IOWA STATE UNIVERSITY
Digital Repository

1-1-2000

Foreign students' use of home country online resources : a uses and gratifications perspective

Yuh-Rong Yuh-Rong
Iowa State University

Follow this and additional works at: https://lib.dr.iastate.edu/rtd

Foreign students' use of home country

online resources: A uses and gratifications perspective

by

Yuh-Rong Her

A thesis submitted to the graduate faculty

in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

Major: Journalism and Mass Communication

Major Professor: John B. Eighmey

Iowa State University

Ames, Iowa

2000

Graduate College
Iowa State University

This is to certify that the Master's thesis of

Yuh-Rong Her

has met the thesis requirements of Iowa State University

Signatures have been redacted for privacy

TABLE OF CONTENTS

CHAPTER 1. INTRODUCTION

The total enrollment of Iowa State University (ISU) in the Fall Semester 1998 was 25,585. Among all enrolled students, there were 2,345 foreign students from more than 120 countries, approximately 9.17% of the entire enrollment (International Education Services, 1999). Not many of the foreign students stay in the United States after they complete their studies at ISU. It is thus important for them to keep in touch with home country information during their stay in the U.S. However, information about their home countries is limited and in the US mass media coverage (Patchara, 1990).

There are three ways for foreign students at ISU to obtain home country information; one is through traditional mass media, the other is through interpersonal communication, and still the other is through the Internet. Their options from among mass media could be newspapers, magazines, TV programs, and so on. If news is conveyed by the way of interpersonal communication, it is probably disseminated by students' compatriots or their family. For example, Tai (1972) found in his study that the Chinese at University of Minnesota met and exchanged information about home frequently. Lee (1984) pointed out that foreign students at Iowa State University who plan to return home were also those who had the most frequent contacts with home citizens.

In the ISU Parks Library, there are 16 overseas newspapers subscribed to by the university and made available in the Periodical Room from 10 different countries. In addition to those newspapers, there are also accessible materials donated by foreign embassies and ISU international associations. ISU Educational Cable TV Channel (ISU 9) used to provide a

university channel among its basic channels. The programs on this channel were mainly based on news programs from "Scola," which is a non-profit educational consortium that transmits programs to private individuals or public organizations via satellite. Scola receives and retransmits TV programs from more than 50 countries in their original languages. There are news programs from about 50 different countries on channel one of Scola in their national or regional languages.

Besides news programs on Scola (which is no longer available on cable TV), foreign students can also obtain home country information from home country online resources if they are provided on the Internet. If they keep in touch with friends from their countries or family, news exchange might happen in their daily contacts. The rapidly development of World Wide Web (WWW) however provides another option for foreign students to obtain home country information. The World Wide Web, with its amazing evolvement, may bring great change in foreign students' exposure to mass media, and undoubtedly, in the way they obtain home country information.

Since 1950s, a variety of studies have been done on foreign students in the U.S. Among them, the use of mass media has always been the main topic (e.g., Ellison & French, 1958; Johnson, 1971; Kang, 1972, Lee, 1984; Lo, 1989; Meng, 1990; Mustaffa, 1990, Patchara, 1990). However, most of the research put the emphasis on the use of U.S. media when foreign students' news-seeking behaviors are concerned (e.g., Lee, 1984; Lo, 1989; Meng, 1990; Mustaffa, 1990; Ryu, 1976; Semlak, 1979; Seyfi, 1979). How foreign students use U.S. mass media to adjust themselves to the new environment and are acculturated to American culture, is the focus of the previous studies (e.g., Ellison & French, 1958; Johnson,

1971; Kang, 1972; Meng, 1990; Mustaffa, 1990; Ryu, 1976). Some studies did mention seeking of home country news, though they were generally underestimated because of the scarcity of home country news for foreign students in the U.S. at that time (e.g., Lee, 1984; Lo, 1989; Meng, 1990; Mustaffa, 1990). Nonetheless, this does not mean home country news is not important to foreign students. On the contrary, previous research (Patchara, 1990) indicated that foreign students ranked home country newspapers as one of the most important sources. In Patchara's study, foreign students' exposure to home country newspapers and magazines decreased sharply due to the scarcity of these newspapers and magazines in the U.S. after they came to the U.S.

The World Wide Web (WWW) may solve the problem of home country news scarcity for foreign students in the U.S. and change their consumption patterns on mass media. The WWW might be the fastest developing medium since TV. According to Nielsen Netratings (Netratings, 2000), the estimate of the Internet users in the United States was 114,000,000 as of October 1999. As of February 2000, the estimate of the Internet users in the United States reached 122,951,350 with an average 2 million increase per month. With the rapid development of the Internet, major mass media in the world are attempting to set up their web pages on the Internet. Online newspapers and magazines provide similar contents to their printed versions, but in most cases the content does not appear to be as complete as printed versions. Besides, there are fewer time and space limitations for them in comparison to the traditional printed media. Moreover, online resources not only provide texts, images, graphics, but also audio and video. Take "Scola" for example; a live video stream of its news channel is available on its web page. That is, the news programming is viewable via the

Internet. The audience does not need a satellite dish or cable TV connection to view its news programs, and it is "Live!"

