# Reading Habits and Attitude in the Digital Environment: A Study of ISLM Students of Dhaka University



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Department of Information Science and Library Management
University of Dhaka, Dhaka-1000, Bangladesh

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**Declaration** 

I hereby declare that the thesis entitled "Reading Habits and Attitude in the Digital

Environment: A Study of ISLM Students of Dhaka University" is my own work and to the best of my knowledge and belief it contains no material previously published or written by

any other person. The whole research work was conducted by me under the guidance and

kind supervision of my supervisor.

I further submit the thesis has not been previously submitted in partial or in full by me for

any degree or diploma to any university or institution.

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Registration No. HA-3094

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# Dedicated to:

My parents and my family members.

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# **List of Abbreviations/Acronyms**

**BASIS** Bangladesh Association of Software and Information Services

**BA** Bachelor of Arts

BSK Bishwa Sahitya Kendra

**DU** Dhaka University

**EFA** Education For All

H1 Hypothesis 1H2 Hypothesis 2

ICT Information and Communication Technology

IP Internet Protocol

**ISLM** Information Science and Library Management

M.A Master of Arts

MDG Millennium Development Goal

**NEA** National Endowment for Arts

**SAARC** South Asian Association foe Regional Cooperation

**SD** Standard Deviation

SPSS Statistical Package for Social Science

**UUCP** Unix-to-Unix Copy

**UN** United Nation

www World Wide Web

#### **Chapter One**

## **Introduction and Background**

#### 1.1 Introduction

Reading is an action of a person who reads and it is an aspect associated with literacy. Reading is a precise process and is not simple in its nature. It involves exact, detailed, sequential perception and identification of letters, words, spelling patterns and large language units. More simply stated, reading is a psycholinguistic guessing game. It involves an interaction between thoughts and language. Reading is the process of constructing meaning from written texts. It is a complex skill requiring the coordination of a number of interrelated sources of information (Anderson et al., 1985). According to the Report of the Commission on Reading, reading is considered as a cornerstone for success, not just in schools, but also throughout the adult life of an individual. Reading has social, academic, economical and survival significance, because democracy of a country can survive when people at large have reading competence. Reading is always a means to an end and not an end in itself. Further, reading is the process of using over 'eyes', our 'mind', to understand the literal as well as the hidden meaning of what the writer was attempting to convey. Therefore, reading gives both power, and pleasure with understanding, by reading the material as a unified whole, by which one can expand the frontiers of knowledge and scholarship. It does not merely involve recognizing a single character and pronouncing it correctly or to recognize and pronounce a few characters that are arranged in a particular manner, but more importantly it is the ability to understand the meaning of these arrangements. According to Bullock (1975), reading is more than a reconstruction of the authors' meanings; it is the perception of those meanings within the total context of the relevant experiences of the reader that is a much more active and demanding process. Here, the reader is required to engage in critical and creative thinking in order to relate what he reads to what he already knows. The civilization of mankind today demands that one should not only know how to read and be literate but also be functionally literate. Functional literacy is acquired as Gray (1956:p.24) puts it when a person has acquired the knowledge and skills in reading and writing which will enable him to engage effectively in all those activities in which literacy is normally assumed in his culture or groups. In short, reading is a complex process that requires the mental capacity, perception and experience of an individual who is conditioned by his or her own distinct cultural environment.

The impact of reading in people's lives is extraordinarily widespread. A reader can learn new skills, can be introduced to new facts, he can become more knowledgeable about the whole world and he can be stimulated to both thought and emotion. Reading has the unique power of transforming readers. It is sometimes said, "We are what we read". Abraham Lincoln said, "The things I want to know are in books. My friend is the man who will get a book to read". Francis Bacon therefore, rightly said, "Reading makes a full man". Reading is the art of interpreting printed and written words. It is a basic tool of education. According to William S. Grey, reading influences the extent and accuracy of information as well as the attitudes, moral beliefs, judgments and action of readers. The reading habit is one of the powerful and lasting influences in the promotion of one's personal development in particular and social progress in general. Regular and systematic reading sharpens the intellect, refines the emotions, elevates tastes and provides perspectives for one's living; and thereby prepares him for an effective civilizing force tending to unite social groups through the dissemination of common experiences. Considering the social, cultural and educational goals of reading, it is felt that it is worthwhile to know the reading habits of students' Community. There are only a few numbers of attempts in the field of reading interest of secondary school children. Moreover, sufficient study of the reading interest, especially of adolescent group in Indian setting is lacking.

#### 1.2 Reading Habit

In 'reading habit', we get two words 'reading' and 'habit'. We know reading is an action of a person who reads and habit is a product of this action or learning. Like all other habits, the habit of reading is an individual develops during the course of time. Reading habit can be defined as the frequency of how often the person does an activity to read books including literature books, stories, magazines, newspapers etc. Reading through reading habit brings some advantages for us. First, good habit is assumed to be able to improve individual's characteristic as a better person, to increase our knowledge and ability in using the language. Now days a common allegation is raised that reading habit is decreasing. It is true that if we go to the reading room of a library, we find most of the seats are dusty. It is really a matter of concern. So, I made a plan to study the reading habit and attitude of the library and information science students. The purpose of this study is to survey the reading habits and attitude of the library and information science students.

#### 1.3 Reading Attitude

Attitudes toward reading are defined as an individual's feeling about reading causing learners to approach or avoid a reading situation (Alexander Filler, 1976). Attitude and interest toward reading can be related in association with feeling and with learners' sprit to learn or in his situation it can be said with the readers' sprit to read. Positive reading attitudes lead to positive reading experiences, which lead to higher academic performance.

#### **1.4 Digital Environment**

A digital environment is a simulated "place" made through the use of one or more computers. Records or evidence of an individual's interaction with a digital environment constitute their digital footprint. Since the late 1980s it has become accepted wisdom that we are living in a digital world. Technological advancement has made e-books and digital libraries a reality. Although the drawbacks of computer screens are still formidable enough to make online reading an option undesirable to many, digital technologies have already begun to affect reading practice and behavior as people spend more time reading online.

In Bangladesh, the computer was first introduced in 1964, with the installation of an IBM 1620 computer at the Atomic Energy Commission. The 1980s are considered the beginning of the automation era for libraries and information centers in Bangladesh. (BASIS, 2005). The 1980s are considered the beginning of the automation era for libraries and information centers in Bangladesh (BASIS, 2005). The Internet arrived in Bangladesh with UUCP e-mail in 1993 and IP connectivity in 1996. In mid-June 1996, the Very Small Aperture Terminal (VSAT) base data circuit was commissioned for the first time in the country. Thereafter, Internet connectivity was established and made available to the public. Nowadays, use of computers and Internet has dramatically increased in Bangladesh though a significant digital divide exists throughout the country over 98 percent of the population in Bangladesh has no e-mail access and about 97 percent has no computer access. The same scenario exists in the country's libraries as most of the libraries especially school, college and public libraries in Bangladesh are still unable to offer ICT-based services for its users. This study attempts to investigate reading habit and behavior in the digital environment on the basis of Information Science and Library management students of Dhaka University.

#### 1.5 Background of the Study

Bangladesh, in full The People's Republic of Bangladesh, a republic of Southern Asia, in the northeastern portion of the Indian subcontinent, bordered on the west, north, and east by India, on the southeast by Burma (Myanmar), and on the south by the Bay of Bengal. The area of the country is 147,570 square kilometers (56,977 square miles). The capital and largest city of Bangladesh is Dhaka. Geographically, historically, culturally, Bangladesh forms the larger and more populous part of Bengal. The population of Bangladesh as of 15 March 2011 is 142.3 million (census 2011 results; this is a preliminary figure which has been disputed by the UN and now by Bangladeshis themselves), much less than recent (2007-2010) estimates of Bangladesh's population ranging from 158 to 170 million and it is the 8<sup>th</sup> populous nation in the world. Bangladesh has a low literacy rate, estimated at 61.3% for males and 52.2% for females in 2010. The educational system in Bangladesh is three-tiered and highly subsidized. The government of Bangladesh operates many schools in the primary, secondary, and higher secondary levels. It also subsidizes parts of the funding for many private schools. In the tertiary education sector, the government also funds more than 15 state universities through the University Grants Commission. In Bangladesh education is mainly offered in Bengali, but English is also commonly taught and used. Bangladesh conforms fully to the Education For All (EFA) objectives, the Millennium Development Goals (MDG) and international declarations. Article 17 of the Bangladesh Constitution provides that all children between the ages of six and ten years receive a basic education free of charge. Universities in Bangladesh are mainly categorized into three different types: public university (government owned and subsidized), private University (private sector owned universities), and international University (operated and funded by international organizations). Bangladesh has some thirty-four public and sixty-four private universities.

Researcher of Bangladesh cannot conduct any research about reading habits and attitude but Bishwa Sahitya Kendra ('World Literature Center'), is a non-profit institution in Bangladesh to promote reading habits, enlightenment and progressive ideas among students and general public. This institution was established by famous writer, television presenter, organizer, and activist Abdullah Abu Sayeed. Bishwa Sahitya Kendra offers classes on world literature for Higher Secondary students, and also provides every book for those classes. For Secondary and Junior school level it operates a nation-wide reading program, and provides books for the students. In 2007, it had 500 schools under this program, and

over 100000 active student members. Besides these programs, Bishwa Shahitya Kendro actively maintains libraries across the nation. It pioneered the concept of mobile library in Bangladesh, which carries books around the country. Since books are expensive and libraries are not available at all - these mobile libraries are getting very popular. Bishwa Shahitya Kendro also arranges reader's forum and discussions, which are open to everyone who is interested. These events are open to new thoughts and encourage thoughtful logical discussions. Through these endeavors Bishwa Shahitya Kendro is continuing its works with a motto that says - "We want enlightened humans". The Kendro activities are mostly based in Bangladesh. It also has an office in New York.

