents. It may be interesting to learn from the table that 72% of the students indicated that they are interested in educational contents. This may look contrary to what the teachers believed about the lower motivation of the students to use electronic media for educational purposes. But from Table 4-5, we see that 71% of the students indicated that they never or only sometimes engage in online study.

On the other hand, 43% usually or always interested in sport news; this was indicated by 53% of the total number of the boys and 25% of the total number of the girls. But 75% of the respondents were interested in world news contents only sometimes or not at all interested. The table indicates that only 8.3% of the students are interested in sexual contents. This response rate has possibly been lower compared to the others due to the students' high level of sensitiveness to respond to them. At the same time, the teachers reported that the electronic media contents the students look for through their electronic media devices or equipment include academic, sexual contents like pornographic pictures and videos. The teachers assured that their students look for sexual contents very often though there are restrictions to do these in the vicinities of the school compounds. Sport news, Soccer, mobile games (they spend too much time on this even in the class), dramas, music, academic (for scholarship), sport news (boys), biographies of celebrities (soccer player, singer, etc.), movies and politics were also contents often motivating the students as described by the teachers.

While comparing Age of students to Frequency of Exposure to Educational Issues, as depicted in Table 4-8, no statistically significant relationship was found between them ($r=-0.193$, $p=0.053$). The same was true for Age and Exposure to Games ($r=-0.093$, $p=0.349$) as well as Age with Exposure to Technology Related Issues ($r=-0.103$, $p=0.292$). Hence, regardless of their ages, students were found to look for contents of educational issues and games. On the other hand, although week, there existed a negative, but statistically significant relationship between Age and Exposure to Movies and Dramas ($r=-0.230$, $p=0.029$). In this case, students of ages 16-17 were found to be exposed more than the others.

It was found out that, using Spearman's rho, Grade Level of students has no a statistically significant relationship with Exposure to Educational Issues ($r=-0.085$, $p=0.400$), Movies, Dramas ($r=-0.184$, $p=0.083$), Games ($r=0.004$, $p=0.969$) and Technology Related Issues ($r=-0.107$, $p=0.274$).

Table 4-8: Comparison of Selected Variables Using School Type and Exposures to Media Contents

Variable	Categories	Mean Rank	Chi-Square	Asymp. Sig. (2-tailed)
Exposure to educational issues	Government school	50.70	1.640	0.440
	Private school	47.09		
	Religious based school	56.09		
Exposure to movies, dramas, etc	Government school	43.32	4.580	0.101
	Private school	52.00		
	Religious based school	38.80		
Exposure to Games	Government school	52.84	1.614	0.446
	Private school	48.69		
	Religious based school	57.77		
Exposure to technology related issues	Government school	51.29	0.534	0.766
	Private school	54.33		
	Religious based school	55.91		

The Kruskal-Wallis test conducted showed that there is no statistically significant difference in the frequency of Exposure to Educational Issues (chi-square =1.640, p=0.440), Movies (Dramas) (chi-square =4.580, p=0.101), Games (chi-square =1.614, p=0.446), and Technology Related Issues (chi-square =0.534, p=0.766) among the three school types.

While visiting the various contents, students had various purposes to meet. Teens and Media researchers such as Arnett (2007), Gross (2004), Freedman (2006), Lerner and Steinberg (2004) attempted to outline various purposes teens engage themselves and spend substantial time on electronic media. Lerner and Steinberg 's (2004) list of adolescents' purposes of media use include entertainment, tension relief, staying current with popular culture, learning about the world, sensation seeking, escape from loneliness, and many others. Table 4-9 provides response rates for the various purposes the students use the media.

Table 4-9: Purposes of Electronic Media Use by Students

Specific Purposes (n=120)	Yes		No	
	Frequency	Percent	Frequency	Percent
Have relationships with people (family, friends, or desired social groups)	107	89.2	13	10.8
Get information, learn about the world	105	87.5	15	12.5
Get pleasure (have fun, amusement, and recreation)	103	85.8	17	14.2
Relax when I get tired	99	82.5	21	17.5
Build self-confidence, get moral guidance, social acceptance or status	85	70.8	35	29.2
To resolve personal problems and difficulties	77	64.2	43	35.8
Escape from boredom or worries	64	53.3	56	46.7
Avoid conflict, ensure uninterrupted attention and focus, or be all alone	53	44.2	67	55.8
Establish interpersonal connections (romantic relationships) with somebody	52	43.3	68	56.7

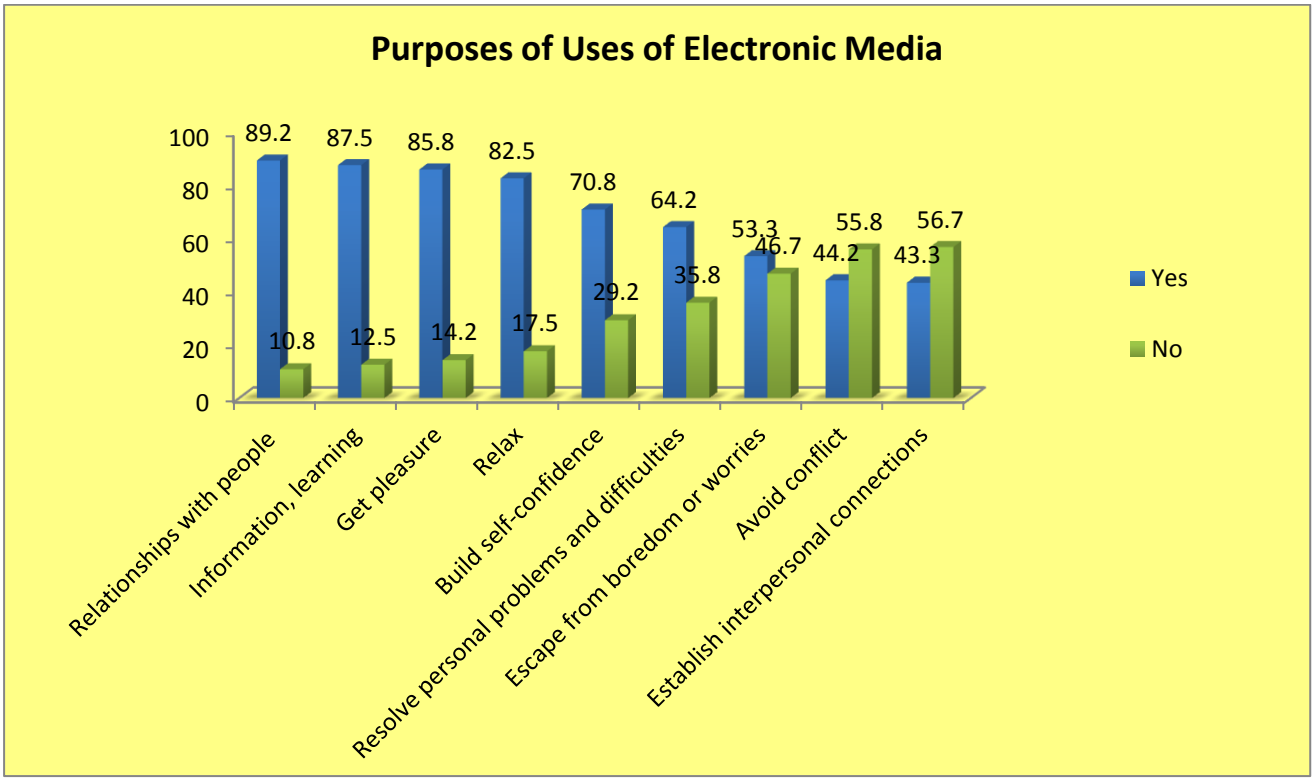

Figure 4-4: Purposes of Use of Electronic Media

The level of use and gratifications of each electronic media, the type of content, the frequency and amount of time spent on any given form of electronic medium, or the specific form, brand, and complexity and quality of the media technology may all affect the purposes the students aim to use the forms of media. But the objective of this particular treatment of the subject is to get a general picture of the extent of the purpose for which they use all the available forms of electronic media. Accordingly, 89% of the respondents indicated that they use the media to have relationships with people (family, friends, or desired social groups), 88% ensured that they use them to get information and learn about the world.

Meanwhile, the teachers of the three high schools indicated that very few students use media for academic purpose. When computers in the ICTs were free and internet connectivity was available, students were sometimes given access to the internet in the high schools' ICTs to do their assignment. But according to the teachers, students' interest to spend time on the internet for academic purpose was so low that they resort to spending time in social medium like Facebook than academic matters. A teacher from Higher 23 Preparatory School reported that he had a situation in which students produced a single Google Map of their respective residence area while the teacher asked about 56 students to get the maps of a number of areas. The students depended on their team leader's effort. The teacher said,

> *The responsibility of a team member for them is to contribute the expected amount of money for generating the Google Map report from an internet café. They showed no interest in spending time to carry out the given assignment by themselves.*

On the contrary, most of the students (85.8%) indicated that they use electronic media to get pleasure (have fun, amusement, and recreation)-this was substantiated by the teachers, 82.5% of them need the media to relax when they get tired, 70.8% of them when they aspire to build self-confidence, they use the media to get moral guidance, social acceptance or status to resolve personal problems and difficulties (64.2%). On the other hand, according to the teachers, there were few students spending time to use their electronic media gadgets and computers to develop programing languages, win science fares competitions, develop antiviruses, carry out educational assignments, avoid loneliness, get worldwide information, discuss ideas and exchange information through Facebook. One of the schools participants said that some of their students were able to prepare power point presentations in the class.