The invention of new technology will always change people's lives. The Internet may in some ways solve the problem for foreign students in the U.S. when they try to obtain home country information. Because the Internet adds variety to foreign students' mass media consumption during their stay in the U.S., their acquisition of home country information from home country online resources now becomes a topic worthy of further investigation.

Purposes of the Study

The number of foreign students in the U.S. increased steadily from the 1980s to the 1990s. According to The Digest of Education Statistics (1996), foreign students enrollment in institution of higher education in the U.S. had increased from 311,880 in 1980/91 to 452,635 in 1994/95. Muzi Lateline News (1998) pointed out that although the U.S. share of foreign students continued to decrease in comparison to other competing countries, the number of foreign students enrolling in colleges and university in the United States increased 5.1 percent in the 1997/98 school year to a total of 481,280. Take Iowa State University (ISU) for example, the percentage of foreign students enrollment reached almost 10% of the total enrollment in 1998 (Fact Book 1998-1999, p. 34, 1998).

Due to the increasing numbers of foreign students in the U.S., the problems foreign students may face have drawn continuous research attention. Previous research focused primarily on foreign students' adjustment and acculturation to the host country. Among those studies, media exposure and consumption have always been the important issues whenever foreign students' needs are concerned (e.g., Lee, 1984; Lo, 1989; Meng, 1990; Seyfi, 1979).

According to these studies, foreign students' mass media exposure is similar to previous literature of immigrants' media use because these two groups share similarities on their adjustment to the host country. For example, US mass media were found to have great influence on both foreign students' and immigrants' acculturation with the host country. Besides, researchers also indicated the noticeable impact of ethnic mass media might bring to the immigrants and foreign students in the United States (Kim, 1977; Tai, 1972). The study conducted by Bao-Hui Hwang and Zhou He (1999) on the media uses and acculturation among recent Chinese immigrants provided the best illustration what important roles ethnic mass media play in Chinese immigrants' daily life and their interaction to the host country. In this study, heavy use of Chinese-language media was the common phenomenon among Chinese immigrants in Silicon Valley. The reasons for heavy home media consumption included: (1) the ready availability of Chinese-language media in Silicon Valley; (2) most of the subjects indicated that they feel more comfortable with their native language than with English; (3) the concern to maintain cultural identity and heritage; (4) the Chinese-language media provide more information that is not available in the English-language media. It was surprising that the subjects in this study indicated that their basic need for surveillance of the important events in the U.S. could be satisfied by Chinese-language media they use; and, (5) observed subjects reported that Chinese-language media provide more entertainment they appreciate and can't find elsewhere.

The heavy use of ethnic media by Chinese immigrants in Silicon Valley suggested there would be a value to further study of foreign students' home media consumption while in the

host country. Foreign students, similar to immigrants in the U.S., relied largely on home mass media (Lee, 1984; Semlak, 1979). With the rapid development of the Internet, foreign students are able to choose home country online resources as alternatives for traditional mass media. Judging from the prevalence of the Internet uses and its ready access in most US colleges and universities, foreign students' uses and gratificatons of home media deserve new exploration.

The Uses and Gratificatons Theory states that people are motivated to mass media or other sources by their social and psychological original of needs. Individuals' needs decide different patterns of media exposure or other activities and then result in consequent gratificatons (Katz, Blumer, & Gurevitch, 1974). Previous studies on foreign students in the United States indicated that foreign students have a need for home country information and they have exposure to home country information sources when they stay in the US. However, the scarcity of home country information sources made their choices limited and thus caused changes in their media exposure behaviors after they arrive in the United States (Patchara, 1990). With the easy access to the Internet on US campuses and the Internet as an emerging powerful medium, foreign students are able to use the Internet as an alternative to obtain home country information. Their media exposure patterns and their gratifications obtained from using the Internet as an alternative to access to home country information becomes issues worth further exploring.

This study is, thus, designed to investigate foreign students' home media consumption patterns from home country online resources from a uses and gratifications perspective. With the combination of previous literature on foreign students' exposure of mass media and recent

research on the Internet, this study aims to examine foreign students' gratifications sought and obtained from home country online resources. Major concerns are: (1) what are the gratifications foreign students seeking and obtaining from home country online resources; (2) what are the relationships or the differences between gratification sought and gratifications obtained from home country online resources; (3) what is the dependency of home country online resources; and, (4) what is the role of home country online resources in comparison with traditional home mass media.