#### 1.6 Aims and Objectives of the Study

The main aim of the study is to examine the reading habits and attitude in the digital environment. This study is conducted on the students of Information Science and Library management of Dhaka University. This study attempts to answer several research questions are given below:

- 1. What is the reading habit of the ISLM students in terms of the following?
  - a. Type of reading material do they read
  - b. Time of reading
  - c. Time spend of reading
  - d. Sources where they get the reading materials
- 2. What type of reading materials do they read in leisure time? This question includes the following question:
  - a. Journal/Magazine
  - b. Newspaper
  - c. Academic book
  - d. Website information.
- 3. What is the students' attitude towards reading?
- 4. What is the preference of document media when they reading? Is it electronic/printed?
- 5. Which media they prefer reading on paper more than online?

#### **Chapter Two**

#### **Literature Review**

#### 2.1 Introduction

Literature review is the most crucial part before conducting any research, which gives necessary input to the researcher to frame the study on the chosen topic. To determine the proposed study, a number of literatures have been reviewed. It is mainly based on primary and secondary sources of information. Cooper (1984) defines "a literature review uses as its database reports of primary or original scholarships, and does not report new primary scholarships, and does not report new primary scholarship itself. The primary reports used in literature may be verbal, but in the vast majority of cases reports are written documents. The types of scholarship may be empirical, theoretical, analytic, or methodological in nature. Second a literature review seeks to describe summaries, clarify of primary reports".

#### 2.2 Review of Relevant Literature

Reading has increasingly been the object of empirical and theoretical investigations. Studies in the area of reading come from various academic disciplines including LIS, education, social science, and recently information systems. Findings about reading contributes significantly to how library provides its services, how teaching students to read can be made more effective, and how website and system design can be made more useful and user friendly. Among common findings as reviewed by Rosss (2002) on reading habits are such that "heavy readers" are more likely to be female than male; to be younger rather than older; and to have achieved a higher education level than the population at large (Book Industry Study Group, 1984; Cole and Gold, 1979).

Some research can be found conducted on college or university students on their reading habits and attitudes. Blackwood et al. (1991) studied the pleasure reading habits of 333 college seniors enrolled at a small, public, US Liberal Arts University. The findings indicated that the majority were reading for pleasure-reading primarily newspaper and most were reported to spend more time reading during vacations than when classes were in session. Both male and female students reported reading for pleasure about 2.5 hours each week while classes were in session and slightly more during vacations. In other study, Sheorey and Mokhtari (1994) examined the reading habits of 85 college students enrolled in an elective development reading course at a large university in the Midwestern USA. They reported that

students read average of 4.75 hours per week. Student who scored higher on a test of reading comprehension reports spending slightly more time on nonacademic reading. Gallik (1999) found that magazines were the popular type of reading material for pleasure reading and are reported to be read frequently by 75 percent of the college students.

Among other findings, Pandian (2000) reported that, about 80 percent of Malaysian university students are reluctant readers of both English 7 Malay materials. Ethnicity, home environment, reading models, gender and school environment are important indicators of reading. Students from the urban areas are found to be reading more than the rural counterpart. Pandian also came up with profile habitual readers in different languages namely English, Malay, Chinese, and Tamil.

This paper presents a selective review of studies conducted in India and abroad, including Anderson (2007), Shahriza (2007), Train (2007), Boström and Lassen (2006), Corradini (2006), Dent (2006), Celep and Cetin (2005), Brier and Lebbin (2004), but this type of research is unusual, since it studies the reading habits of the senior secondary students. Schools curriculum incorporates an expressive and exploratory from interactive education system, so that they develop an inquisitive mind and discover the power of selfdetermination and discipline to grow up into successful professionals and good human beings. Professors make assumptions about students' reading habits before coming to decisions about their reading requirements for a particular course or topic. These assumptions relate to the speed and efficacy of reading together with the recognition and appreciation of the significance of materials to be read. College students are expected be efficient and proficient readers. Many college courses require students to read 100-150 pages of material per week. When this is multiplied by 4 or 5 courses per semester, it equates to 400 or more pages per week. Time management is crucial to keeping up on reading assignments. Students must have good organization skills for college. If they are disorganized, they will quickly find themselves falling behind in assignments, due dates and reading (Glencoe 2004).

Reading is essential to academic success and to intellectual growth. The National Endowment for the Arts (NEA) surveyed 17,000 individuals and discovered that in 1982, 57 percent of adult Americans read literature and in 2004 the figure had fallen to 46.7 percent. The rate of decline for the youngest adults, those aged 18 to 24, was 55 percent greater than that of the total adult population. The NEA study did not include non-fiction or college

student reading, however, it is believed that decline of reading threatens not only America's arts heritage but it's economic position in the world as well. Reading requires sustained focused attention, working with the powers of memory and imagination. Economic success depends on innovation and creativity which comes from reading. Television, video games, and even the internet are more passive than reading. Reading forces the reader to think; watching allows escape. College students nowadays do not have the traditional sense of the role that reading plays in the development of one's life (NEA 2004).

The impact of digital media on reading has increasingly been the object of empirical and theoretical exploration by researchers from a wide range of disciplines, notably psychology, computer science, education, literacy studies, and library and information science. Each discipline has developed its unique research focuses and methodology. It is not the purpose of this study to review all the different approaches and studies. Nevertheless, an examination of the related literature reveals that there are some essential studies that deserve closer attention.

With the growing amount of digital information available and the increasing amount of time that people spend reading electronic media, the digital environment has begun to affect people's reading behavior. A number of scholars argue that the arrival of digital media, together with the fragmentary nature of hypertext, is threatening sustained reading (Healy, 1990; Birkerts, 1994). Birkerts (1994) further notes that the younger generation growing up in the digital environment lacks the ability to read deeply and to sustain a prolonge engagement in reading.

Bolter (1991) states: "The shift from print to the computer does not mean the end of literacy itself, but the literacy of print, for electronic technology offers us a new kind of book and new ways to write and read".

Digital media contribute to a transformative shift in reading. They also introduce a number of powerful advantages that are traditionally absent in the printed environment, such as interactivity, non-linearity, immediacy of accessing information, and the convergence of text and images, audio and video (Landow,

1992; Lanham, 1993; Murray, 1997; Ross, 2003). Lanham (1995) compares the difference between print literacy and digital literacy. He asserts that: "In the world of print, the idea and its expression are virtually one. The meaning takes the form of words; words generate

the meaning. Digital literacy works in an inherently different way. The same digital code that expresses words and numbers can, if the parameters of expression are adjusted, generate sounds and images. This parametric variation stands at the center of digital expressivity, a role it could never play in print".

Digital literacy could potentially enhance our ability to make information more suitable to a targeted recipient (e.g. persons with disabilities). Whether people like digital media or not, reading and literacy are being redefined by the arrival of digital technology. The introduction of new media brings both positive and negative possibilities. In a study of the impact of new media on people's reading habits between the 1970s and the 1990s, Knulst et al. (1996) find that: "The new media require users to articulate their preferences more explicitly. Using a control panel, the user can impose his will down to the smallest detail, and is thus confronted each time with the results of his own preferences. In multimedia-land people are not encouraged to wait until they know more about a subject before they click on to the next, or to open themselves up to unknown points of view. And this is precisely one of the great achievements of the reading culture".

Printed media and digital media have their own advantages and limitations. The challenge is to determine the applicability of a particular medium in a given context or process. For example, electronic media tend to be more useful for searching, while paper-based media are preferred for actual consumption of information. Reading is still the most efficient method for communicating words. A more complex society will demand increased rather than decreased reading. The remaining question we should deal with is the medium through which reading is done. It seems unlikely that the computer will in the future replace the printed book as a reading medium in the way that it replaced the typewriter as a writing tool. Ross (2003) suggests that we need to pay more attention to how readers actually engage different media, their reason for choosing one format over another, and the satisfactions with each format. In a recent study of reading practices at the National University of Mexico, Ramirez (2003) finds that nearly 80 percent of students prefer to read a digital piece of text in print in order to understand the text with clarity. Nearly 68 percent of respondents report that they understand and retain more information when they read printed media. However, only 4 percent of respondents report the opposite. Lower resolution on a computer monitor is one of the major factors that people print out documents (especially lengthy documents) for reading. Hartzell (2002) also notes that "reading from a monitor is up to 30 percent slower than reading the same text on a printed page. Murphy et al. (2003) focus on the persuasiveness of printed texts and electronic texts. They note that undergraduate students who read online text find the text more difficult to understand, less interesting, and the authors less credible than those who read the printed version

Adler et al. (1998) describe the work-related document (printed and electronic) activities of 15 people from a variety of professions over a period of five consecutive working days. They find that document-activity time accounted for an average of nearly 82 percent of working time, ranging from 23 percent (for nurses) to 94 percent (the accounting assistant). A recent study of the document activities in the International Monetary Fund (IMF), a document-intensive organization, finds that 51 percent of document activities involve paper only, 14 percent involve digital documents only, and 35 percent a combination of paper and digital documents (Sellen and Harper, 1997). Clearly, there will be a co-existence of paper and digital documents in the future, simply because each medium tends to support certain activities that are not easily replaced by the other.

Reading is not a single activity. It is a complex and variable behavior. It involves different purposes and requires different skills in handling documents. McKnight (1997) offers a number of excellent insights in reading behavior of electronic media. He observes that people do not like to read from screens. They prefer to print out electronic documents for reading, even printouts from dot matrix printers. He argues that the recent trend in mounting electronic documents in Adobe's PDF format also discourages screen reading and encourages printing. People tend to print out documents that are longer than can be displayed on a few screens. People also know how to organize and manipulate paper documents, but manipulating electronic documents requires a different set of skills.

People like to browse and find things by accident. Nunberg (1994) notes: "Browsing a document database will never be quite as informative as browsing a bookstore or library stacks, since electronic documents don't bear physical traces of their provenance the way print books do – the price we pay for delivering them of their bodies. But it may not be much different from browsing around in a video rental outlet".

Olsen's (1994) study finds that serendipity was identified as important by 82 percent of people in her survey. Flipping and scanning (a reading pattern associated with printed documents) is not only a means for locating information in a document, but also a means to

get a sense of the whole text. Scrolling on a computer screen does not support this mode of reading and information processing. Readers tend to establish a visual memory for the location of items on a page and within a document. Scrolling weakens this relationship (Olsen, 1994). There is a historical analogy of this reading pattern. As Manguel (1996) notes:"The unwieldy scroll possessed a limited surface — a disadvantage we are keenly aware of today, having returned to this ancient book form [codex] on our computer screens, which reveal only a portion of text at a time as we "scroll" upwards or downwards".