4.3.4. Amount of Time Spent on Electronic Media by Students

The effort to accurately measure the time frequent media consumers, like the youth, spend has been a difficulty to researchers. Donald F. Roberts and Ulla G. Foehr (2008) have indicated that this difficulty can be caused by issues like the multitasking aspect of the media use pattern of the young students, the fast changing electronic media technology and the rapidly shifting nature of adolescent online behaviour. The measurement of the amount of time the consumers of the media spend may be a huge research investment. But for the sake of this study, effort has been made to investigate how much time the respondents spend on specific forms of media and how frequently these particular respondents spend their time on certain specific media activities. In this section, the amount of time the students spent on electronic media is dealt with. Table 4-10 depicts the amount of time the students spend on various electronic media.

Table 4-10: Time Spent on Electronic Media

Forms of Electronic Media	<2 hrs. a day		2-4 hrs. a day		4-6 hrs. a day		>6 hrs. a day		Total		>4 hrs. a day	
	Freq	Per	Fre	Per	Freq	Per	Freq	Per	Freq	Per	Freq	Per
E-mailing	77	85.6	5	5.6	4	4.4	4	4.4	90	100	8	8.9%
Instant messaging	62	71.3	15	17.2	2	2.3	8	9.2	87	100	10	11.5%
Text messaging	69	62.7	20	18.2	11	10.0	10	9.1	110	100	21	19.1%
Chatting	47	44.8	24	22.9	17	16.2	17	16.2	105	100	34	32.4%
Blogging	52	78.8	11	16.7	1	1.5	2	3.0	66	100	3	4.5%
Managing Facebook page	44	42.7	36	35.0	11	10.7	12	11.7	103	100	23	22.3%
Tweeting	53	76.8	10	14.5	4	5.8	2	2.9	69	100	6	8.7%
Playing online games	53	72.6	10	13.7	7	9.6	3	4.1	73	100	10	13.7%
Playing Video Games	47	49.5	24	25.3	14	14.7	10	10.5	95	100	24	25.3%
Watching Computer videos like YouTube	58	62.4	20	21.5	7	7.5	8	8.6	93	100	15	16.1%

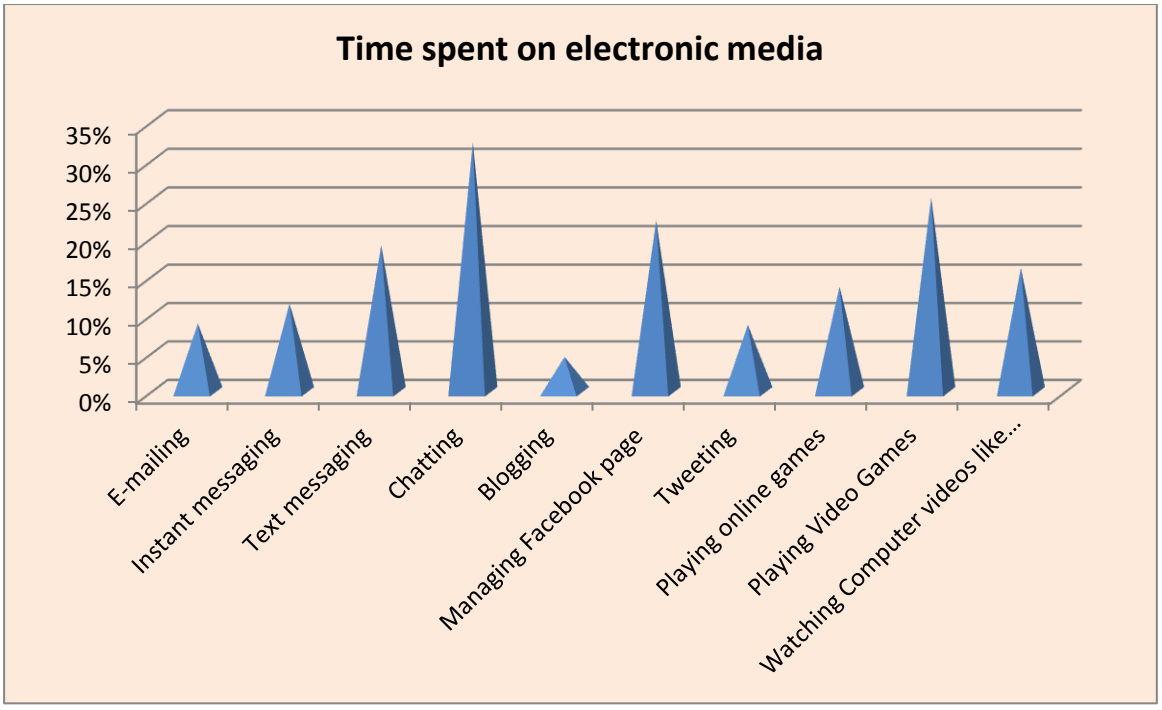

Figure 4-5: Time Spent on Electronic Media

The students were asked to indicate how much time they spent within the range from less than 2-hours to more than 6-hours. Taking 4-hours and above a sufficiently large amount of time to spend on a given form of electronic media, and considering that various total frequency of responses (ranging from 66 to 110) were reported in this study, we can see from Table 4-10 that 32.4% of the students spend on chatting, 25.3% of them on playing video games, 22.3% on Facebook, 19.1% on text messaging, and 16.1% on watching computer videos like YouTube.

On the other hand, only few respondents indicated that they spend relatively lower time on emailing (8.9%), tweeting (8.7%), and blogging (4.5%). Most of the teachers indicated that, though their students have a very high interest to spend time on the electronic media, owing to the tightness of the schools' academic schedules, their students rarely spend time on electronic media during school hours because they spend the time from morning to around 3 in the afternoon in class activities, and use the rest for carrying out their assignment. From their various possible observations they were also able to conclude that most of the students spend at least 2-hours/day on the internet.

A depicted in Table 4-11, Age of students has no statistically significant relationship with the following variables which measured the amount of time spent on Facebook (r=-0.079, p=0.523), time spent on Playing Video Games (r=-0.151, p=0.208), time spent on Text Messaging (r=-0.071, p=0.507), and time spent on Playing Online Games (r=-0.049, p=0.705). Grade level had also no statistically significant relationship with time spent on Facebook (r=0.043, p=0.733), time spent on Playing Video Games (r=-0.153, p=0.203), time spent on Text Messaging (r=-0.113, p=0.290), and time spent on Playing Online Games (r=-0.169, p=0.186). Thus, regardless of their age and grade levels, the students were found to spend a relatively significant amount of time using Facebook as a social media interface, play video games, exchange text messages, and play online games.

Table 4-11: Comparison of Types of Schools with Time Spent on Various Forms of Electronic Media

Variable	Categories	Mean Rank	Chi-Square	Asymp. Sig. (2-tailed)
Time spent on Facebook	Government schools (Higher 23 Preparatory School and Shimelis Habte grade 9-10 School)	27.50	6.354	0.042
	Private school (South West Academy Preparatory School)	34.57		
	Religious based school (Debre Hail Kidus Raguel High School)	39.91		
Time spent on playing video games	Government school (Higher 23 Preparatory School and Shimelis Habte grade 9-10 School)	33.95	1.299	0.522
	Private school (South West Academy Preparatory School)	39.21		
	Religious based school (Debre Hail Kidus Raguel High School)	35.09		
Time spent on text messaging	Government school (Higher 23 Preparatory School and Shimelis Habte grade 9-10 School)	40.01	4.423	0.110
	Private school (South West Academy Preparatory School)	49.10		
	Religious based school (Debre Hail Kidus Raguel High School)	48.52		
Time spent on playing online games	Government school (Higher 23 Preparatory School and Shimelis Habte grade 9-10 School)	32.22	1.343	0.511
	Private school (South West Academy Preparatory School)	29.95		
	Religious based school (Debre Hail Kidus Raguel High School)	34.22		

Table 4-11 shows the existence of a statistically significant difference on time spent on Facebook among the three school types (chi-square =6.354, p=0.042). In this case, the students in the faith based school were found to spend more time than the others. But, there is no statistically significant difference among the three school types, on time spent on Playing Video Games (chi-square =1.299, p=0.522), Text Messaging (chi-square =4.423, p=0.110), and Playing Online Games (chi-square =1.343, p=0.511).

4.4. Electronic Media Influence

Electronic media influence refers to the notion about the ways electronic media affect how the media consumers think and behave. The fast moving electronic media technology, the abundant electronic information, coupled with the interest and motivation of adolescents for the swiftly changing number and qualities of media products have triggered the various influences of the electronic media on them. Steinberg (2009) views that the media shape adolescents' interests, motives and beliefs about the world. This section provides with the findings of how these adolescents are influenced by the media in question. Table 4-12 provides with the rates of the various responses given by the students on how influenced they were as a result of their engagement in the various forms of electronic media.