CHAPTER 2. LITERATURE REVIEW

This chapter includes an introduction of the uses and gratifications theory and related research, followed by previous studies about foreign students' home media uses patterns and recent research on the Internet use among either general users or specific groups. The chapter concludes with a statement of research questions.

Theoretical Orientation

The following part is dedicated to a description and discussion of the theoretical orientation applied in this study.

The uses and gratifications theory

In contrast to perspectives that assume audience members are passive receivers, the uses and gratifications perspective regards audience members as active users and emphasizes the social and psychological aspects of communication behaviors. This approach underscores the audience's selective use and choice of media and the gratifications involve the functions of the media.

The major elements of uses and gratifications theory are: (1) people's needs and motives to communicate; (2) the mass media; (3) the psychological and social environment; (4) functional alternatives to media use; (5) communication behaviors; and, (6) the consequences of communication behavior. According to Katz, Blumler, and Gurevitch (1974), uses and gratifications theory helps explain how media are used to gratify people's needs, understand motives for media behavior, and identify functions of media uses. They also pointed out that uses and gratifications emphasizes:

The social and psychological origins of needs, which generate expectations of the

mass media or other sources, which lead to differential patterns of media exposure (or engagement in other activities), resulting in need gratifications and other consequences, perhaps most unintended ones (p.20).

Previous research on uses and gratifications theory found people use media to gratify their social and psychological needs. Katz et al. (1974) indicated that media are used to gratify certain needs, including "strengthening understanding of self, friends, others or society," "strengthening the status of self or society," and "strengthening contact with family, friends, society, or culture." McQuail, Blumler, and Brown (1972) found the four major types of gratifications attained by television viewers. They are "diversion," "personal relationship," "personal identity," and "surveillance."

Blumler (1979) pointed out that "audience activity" composed of the utility, intentionality, selectivity, and involvement with the media is the main idea of uses and gratifications theory. As to media use, Rubin (1984) indicated that it can be divided into two categories: ritualized (diversionary) or instrumental (utilitarian). These two orientations are concerned with audience exposure and selectivity, as well as their attitudes and expectations on media use. According to Rubin (1984), ritualized media use tends to be less active and less goal-directed although habitually great exposure can be found in order to kill time or for diversion. Instrumental media use, in contrast, tends to be greater exposure to specific media for news and information. It is active, goal-directed, and the media content perceived tends to be realistic.

Social context and potential for interaction were suggested as two variables of audience activity. Mobility and loneliness were found as important indicators. Rubin (1984) indicated that reduced mobility and greater loneliness will lead to both ritualized media use

and greater media reliance.

Gratifications sought (GS) vs. gratifications obtained (GO)

The relationship between gratifications sought (GS) and gratifications obtained (GO) has also been extensively explored in the uses and gratifications literature. Palmgreen and Rayburn in late 1970s demonstrated measures of gratifications sought and gratifications obtained in their study of exposure to public television. The focus of the study conducted by Pamgreen and Rayburn aimed to explain how the relationships between GS and GO and subsequent satisfactions may relate to media selections, exposure, dependency, or media effects. The major concerns included: (1) the relationship between each GS and its corresponding GO measure, and (2) audience satisfaction questions, such as whether the dimensions of GS from a certain type of medium or program the same as the dimensions of GO from the media exposure (Palmgreen et al., 1980).

To investigate the relations between GS and GO, a study on TV news programs and most watched news program was conducted (Palmgreen et al., 1980). The results indicated that each GS correlated either moderately or strongly with its corresponding GO. The correlationships between each GS and its noncorresponding GOs were however much lower. The moderate to strong, but not perfect, correlations suggested that a gratifications sought is not necessarily a gratifications obtained. Also, "the degree of dependence on a particular program was found positively related to the strength of the GS versus GO relationship (p.183, Palmgreen et al., 1980)." A study of network evening news programs and 60 Minutes (Wenner, 1982) further investigated the role of GS and GO in predicting media dependency. The results showed that GO is a stronger predictor on audience dependency on network news

programs and 60 Minutes than GS after demographic variables, habitual media use are controlled. As to the correlations between GS and GO, each GS was again found most strongly correlated to its corresponding GO and less strongly correlated to its noncorresponding GOs. A t-test analysis of differences between individual GS and GO further indicated that a gratification sought is not always a gratifications obtained. Although gratifications obtained was found generally significantly higher than gratifications sought, an exception to this trend was found in surveillance dimension gratifications. That is, the respondents in this study indicated that they obtain a lower level of surveillance gratifications than they seek from their exposure to network news programs.