The emergence of the new digital environment has also captured the interest of many researchers. With the growing amount of digital information available, people particularly young adults are found spending more time reading electronic materials (Liu, 2005; Ramirez, 2003). A growing amount of reading time is spent more on skimming and browsing for information on the Internet. On the other hand, the nature and purpose of reading seems to deviate as well from the traditional reading methods, which are brief, linear and less structured. Some researchers argued that the growth of electronic media may give negative implication to the fact that people are less engaged in extensive reading and lack the ability to read deeply and to sustain a prolonged engaged in reading (Liu, 2005). Other would argue that people still prefer printed documents when it comes to reading. Both Liu (2005) and Ramirez (2003) provide evidence that people would print from the internet in order to engage further reading. Liu also provides the evidence that the age factor contributes to reading behavior on the internet. In addition, younger people can tolerate more time reading the screen-based materials.

#### **Chapter Three**

### **Research Design and Methodology**

#### 3.1 Research Design

The choice of an appropriate research methodology is important for any research study. This chapter discusses the research design and data collection methodology used in this thesis. The study contains a huge amount of data and information. This research used a mixed method research approach. Both quantitative and qualitative methods for data collection and subsequent analysis were used. Data for this research came from both primary and secondary sources. Secondary sources of data included previous works such as reports, books, journals, magazines, electronic sources and other related materials. The primary data was collected using different data collection instrument; questionnaire comprising close–ended and open-ended questions designed on issues directly related to the objectives of the research and qualitative interviews with some of the respondents to get additional information as well as in-depths views on the topic being researched. Both deductive and inductive analyses were used to analyze the collected data. Patton (1990) argues that inductive analysis means that the patterns, themes and categories of analysis come from the data; they emerge out of the data rather than being imposed on prior to data collection and analysis.

#### 3.2 Sources of Data

Data is the main ingredient for any research. Data can be collected from the field of any other sources. Data was collected from the students of Arts faculty at the University of Dhaka. The study combined both the qualitative and quantitative in nature along with review of related literature. The conceptual and textual information related to the present study were collected both from primary and secondary sources of information.

- Primary Data or Information: For collecting primary data or information I would follow interview method. I collect my primary information through face to face interview and discussion with the faculties of different wings of online journals.
- > Secondary Data or Information: For secondary data or information I have gone through different types of publications. I had also used published data and various types of e-journals which were related to my study.

#### 3.3 Questionnaire

The digital environment has begun to affect how people read. However, few studies have explored this fundamental issue. Researchers are only at the very early stage of discovering changes in reading patterns. Many previous studies attempted to explore reading in the digital environment by examining the evolution of reading or observing how people read documents (especially electronic documents) within a specific period of time. While these approaches are useful in discovering how reading behavior changes, they are limited. For example, the evolution approach allows us to see changes in reading from a historical perspective, but is limited in providing us with detailed information on how reading activities are actually changing. On the contrary, the observation approach gives us detailed analysis and description of how people actually read, but fails to provide a broad picture of how reading behavior changes in the digital environment.

To meet the objective of the report writing a questionnaire was prepared, which includes various technical questions. The questionnaire was designed in order to measure the overall attitude on reading habit. To meet the objectives of the study, a questionnaire is prepared which includes 15 questions with several sub-questions. It was made with simple, direct and familiar words, keeping the respondent level in mind. It also includes both open-ended and close questions. It was designed for the ISLM students of Arts faculty at the University of Dhaka for gathering data and information regarding their measuring towards concerning reading habits. Questionnaires were distributed among the students of the department of ISLM. Questions were designed to increase contributions and emphases were placed to take their opinion and thinking.

Participants were asked to respond to the following questions:

- 1) Time spent on reading;
- 2) Percentage of time spent on reading printed documents;
- 3) Percentage of time spent on reading electronic documents;
- 4) Percentage of time spent on browsing and scanning;
- 5) Percentage of time spent on keyword spotting;
- 6) Percentage of time spent on in-depth reading;
- 7) Percentage of time spent on concentrated reading;
- 8) Percentage of documents read one time (one-time reading);
- 9) Reading things selectively;
- 10) Non-linear reading (e.g. jump);

- 11) Sustained attention;
- 12) Frequency of annotating printed documents while reading;
- 13) Frequency of annotating electronic documents while reading;
- 14) Frequency of highlighting printed documents while reading;
- 15) Frequency of highlighting electronic documents while reading;
- 16) Frequency of printing out electronic documents for reading; and
- 17) Preference of document media when reading.

The response categories for questions (1)-(5) include "more time", "less time", "no change" and "don't know"; the response categories for questions (6)-(11) include "increasing", "decreasing", "no change", and "don't know"; for questions (12)-(16) the response categories include "always", "frequently", "occasionally", and "never"; and the response categories for question (17) include "electronic media", "printed media", and "either one is fine".

The amount of time spent on reading varies widely among different age groups. This study focuses on people who are between 15 to more than 26 years old. Since the purpose of this study is to explore the impact of digital media on reading habits, people who have extensive experience in reading digital documents were selected.

#### 3.4 Response Rate

200 copies of questionnaires were distributed among the students of ISLM of DU. Participants were informed that the purpose of this study was to explore the impact of digital media on reading habits. They were asked to fill out the questionnaires based on their own experiences with reading. 153 returned copies were tabulated and analyzed.

#### 3.5 Procedure of the Data Analysis

For the data analysis the following steps are followed:

- **Software:** Computer software (e.g. The SPSS statistical package and Microsoft excel) were used, which has helped to make the analysis of data controlled during the research proposal easier, more efficient and more effective.
- Tables: Frequency table, data analysis etc. have been used to describe the findings.
- **Graphics:** Chart wizard, graph different types of figures have been used to represent the findings from the survey.

This chapter has explained in detail the methodology used in this research, including the research design, sampling, and techniques used to select the sample, data collection methods, research instruments and data analysis techniques were discussed.

#### 3.5.1 Mann-Whitney U-test

The most common nonparametric statistical test for unrelated samples of scores is the Mann-Whitney U-test. This test is used for similar research design as the independent t-test. In other words, it can be used on two groups of scores that are independent of each other. The null hypothesis tested by the Mann-Whitney U-test is that there is no different between the two groups in terms of location, focusing on the median as a measure of central tendency. This test was conducted to determine the differences between male and female users in terms of their opinion on prefer reading online over reading on paper, prefer reading on paper over reading online and attitude towards reading habits.

#### 3.5.2 Kruskal-Wallis Test

The most common non-parametric statistical test for unrelated samples of scores is Kruskal-Wallis test. This test is also used for similar research design as the independent t-test. In other words, it can be used on more than two groups of scores that are independent of research of each other. The null hypothesis tested by the Kruskal-Wallis test is that there is no difference between the groups. This test was conducted to find out the differences among various age groups and level of education with regard to their opinions on prefer reading online over reading on paper, prefer reading on paper over reading online and attitude towards reading habits.

## **Chapter Four**

# **Results of the Study**

This chapter discusses the results of the survey conducted as part of this research. A total of 153 students responded to the questionnaire on reading habits and attitude in the digital environment: a study of ISLM students of Dhaka University.

Table 4.1: Gender of the students

Gender	Frequency	Percentage
Male	77	50.30
Female	76	49.70
Total	153	100.00

Table 4.1 shows that among 153 students, 77 (50.3%) were male and 76 (49.7%) were female. This suggests a balance between male and female respondents. Figure 4.1 below illustrate gender of the students.

Figure 4.1: Gender of the students

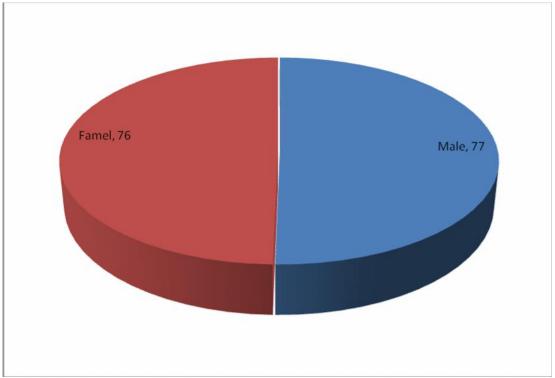


Table 4.2: Levels of education of the students

Levels of education	Frequency	Percentage
1st Semester	7	4.58
3rd semester	19	12.42
4th semester	35	22.88
5th semester	13	8.50
6th Semester	13	8.50
7th semester	24	15.69
Post Graduate	42	27.45
Total	153	100

Table 4.2 indicates that 7 (4.58%) students were studying in their first semester, 19 (12.42%) were studying in third semester, 35 (22.88%) were studying in fourth semester, 13 (8.50%) were studying in fifth and sixth semester, 24 (15.69%) were studying in seventh semester and 42 (27.45%) students were at the post graduate level. There were no students from the second semester and eight semesters.

Figure 4.2: Levels of education of the students

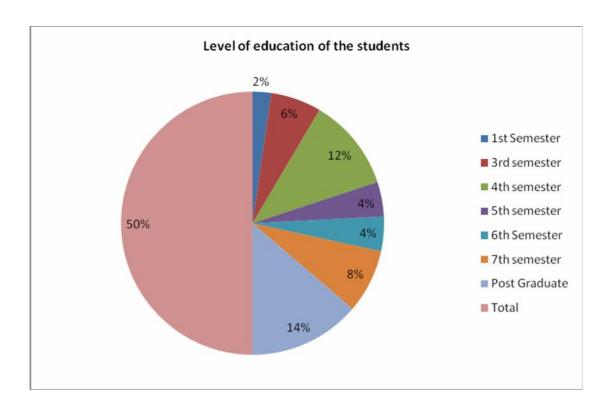


Table 4.3: Age groups of the students

Age groups	Frequency	Percent
15-18 years	2	1.31
18-20 years	32	20.92
20-23 years	85	55.56
23-26 years	32	20.92
More than 26 years	2	1.31
Total	153	100

Table 4.3 shows that 32 (20.92%) students were aged between 18-20 years and 23-26 years. The largest group of students 85 (55.56%) comprised of those in the age group of 20-23 years. The smallest groups of respondents 2 (1.31%) were between 15-18 years and more than 26 years.