Table 4-12: Electronic Media Influence

Aspect of Influence Fre=Frequency	Strongly Disagree		Disagree		Agree		Strongly Agree		Agree+Strongly Agree	
	Fre	%	Fre	%	Fre	%	Fre	%	Fre	%
Eating habit affected (often eat too much or lose appetite, etc.)	37	31	35	29	28	24	8	7	36	30
Often distracted in classroom	29	24	41	34	34	28	6	5	40	33
Often destructed at home while doing my homework/assignments	16	13	30	25	52	44	16	13	68	57
Effort to study increased	18	21	23	26	29	33	8	9	37	42
Effort to study hard decreased	17	14	38	32	43	36	4	3	47	39
Academic performance negatively affected	23	20	36	31	34	30	14	12	48	42
Physical status affected (experienced gain/loss of weight)	56	48	33	28	15	13	7	7	22	19
Developed an increasing desire for sexual contents	60	50.4	32	26.9	17	14.3	6	5.0	23	19

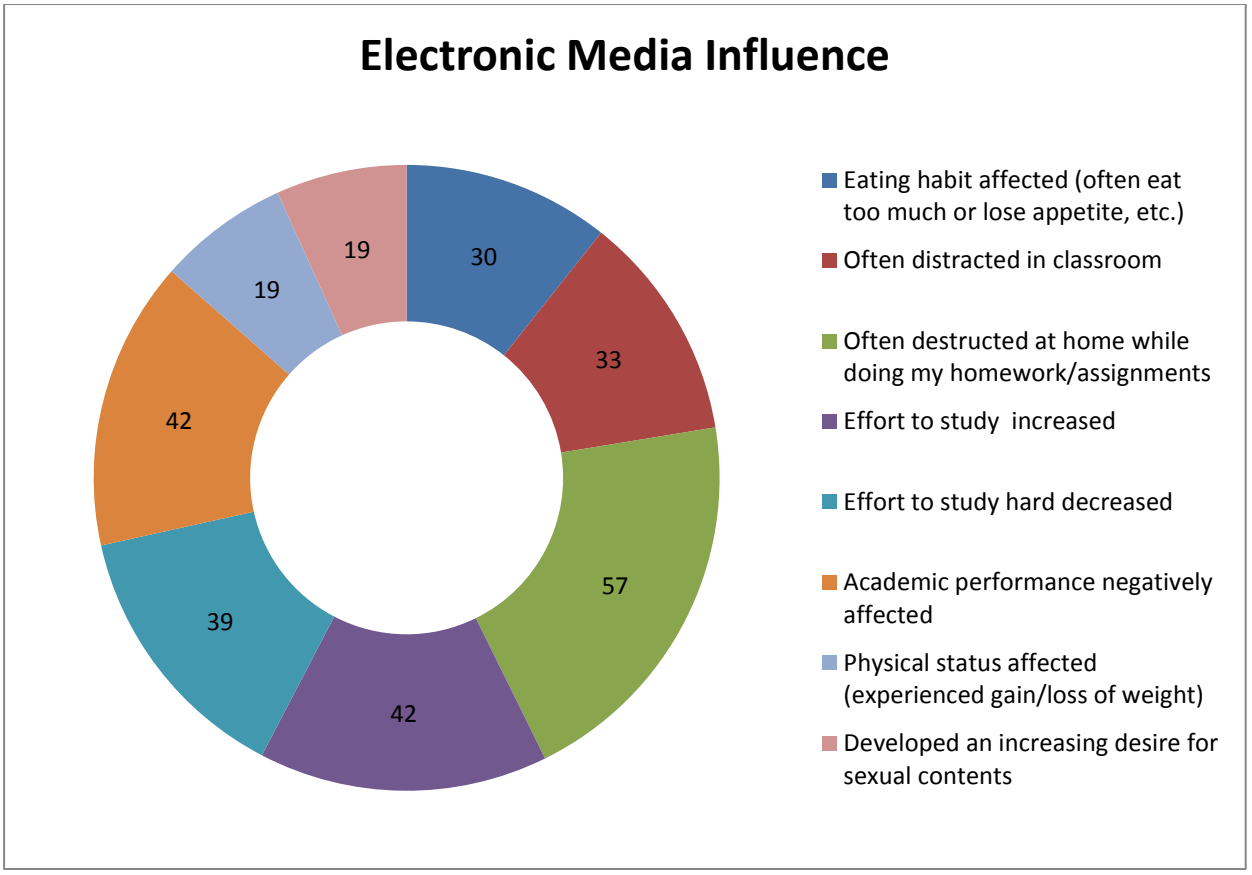

Figure 4-6: Electronic Media Influence

Taking the sum of those respondents who Agreed and who Strongly Agreed on the aspects of influences, Table 4-12 helps us see various significant influences as indicated in the various aspects below.

4.4.1. Electronic Media Influence on Students' Academic Performance

The table indicates that 57% of the respondents have agreed that, as a result of engaging themselves in various interactions and communications, or listening or watching media programs at home, they were often distracted while doing their homework/assignments, 42% agreed that their effort to study increased, on the other hand, the effort of studying of 39% of them has decreased, the academic performance of 42% of them have been adversely affected. Out of 40 students agreed or strongly agreed that their class room attention was distracted. The teachers indicated that the students had referred to numerous instances where most of their internet user students have low academic performances. A teacher underscored the following:

Most of the students who spend most of their time browsing the internet perform lower in their academic endeavour than those spending less time.

The 2015 cumulative yearly grades of 50 students (as reported by the students) were found below 85%. This is an indicator for the previously researched fact that students' electronic media engagement while on academic tasks negatively influence their academic performance.

Age of students had no statistically significant relationship with the self-reported extent of influence of electronic media on Classroom Attention (distracted in classroom with r=-0.086, p=0.454), Attention While Studying at home (distracted at home with r=-0.174, p=0.102), and Study Habit (increase on study effort with r=-0.180, p=0.152). The same was true to Grade Level of Students; Classroom Attention (distracted in classroom with r=-0.036, p=0.751), Attention While Studying at Home (distracted at home with r=-0.089, p=0.406), and Study Habit (increase on study effort with r=-217, p=0.082).

Table 4-13: Comparisons of Various Academic Influences of Electronic Media on Students and School Types

Variable	Categories	Mean Rank	Chi-Square	Asymp. Sig. (2-tailed)
Influence on classroom attention (distracted in classroom)	Government schools (Higher 23 Preparatory School and Shimelis Habte grade 9-10 School)	45.11	6.604	0.037
	Private school (South West Academy Preparatory School)	31.02		
	Religious based school (Debre Hail Kidus Raguel High School)	42.77		
Influence on attention while studying at home (distracted at home)	Government schools (Higher 23 Preparatory School and Shimelis Habte grade 9-10 School)	35.92	8.424	0.015
	Private school (South West Academy Preparatory School)	49.19		
	Religious based school (Debre Hail Kidus Raguel High School)	52.14		
Influence on study habit (decrease on study effort)	Government schools (Higher 23 Preparatory School and Shimelis Habte grade 9-10 School)	37.85	0.468	0.791
	Private school (South West Academy Preparatory School)	40.05		
	Religious based school (Debre Hail Kidus Raguel High School)	35.89		

In connection with the influence of electronic media on classroom attention of the students, Table 4-13 indicates that it was found out that those students from government schools were relatively highly distracted in classroom than students from other schools (chi-square =6.604, p=0.037). Students from private schools were found to have their attention distracted by electronic media interruptions while studying at home more than those in the two other schools (chi-square =8.424, p=0.015). Whereas, there was no statistically significant difference on the influence of the media on the study habits of the students among the three school types (chi-square =0.468, p=0.791).

4.4.2. Electronic Media Influence on Students' Physical and Individual Behavior

Only 19% indicated that their physical status were affected (experienced gain/loss of weight), and 30% of them indicated that their eating habit was affected (eating too much or losing appetite). According to Table 4-12, 57 % agreed or strongly agreed that their attention at home is distracted while attending to one or more electronic forms of media. This is the issue of multitasking in electronic media. A relatively insignificant number of students (19%) indicated that they had developed an increasing desire for sexual contents.

The discussants pointed out cases in which some students reported to them that they spent time on electronic media to avoid depressions and loneliness. In many cases, they had situations to see that some students demonstrate aggressiveness and stubbornness when approached by teachers. There were also cases in which students demonstrated violent behaviors which the teachers reported to occur as a result of watching violent films. A teacher in one of the focus group expressed his observation like this:

> *I remember a student once hit a teacher with an iron rod. I was able to trace this incidence and found that she got it from the violent films she often watched.*

A teacher in South West Academy Preparatory School expressed his frustration and mentioned the following:

> *In one of my classes, I posed the topic, "What do you know about Ethiopia", no one student was mentioning about Ethiopia, the students were rather talking about English Premier League and other foreign matters.*

Another teacher in the same school described his observation like this:

> *I have the experience to watch students who are often following wearing, speaking and walking styles, and the hair styles of celebrities in the film, music and soccer industries. They jump on desks in classes, and so many things they watched on the TV and internet. A number of students introduce themselves and greet others the way the foreign celebrities they follow do. In general, I can conclude that the students are influenced by foreign practices.*

4.4.3. Electronic Media Influence on Students' Interpersonal Relationship and Social Relationships

The teachers had also quite a number of cases in which their students use highly contrasted texts especially when exchanging text messages; they use such a writing style even on their academic works. Examples include w/c, to mean "which", w/o to mean "without", STR8, to mean "straight", PPL to mean "people", PLZ to mean "please", etc. There are also aspects in which some students developed their writing skills as in the case of writing plays, in which case they were potentially influenced by the fact that they spent on watching TV entertainment programs and other movies. There have been many situations in which students relate a given area or issue of a subject matter to what they have visited on the internet.

They use their group Facebook pages "The Killers" and "Shint Bet" to post messages to express their hatreds and attitudes to the school administration and the teachers. The teachers indicated that their schools make a rigorous effort to mould students' behavior, help them keep away from bad behaviors as a result of using electronic media. When students are found ill-mannered, they are counselled and helped to get out of the bad behaviors. The teachers in Debre Hail Kidus Raguel High School-a faith based school said concerning the effort the school makes in helping the students model good behaviour while engaging in electronic media interactions:

> *We have had a report of a lower level of incidences of unethical use of electronic media in the premises of the school. We make every effort to disseminate the beliefs, ethics, practices (prayer and teaching) of our school to the students, and we strictly follow up this.*

4.5. Rules on Electronic Media Exposure

Roberts et al (2005) concluded that among 7th- to 12th graders, only 22% report to have rules on TV content or time, 35% report rules about computer content or time, and only just 16% of 7th- to 12th-graders report rules governing music content. They underscored also that parental regulations of TV behavior do make a difference even among older youth. In their research to examine the natures of household rules, they had questions about rules controlling media activities which were varied but generally asked about controls on the amount of use, on content used, and on contingencies controlling use (e.g., no viewing until homework is completed). In addition, several items assessed "parent involvement" with youth media behavior independent of explicit rules (e.g., parents' attention to ratings). Clear rules on media use are essential in schools also to clearly inform students the boundaries to behave accordingly.