Media dependency

The Uses and Dependency Model (Rubin & Windahl, 1982) suggested that needs and motives, information-seeking strategies, media and functional alternative use, and media dependency relate to one another. Social and psychological attributes were found as main factors which affect media motives, availability of alternatives, and dependency on certain media (Rubin, 1984). Restricted environmental context to communication alternatives will result in greater dependency on certain media and a possible pattern of media use. On the contrary, the more sources of gratifying information needs, the less dependent the audience will be on certain medium. It should be stressed though, previous research on foreign students and their home news media uses suggested that there is a significant relationship between demographics (gender, education level, length of residence, and English proficiency) and home news media use (Lee, 1984; Lo, 1989). Ball-Rokeach and Defleur (1976) defined media dependency as "a relationship in which the satisfaction of needs or the attainment of

goals by one party is contingent upon the resources of another party"(p. 6). Dependency of media is related to motives for attending to the media. Rubin and Windahl (1982) pointed out that the more people perceived themselves as obtaining more gratifications or the more they are motivated in seeking gratifications will lead to greater extent dependency on certain medium.

Recent Studies on the Internet Use

Various studies on the Internet use have emerged with the rapid development of the Internet technology. Among those studies, the uses and gratifications theory has been adopted as the main theoretical framework for the Internet related studies in mass communication research. Eighmey (1997) indicated that the uses and gratifications approach has been used to explore the possible effects electronic media may bring and would be further applied to research on the impact of the online world.

In late 1980s, Rafaeli (1986) examined the use of a university computer bulletin board. He found in this research that computer bulletin board provides its audiences with different gratifications. "Entertainment, diversion, and recreation" were rated as the major motivations for using the computer bulletin board by the users. Users also reported great attention on the information or factual reports posted on the bulletin board. This research showed the potential personal communication within the computer-mediated communication and the applications of the uses and gratifications approach in the computer-mediated research.

Eighmey and McCord (1997) investigated the audience experience associated with commercial websites. Similarities to the types of uses and gratifications reported in previous research on other mass media were found in this study. For example, dimensions such as

"entertainment value," "personal relevance," "information involvement," "clarity of purpose," "controversy," "credibility," and "purchase interest" were found as similar as in previous research. In addition, "personal involvement" and "continuing relationship" were found and identified as new dimensions in this study when examining audience reactions to websites. In this study, audiences were attracted to commercial websites which provide product information within a broader and entertaining context. Participants in this study also showed a preference for the websites that showed clear organization and good design principles.

Nortey (1998) adopted four factors (information value; entertainment value; involvement/interactivity; and clarity of purpose/credibility) from the uses and gratifications scales in Eighmey and McCord's literature. She also borrowed the other four social support scales (emotional support; appraisal support; instrumental support; and information support) from House's categorizations to develop the measurement in her study on how the suffers of chronic illnesses use online resources to gratify their special needs. The results of her study showed users seek primarily for information from online health resources. Nortey also found involvement/interactivity, entertainment, and clarity/purpose were the secondary gratifications sought. Furthermore, suffers of chronic illnesses indicated that emotional support, appraisal support, and instrumental support are gratifications they obtained from online resources. The author pointed out that the results indicated that online resources provide suffers of chronic not only gratifications on information but also gratifications related to social support.

A study conducted by Abela (1997) examined what the Internet use in Malta in a uses and gratifications perspective. An online survey was designed to explore the general users of the Internet in Malta. Major concerns include: (1) the needs gratified by connecting to the

Internet; (2) gender differences in Internet use; and, (3) the effect Internet use has on people's relationships. The results of the survey showed Internet subscribers in Malta have eight types of motivations for connecting to the Internet. They are escape, fantasy/play, information seeking, browsing, entertainment, transaction business, and transaction computer. Each dimension of the motivations interrelates to the use of the Internet. The Maltese use the Internet to gratify their different needs ranging from information seeking to experimenting with one's identity. Gender differences were found among several dimensions of gratifications. More specific, male users were found significantly different from female counterparts on "entertainment," "transaction-business," "transaction-computer," and "play/fantasy" motivations. Entertainment was found the gratification obtained more by the male than the female form the Internet use. Finally, Maltese Internet users reported changes in their relationships after they connected to the Internet. Positive and negative effects of the Internet on their relationship were indicated in response to the opened-ended question. Major effects cited by the respondents ranged extremely from "meeting new people" and "communicating with people far way" (positive) to "excluding real life" and "addiction to the Internet" (negative).

Internet information may also complement the traditional mass media. In surveying results of Internet use by faculty/staff and students from Boston College, Hunter (1996) indicated that neither faculty/staff nor students expected the web to replace traditional mass media. Both groups also reported that the web hadn't replaced traditional mass media (newspapers, magazines, and television) in their actual use. The main reason that the web failed to replace traditional mass media in the Boston College internet use study was attributed

to the limitations of the web which enable its traditional mass media counterparts to stay competitive. However, online resources have provided alternatives for foreign students to obtain home country information which were quite limited in the past due to the scarcity of home media in the US.