Age groups of the students Frequency of the students 160 140 120 100 80 60 40 20 0 15-18 18-20 20-23 23-26 More Total than 26 years years years years vears Frequency 2 32 85 32 2 153

Figure 4.3: Age groups of the students

Table 4.4: Frequency of read in a week

55.56

20.92

1.31

100

Percent

1.31

20.92

Frequency of read in a week	Frequency	Percentage
Never	0	0
Rarely	18	11.76
Sometimes	50	32.68
Often	41	26.80
Always	44	28.76
Total	153	100

Table 4.4 shows the frequency of read in a week. The result suggests that among 153 respondents, 18 (11.76%) students read rarely, 50(32.68%) students read sometimes, 41 (26.80%) students read often, and 44 (28.76%) students read always read in a week. Tables

4.4 also illustrate that, among 153 students the frequency of never read in a week is 0 (0%). Figure 4.4 below illustrate the frequency of read in a week.

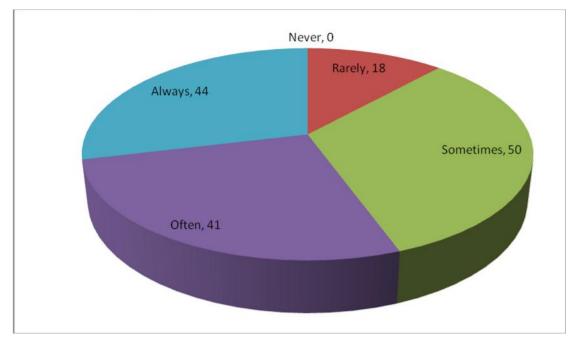


Figure 4.4: Frequency of read in a week

Table 4.5: Type of reading material that the respondents read every day to at least a few times a week (multiple responses)

Reading materials read every day to at least a few times a week	Frequency	Percentage
Newspaper	132	86.27
Academic book	92	60.13
Website information	75	49.01
Magazine	67	43.80
Fiction	47	30.72
Journal article	36	23.53
Text book	60	39.22
Literature	63	41.18
Others	46	30.07

Table 4.5 shows the distribution of eight types of reading material, i.e. newspaper, academic book, website information, magazine, fiction, journal article, text book, literature and others that the respondents read. The majority of the students read newspaper everyday for at least a few times a week and the rate is 132(86.27%). Besides this, the students read academic book 92(60.13%), website information 75(49.01%), magazine 67(43.80%), fiction 47(30.72%), journal article 36(23.53%), text book 60(39.22%), literature 63(41.18%), and 46 (30.07%) students read other materials at least a few times a week. The results pointed to

the high rate of newspaper in addition to the academic book and website information. Figure 4.5 below illustrate the type of reading material that the respondents read every day to at least a few times a week.

Types of reading materials read

132

92

75

67

47

36

60

63

46

Maggaine Fiction Textbook Interduce Outlets

Academic book Maggaine Fiction Textbook Interduce Outlets

Figure 4.5: Type of reading material that the respondents read every day to at least a few times a week (multiple responses)

Table 4.6: Time spent on reading

Hours	Frequency	Percentage
Less than 1 hour	26	16.99
1-3 hours	86	56.21
4-6 hours	32	20.92
7-9 hours	7	4.58
10 hours and above	2	1.31
Total	153	100

Table 4.6 shows that the distribution of amount of time spent on reading materials. The result indicates among 153 students, 26 (16.99%) read reading materials less than one hour, 86 (56.21%) read one to three hour, 32 (20.92%) read four to six hour, 7 (4.58%) read seven to nine hour and 2 (1.31%) read ten or above ten hour. On average, the students spent about one to three hours for reading. This result is somewhat expected due to academic activities that require a significant amount of reading time in order to perform academically. However, the amount of time spent on reading should be attributed to reading academic and text book rather than other materials. The result is slightly higher than the study conducted by Sheorey and Mokhtari (1994) on university students in the USA, where the average reading time per week was 4.75 hours. The high amount of time spent on reading

may have also conformed to the findings by Liu (2005) who indicated that people read more in the digital age. This is because information can be obtained faster, cheaper, and more conveniently through the internet. Figure 4.4 below illustrate the frequency of time spent on reading.

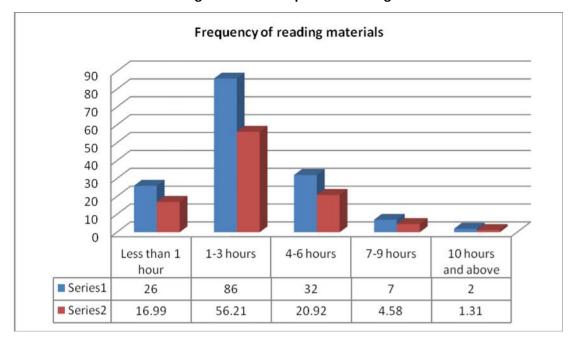


Figure 4.6: Time spent on reading

Table 4.7: Sources of reading material (multiple responses)

Sources use to get the reading materials	Frequency	Percentage
Libraries	96	62.75
Book shops	41	26.80
Friends	79	51.63
Internet	107	69.93
Others	38	24.84

Several sources were identified used by the respondents to get their reading materials. These were libraries, book shops, friends, internet and others. Table 4.7 shows that 96 (62.75%) students use libraries, 41 (26.80%) use book shops, 79 (51.63%) use friends, 107 (69.93%) use internet, and 38 (24.84%) use other sources to get their reading materials. The internet was found to be the most frequently used sources to get the reading materials. Figure 4.7 below illustrate the frequency of sources to get the reading materials.

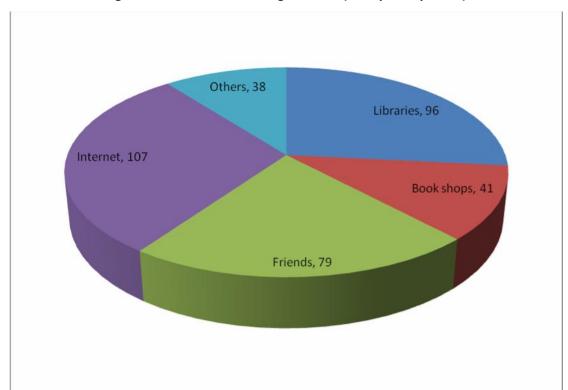


Figure 4.7: Sources of reading material (multiple responses)

Table 4.8: Frequency of reading time of the day

Time for reading	Frequency	Percentage
At night	47	30.72
In the morning	17	11.11
In the afternoon	2	1.31
Free period	30	19.61
Whenever they have the chance	57	37.25
Total	153	100

The respondents were also asked about the time of the day that they normally spend to read. Table 4.8 indicates among 153 respondents, 47 (30.72%) students read at night, 17 (11.11%) students read in the morning, 2 (1.31%) students read in the afternoon, 30 (19.61%) students read their free period and 57 (37.25%) students read whenever they have the chance. Figure 4.8 illustrate the frequency of reading time of the day.

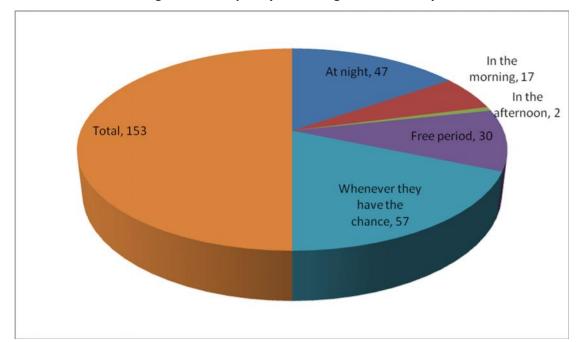


Figure 4.8: Frequency of reading time of the day

Table 4.9: Frequency of reading materials during leisure time (multiple responses)

Reading materials read in leisure time	Frequency	Percentage 41.18		
Magazine	63			
Newspaper	87	56.86		
Fiction/novel	91	59.48		
Academic book	18	11.76		
Website	45	29.41		
Comic	30	19.61		
Article	12	7.84		
Text book	11	7.20		
Literature	47	30.72		
Al-Quran/Islamic book	40	26.14		

Respondents were asked to state ten types of reading material that they like to or usually read during leisure time. Table 4.9 indicates that 63 (41.18%) students read magazine, 87 (56.86%) students read newspaper, 91 (59.48%) students read fiction/novel, 18 (11.76%) students read academic book, 45 (29.41%) students read website, 30 (19.61%) students read comic, 12 (7.84%) students read article, 11 (7.20%) students read text book, 47 (30.72%) students read literature, and 40 (26.14%) students read Al-Quran/ Islamic book during leisure time. Magazines, newspaper, and fiction/novel are among the most popular reading materials read during the respondents' leisure time. The fact that magazines received the highest score is consistent with the results from research conducted by Gallik (1999).

University students tend to read fiction/novel during their leisure time. Figure 4.9 illustrate the frequency of reading materials during leisure time.

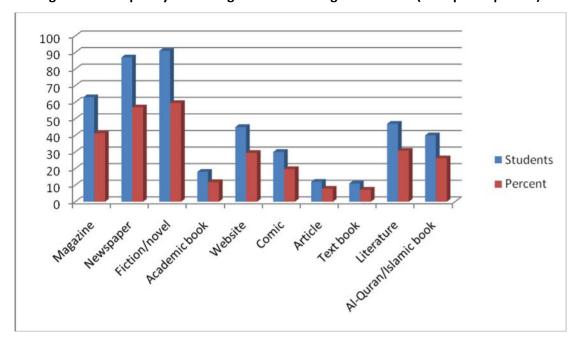


Figure 4.9: Frequency of reading materials during leisure time (multiple responses)

Table 4.10: Frequency of activities during leisure time (multiple responses)

Activities perform during leisure time	Frequency	Percentage		
Reading	68	44.44		
Surf Internet	57	37.25		
Games/sports	44	28.76		
Sleeping	49	32.10		
Shopping	47	30.79		
Eating	29	18.95		
Cooking	32	20.92		
Travelling	45	29.41		
Gardening	10	6.54		
Studying	21	13.73		
Drawing	11	7.20		
Writing	18	11.77		
SMS	25	16.34		
Gossiping	75	49.02		
Watching TV/movie/VCD	108	70.59		
Listening to the music/radio	73	47.71		
Others	14	9.15		

Table 4.10 indicates that, the type of activities that the respondents like to do during leisure time and also provides the list of activities in descending order. The frequency of activities perform by the respondents are reading 68 (44.44%), surf internet 57 (37.25%),

games/sports 44 (28.76%) , sleeping 49 (32.10%) , shopping 47 (30.79%), eating 29 (18.95%), cooking 32 (20.92%), travelling 45 (29.41%), gardening 10 (6.54%), studying 21 (13.73%), drawing 11 (7.20%), writing 18 (11.77%), SMS 25 (16.34%), gossiping 75 (49.02%), watching TV/movie/ VCD 108 (70.59%), listening to the music/radio 73 (47.71%) and others 14 (9.15%). Figure 4.10 illustrates the frequency of activities during leisure time.