This section of the study deals with the social environment in which the students are able to interact with the media, how their parents, members of their families, school leaderships and teachers, and other relevant constituents put restrictions and limitations on the level and amount of time the students freely interact with the electronic media. These actors put rules orally or in writing that constraint their liberty to spend on the media.

Table 4-14: Rules on Electronic Media Exposure

There are rules or Guidelines about: Fre=Frequency	Strongly Disagree		Disagree		Agree + Strongly Agree		Not Sure	
	Fre	%	Fre	%	Fre	%	Fre	%
Types of TV contents at home	15	13	20	17	84	71	0	0.0
Amount of time to spend watching TV at home	17	16	27	23	70	60	3	3
Types of internet contents at home	12	10	33	28	71	61	0	0
Electronic media use in the classroom during teaching learning sessions	35	32	20	19	51	47	2	2
Electronic media use in the school's compound	20	17	22	19	68	59	6	5
Amount of time to spend on electronic media in the school's compound	25	21	30	26	55	47	7	6
Electronic media use in the library	25	23	33	30	48	43	5	5
Amount of time to spend watching TV at school ICT Center	28	24	39	34	40	34	9	8
Types of internet contents at school ICT Centres	20	17	29	25	64	55	3	3

Taking the sum of those respondents who Agree and those who Strongly Agree on the aspects of Rules on Media Exposure, we can see from Table 4-14 that 71% of the students agree or strongly agree that rules are established at home on which types of TV program they should watch, 61% of them students agree or strongly agree that rules are set at home on what type of internet contents they need to visit, while 55% agree/strongly agree that there is a restriction on the types of internet contents they can freely visit at their school ICT centers, 60% agree/strongly agree that there are rules on the amount of time they are free to spend watching TV at home. On the other hand, a substantial number of students (51%) who participated in this study held that there were no restrictions on electronic media use in the classroom during teaching learning sessions; a significant number of them (36% and 52%) indicated that there were no restriction of using electronic media in the school compound and in the library respectively.

In fact, as most of a significant number (48%) of the parents/guardians of the students have a good educational background, we can have the confidence that they have a significant level of the knowledge and understanding of issues of electronic media and their capabilities to help and coach them to model a good practice while they use the given media. Most of the students (59%) agree/strongly agree that their schools have established rules that prohibit them from using electronic media devices like mobile phones, visiting the media, and interacting and communicating with others while they are in their school compound. All the principals during interview and the teachers of the schools indicated that getting mobile phones to school compound and using the phones in the vicinity of the compound are strictly prohibited and that parents have agreed on the decision. During the focus group discussion, a teacher from South West Academy said the following concerning the banning of mobile phones:

> *Our school extremely prohibits and has clearly communicated to parents that bringing and using of any sort of mobile phones to the school will be an offence and results in appropriating of the phone by the school; in fact, parents have agreed on this. But in spite of this rule, students are often found with phones of various types.*

One of the schools has students' regulation which stipulates issues of wearing styles but not necessarily issues of electronic media. However, teachers prohibit students from playing phone games, watching movies during classes, and exchanging texts and social media contents. The principal and the school ICT Administrator, and the teachers of this school indicated that there is a regulation that prohibits bringing to and use of mobile phones in the school compound. In fact, Page 13 of the Student-Parent Handbook (2014) disseminated to the parents clearly stipulates the following:

> *Never bring electronic devices including mobile phones, iPods, iPhones, calculators, and CDs to school. If such items are found in the hands of students, they would be returned to parents at the end of the academic year.*

The teachers of the Debre Hail Kidus Raguel High School specified that there is a clear stipulation of the banning of having mobile phones in the school's premises; any student found having mobile phones in the school premises shall have his/her phone appropriated by the school, be kept with the school administration till the end of the academic, and be returned to the student after completing the academic achievement of the year and upon being fined ETB 100. Students found repeating this offence, visiting internet sites for purposes like pornographic, violence, sending academic messages (contents) to friends during examinations, and other offensive are subject to punishments including immediate dismissal from the school. On the other hand, none of the participants have indicated that there are rules on electronic media use in other parts of the school like the library, ICT centers and others.

4.6. Discussion of the Findings

The ever increasing level of the power of market penetrability and varieties of the electronic media products and the continuous increase in the need to discover these products on the part of high school age students have been consistently going hand in hand during the last couple of decades. The features, forms and types of contents and applications of the media products have attracted the attention of these students so much that they have been encountering a number of challenges including being distracted from their educational priorities, imitating various styles they have copied from the internet and other media applications and behaving the same way they have observed in the media and may be influenced so much so that they relate to others depending on the amount of

time they spend and the types of the electronic media content they have encountered. These influences have brought about a number of adverse effects on their teaching-leaning process in schools, their personal behavior, and social life. This study hopes to contribute to addressing the concerns. This section is devoted to interpreting the findings, attempts to address these problems and the research questions, and relate the findings with findings of other studies.

The schools in question have developed ICT centers with a number of computers, limited internet connectivity mostly availed for teachers in the ICT centers, WI-Fi in the vicinity of the school compound but not often accessible for the students, Plasma TV programs but not often utilized well due either to the poor coordination and integration or inconsistent follow up by the school or lack of motivation on the part of the students. In all the three schools, ICT classes were conducted for students by skilled personnel. The time the students spend on electronic media in the ICT centers is relatively lower than they do in other places.

One of the three schools, South West Academy, however, pays more attention to the optimization of the ICT technology, is more intentional in strengthening the ICT centers and ensuring the right integration of online communication with the academic program. The school's effort to automate its academic activities and establish an online interface whereby teachers and school leadership are able to readily communicate with their students and their parents is of tremendous significance in contributing to making the school an electronic media friendly environment to the students.

Schools play significant roles in terms of creating and fostering youth friendly electronic media environment that contributes to the cognitive, social, physical and moral development of their students. This needs a rigorous effort on the part of the school to equip and resource their ICT infrastructure, build and upgrade the competencies of their ICT staff in line with the ever changing electronic media technology and its influences, motivate their academic staff to help follow up their students to help them make the most out of the technology. In this regard, much more work is expected to be done by the schools.

The review of literature in this study indicates that distinctions of the various forms of electronic media are getting more and more blurry as a result of the continuous advancement of the technology. This situation has made a number of types of forms of media accessible through mobile phones. E-mail, YouTube, cameras, text messaging, and social media like Facebook, Tweeter and WhatsApp can all be administered with the help of cell phones. Adolescents use these communication forms for various purposes. These findings are compatible with the findings of this study. Major implications of the findings of this study are discussed below.

Students' Level of Use of Electronic Media

The findings of this study indicate that students under this study use quite a number of electronic media tools but TV, radio and cell phones play significant places in the lives of the students. Level of income of the families of the students under this study was not at all a hindrance to own personal cell phones including those expensive smart phones like Samsung, galaxy, iPhone. Getting access to computers, laptops, iPad, and iPods is part of the life style of the young students. These students are motivated by and enjoy exploring the ever increasingly upgraded features of the various forms and applications of the electronic media. According to the finding of this study, text messaging and interaction through the social media called Facebook take the larger place in the lives of the electronic media communication patterns of the youth. There is a blurry distinction in the level of spending time on the media amongst the students in the continuum of their age group (15-24) treated in this study.

The Influence of Electronic Media on Academic Performance

A relevant aspect to point out amongst the findings of this study is regarding the students' interest towards educational electronic media contents. The scenario that students' interest for educational contents was higher than their engagement on online studies implies that the interest of the students' online study needs a specific attention and further study. However, this may mean that they may develop an interest to look for educational media contents but not necessarily spend a meaningful amount of time to use them for their academic purpose. This does not necessarily mean that they do not want to get online information and neither does it mean they don't have the interest to get online learning. In fact the findings indicated that a majority of them use electronic media for the purpose of learning about the world.

Given the unsatisfactory capacities of the electronic media infrastructure of the schools, with the exception of South West Academy, and lack of a well-designed electronic media environment that would provide the students with motivating and engaging online learning intervention that is integrated with the regular curricular activities, students' high interest and continuous attempt to look for media contents other than education (music, movies, games, etc.) through their individual mobile phones would expose them for a number of unhealthy media contents resulting in adverse behaviours. One predominant school curricular effort on the part of higher schools media-education, schools plasma programs, according to this study, needs critical attention and further research as to why students show lower interest in the program. A teacher in the focus group discussion held for Higher 23 Preparatory School teachers pointed out the following:

> *A plasma project piloted in 2015 by an American and two Dutch academicians designed a school curriculum in the form of plasma. The program was uploaded in 50 tablets and provided to selected 90 students to work on English, Mathematics, Physics, and Chemistry. The students were hardly interested in the project a week after they started working on the program, hence the failure of the project. When the students were asked why they were not interested in the program, they said, 'The program does not have any new intervention, "Addis neger yelewum". They only wanted to concentrate on something that helps them prepare for exams.*

A large number of the students, according to this study, lack the interest to carry out their academic assignments with the help of the internet. They are mostly distracted both during class and at home while studying. According to teachers during the focus group discussion, they tend to listen music, watch movies, soccer on DSTV, listen to radio programs on soccer competitions (e.g. follow English Premier League schedules), and interact on the Facebook. Most students pay much more attention to electronic media products than making effort to their core business-education. This tendency affects their study habits and schedules and makes them to remain behind in their study schedule. This, in turn, results in poor academic performance. According to Jacobson and Forste's (2011) findings, electronic media use is negatively associated with student's grades. Teachers' view during the focus group discussion for South West Academy is compatible with this view. They emphasized that students with high performance spend less time on

electronic media than those with low performance. On the other hand, the intentional effort of few students to productively use the media had an impact on the cognitive skill of the students. Some of the students, according to teachers in South West Academy, were found to be able to develop programing languages and computer applications, win science fares competitions, develop antiviruses, get worldwide information, discuss productive ideas, and prepare power point presentations in the class.