Foreign Students' Home Country Media Uses

The use of news media by foreign students presents an interesting area in which to examine the uses and gratifications associated with Internet information. Foreign students seek information from diverse sources, including U.S. media and home country media. Because of newer Internet technology in the latest news, Internet sources may become popular and the students will therefore become a population in which Internet sources can be studied and contrasted with traditional media used by the students.

Studies on foreign students in the US have been done since 1950. Most focus on the interpersonal communication with Americans among foreign students and their exposure to mass media. How foreign students are acculturated through exposure to U.S. media and interpersonal communication with Americans is also a main topic in the previous research (e.g., Kim, 1977; Moore, 1976; Johnson, 1971; Moghrabi, 1972; Lee, 1984).

In addition, how foreign students adjust to their new environment by the use of U.S. mass media and interpersonal contacts with American are another two major topics which arouse widespread discussion. No direct research was found to explore how foreign students obtain news from their home countries, although it was mentioned in some studies that a hunger for home country news does exist among foreign students in the United States. But no further research was done (e.g., Lee, 1984; Mustaffa, 1990; Meng, 1990; Patchara, 1990).

Need for home country news

A survey conducted by Lee (1984) found that 22.4% of foreign students at Iowa State University responded that they subscribed to their home newspapers. As to home news magazines, the percentage of Iowa State University foreign students who subscribe to home magazines in the sample was 10.4%.

According to Semlak (1979), foreign students depend largely on the publications from their home countries. A study named "what foreign students think of our press" by Ellison and French (1958) showed that foreign students in the U.S. were eager to know news from their home countries. Though they thought there were various American newspapers among selections, they could hardly obtain home country news from these American newspapers. They also found that students from Africa, Scandinavia and Australia said almost no news of their own countries from the American press. In this study, 60% of the foreign students received newspapers from home countries. Tai (1972) also pointed out in his study about the Chinese at the University of Minnesota that they met and read home newspapers frequently.

Motivation

Motivation was found as a decisive factor which affected foreign students' exposure to home country news media and contacts with home citizens (Lee, 1984).

In the study, Lee (1984) divided foreign students into two groups according to the motivation which determined their different patterns of media exposure and personal contacts. It was found that whether foreign students would plan to stay in the U.S. or return home upon completion of their study was an important factor which determined how foreign students chose their information source. The author pointed out that "there are significant differences

in foreign students' availability of home news media. The difference is affected by their difference in motivation. Students who plan to return to home country subscribe to their home newspapers and home magazines significantly more than students who plan to stay in America. However, the two groups are almost identical in their availability of the U.S. mass media" (p.86).

The study also investigated some patterns of media use by foreign students at Iowa State University. Among them, there were two interesting facts about the use of home news media: (1) among ISU foreign students who planned to return to home, one-third of them read home newspapers almost everyday. Home newspapers were considered as an important information source for those who plan to return to home but lacked of personal contacts with home citizens. (2) students who planned to return home and had frequent contacts with home citizens were the highest users of home news media.

In Lee's study, motivation was an important factor which determines the news-seeking behaviors of ISU foreign students. Planning to return home or to stay in the U.S. serves as motivation in their news-seeking behaviors.

Availability of home country news

According to Patchara (1990), talking with home friends was considered as the second important news channel and source of information for foreign students while studying in the U.S. In his research, foreign students also ranked home country newspapers as one of the top five most important news sources. However, after foreign students arrived in the US, their exposure to home country mass media decreased sharply. Many respondents in this study mentioned that they could rarely find mass media from their home countries. Parchara found

that: "due to the scarcity of home country newspapers, the respondents increased their consumption of U.S. newspapers." Availability was indicated as a main factor which affected foreign students' exposure of home news media (p.53).

Though foreign students considered talking with friends as another major news source, the proximity to other students from their country seemed to be a problem. In a 1997 census provided by the Office of International Students and Scholars of Iowa State University, foreign students from only 36 out of 127 foreign countries have more than 10 citizens present on campus. Many foreign students find few or no home citizens on campus. On the contrary, those who have more home citizens on campus may have more chances to keep contacts with home citizens. Kang (1972) found that 80% of the Chinese students belonged to their own community, which helped them keep close contacts with their country. Lee (1984) also indicated that personal contacts with home citizen affected foreign students' news-seeking behaviors.

Demographic variables

Demographic variables, such as length of residence, sex, and educational level, were found as influential indicators of foreign students' mass media use behaviors. Lee (1984) found that graduate students used home newspapers more frequently than undergraduate students, while male students used home newspapers slightly more frequently than female students. Length of residence was found one of the most powerful predictor when foreign students' use of news media was concerned. Lee (1984) indicated that a positive correlation was found between length of residence and the use of home news media. He also found that length of residence had a significant relationship with the use of broadcast media. Lo (1989) used length of stay

as an indicator to divide the population into four groups. The results showed that significant relationship existed among length of residence and different mass media uses. For example, for all the four groups, television was the most important source of the information followed by newspapers as the second most import source.