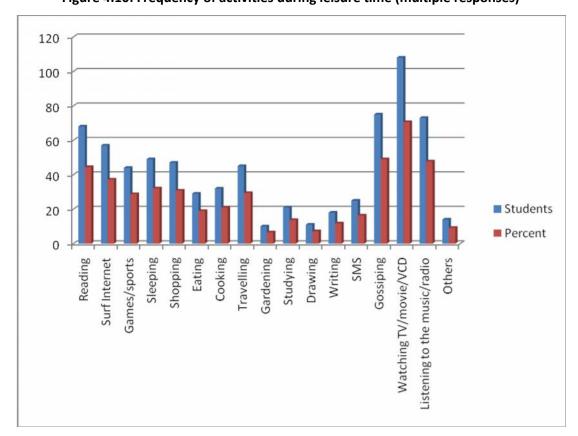


Figure 4.10: Frequency of activities during leisure time (multiple responses)

Table 4.11: Time spent on reading printed documents

Time spent on reading printed documents	Frequency	Percentage		
More time	66	43.13		
Less time	44	28.76		
No change	7	4.58		
Don't know	36	23.53		
Total	153	100		

Table 4.11 indicates that, the time spent on reading printed documents. Among 153 respondents, 66 (43.13%) students spent more time, 44 (28.76%) students spent less time on reading printed documents.

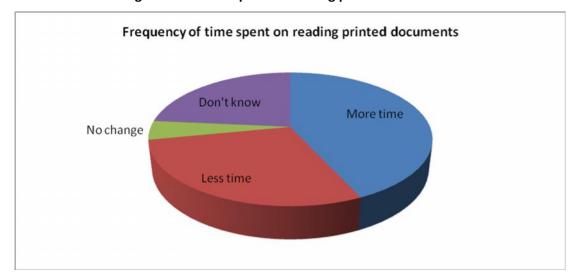


Figure 4.11: Time spent on reading printed documents

Table 4.12: Time spent on reading electronic documents

Time spent on reading electronic documents	Frequency	Percentage		
More time	36	23.53		
Less time	83	54.25		
No change	6	3.92		
Don't know	28	18.30		
Total	153	100		

Table 4.12 indicates that, the time spent on reading electronic documents. Among 153 respondents, 36 (23.53%) students spent more time, 83 (54.25%) students spent less time on reading printed documents.

Frequency of time on reading electronic documents 90 80 70 60 50 40 30 20 10 0 More time Less time No change Don't know Series1 36 83 28 Series2 23.53 54.25 3.92 18.3

Figure 4.12: Time spent on reading electronic documents

Table 4.13: What is the circumstance affecting the choice of reading media?

Prefer reading online over			Fre	equen	су				
reading on paper	1	2	3	4	5	6	7	Mean	SD
When I read short document	11	8	23	57	22	20	12	4.17	1.54
When I do casual reading	4	7	30	37	23	37	15	4.56	1.52
When the document is easy to									
understand	6	4	16	48	30	15	34	4.78	1.60
When I need the most recent									
information	1	3	15	28	21	32	53	4.54	1.51
When I need information at									
the last minute	4	3	25	41	21	30	29	4.82	1.57
When I need browsing	5	10	19	36	28	26	29	4.74	1.65
When I want one-time									
reading only	4	9	14	57	29	20	20	4.56	1.47
When music is embedded in									
the document	4	4	26	56	38	11	14	4.37	1.32
When I want to save money	6	5	34	29	35	13	31	4.60	1.66
When I feel bored	9	9	32	40	25	19	19	4.28	1.64
			Fr	equen	CV				
Prefer reading on paper over									
reading online	1	2	3	4	5	6	7	Mean	SD
When I read lengthy									
documents	12	7	34	32	14	22	32	4.56	1.84
When I need serious/in-depth									
reading	4	9	12	33	40	20	35	4.89	1.59
When I read something that is									
difficult to understand	6	6	27	42	22	29	21	4.58	1.62
When I read scholarly/									
research papers	7	2	24	53	36	16	15	4.34	1.35
When I read something that is									
very important and							•		
interesting	0	4	15	44	35	29	26	4.91	1.31
When I need to take notes	1	7	16	44	36	28	21	4.80	1.36
When I need multiple-time	_								
reading	0	12	24	40	32	32	13	4.61	1.45
When I need cross-						4.5			4
referencing	3	3	41	53	30	19	4	4.20	1.21
When I need constant moving	1	5	23	47	25	26	26	4.86	1.51
When I feel calm and relaxed	4	5	18	57	29	22	18	4.54	1.41

The students were asked to evaluate the circumstance affecting the choice of reading media on prefer reading online over reading on paper and prefer reading on paper over reading online from 1 - "lowest" to 7 - "highest" on seven point Likert scale. Table 4.13 shows the frequency of student response and mean (standard deviation) for each questionnaire item.

The results suggest that students were generally satisfied with the choice of reading media on prefer reading online over reading on paper and prefer reading on paper over reading online as most ratings fell above 4, i.e. the average score.

Table 4.14: Style of reading electronic resources based on degree

	Frequency (%)				
Percentage of time spent on	Increasing	Decreasing	No change	Don't know	
Browsing and scanning	126 (82.42)	6 (3.86)	13 (8.50)	8 (5.22)	
Keyword spotting	72 (46.84)	12 (7.83)	38 (24.87)	31 (20.46)	
One-time reading	77 (50.23)	24 (15.65)	23 (15.11)	29 (19.01)	
Reading selectively	95 (62.16)	15 (9.77)	33 (21.53)	10 (6.54)	
Non-linear reading	25 (16.34)	35 (22.87)	32 (21.86)	61 (39.93)	
Sustained attention	44 (28.76)	37 (30.64)	35 (21.92)	27 (17.68)	
In depth reading	57 (37.31)	34 (22.23)	30 (19.55)	32 (20.91)	

Table 4.14 indicates that the results of style of electronic resources based on degree. In all cases the increasing rate is high except non-linear reading. On the other hand, don't know is low about all cases for identifying the style of reading electronic resources.

Table 4.15: What is your attitude towards reading?

Student's attitude	Frequency								
towards reading	1	2	3	4	5	6	7	Mean	SD
You love to read	3	2	15	41	26	35	31	5.05	1.46
You have a lot of books in									
your room	2	5	22	36	50	20	18	4.69	1.34
You like to read book									
whenever you have free									
time	1	6	34	36	19	25	32	4.76	1.60
Reading is one of your									
favorite activities	6	8	8	40	26	30	35	4.97	1.64
You gate a lot of									
enjoyment from reading	3	3	19	47	28	32	21	4.79	1.42
You like talking about									
books with other people	7	10	26	49	28	19	14	4.27	1.51
You think reading is									
boring	58	13	25	22	20	11	4	4.88	1.83
You think reading is waste									
of time	58	24	10	21	29	9	2	2.88	1.82
It takes you a long time to									
read book	12	7	12	50	33	26	13	2.83	1.58
You try very hard, but you									
just cannot read very well	24	10	29	36	31	16	7	3.76	1.69
Overall attitudes towards									
reading	4	2	17	59	21	25	25	4.74	1.46
Reading is very easy for									
you	5	5	22	54	42	7	18	4.41	1.39
You do not read as well as									
other students in your									
class	16	15	19	38	32	15	18	4.12	1.77
When you reading by									
yourself you understand	2	14	42	38	24	14	19	4.22	1.54