Students' interest and commitment to spending in communicating and interacting through social media, very specifically Facebook, with their friends and others are pretty overwhelming and need a specific attention. This study has indicated that irrespective of age and grade level, students spend quite a lot of time on Facebook. However, it was also verified in this study that students of the faith based school (Debre Hail Kidus Raguel High School) spend more time on Facebook than the others. To arrive at the reason behind this distinction needs further in-depth study. This might also have been a result of sampling bias.

Students feel the freedom to use Facebook as a platform to air their likes and dislikes of their teachers, friends and others; express their views of the academic and administrative matters of their school. A common social medium interactive platform for students, according to this study, is Group Facebook. The overwhelming amount of time students spend on Facebook is a concern for their parents, teachers and school leadership as it potentially replaces their study time. This situation affects the efficiency of their study and schools' effort to achieve instructional objectives. A substantial number of students who participated in this study held that there were no restrictions on electronic media use in the classroom during teaching learning sessions, in the school compound and in the library. This indicates that these students used their liberty to exchange media contents through Facebook even during school hours.

Wang et al (2011) concluded that 64% of American students post or respond on the Facebook during school hours. This for sure distracts the attention of students during the teaching learning process. In this study, those students from government schools were found to be relatively highly distracted in class room than students from other schools while those students from private schools were found to have their attention distracted as a result of engagement in electronic media interruptions while studying at home more

than those from the rest of the other schools. These results can be attributed to the difference in the level of restrictions impeded on the students at the various schools. It was found that the private school South West Academy is a school which put a severe restriction on students' uses of electronic media in the vicinity of the school's compound. The students get more freedom out of school than at school to spend time on the media. Teachers at South West Academy, during the focus group discussion, underscored that it was this restriction that could be taken as a frontline factor that made them open a group Facebook account, which they called "The Killers", to express their views and complaints on the school administration and their teachers.

Private and Public Life Styles

This study has also indicated that the media technology has allowed users to interact with others both privately and in public. While spending so much time in text messaging, students are interested in more private interactions than public. It was indicated in this study that older students (17-20 and those in grades 11-12) spend much more time on text messaging than the younger ones. This indicates that older young students lean towards private life more than younger students.

The western bed-room TV culture is only a practice and life style of very few students, as the economic levels of most of the parents of the students do not allow them to afford having TV sets in the bed room of their young boys and girls. But "bed-room" cell phone culture is a practice of most of the students. A significant amount of their time on the phone is spent more privately than in public. Although Facebook allows more public interactions than text messaging, these students are able to restrict users from getting certain access to their profiles; they can still keep their media interactions as private as possible. They watch both online and offline videos, play both online and offline games with the help of their cell phones, listen to music still keeping themselves private. Given the large amount of time these students spend manipulating their media devices, youth's private life style can be considered as an area to be critically looked at.

Electronic Media Interactions and Youth Development

Arnett's (2007) view of adolescents' orientation towards media to use them as sources of self-socialization and of messages about their identity has been indicated in the findings of this study. In view of this, students interact amongst themselves through social media

like Facebook, Tweeter and WhatsApp to express their views about a given issue. In So doing they build their relationships, express their ideas freely and confidently. They relieve and dispel negative emotions. Hence, social media has a positive impact on both the cognitive and social development of young students. On the other hand, as they are seldom coached to optimize the level of their privacy in using the media, they are susceptible to uncontrolled and unfiltered media contents like unhealthy sexual and violent media products.

Electronic Media and Youth Sexual Orientation

Although students' response rate for the variable Exposure to Sexual Contents was lower than other contents, other studies suggest that media exposure can increase early sexual behavior and that most teens spend significant amount of time browsing sexual sites. This position was also substantiated by the teachers during the focus group discussions. They indicated that some students develop online romantic relationship. They have reported that they had the opportunity to observe that their students exchange personal information via Facebook to initiate love relations. In line with, a teacher from Higher 23 Preparatory School said the following:

> *I had the opportunity to read the diary of a student who had sent her personal address to a person she never had any physical contact, and has been exchanging love messages with the man. She wrote him that she wanted to meet him in person and tried to send her picture via somebody but could not succeed. She finally informed the person that she would send him her personal photo via Facebook so that he could be able to meet her. When she met the person physically, she was later upset because the person she met was much older than she had expected.*

The teachers indicated that, as a result of spending time on the internet, there were students who developed a same sex sexual orientation. This was demonstrated in the pictures posted in the Facebook pages of the students.

In conclusion, the patterns of communications and interactions of the students through the various forms of media have both positive and negative influences on the quality of the academic performance of the students, the level of effectiveness of the school

curricular objectives and the efficiency of the overall teaching learning process of the schools, the individual behavior, interpersonal relationship and social interactions of the students. The shocking length of time spending on the electronic media contents and products and the lose-controlled interactions of the adolescents with the various media especially, the social media, is a concern for both parents and higher school communities.

Chapter Five

5. Summary, Conclusion and Recommendation

The study has identified level of access to the various forms of media and influences of these media on the school age youth. Therefore, the conclusions drawn and recommendations made hereunder are based on the findings obtained from the analysis of observations, questionnaires, interviews, and focus group discussions.

5.1. Summary

The study has examined the features of students' media environment, the various forms of electronic media communications and interactions students engage themselves, the contents they are exposed to by the media and the purposes the media serving the students. Effort was also made to evaluate the amount of time students spend in using the electronic media (at school, out of school, at home). Exploring the merits and de-merits of the uses of electronic media by the students, and the roles and efforts currently played by high school teachers and school leadership in influencing the behaviours of their students in terms of optimizing electronic media communications of the students have also been given profound places in this study.

Both quantitative and qualitative approaches were employed in the study. Interviews Questionnaires and focus group discussions were used to collect data from students, teachers and school principals, who were the focus of the study. Other similar researches and theoretical frameworks that support the subject under study have also been looked at and examined in light of the essence and objectives of the study. The data were analysed using genres of SPSS version 20 and the following major findings have been found.

5.1.1. Electronic Media Types Students Use

The findings of the study showed that the majority of the respondents have access to most of the electronic media environment with mobile phones, TV and radio being the most outstanding sources of electronic media students use to access to the online media. Although ICT centers of the high schools meant to serve the students in many ways, students' use of computers at the centers are limited to academic matters due to various reasons including the lower ratio of their number of the students to the number of the

computers available in the center, the usually poor signal strength of the internet connectivity of the centers, in many cases, the restrictions of the students to get access to the network, in most cases, also due to lack of interest of most students to spend on private communication and interaction concerns than academic matters. Although the types of the sources of media the students own may vary from student to student mostly depending on the income status of their parents/guardians, there were incidents where some students found having DSTV's at their own, few students owning their own PC's or laptops with Wi-Fi or evideo or CDMA connections at home, few others having expensive smart phones, iPhones, iPads, iPods, etc.

5.1.2. Students' Level of Use of Electronic Media

Depending on the type of the phones they use, students are able to subscribe to various forms of applications like Skype, WhatsApp, and Viber; they exchange messages, pictures and videos through forms of media like email, instant messaging (IMing), chatting, text messaging. They also involve in social media like Facebook and Tweeter. The larger number of the students involve in text messaging and Facebook communications. Too many students spend time in offline games and watch online videos like YouTube. Most of these forms of media require internet connections; except for few students who can use their mobile account to get internet service, the larger number of them depend for their internet service on quite a number of ways including Wi-Fi in their school compound, internet cafes and other places where Wi-Fi are easily accessible.

The students have various intentions in mind while using the media. Most of them use the media to have relationships with people (family, friends, or desired social groups), to get information and learn about the world, to get academic information, to pursue scholarship, to get pleasure (have fun, amusement, and recreation), to relax when they get tired, get moral guidance, social acceptance or to resolve personal problems and difficulties. There are very few students who use these media to carry out their school assignments, spend time to develop software. World news, sport news, games, sexual contents, and technology products are mostly searched contents by the students. Students spend in many cases more than 4 hrs a day to satisfy many of their needs mentioned above.

5.1.3. Influences of the Uses of Electronic Media by Students

As a result of engaging themselves in various interactions and communications, or listening or watching media programs, the students face problem of destruction while in class and doing their homework/assignments, they often lose interest to study hard, and hence their academic performance is adversely affected. Some students find themselves having their eating habit affected (eating too much or losing appetite), experiencing gain/loss of weight as a result of continuous involvement in the electronic media communications and interactions. Students' electronic media engagement while on academic tasks negatively influence their academic performance. There have also been numerous instances where most internet users have low academic performances. As a result of spending time on the internet, there were students who developed a same sex sexual orientation.