Focus of the study

In the past, the uses and gratifications theory was widely employed on research about the audience's exposure to new mass media, such as radio and television. Recently, judging from the most up-to-date growing mass medium - the Internet, research about the Internet and its audience has drawn great discussion. Some of those research found the uses and gratifications theory explains well why so many people rush to the Internet and the benefits people get from it. However, there are no studies examining foreign students' use of home country online resources on the basis of the uses and gratifications theory perspective. Previous research on foreign students' media exposure focused primarily on their consumption of the US mass media. For example, Ryu (1976) and Seyfi (1979) found that American mass media are used by foreign students to relax, to promote their English ability, and to get information.

Previous research on the Internet use (Abela, 1997; Eighmey & McCord, 1997; Nortey, 1998) suggested that audiences seek different gratifications according to their individual needs. Foreign students in the U. S. have their unique gratifications they seek from the Internet in comparison to general Internet users. The advent and rapid growth of the Internet technology provide foreign students another alternative to access to home country

information. It is thus worth investigating what gratifications are foreign students seeking and obtaining from home country online resources.

From the uses and gratifications perspective, the Internet might satisfy foreign students' needs for home country information and provide them as an alternative beside traditional mass media (printed media and TV) and interpersonal communication (contacts with compatriots).

Building on literatures of foreign students' media exposure, the Internet and the theoretical framework of the uses and gratificatons theory, this study aims to examine foreign students' use of home country online resources in a uses and gratifications perspective.

Research Questions

The following research questions will be examined:

Question 1. What gratifications are foreign students seeking from home country online resources?

Question 2. What gratifications are foreign students obtaining from home country online resources?

Question 3. Are there relationships or differences between gratifications sought (GS) and gratifications obtained (GO) from home country online resources?

Question 4. Are gratifications sought (GS) or gratifications obtained (GO) more strongly related to a media dependency score?

Question 5. Do respondents believe that home country online resources will be able to replace traditional forms of home country mass media?

CHAPTER 3. METHODOLOGY

This chapter includes the methods applied to gathering data for this study. Interview and survey are two approaches used for data collection.

Questionnaire Design

Five foreign students in Iowa State University were interviewed to generate ideas for questionnaire design. Two students from Taiwan, one from Malaysia, one from Hong Kong, and the other from Denmark were recruited for the interviews. Interviews were conducted separately with five interviewees about their use of home country online resources. Each interview lasted around 30 minutes, which allowed full discussion and description of personal history on the use of home country online resources.

Pre-test

A tentative questionnaire was designed according to the ideas generated from the interviews and previous related research. Ten foreign students were selected on a convenience basis to test and provide suggestions for the first draft of the questionnaire. Four students from Taiwan, two from South Korea, two from Malaysia, one from Mexico, and one from Denmark participated voluntarily in the pre-test. It took the ten participants from 11 to18 minutes to complete the tentative questionnaire. All participants then met with the researcher separately for 20 minutes to critique and provide suggestions for the tentative questionnaire. The questionnaire was then modified and reworded based on the pre-test results (Appendix B).

Sampling

According to the census data provides by International Education Services (IES) at Iowa State University, the total enrollment of foreign students at Iowa State University in the Fall Semester, 1999 was 2,367. A computerized name and address list of all foreign students was provided by International Education Services after the project was approved by the University Human Subjects Review Committee. The list showed that as of September 3, 1999, there were 2, 442 foreign students listed on the directory. In order to properly represent the population and take cost into consideration, a sample of 500 foreign students was drawn to participate in the survey by using the systematic random sampling.

Questionnaire Development

Data for this study was collected by the use of questionnaire. The questionnaire included six types of items:

(1) Items designed to evaluate the exposure to different media resources.

(2) Items designed to evaluate gratifications sought from home country online resources

(3) Items designed to evaluate gratifications obtained from home country online resources.

(4) Items designed to measure dependency, frequency, and attention to home country online resources.

(5) Items designed to evaluate the efficiency of home country online resources in comparison with traditional forms of home mass media. Open-ended questions

were included to explore reasons led to different level of exposure to home country online resources.

(6) Items designed to provide demographic information.

Different schemas for categorizing media news gratifications were applied to various previous research and thus makes it more difficult to get a certain pictures of the forms of news gratifications. Cited in Wenner (1985, pp. 171-175), researchers such as Schramm and Swanson consider two gratifications, while McQuail, Wenner, and Palmgreen proposed more forms of gratificatons. However, recent categorizations for news gratifications are either fourfold typology (surveillance, correlation, social transmission, and entertainment) suggested by Lasswell (1948) and Wright (1960) or the schema proposed by McQuail et al. (1972) which divides news gratifications into "surveillance," "personal identity," "personal relationships," and "diversion."