read   You read more slowly than other students in your class   15   15   33   35   27   23   5   4.87   1.60	almost avanthing var									
You read more slowly than other students in your class         15         15         33         35         27         23         5         4.87         1.60           You read only materials related to your job/ career         11         21         23         27         41         17         13         4.10         1.68           You are more competent in your job with the new knowledge acquired through reading         1         10         15         37         42         27         21         4.79         1.42           You only read when a topic really interested for you         3         15         34         34         30         17         20         4.33         1.59           Your busy schedule discourages you from reading         2         8         35         40         30         20         18         4.44         1.47           Book shops are one of your foor bour feeding information from TV is faster and more enjoyable for you         3         11         20         37         27         24         31         4.76         1.63           You will try to get reading materials if it is good         1         8         12         27         48         24         33         5.07         1.48           You spend your money for buying a book or maga	almost everything you									
than other students in your class										
your class         15         15         33         35         27         23         5         4.87         1.60           You read only materials related to your job/ career         11         21         23         27         41         17         13         4.10         1.68           You are more competent in your job with the new knowledge acquired through reading         1         10         15         37         42         27         21         4.79         1.42           You only read when a topic really interested for you         3         15         34         34         30         17         20         4.33         1.59           Your busy schedule discourages you from reading meading         2         8         35         40         30         20         18         4.44         1.47           Book shops are one of your favorite sports         8         9         21         43         41         15         16         4.37         1.53           Getting information from TV is faster and more enjoyable for you         3         11         20         37         27         24         31         4.76         1.63           You will try to get reading materials if it is good         1         8         12         2										
You read only materials related to your job/ career         11         21         23         27         41         17         13         4.10         1.68           You are more competent in your job with the new knowledge acquired through reading         1         10         15         37         42         27         21         4.79         1.42           You only read when a topic really interested for you         3         15         34         34         30         17         20         4.33         1.59           Your busy schedule discourages you from reading         2         8         35         40         30         20         18         4.44         1.47           Book shops are one of your favorite sports         8         9         21         43         41         15         16         4.37         1.53           Getting information from TV is faster and more enjoyable for you         3         11         20         37         27         24         31         4.76         1.63           You will try to get reading materials if it is good         1         8         12         27         48         24         33         5.07         1.48           You spend your money for buying a book or magazine         1         4		4.5	4.5	22	25	27	22	_	4.07	1.60
related to your job/ career	<b>-</b>	15	15	33	35	27	23	5	4.87	1.60
Career	-									
You are more competent in your job with the new knowledge acquired through reading         1         10         15         37         42         27         21         4.79         1.42           You only read when a topic really interested for you         3         15         34         34         30         17         20         4.33         1.59           Your busy schedule discourages you from reading         2         8         35         40         30         20         18         4.44         1.47           Book shops are one of your favorite sports         8         9         21         43         41         15         16         4.37         1.53           Getting information from TV is faster and more enjoyable for you         3         11         20         37         27         24         31         4.76         1.63           You will try to get reading materials if it is good         1         8         12         27         48         24         33         5.07         1.48           You always encourage others to read         3         7         12         34         35         35         27         5.00         1.89           You spend your money for buying a book or magazine         1         4         26	• • •	4.4	24	22	27	4.4	47	4.2	4.40	4.60
in your job with the new knowledge acquired through reading		11	21	23	27	41	1/	13	4.10	1.68
knowledge acquired through reading 1 10 15 37 42 27 21 4.79 1.42  You only read when a topic really interested for you 3 15 34 34 30 17 20 4.33 1.59  Your busy schedule discourages you from reading 2 8 35 40 30 20 18 4.44 1.47  Book shops are one of your favorite sports 8 9 21 43 41 15 16 4.37 1.53  Getting information from TV is faster and more enjoyable for you 3 11 20 37 27 24 31 4.76 1.63  You will try to get reading materials if it is good 1 8 12 27 48 24 33 5.07 1.48  You always encourage others to read 3 7 12 34 35 35 27 5.00 1.89  You spend your money for buying a book or magazine 1 4 26 43 37 25 17 4.66 1.34  You usually read the newspaper thoroughly 3 8 18 44 36 21 23 4.68 1.49  You enjoy sports more than reading 14 19 19 40 18 23 20 4.16 1.83  You read only your lunch/coffee/tea breaks 30 17 30 38 14 17 7 3.34 1.75  You will only go to the book shop/library if you need to get a particular	·									
through reading										
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reading materials   4   20   21   44   22   15   27   4.39   1.70	reading materials	4	20	21	44	22	15	27	4.39	1.70

The students were asked to evaluate the attitude towards reading from 1 - "lowest" to 7 - "highest" on seven point Likert scale. Table 4.15 shows the frequency of student response and mean (standard deviation) for each questionnaire item.

The results suggest that students were generally satisfied with the attitude towards reading as most ratings fell above 4, i.e. the average score.

#### **Hypotheses**

In order to analyze the influence of demographic characteristics on reading habits and attitude in the digital environment of ISLM students of Dhaka University, the following null hypotheses were tested:

- **H1.** There is no significance difference between male and female students in terms of their opinion on prefer reading online over reading on paper, prefer reading on paper over reading online and attitude towards reading; and
- **H2.** There is no significance difference among levels of education and age groups in terms of their opinion on prefer reading online over reading on paper, prefer reading on paper over reading online and attitude towards reading.

Table 4.16: Mann-Whitney test for difference between gender and prefer reading online over reading on paper

Prefer reading online over reading on paper	Mann- Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
When I read short document	2762.5	5765.5	-0.616	0.538
When I do casual reading	2912	5915	-0.052	0.958
When the document is easy to understand	2504	5507	-1.581	0.114
When I need the most recent information	2683.5	5686.5	-0.913	0.361
When I need information at the last minute	2237	5240	-2.567	0.010*
When I need browsing	2383.5	5386.5	-2.013	0.044*
When I want one-time reading only	2409	5412	-1.950	0.051
When music is embedded in the document	2846.5	5849.5	-0.301	0.764
When I want to save money	2607	5610	-1.187	0.235
When I feel bored	2475	5478	-1.676	0.094

Notes: \*significant at *p*<0.05

The result of Mann-Whitney test results in Table 4.16 showed that there are no significant difference between male and female students in terms of their opinion on prefer reading online over reading on paper except 'when I need information at the last minute' and 'when I need browsing'.

Table 4.17: Mann-Whitney test for difference between gender and prefer reading on paper over reading online

Prefer reading on paper over reading online	Mann-	Wilcoxon		Asymp. Sig. (2-
	Whitney U	W	Z	tailed)
When I read lengthy documents	2056.5	5059.5	-3.227	0.001*
When I need serious/in depth reading	2695	5698	-0.862	0.389
When I read something that is difficult to understand	2395.5	5398.5	-1.974	0.048*
When I read scholary/research paper	2758	5761	-0.633	0.527
When I read something that is very important and interesting	2841	5844	-0.318	0.751
When I need to take notice	2845.5	5771.5	-0.301	0.764
When I need multiple time reading	2436	5439	-1.826	0.068
When I need cross-referance	2634	5637	-1.105	0.269
When I need constant moving	2534	5537	-1.465	0.143
When I calm and relaxed	2850	5776	-0.287	0.774

The result of Mann-Whitney test results in Table 4.17 showed that there are no significant difference between male and female students in terms of their opinion on prefer reading on paper over reading online except 'when I read lengthy documents' and 'when I read something that is difficult to understand'.

Table 4.18 : Mann-Whitney test for difference between gender and students' attitude towards reading

Students'attitude towards reading	Mann-	Wilcoxon		Asymp. Sig.
	Whitney U	W	Z	(2-tailed)
You love to read	2902	5828	-0.090	0.929
You have a lot of books in your room	2550	5553	-1.411	0.158
You like to read book whenever you have free time	2463	5466	-1.724	0.085
	2570.5	FF72 F	1 226	0.105
Reading is one of your favorite activities	2570.5	5573.5	-1.326	0.185
You get a lot of enjoyment from reading	2600.5	5603.5	-1.218	0.223
You like talking about books with other people	2495	5498	-1.611	0.107
You think reading is boring	2184	5110	-2.800	0.005*
You think reading is waste of time	2496	5422	-1.625	0.104
It takes you a long time to read book	2918	5921	-0.030	0.976
You try very hard, but you just cannot read very well	2780	5706	-0.542	0.588
Overall attitudes towards reading	2379	5382	-2.070	0.038*
Reading is very easy for you	2343.5	5346.5	-2.203	0.028*

You do not read as well as other students in your class	2464	5390	-1.713	0.087
When you reading by yourself you	2175	5178	-2.802	0.005*
understand almost everything you read	_			
You read more slowly than other students in your class	2820	5746	-0.393	0.694
·				
You read only materials related to your job/career	2707	5633	-0.813	0.416
You are more competent in your job				
with the new knowledge acquired	2650	5576	-1.030	0.303
through reading				
You only read when a topic really	2050	E0E3	0.202	0.770
interests for you	2850	5853	-0.282	0.778
Your busy schedule discourages you	2456	5.450	4.752	0.000
from reading	2456	5459	-1.752	0.080
Bookshops are not of your favorite				
shopping sports	2788.5	5791.5	-0.514	0.607
Getting information from TV is faster				
and more enjoyable for you	2622	5625	-1.129	0.259
You will try to get reading materials if it				
is good	2317.5	5320.5	-2.279	0.023*
You always encourage others to read	2505.5	5508.5	-1.567	0.117
You spend your money for buying a book	2346	5349	-2.168	0.030*
or magazine	2346	5349	-2.168	0.030
You usually read the newspaper	2764	F.C.0.7	0.616	0.530
thoroughly	2761	5687	-0.616	0.538
You enjoy sports more than reading	2393	5319	-1.974	0.048*
You read only your lunch/coffee/tea	204.4.5	5047.5	0.043	0.066
breaks	2914.5	5917.5	-0.043	0.966
You will only go to the bookshop/library				
if you need to get a particular reading	2681.5	5684.5	-0.910	0.363
material				
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The result of Mann-Whitney test results in Table 4.18 showed that there are no significant difference between male and female students in terms of their opinion on attitude towards reading except 'you think reading is boring', 'overall attitudes towards reading', 'reading is very easy for you', 'when you reading by yourself you understand almost everything you read', 'you will try to get reading materials if it is good', 'you spend your money for buying a book or magazine' and 'you enjoy sports more than reading'.

Table 4.19: Kruskal-Wallis test for difference among level of education and prefer reading online over reading on paper

Prefer reading online over reading on paper	Chi-Square	df	Asymp. Sig.
When I read short document	3.684	6	0.719
When I do casual reading	3.585	6	0.733
When the document is easy to understand	9.817	6	0.133
When I need the most recent information	18.051	6	0.006*
When I need information at the last minute	8.759	6	0.188
When I need browsing	10.408	6	0.108
When I want one-time reading only	17.351	6	0.008*
When music is embedded in the document	19.724	6	0.003*
When I want to save money	13.623	6	0.034*
When I feel bored	5.117	6	0.529

In Table 4.19, Kruskal-Wallis test showed that there were no differences among levels of education in terms of their opinion on prefer reading online over reading on paper except 'when I need the most recent information', 'when I want one-time reading only', 'when music is embedded in the document' and 'when I want to save money'.

Table 4.20: Kruskal-Wallis test for difference among level of education and prefer reading on paper over reading online

Prefer reading on paper over reading online	Chi-Square	df	Asymp. Sig.
When I read lengthy documents	8.120	6	0.229
When I need serious/in depth reading	23.727	6	0.001*
When I read something that is difficult to understand	14.385	6	0.026*
When I read scholarly/research paper	10.789	6	0.095
When I read something that is very important and interesting	14.660	6	0.023*
When I need to take notice	8.518	6	0.203
When I need multiple time reading	3.344	6	0.765
When I need cross-reference	8.763	6	0.187
When I need constant moving	7.882	6	0.247
When I calm and relaxed	8.872	6	0.181

Notes: \*significant at p<0.05

In Table 4.20, Kruskal-Wallis test showed that there were no differences among levels of education in terms of their opinion on prefer reading on paper over reading online except 'when I need serious/in depth reading', 'when I read something that is difficult to understand' and 'when I read something that is very important and interesting'.