There are also cases in which some students reported to have spent time on electronic media to avoid depressions and loneliness. They have reported that they had the opportunity to observe that their students exchange personal information via Facebook to initiate love relations. In many cases, situations were observed when some students become aggressive and stubborn when approached by teachers. Students' ways of speech, wearing dresses and hair dressing styles have all been copied from celebrities of movies, soccer, world music, medalists. Many students use highly contrasted texts especially when exchanging text messages; they use such a writing style even on their academic works. Some students, on the other hand, have developed play writing skills as what they have watched from TV programs.

Parents and schools often restrict and control students' use of the various media while at home and at school respectively. Only one out of the three schools reported the school has clearly put rules on media use and the consequences on failure to comply with rules, and clearly communicated to both students and their parents. The other two schools do not have clearly defined written documents on the subject but often instruct and educate their students on how to use and not to use electronic media and the consequences thereby. Due to the schools' tight academic schedule during the course of the day and the serious restriction on the media use, certain students use anonymous electronic medium to air their voices.

The school's guidance and counselling services play significant roles in helping ill-mannered students. In this regard, one of the schools, which is faith based, experience a lower level of incidences of unethical use of electronic media in the premises of the school which is attributed to the effort of the school to disseminate the beliefs, ethics, practices of the school to the students, and the strict observation of the same on the part of the students.

5.2. Conclusion

The findings of this study show that high school students are heavy consumers of the electronic media. They spend a large amount of time on the various media products and forms of electronic media. Although school ICT infrastructure is far from being user-friendly for them, students have many ways and resources to access and meet their various online communication needs. In line with the beliefs of the Uses and Gratifications theory, these teenagers are active to find media which gratify their needs in terms of cognitive and their social interactions, and hence do the utmost effort to look for the media services irrespective of the fact that they are impeded by restrictions put against their ways. With proper control, administrative procedures and follow ups, students' electronic media life both at school, at home, and elsewhere can be turned to be instrumental in contributing to the quality cognitive, social, and ethical development.

5.3. Recommendations

1. As the youth are fond of exploring new technologies, they are always targeted to the consumption of the products of the technologies. Schools should secure strategies that would motivate students to optimally use electronic media to help foster quality academic program, healthy youth behaviors, and social interactions of the students with others and amongst themselves. Schools along with parents need to always be cautious and educating their students on the negative influences of the products and protect them from their aftermath.

2. Schools ICT curricula should be designed in such a way as to contribute to students' productive use of electronic media. The ICT infra structures need to be strengthened in order to accommodate the media needs of their students. They need also to promote the implementation of high school programs in media awareness.

3. Teachers' have a significant role in helping students in using electronic media as positively as possible. Their major role should be counselling and coaching not preventing students from utilizing electronic media products. They have to play an intentional role in molding the behavior of their students in terms of using electronic media; foster an electronic-media-learning-culture and contribute towards minimizing possible adverse effects of the electronic media in question.

4. An intentional intervention should be made on teachers' and school leadership's awareness on adolescents' behavior, the electronic media industry, and students' attitudes towards the ever increasing types and forms of electronic media and the nature and influences of these media industry.

5. Students' academic performances are heavily influenced by the extent of attention, care and support provided to them in leveraging a wise and productive use of the electronic media.

6. As involvement in electronic media communication causes students' distractions during class, school leadership and teachers need to model, instruct and coach students on how to maximize learning and achieving excellent academic performance.

7. While communicating and interacting through electronic media, students tend to live more and more private lives which adversely affect their social interactions. Hence parents, high school teachers and school leadership need to integrate subject matters on issues of electronic media in their school curricula to help educate students and help them leverage and balance both private and public life.

8. Mobile phones are the basic electronic device students easily access. Modern market of the mobile technology has been able to grip the minds and attract the hearts of the youth by continuously upgrading the types and qualities of the applications and features of this electronic device. Teachers need to be well aware of this and coach their students on spending quality time on contents that are developmental to the students' well-being.

9. TV is a powerful teacher if used properly. High school leadership needs to work on designing TV educational programs that would positively contribute to the students' academic effort. Educational videos can also serve as powerful prosocial teaching devices. Teachers should be encouraged to foster healthy TV habits. On the other hand parents should be very cautious of the TV watching habits of their children as TV takes time away from reading and doing their assignments. Unsupervised TV viewing by school-aged teens has a significant detrimental effect on their academic performance. Unsupervised TV viewing can also result in, as indicated in this study and other previous researches, physical unfitness due to eating high fat and energy rich foods advertised on the TV. Hence parents' role in scheduling the TV program for their teens and educating them on the adverse effects of the media products are very significant.

10. Josephson (1995) and Thomson (2001) point out that some video games may help the development of fine motor skills and coordination, but many of the concerns about the adverse effects of TV (eg, inactivity, asocial behaviour and violence) also apply to excessive exposure to video games. On the other hand, electronic media devices like mobile phones may carry violent video games applications; teachers and parents can play significant roles in educating students on how harmful these games are on their mental development. Parents should be advised to familiarize themselves with various rating systems for video games and use this knowledge to make their decisions.

11. Monitoring and controlling of youth's access to various forms of electronic media communications are ever more growing challenges and it is important for parents to inform themselves about these online forms so they can have meaningful discussions about them with their adolescents.

12. Electronic media are not necessarily full of evil contents; if used properly, they can be very useful for achieving youth holistic development. Hence, parents, teachers and school leadership need to make the most out of the media for quality education.

13. Rules on media use should be purposeful, meaningful, practical, motivating to students not just mere hard and fasts, and need to be consistent. They should also be put in writing, clearly and continuously communicated to the students, parents and

the school community so that everyone knows what is expected of everyone. As pointed out by Feldman *et al* (2008), codes of conduct on electronic media should be described for students and other relevant school community constituents that would help students model good behaviour, focusing on acceptable behaviors but also including rules prohibiting unsafe or aggressive behavior. The consequences for breaking rules should also be clearly explained and provided for due process for those identified as breaking the rules.

14. The Ethiopian Ministry of Education and the Ethiopian Government Communications Affairs Office can play a pivotal role in laying out strategies for high schools that would help them provide parents with resources and information to promote media awareness programs. The Ministry may coordinate networking and provide support on the same that help foster discussions involving parents, school leadership and teachers, and other organizations about the impact of electronic media on children and youth.

15. This particular area should be critically looked at, research should be conducted with broader scope and larger sample in cities like Addis Ababa, and strategic measures should be taken on unhealthy behaviors observed as a result of students' engagement with electronic media. The Ministry of Education and other relevant constituents may support researches on the impact of electronic media on the mental and physical well-being of children and adolescents. The government should outline clearly defined strategies and implement the same on how to use electronic media by high school students.

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Appendices

Appendix I

Observation Check list: ICT Infrastructure in 3 High Schools

Item/ Topics to Check

1. Availability office computer vs. number of available staffs ratio in the news room
2. Availability of internet connection
3. Availability of LAN connectivity for Intranet purpose
4. Availability of drives, CD/DVD Backup server
5. Organizational Guideline on using internet, mobile phones and other electronic media by students
6. Types of electronic media students use during their break out of class

Appendix II

Questionnaire

Addis Ababa University
School of Graduate Studies
College of Education and Behavioral Studies
Masters' Thesis

Questionnaire to be completed by High School Students

Dear respondent,

The researcher of this study is working on a partial fulfilment of Master of Arts in Educational Leadership and Management. The research focuses on "The extent of influences of electronic media on the behavior, academic performance and interactions of students of selected high schools of Addis Ababa". To this effect, your genuine response is very relevant to supply the data and hence you are kindly requested to complete this questionnaire. Kindly, note that all the findings of this work are only meant for the fulfilment of the program. The researcher forwards his gratitude in advance for you immediate cooperation and dedication.

The researcher

I. Background Information

1. Name of School_____
2. Sex: Male □ Female □
3. Grade Level
   A. 9^{th} B. 10^{th} C. 11^{th} D. 12^{th}
4. Age group

A. 14-15 B. 16-17 C. 18-19 D. 20 and above
□ □ □ □

5. Parents'/Guardian's Level of Education
   a. Father's _____ If father is not alive Male Guardian's _____
   b. Mother's _____ If mother is not alive female Guardian's _____
   c. The following is/are available at home. Please thick Yes if media devices exist at home, otherwise, thick No.

Electronic Media Devices	Yes	No
Mobile phone	☐	☐
TV	☐	☐
WiFi	☐	☐
Others (Please specify)	☐	☐

6. Your latest cumulative average mark
   a/ Below 60 ☐ b/ 60-74.9 ☐ c/ 75-84.9 ☐ d/ 85-90 ☐ e/ >90 ☐

7. Your latest rank from the class
   a/ Above 20 ☐ b/ 16-20 ☐ c/ 11-15 ☐ d/ 6-10 ☐ e/ 1-5 ☐

II. Notes on Electronic Media

Most emerging literatures on electronic media agree that electronic Media refers to broadcast or storage media that take advantage of electronic technology. They may include television, radio, Internet, fax, CD-ROMs, MP3s, DVD, video games, cell phones, computer networks and any other medium that requires electricity or digital encoding of information. As you fill this questionnaire, kindly, have this concept in mind.

III. Types of Electronic Media Devices Students Use

Direction: In the boxes below, different forms of **electronic media devices** are outlined. Please, thick **Yes** if you use the electronic media devices, if you do not, thick No.