Surveillance refers to acquiring news and information which may be related or interesting to the audience. Diversion gratifications help the audience escape from the boredom of everyday life or distract their attentions from things that bother them. Gratifications of personal identity are related to understanding about oneself, feeling a sense of self, or value reinforcement. Social utility, companionship, and topics for everyday conversations are categorized into "personal relationships" gratifications. Further investigations of categorizations applied in previous literature indicated that the main concepts in dimensions of gratifications are quite similar to one another although they may be named as different terms by scholars. For example, "diversion" dimension of gratifications might appear as "escape" while "personal relationships" might be called as "social interaction."

However, this study aims at exploring the gratificatons sought and gratifications obtained from the new medium- the Internet. The categorizations of the Internet use in Malta (Abela, 1997) were thus adopted and modified based on the results of interviews of five foreign students to fit the needs of this study. Thus questions were designed into six categories of: escape, information seeking, social interaction, entertainment, browsing, transaction-business. It should be further indicated that among these six categories, transaction-business and browsing, which refer to "financial management on the Internet (such as on-line banking, on-line investment, etc)" and "browsing for information without a specific purpose" separately, are the new concepts of categorization appear in the study related to the Internet. Nineteen items of statements were then designed to measure the gratifications sought and gratifications obtained from home country online resources. All of the nineteen statements were developed based on the results of pre-tests of the tentative questionnaire and the categorizations found in the Internet Use in Malta (Albela, 1997). They were:

(1) Items in the category of escape: "To relieve boredom (Boredom)," "Because I have nothing better to do (Nothing)," "Because I feel I'm not alone (Not alone)," and "To distract from tedious life affairs (Distract)."

(2) Items in the category of information seeking: "To find information (Information)," "For research purpose (Research)," "To give me support for my ideas (Ideas)," and "To download software (Software)."

(3) Items in the category of social interaction: "To socialize with friends/relatives (Socialize)," "To feel closer to family and friends (Feel close)," and "To exchange information (Exchange info.)."

(4) Items in the category of entertainment: "To relax (Relax)," "Because it entertains me (Entertain)," and "To have fun (Fun)."

(5) Items in the category of browsing: "Provides me with topics for conversation (Conversation)," "Helps me to learn new things (Learn)," and "Helps me to find out what's happening in the world (World)."

(6) Items in the category of transaction-business: "To order things (Order)," and "Helps me manage my finance (Financial)."

Methods applied to the previous research on gratification sought and gratification obtained in TV news programs (Palmgreen, 1980; Wenner, 1982) were applied to test the gratifications sought and gratifications obtained from home country online resources. Respondents who have exposure to home country online resources were requested to answer all six types of questions while respondents who do not use home country online resources answered only questions related to their exposure to various media and demographic information. Foreign students who use home country online resources were first asked to answer the average time they spend on home country online resources per week and the place they most often access to those resources. They then rated the importance of various resources from which they obtain information either about home country or the US. After that, respondents rated statements about their intentional gratifications sought (GS) for home country online resources on a 6 point Likert scale with choices of (1) strongly disagree, (2) disagree, (3) somewhat disagree, (4) somewhat agree, (5) agree, and (6) strongly agree.

Open-ended questions concerning the frustrations and benefits they receive from home country online resources and their personal opinions about home country online resources in

comparison to traditional home country mass media were arranged right after the intentional gratifications sought evaluations. Questions about dependency, frequency, and attention to favorite home online resource followed. Questions about the need for favorite home online resource and the existence of possible alternatives were used to test dependency. Attention to the favorite home news medium was measured on a six-point scale according to the degree of attention devoted to the medium. Besides, habitual media exposure measurement was concerned about the time spending on consuming favorite home medium in an average month. Respondents then again were required to rate similar but rewording statements concerning about the gratifications they obtain (GO) from their most favorite home online resource. At the last part of the questionnaire, respondents were requested to provide demographic information.

Data Collection

Five hundred self-administered questionnaires with complete instructions were mailed out to the 500 randomly selected foreign students with a self-stamped returned envelope enclosed on November 11, 1999. A follow-up reminder was sent to each of the selected respondents 18 days later by email to increase the responding rate. A second mailing started on December 5, 1999 and aimed at encouraging non-reply respondents to participate in the survey. Email was again used to send the second follow-up reminder ten days after the second mailing. By January 11, 2000, 202 copies of returned questionnaires were collected, which generated a responding rate of 40.4 percent. In order to reach the estimated 50 percent responding rate, a third mailing was launched on January 20, 2000. Two weeks after the third mailing, a total of 238 questionnaires were collected with a return rate of 47.6 percent. All of

the 238 questionnaires returned were analyzable. The data collection period lasted almost three months because a week long Thanksgiving Break in late November and the three-week long winter break followed by the end of fall semester were taken into consideration.