Table 4.21: Kruskal-Wallis test for difference among age group and prefer reading online over reading on paper

Prefer reading online over reading on paper	Chi-Square	df	Asymp. Sig.
When I read short document	4.518	4	0.340
When I do casual reading	8.901	4	0.064
When the document is easy to understand	1.864	4	0.761
When I need the most recent information	2.316	4	0.678
When I need information at the last minute	6.367	4	0.173
When I need browsing	2.547	4	0.636
When I want one-time reading only	4.902	4	0.297
When music is embedded in the document	10.264	4	0.036*
When I want to save money	6.258	4	0.181
When I feel bored	7.505	4	0.112

Kruskal-Wallis test showed in Table 4.21 that there were no differences among age groups in terms of their opinion on prefer reading online over reading on paper except 'when music is embedded in the document'.

Table 4.22: Kruskal-Wallis test for difference among age group and prefer reading on paper over reading online

Prefer reading on paper over reading online	Chi-Square	df	Asymp. Sig.
When I read lengthy documents	2.311	4	0.679
When I need serious/in depth reading	4.173	4	0.383
When I read something that is difficult to understand	3.621	4	0.460
When I read scholary/research paper	5.758	4	0.218
When I read something that is very important and	2.003		0.735
interesting	2.005	4	0.733
When I need to take notice	1.982	4	0.739
When I need multiple time reading	1.741	4	0.783
When I need cross-referance	5.552	4	0.235
When I need constant moving	2.148	4	0.709
When I calm and relaxed	2.826	4	0.587

Notes: \*significant at *p*<0.05

In Table 4.22 Kruskal-Wallis test showed that there were no differences among age groups in terms of their opinion on prefer reading on paper over reading online.

Table 4.23: Kruskal-Wallis test for difference among level of education and students' attitude towards reading

Students' attitude towards reading	Chi-Square	df	Asymp. Sig.
You love to read	18.616	6	0.005*
You have a lot of books in your room	4.440	6	0.617
You like to read book whenever you have free time	5.115	6	0.529
Reading is one of your favorite activities	11.617	6	0.071
You get a lot of enjoyment from reading	5.513	6	0.480
You like talking about books with other people	11.048	6	0.087
You think reading is boring	13.453	6	0.036*
You think reading is waste of time	9.784	6	0.134
It takes you a long time to read book	11.217	6	0.082
You try very hard, but you just cannot read very well	19.250	6	0.004*
Overall attitudes towards reading	6.253	6	0.395
Reading is very easy for you	2.581	6	0.859
You do not read as well as other students in your class	18.525	6	0.005*
When you reading by yourself you understand almost everything you read	9.528	6	0.146
You read more slowly than other students in your class	30.067	6	0.000*
You read only materials related to your job/career	9.440	6	0.150
You are more competent in your job with the new knowledge acquired through reading	5.957	6	0.428
You only read when a topic really interests for you	11.822	6	0.066
Your busy schedule discourages you from reading	10.659	6	0.099
Bookshops are not of your favourite shopping sports	2.371	6	0.883
Getting information from TV is faster and more enjoyable for you	3.217	6	0.781
You will try to get reading materials if it is good	5.571	6	0.473
You always encourage others to read	4.279	6	0.639
You spend your money for buying a book or magazine	4.580	6	0.599
You usually read the newspaper thoroughly	5.218	6	0.516
You enjoy sports more than reading	5.574	6	0.473
You read only your lunch/coffee/tea breaks	11.415	6	0.076
You will only go to the bookshop/library if you need to get a particular reading material	20.463	6	0.002*

Kruskal-Wallis test showed in Table 4.23 that there were no differences among levels of education in terms of their opinion on attitude towards reading except 'you love to read', 'You think reading is boring', 'you try very hard, but you just cannot read very well', 'you do not read as well as other students in your class', 'you read more slowly than other students

in your class' and 'you will only go to the bookshop/library if you need to get a particular reading material'.

Table 4.24: Kruskal-Wallis test for difference among age group and students' attitude towards reading

Students' attitude towards reading	Chi-Square	df	Asymp. Sig.
You love to read	10.100	4	0.039*
You have a lot of books in your room	6.610	4	0.158
You like to read book whenever you have free time	2.377	4	0.667
Reading is one of your favorite activities	0.309	4	0.989
You get a lot of enjoyment from reading	4.226	4	0.376
You like talking about books with other people	0.536	4	0.970
You think reading is boring	3.699	4	0.448
You think reading is waste of time	2.436	4	0.656
It takes you a long time to read book	13.672	4	0.008*
You try very hard, but you just cannot read very well	1.393	4	0.845
Overall attitudes towards reading	1.748	4	0.782
Reading is very easy for you	8.038	4	0.090*
You do not read as well as other students in your class	12.614	4	0.013*
When you reading by yourself you understand almost everything you read	2.591	4	0.628
You read more slowly than other students in your class	12.670	4	0.013*
You read only materials related to your job/career	2.136	4	0.711
You are more competent in your job with the new knowledge acquired through reading	8.474	4	0.076
You only read when a topic really interests for you	6.576	4	0.160
Your busy schedule discourages you from reading	5.053	4	0.282
Bookshops are not of your favourite shopping sports	2.184	4	0.702
Getting information from TV is faster and more enjoyable for you	5.314	4	0.257
You will try to get reading materials if it is good	3.978	4	0.409
You always encourage others to read	7.639	4	0.106
You spend your money for buying a book or magazine	2.768	4	0.597
You usually read the newspaper thoroughly	5.607	4	0.230
You enjoy sports more than reading	1.791	4	0.774
You read only your lunch/coffee/tea breaks	4.863	4	0.302
You will only go to the bookshope/library if you need to get a particular reading material	8.380	4	0.079

Notes: \*significant at *p*<0.05

In Table 4.24 Kruskal-Wallis test showed that there were no differences among age groups in terms of their opinion on attitude towards reading except 'you love to read', 'it takes you a

long time to read book', 'reading is very easy for you', 'you do not read as well as other students in your class' and 'you read more slowly than other students in your class'.

## **Chapter Five**

## Findings, Recommendations and Conclusion

This study was conducted in an attempt to enhance the understanding about reading habits and attitude of the ISLM students of Dhaka University. In the overall analysis that include both groups, results indicates that ISLM students spend quite a significant amount of time reading newspaper, academic books, literature, and websites information. Reading has also become a major activity during their leisure time.

The amount of time spent on reading by the ISLM students is seen as higher than the average individual adults surveyed in the past. This group is expected to read more due to their engagement in the academic process that requires them to read. This engagement may have resulted in their reading material that is less functional and more academic in nature. On the other hand, the website is seen as an increasingly important reading source. Reading habits and attitude as analyzed for this survey result in a number of findings.

First of all, the readers embrace readily reading materials across various channels and formats, in printed periodical publications, on the Internet, and in books, often reading in at least two languages, Bengali and English, and differentiating along a wide array of personal preferences.

At the same time, reading is more connected with the ambition to become more educated, and improve oneself, or gain in status, than as a pleasure and entertaining pastime.

With the Internet, cultural habits, and reading just as well, undergo significant and rapid change, as books are seen more and more often to be merging (and compete) with other media and the growingly available digital content. As reading, and more specifically, the reading of books, is seen more as a requirement than an emotionally well embedded cultural routine, it risks to being challenged by other cultural offerings in a heightened competition, ultimately losing ground.

Already a division can be identified, clearly juxtaposing on the one hand a group of highly engaged power readers who, at the same time, are savvy users for all other kinds of media and content.

To bridge such an emerging split, two complementary strategies must be particularly recommended: On the one hand, it seems advisable to promote books and reading not exclusively through their educational and personality building values, but also, in addition, by highlighting their attractiveness and status in the wider contexts of other media as well as that of modernity.

Making books and reading, and as a result, knowledge an integral part of today's life, of media programs as much as of daily routines, as the salt in the many communications and in the entertainment of a people, can be a most effective strategy for anchoring them in the wider perspectives of a developing knowledge society.

This requires, on the other hand, to energetically developing choice in reading materials, from the symbolically highly valued to the widest other ranges, covering all the diverse strands and ambitions of readers, and to increase their availability and the ease of access.

The result of Mann-Whitney test for gender differences showed that although there were no significant differences in terms of their opinion on prefer reading online over reading on paper except 'when I need information at the last minute' and 'when I need browsing'. Also, there are no significant differences between male and female students in terms of their opinion on prefer reading on paper over reading online except 'when I read lengthy documents' and 'when I read something that is difficult to understand'.

The result of Mann-Whitney test showed that there are no significant difference between male and female students in terms of their opinion on attitude towards reading except 'you think reading is boring', 'overall attitudes towards reading', 'reading is very easy for you', 'when you reading by yourself you understand almost everything you read', 'you will try to get reading materials if it is good', 'you spend your money for buying a book or magazine' and 'you enjoy sports more than reading'.

Kruskal-Wallis test showed that there were no differences among levels of education in terms of their opinion on prefer reading online over reading on paper except 'when I need the most recent information', 'when I want one-time reading only', 'when music is embedded in the document' and 'when I want to save money'. Also, showed that there were no differences among levels of education in terms of their opinion on prefer reading on

paper over reading online except 'when I need serious/in depth reading', 'when I read something that is difficult to understand' and 'when I read something that is very important and interesting'. There were no differences among age groups in terms of their opinion on prefer reading online over reading on paper except 'when music is embedded in the document'.

Kruskal-Wallis test showed that there were no differences among age groups in terms of their opinion on prefer reading on paper over reading online. There were no differences among levels of education in terms of their opinion on attitude towards reading except 'you love to read', 'You think reading is boring', 'you try very hard, but you just cannot read very well', 'you do not read as well as other students in your class', 'you read more slowly than other students in your class' and 'you will only go to the bookshop/library if you need to get a particular reading material'. It also showed that there were no differences among age groups in terms of their opinion on attitude towards reading except 'you love to read', 'it takes you a long time to read book', 'reading is very easy for you', 'you do not read as well as other students in your class' and 'you read more slowly than other students in your class'.