መመሪያ፡- ከዚህ በታች የተለያዩ የኤሌክትሮኒክስ ሚዲያ **መሳሪያዎች** ተዘርዝረዋል፡፡ አንተ/አንቺ በምትጠቀምባቸው/ሚባቸው ሳጥኖች አንጻር ምልክት አድርግ/ጊ፡፡

Types of Electronic Media Devices	Yes	No
Mobile phone	☐	☐
Tablet such as an iPad or Samsung	☐	☐
TV	☐	☐
Radio	☐	☐
Desktop Computers/Laptops	☐	☐
DVD’s	☐	☐
CD-ROM’s	☐	☐
MP3’s	☐	☐
iPods	☐	☐
Flash disks	☐	☐
Others (Please specify)	☐	☐

IV. Forms of Electronic Media Students Use

Direction: In the boxes below, different forms of electronic media are outlined. Please, thick **Yes** if you use the forms of electronic media, if you do not, thick **No**.

መመሪያ፡- ከዚህ በታች በተለያዩ የኤሌክትሮኒክስ ሚዲያ መሳሪያዎቻችን የምናደርጋቸው የግንኙነት ዓይነቶች ተዘርዝረዋል፡፡ አንተ/አንቺ በምታደርጋቸው/ጊያቸው የግንኙነት ዓይነት ሳጥኖች አንጻር ምልክት አድርግ/ጊ፡፡

Forms of Electronic Media	**Yes**	**No**
E-mail	☐	☐
Instant messaging	☐	☐
Text messaging	☐	☐
Chat rooms	☐	☐
Blogs	☐	☐
Facebook	☐	☐
Tweeter	☐	☐
WhatsApp	☐	☐
Online games (e.g. *World of Warcraft)*	☐	☐
Video Games (includes offline games)	☐	☐
Computer videos like YouTube	☐	☐
Others (Please specify)	☐	☐

V. Potential Sites/Areas where Electronic Media are Used

Direction: In the boxes below, various sites where you can potentially get an access to the forms of electronic media are outlined. Please, thick **Yes** if you use the forms of electronic media, if you do not, thick **No**.

መመሪያ፡ ከዚህ በታች የተለያዩ የኤሌክትሮኒክስ ሚዲያ መሳሪያዎችን በመጠቀም የምንፈልገውን የኤሌክትሮኒክስ ሚዲያ አገልግሎት የምናገኝባቸው ***ሥፍራዎች*** ተዘርዝረዋል፡፡ አንተ/አንቺ አገልግሎቶቹን የምታገኝባቸው/ኚባቸው ***ሥፍራዎችን*** በሚያመለክቱት ሳጥኖች አንጻር ምልክት አድርግ/ጊ፡፡ ከአንድ በላይ ካለ ማመልከት ይቻላል፡፡

Areas where I use the Electronic Media	
At video centers	☐
At school computer rooms (ICT Center)	☐
At Internet Cafes	☐
At school libraries	☐
In restaurants, hotels, cafes, etc.	☐
Near institutional sites where Wi-Fi is easily accessible	☐
At own home	☐
Anywhere (on my personal mobile phone, with CDMA/Evido gadgets)	☐
Others (Please state)	☐

VI. Frequency of Utilizing Electronic Media

Direction: In the boxes below, you are asked to indicate how frequently you use the electronics media to get the service you want. Please, thick the options that indicate how frequently you use the forms of electronic media.

መመሪያ፡- ከዚህ በታች የተለያዩ የኤሌክትሮኒክስ ሚዲያ መሳሪያዎችን **ምን ያህል አዘውትረን** እንደምንጠቀም እንድናመለክት ተፈልጓል፡፡ አንተ/አንቺ አገልግሎቶቹን ምን ያህል አዘውትረህ/ሽ እንደምትጠቀም/ሚ በሚያመለክቱት ሳጥኖች አንጻር ምልክት አድርግ/ጊ፡፡

Electronic Media Activities	Daily	Weekly	Once a month	Never
Emailing	☐	☐	☐	☐
Watching movies	☐	☐	☐	☐
Searching for Information to educate myself on a given issue, i.e. to get knowledge on a given subject	☐	☐	☐	☐
Gathering news to update myself	☐	☐	☐	☐
Uploading and downloading news, files, reports	☐	☐	☐	☐
Instant Messaging /Chatting on a specific issue	☐	☐	☐	☐
Searching for scholarship	☐	☐	☐	☐
Keeping in touch with various people such as friends, relatives, girlfriend/ boyfriend, strangers and others	☐	☐	☐	☐
Studying and learning online	☐	☐	☐	☐
Playing games	☐	☐	☐	☐
Others (Please state) _____	☐	☐	☐	☐

VII. Purposes of Use of Electronic Media

a. **Direction**: In the boxes below, you are asked to indicate for what **general purposes** you use the electronics media to get the service you want. Please, thick **Yes** to indicate why you use the forms of electronic media, otherwise, thick No.

መመሪያ፡-ከዚህ በታች የተለያዩ የኤሌክትሮኒክስ ሚዲያ መሳሪያዎችን **ለምን አጠቃላይ ምክንያት** እንደምንጠቀምባቸው እንድናመለክት ተፈልጓል፡፡ አንተ/አንቺ የሚዲያ መሳሪያዎቹን የምትጠቀመው/ሚው ከዚህ በታች ለተጠቀሱት አጠቃላይ ጉዳዮች ከሆነ "**Yes**" ካልሆነ ግን "**No**" በማለት በሳጥኖች አንጻር ምልክት አድርግ/ጊ፡፡

Forms of Electronic Media	Yes	No
Doing my personal assignments	☐	☐
E-mailing	☐	☐
Instant messaging	☐	☐
Text messaging	☐	☐
Chatting	☐	☐
Blogging	☐	☐
Managing my Facebook page	☐	☐
Tweeting	☐	☐
Playing online games (e.g. *World of Warcraft)*	☐	☐
Playing Video Games	☐	☐
Watching Computer videos like YouTube	☐	☐
Others (State)		

b. **Direction**: In the boxes below, you are asked to indicate for what **specific purposes** you use the electronics media to get the service you want. Please, thick **Yes** against why you use the forms of electronic media, if you do not, thick No.

መመሪያ፡- ከዚህ በታች የተለያዩ የኤሌክትሮኒክስ ሚዲያ መሳሪያዎችን **ለምን የተለየ ምክንያት** እንደምንጠቀምባቸው እንድናመለክት ተፈልጓል፡፡ አንተ/አንቺ የሚዲያ መሳሪያዎቹን የምትጠቀመው/ሚው ከዚህ በታች ለተጠቀሱት ልዩ ጉዳዮች ከሆነ "**Yes**" ካልሆነ ግን "**No**" በማለት በሳጥኖች አንጻር ምልክት አድርግ/ጊ፡፡

Specific Purposes	**Yes**	**No**
Get pleasure (have fun, amusement, and recreation)	☐	☐
Relax when I get tired	☐	☐
Escape from boredom or worries	☐	☐
Get information, learn about the world	☐	☐
Have relationships with people (family, friends, or desired social groups)	☐	☐
Establish interpersonal connections (romantic relationships) with somebody	☐	☐
Avoid conflict, ensure uninterrupted attention and focus, or be all alone	☐	☐
To resolve personal problems and difficulties	☐	☐
Build self-confidence, get moral guidance, social acceptance or status	☐	☐
Others (Please state)		
_____	☐	☐

VIII. Electronic Media Contents exposure

Direction: In the boxes below, you are asked to indicate the types of contents you often visit, read, watch, listen, or entertain yourself, etc. with the help of the various electronic media. Please, thick the option that applies to you.

መመሪያ፡ ከዚህ በታች የተለያዩ የኤሌክትሮኒክስ ሚዲያ መሳሪያዎችን በመጠቀም ለማግኘት የምንፈልጋቸውን **የሜዲያ ይዘቶች** እንድናመለክት ተፈልጓል፡፡ አንተ/አንቺ አገልግሎቶቹን ለምን ዋና ዋና ምክንያቶች አዘውትረህ/ሽ እንደምትጠቀም/ሚ በሚያመለክቱት ሳጥኖች አንጻር ምልክት አድርግ/ጊ፡፡

Forms of Electronic Media	**Never**	**Rarely**	**Sometimes**	**Usually**	**Always**
Educational issues	☐	☐	☐	☐	☐
World news	☐	☐	☐	☐	☐
Sport news	☐	☐	☐	☐	☐
Movies, dramas, etc.	☐	☐	☐	☐	☐
Music	☐	☐	☐	☐	☐
Politics	☐	☐	☐	☐	☐
Games	☐	☐	☐	☐	☐
Sexual contents	☐	☐	☐	☐	☐
Technology related issues	☐	☐	☐	☐	☐
Others (State)					

IX. Time spent on electronic media

Direction: - In the boxes below, you are asked to indicate how much time you spend while using the various electronic media. Please, thick the option that applies to you. (Consider a day=24 hrs.)

መመሪያ፡ ከዚህ በታች የተለያዩ የኤሌክትሮኒክስ ሚዲያ መሳሪያዎችን ስንጠቀም ምን ያህል ጊዜ እንደምናጠፋ እንድናመለክት ተፈልጓል፡፡ አንተ/አንቺ አገልግሎቶቹን ስትጠቀም ምንያህል ጊዜ እንደምትወስድ/ጂ እንደደምትጠቀም/ሚ በሚያመለክቱት ሳጥኖች አንጻር ምልክት አድርግ/ጊ፡፡ (አንደ ቀንን 24 ሰዓት አድርገህ/ሽ ውሰድ/ጂ)

Forms of Electronic Media	**<2 hrs. a day**	**2-4 hrs. a day**	**4-6 hrs. a day**	**>6 hrs. a day**
E-mailing	☐	☐	☐	☐
Instant messaging	☐	☐	☐	☐
Text messaging	☐	☐	☐	☐
Chatting	☐	☐	☐	☐
Blogging	☐	☐	☐	☐
Managing my Facebook page	☐	☐	☐	☐
Tweeting	☐	☐	☐	☐
Playing online games (e.g. *World of Warcraft)*	☐	☐	☐	☐
Playing Video Games	☐	☐	☐	☐
Watching Computer videos like YouTube	☐	☐	☐	☐
Other _____	☐	☐	☐	☐

X. Electronic media influence

Direction: - In the table below, you are asked to indicate how much you are affected while you use the various electronic media. You are just asked to indicate your level of agreement or disagreement with the following items stated. Please thick the boxes that indicate your agreement or disagreement.

መመሪያ፡ ከዚህ በታች የተለያዩ የኤሌክትሮኒክስ ሚዲያዎችን ስትጠቀም የምታገኛቸው የሚዲያ ይዘቶች በአንተ ላይ ያሳደሩብህን የተጽእኖ ሁኔታ መረዳት ተፈልጓል፡፡ የተጠቀሱት ተጽእኖዎች አንተን/አንቺን የሚመለከቱ ጉዳዮች የመሆናቸውን ደረጃ በሚያመለክቱት ሳጥኖች አንጻር ምልክት አድርግ/ጊ፡፡

Aspect of influence	Strongly Disagree	Disagree	Agree	Strongly Agree	Not Sure
My eating habit has been affected (I often eat too much or lose appetite, etc.)	☐	☐	☐	☐	☐
I am often destructed in classroom or in the library (to call or respond to phone calls, send or respond to emails, play mobile games, chat , visit my social media pages like Facebook, or exchange some other electronic media content)	☐	☐	☐	☐	☐
I am often destructed at home while doing my homework/assignments (to call or respond to phone calls, send or respond to emails, play mobile games, chat , visit my social media pages like Facebook, or exchange some other electronic media content)	☐	☐	☐	☐	☐
Increased my effort to study hard					
My effort to study hard has decreased	☐	☐	☐	☐	☐
My academic performance has been negatively affected	☐	☐	☐	☐	☐
My physical status has been affected (I have experienced gain/loss of weight)	☐	☐	☐	☐	☐
I have developed an increasing desire for sexual contents	☐	☐	☐	☐	☐
I have been involved in violence act (like physical aggression, fights, etc.) as a result of being exposed to the media contents (like watching violent movies, etc.)	☐	☐	☐	☐	☐
I have been addicted to substance use (smoke, chew chat, drink alcoholic drinks, etc.)	☐	☐	☐	☐	☐
Other: (Please specify)	☐	☐	☐	☐	☐

XI. Rules on Media Exposure (Electronic media in this case mostly refer to TV, desktop computers/laptops, mobile phones, DVD's, MP3's, etc.)

Direction: In the table below, you are asked to indicate your level of agreement or disagreement with the following items stated. Please thick the boxes that indicate your agreement or disagreement.

መመሪያ፡ ከዚህ በታች የተለያዩ የኤሌክትሮኒክስ ሚዲያ መሳሪያዎች አጠቃቀም ዙሪያ የወጡ ***መመሪያዎች*** መኖራቸውን እንድናመለክት ተፈልጓል፡፡ አንተ/አንቺ መመሪያዎቹ መኖራቸውን ለማመልከት የመስማማትህን/ሽን ደረጃ በሚያመለክቱት ሳጥኖች አንጻር ምልክት አድርግ/ጊ፡፡

There are rules or Guidelines about:	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	**Not Sure**
Types of TV **contents** at school **ICT Center**	☐	☐	☐	☐	☐
Types of TV **contents** at **home**	☐	☐	☐	☐	☐
Electronic media use in the classroom during **teaching learning sessions**	☐	☐	☐	☐	☐
Electronic media use in the school's **compound**	☐	☐	☐	☐	☐
Electronic media use in the library	☐	☐	☐	☐	☐
Types of **internet contents** at school **ICT Centers**	☐	☐	☐	☐	☐
Types of **internet contents** at **home**	☐	☐	☐	☐	☐
Amount of **time** to spend watching TV at school **ICT Center**	☐	☐	☐	☐	☐
Amount of **time** to spend watching TV at **home**	☐	☐	☐	☐	☐
Amount of **time** to spend on electronic media in the classroom **during teaching learning sessions**	☐	☐	☐	☐	☐
Amount of **time** to spend on electronic media in the school's **compound**	☐	☐	☐	☐	☐
Others: (Please specify)	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐

Appendix III

FGD questions framed to Teachers, Unit Leaders, and ICT Staff

Introduction
Number of participants_____
Time allotted _____
Place of discussion_____

Research Objectives

a. Describe what students' media environment look like.
b. Examine the students' level of use of electronic media.
c. Understand the influences of the uses of the electronic media in the academic performance, individual behavior and social relationship of high school students.

Discussion Questions

1. Does the school have an ICT center? Do you generally believe that your school is an electronic media friendly environment?
2. How many computers does the school ICT center have? Do you think the ratio of the students to the number of computers is fair?
3. Do you have locally networked internet connection (LAN)? How strong is the connectivity?
4. From your observation as a teacher, what types of electronic media do your students use (mobile phones, iPhones, smart phones, palm tops, laptops, etc.)? Is there any difference between boys and girls, in terms of the types and level of electronic media devices they use? Is there any difference amongst students of various grades? Is there any correlation between students' family income status and the level of use of the media in question?
5. Share your idea if you have any knowledge as to which contents of the internet your students visit.
6. Share your idea if you have any knowledge for what purpose your students use the internet.
7. Do you ever give your students assignments to be worked out on computers with the help of internet?
8. Does your ICT center have sufficient types and number of instructional electronic media like DVDs (Digital Versatile Disc), CDs (Compact Discs), Mini Disk recorder, Media Players (such as the MP3 Player), and the likes? How do you evaluate the qualities and relevance of the ICT devices and equipment for instructional purposes?
9. From your observations, how does use of the various media (like mobile phone, internet, social media, etc. influences the students in terms of their
    a. Academic performance? (classroom: participation, attentiveness, disruption, detouring, devouring; doing assignments timely and accurately; Studying habits; result/grades: low, medium, high; absenteeism
    b. Individual behavior? (Disturbing in the class, disobedience, chatting in the class, quarreling with others, etc.)

c. Social relationship to others? (Relationship with friends, family members, social interaction and development of social networks. etc.)

10. How is the classroom learning process influenced as a result of students' use of electronic media?
11. Do you ever observe any relationship between the media communication pattern and the influence in the social relations of the students? Explain.
12. What is your position concerning students use of electronic media?
13. Is there any school guideline on how to use the Internet services, personal phones, social media, in the office?

Appendix IV

Interview Questions for High School Principals

1. What does your school' ICT infrastructure look like?
2. Does the school have an ICT center? Do you generally believe that your school is an electronic media friendly environment?
3. How many computers does the school ICT center have? Do you think the ratio of the students to the number of computers is fair?
4. Does your ICT center have sufficient types and number of instructional electronic media like DVDs (Digital Versatile Disc), CDs (Compact Discs), Mini Disk recorder, Media Players (such as the MP3 Player), and the likes
5. Is there any school guideline on how to use the Internet services, personal phones, social media, in the office?
6. What do you do to equip your teachers' to help their students make a quality and productive use of the media?
7. What are the checks and balances you have put in your school to leverage students' use of electronic media within the school?

Appendix V

Online Communication Form, Electronic Hardware That Supports It, and Functions of the Communication Form

Communication Form	Electronic Hardware That Supports It	Functions Enabled
E-mail	Computers, cell phones, Personal Digital Assistants (PDAs)	Write, store, send, and receive asynchronous messages electronically; can include attachments of word documents, pictures, audio, and other multimedia files
Instant messaging	Computers, cell phones, PDAs	Allows the synchronous exchange of private messages with another user; messages primarily are in text but can include attachments of word documents, pictures, audio, and other multimedia files
Text messaging	Cell phones, PDAs	Short text messages sent using cell phones and wireless hand-held devices such as the Sidekick and Personal Digital Assistants
Chat rooms	Computers	Synchronous conversations with more than one user that primarily involve text; can be either public or private
Bulletin boards	Computers	Online public spaces, typically centered on a topic (such as health, illnesses, religion), where people can post and read messages; many require registration, but only screen names are visible (such as www.collegeconfidential.com)
Blogs	Computers	Websites where entries are typically displayed in reverse chronological order (such as www.livejournal.com); entries can be either public or private only for users authorized by the blog owner/author
Social networking utilities	Computers	Online utilities that allow users to create profiles (public or private) and form a network of friends; allow users to interact with their friends via public and private means (such as messages, instant messaging); also allow the posting of user-generated content such as photos and videos (such as www.myspace.com)

Communication Form	Electronic Hardware That Supports It	Functions Enabled
Video sharing	Computers, cell phones, cameras with wireless	Allows users to upload, view, and share video clips (such as www.YouTube.com)
Photo sharing	Computers, cell phones, cameras with wireless	Allows users to upload, view, and share photos (such as www.Flickr.com); users can allow either public or private access
Massively multiplayer online computer games (MMOG)	Computers	Online games that can be played by large numbers of players simultaneously; the most popular type are the massively multiplayer role playing games (MMORPG) such as *World of Warcraft*
Virtual worlds	Computers	Online simulated 3-D environments inhabited by players who interact with each other via avatars (such as Teen Second Life)

DECLARATION

This thesis is my original work, has not been presented for a degree in any other university and that all sources of materials used for the thesis have been appropriately acknowledged.

Name_____

Signature_____

Date_____

This thesis has been submitted for examination with my approval as university advisor.

Name_____

Signature_____

Date_____