The knowledge acquired through this study should contribute to better understanding of the phenomena of reading habits and attitude in ISLM students of DU specially, and in contributing to the future research in similar areas generally. Since this study may be created as a case study, the result should contribute generally in terms of methodology for studies to be conducted at a different level of population or with a broader scope of population.

Several limitations can be found in the conduct of this study. Among them are the inclusion of only one department, and the limited amount of variables studied. A bigger scale study need to be conducted for more reliable results, and with the inclusion of more variables such as family background, reading exposure and availability of reading materials, and variables that are related specifically with reading in the digital environment. Further studies should focus more on how reading can actually take place using computers and wireless communication devices, how information and knowledge are extracted through non-linear reading, and the factors that contribute to the on-linear reading pattern.

It is encouraging to know that the student community awakened to read which will raise good citizens for the country. The role of librarian is really challenging. If the students are start reading at a young age, it will create an impact in every area of their life. The above findings of this study lead us to conclude that LIS students need to improve their reading habits. It will be beneficial to have a record of their reading habits in order to make predictions about their academic success in the study. For effective promotion of reading habits, skills and culture, reading must be made pleasurable and voluntary. All shades of opinion must be catered for be well considered. It is such a demonstration of democratic sensitivity that can turn even a reluctant reader to a lover of books. In a library there should be adequate reading area and related facilities to accelerate reading habits. There are still barriers in creating a reading environment that will inculcate good reading habits in LIS students. The library is still the best place for quiet study.

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## **Appendix**

### The Questionnaire

# Reading Habits and Attitude in the Digital Environment: A Study of ISLM Students of Dhaka University

## 1. Demographic and academic information

**1.1 Gender:** 1.1.1 Male 1.1.2 Female

**1.2 Level of education:** 1.2.1 1<sup>st</sup> semester 1.2.2 2nd semester

1.2.3 3<sup>rd</sup> semester 1.2.4 4th semester

1.2.5 5<sup>th</sup> semester 1.2.6 6<sup>th</sup> semester

1.2.7 7<sup>th</sup> semester 1.2.8. 8<sup>th</sup> semester

1.2.9 Post-Graduate

**1.3 Age:** 1.3.1 15-18 years 1.3.2 18-20 years

1.3.3 20-23 years 1.3.4 23-26 years

1.3.5 More than 26 years

## 2. How often do you read in a week?

2.1 Never 2.2 Rarely 2.3 Sometimes

2.4 Often 2.5 Always

## 3. What types of reading materials do you read? (Multiple)

3.1 Newspaper 3.2 Academic book 3.3 Website

3.4 Magazine 3.5 Fiction 3.6 Journal article

3.7 Text book 3.8 Literature 3.9 Others

## 4. How frequent do you read these reading materials?

4.1 Less than 1 hour 4.2 1-3 hour 4.3 4-6 hour

4.4 7-9 hour 4.5 10 and above

## 5. What resources do you use to get the reading materials? (Multiple)

5.1 Libraries 5.2 Book shop 5.3 Friends

5.4 Internet 5.5 Others

## 6. What time of the day do you read?

6.1 At night 6.2 In the morning 6.3 In the afternoon

6.4 Free period 6.5 Whenever they have the chance

# 7. What types of reading materials do you read every day to at least a few times a week? (Multiple)

7.1 Newspaper 7.2 Academic book 7.3 Website information

7.4 Magazine 7.5 Fiction 7.6 Journal article

7.7 Text book 7.8 Literature 7.9 Others

## 8. What types of reading materials do you read in leisure time?(Multiple)

8.1 Magazine 8.2 Newspaper 8.3 Fiction/novel

8.4 Academic book 8.5 Website 8.6 Comic

8.7 Article 8.8 Textbook 8.9 Literatures

8.10 Al-Quran/Islamic book

## 9. What types of activities do you perform during leisure time? (Multiple)

9.1 Reading 9.2 Surf internet 9.3 Games/sport

9.4 Sleeping 9.5 Shopping 9.6 Eating

9.7 Cooking 9.8 Traveling 9.9 Gardening

9.10 Studying 9.11 Drawing 9.12 Writing

9.13 SMS 9.14 Gossiping 9.15 Watching TV/movie/VCD

9.16 Listening to the music/radio 9.17 others

## 10. How much time do you spend on reading printed documents?

10.1 More time 10.2 less time

10.3 No change 10.4 don't know

## 11. How much time do you spend on reading electronic documents?

11.1 More time 11.2 Less time

11.3 No change 11.4 Don't know

#### 12. What is the preference of document media when reading?

12. 1 Electronic media 12.2 Printed media 12.3 either one is fine

## 13. What are the circumstances affecting the choice of reading media?

[Please circle the numbers, which most appropriately reflect your impressions about reading attitudes. Please try to respond to all the items. Here, 1=Strongly disagree, 2=Disagree, 3=Disagree somewhat, 4=Neutral, 5=Agree somewhat, 6=Agree and 7=Strongly agree]

Prefer reading online over reading on paper	Low		'	Average	High		)
13.1 When I read short documents	1	2	3	4	5	6	7
13.2 When I do casual reading (e.g. news and entertainment)	1	2	3	4	5	6	7
13.3 When the document is easy to understand	1	2	3	4	5	6	7
13.4 When I need the most recent information	1	2	3	4	5	6	7
13.5 When I need information at the last minute (e.g.	1	2	3	4	5	6	7
Easy to copy and paste)	1		3	4	)	U	,
13.6 When I need browsing (e.g. not sure the document is exactly what I need)	1	2	3	4	5	6	7
13.7 When I want one-time reading only	1	2	3	4	5	6	7
13.8 When music is embedded in the document	1	2	3	4	5	6	7
13.9 When I want to save money (e.g. cost in printing documents)	1	2	3	4	5	6	7
13.10 When I feel bored	1	2	3	4	5	6	7
Prefer reading on paper over reading online		Low		Average	High		)
13.11 When I read lengthy documents (e.g. novels,	1	2	3	4			7
textbooks)				4	5	6	
textbooks)  13.12 When I need serious/in-depth reading	1	2	3	4	5	6	7
·	1	2	3				7
13.12 When I need serious/in-depth reading  13.13 When I read something that is difficult to				4	5	6	
13.12 When I need serious/in-depth reading 13.13 When I read something that is difficult to understand	1	2	3	4 4	5 5	6 6	7
13.12 When I need serious/in-depth reading 13.13 When I read something that is difficult to understand 13.14 When I read scholarly/research papers	1	2	3	4	5	6	7
13.12 When I need serious/in-depth reading 13.13 When I read something that is difficult to understand 13.14 When I read scholarly/research papers 13.15 When I read something that is very important and	1	2	3	4 4	5 5	6 6	7
13.12 When I need serious/in-depth reading 13.13 When I read something that is difficult to understand 13.14 When I read scholarly/research papers 13.15 When I read something that is very important and interesting (e.g. preservation)	1 1 1	2 2 2	3 3	4 4 4	5 5 5	6 6	7 7 7
13.12 When I need serious/in-depth reading 13.13 When I read something that is difficult to understand 13.14 When I read scholarly/research papers 13.15 When I read something that is very important and interesting (e.g. preservation) 13.16 When I need to take notes (e.g. annotation)	1 1 1	2 2 2	3 3 3	4 4 4	5 5 5 5	6 6 6	7 7 7
13.12 When I need serious/in-depth reading 13.13 When I read something that is difficult to understand 13.14 When I read scholarly/research papers 13.15 When I read something that is very important and interesting (e.g. preservation) 13.16 When I need to take notes (e.g. annotation) 13.17 When I need multiple-time reading	1 1 1 1	2 2 2 2	3 3 3	4 4 4 4	5 5 5 5 5	6 6 6	7 7 7 7

## 14. Style of reading electronic resources based on degree.

Percentage of time spent on	Increasing	Decreasing	No change	Don't know
14.1 Browsing and scanning				
14.2 Keyword spotting				
14.3 One-time reading				
14.4 Reading selectively				
14.5 Non-Linear reading				
14.6 Sustained attention				
14.7 In depth reading				

# 15. What is your attitude towards reading?

Student's attitude towards reading		Low Average		High			
15. 1 You love to read	1	2	3	4	5	6	7
15. 2 You have a lot of books in your room	1	2	3	4	5	6	7
15. 3 You like to read book whenever you have free time	1	2	3	4	5	6	7
15. 4 Reading is one of your favorite activities	1	2	3	4	5	6	7
15. 5 You get a lot of enjoyment from reading	1	2	3	4	5	6	7
15.6 You like talking about books with other people	1	2	3	4	5	6	7
15. 7 You think reading is boring	1	2	3	4	5	6	7
15. 8 You think reading is waste of time	1	2	3	4	5	6	7
15. 9 It takes you a long time to read book	1	2	3	4	5	6	7
15. 10 You try very hard, but you just cannot read very well	1	2	3	4	5	6	7
15. 11 Overall attitudes towards reading	1	2	3	4	5	6	7
15.12 Reading is very easy for you	1	2	3	4	5	6	7
15.13 You do not read as well as other students in your class	1	2	3	4	5	6	7
15.14 When you reading by yourself you understand almost everything you read	1	2	3	4	5	6	7
15.15 You read more slowly than other students in your class.	1	2	3	4	5	6	7

15.16 You read only materials related to your job/career	1	2	3	4	5	6	7
15.17 You are more competent in your job with the new knowledge acquired through reading	1	2	3	4	5	6	7
15.18 You only read when a topic really interests for you	1	2	3	4	5	6	7
15.19 Your busy schedule discourages you from reading	1	2	3	4	5	6	7
15.20 Bookshops are one of your favourite shopping spots	1	2	3	4	5	6	7
15.21 Getting information from TV is faster and more enjoyable for you	1	2	3	4	5	6	7
15.22 You will try to get reading materials if it is good	1	2	3	4	5	6	7
15.23 You always encourage others to read	1	2	3	4	5	6	7
15.24 You spend your money for buying a book or magazine	1	2	3	4	5	6	7
15.25 You usually read the newspaper thoroughly	1	2	3	4	5	6	7
15.26 You enjoy sports more than reading	1	2	3	4	5	6	7
15.27 You read only your lunch/coffee/tea breaks	1	2	3	4	5	6	7
15.28 You will only go to the bookshop/library if you need to get a particular reading material	1	2	3	4	5	6	7