For data entry and analysis, the Statistical Package for the Social Sciences (SPSS) computer program was used in this study.

CHAPTER 4. RESULTS AND DISCUSSION

In this chapter, the results and discussion are presented. It starts with the descriptive statistics for variables in the questionnaire, followed by the results and discussions of research questions, and finally additional findings.

This study aims at answering several questions as following. Adopting the uses and gratifications theory and previous research on foreign students' exposure to mass media, foreign students in Iowa State University were surveyed regarding their use on home country online resources and the gratifications they obtain from those resources. The basic analytical method examines the similarities and differences found in this study and indicated in previous research in a uses and gratifications perspective. Are the gratifications foreign students seeking and obtaining from home country online resources different from those of general users of the Internet? Are home country online resources proving a better way for foreign students to access to news from home country? This study examined the role home country online resources play as access to home country information during foreign students' stay in the United States.

Analytical Approaches

Previous study on Internet subscribers in Malta shows eight types of motivations for connecting to the Internet. They are escape, fantasy/play, information seeking, browsing, social interaction, entertainment, transaction-business and transaction-computer. The modified version of categorizations for this study covers six types of motivations: escape, information seeking, social interaction, entertainment, browsing, and transaction-business.

Descriptive statistics were first used to present most variables tested in the questionnaire. Factor analysis was used to examine the similarities in the factor patterns appeared in this study in comparison to the categorizations adopted and modified from the Maltese Internet subscribers study (Abela, 1997). Foreign students' gratifiactions obtained from their favorite home country online resources also analyzed by the use of factor analysis. Cronbach's alpha was used to test the reliability of the items loaded in the factors. The Pearson correlation coefficient (r) was used to examine the relationships between gratifications sought (GS) and gratifications obtained (GO) because it can indicate the direction and strength of the relationship between GS and GO found in this study. Multiple regression analyses were then used to test the influence of gratifications sought and gratifications obtained in predicting media dependency. Moreover, Paired-samples T-test was selected as the method to measure the differences between corresponding gratificatons while independent-sampled T-test was used to test the differences between gender and dimensions of gratifications sought and gratifications obtained. Finally, crosstabulations (Chi-square) were used to test the relationships between demographic variables and foreign students' exposure to home country online resources.

Research questions and analytical methods

Five research questions were examined in this study.

Question 1. What gratifications are foreign students seeking from home country online resources?

Analytical methods: Nineteen items were examined by the use of factor analysis to determine what gratifications foreign students are seeking from home country online

resources. All the nineteen items were adopted from Abela's (1997) survey on Maltese Internet subscribers and were modified according to the results from the interviews with five foreign students. Cronbach's alpha was used as reliability test for each item loaded on different factors.

Question 2. What gratifications are foreign students obtaining from home country online resources?

Analytical methods: Nineteen items were examined by the use of factor analysis to determine what gratifications foreign students are obtaining from their favorite home country online resources. Nineteen items used to test gratificatinos sought were reworded to test gratifications obtained from home country online resources. Cronbach's alpha was again used to measure reliability of the loaded items.

Question 3. Are there relationships or differences between gratifications sought (GS) and gratifications obtained (GO) from home country online resources?

Analytical methods: Correlations between gratifications sought and gratifications obtained found in previous two questions were examined by the use of Pearson correlation coefficient (r). Correlation matrix was used to examine the relationships between corresponding and non-corresponding items. T-test was then used to compare the mean GS with the corresponding mean GO for gratifications items.

Question 4. Are gratifications sought (GS) or gratifications obtained (GO) more strongly related to a media dependency score?

Analytical methods: Multiple regression analyses were used to test whether gratifications obtained (GO) or gratifications sought (GS) has the stronger influence on

predicting the dependency on favorite home country online resources after controlling for the influences of demographic factors, habitual media exposure, and attention level. The variances GO measures and GS measures account for decided whether GO or GS has great influences on predicting media dependency. The dependency score was measured by respondents' self-evaluation on their dependency on home country online resources whenever they need home country information (see Question. 32 in Appendix B).

Question 5. Do respondents believe that home country online resources will be able to replace traditional forms of home mass media?

Analytical methods: Foreign students' opinions on the replacement of home country online resources to traditional forms of home mass media were first coded into several categories. Frequency and percentage were then used to present foreign students' evaluation on this issue.

Survey Results

238 foreign students out of the 500 systematic randomly selected respondents at Iowa State University participated in the survey and returned their questionnaires. 22 out of the 238 respondents skipped the four open-ended questions, but all the 238 returned questionnaires are valid for this study. The responding rate for the survey is thus 47.6%. With a sample size of 238, we can be 95% confident that the results in the population will be the same as in the sample plus or minus 6.4% sampling errors.

Demographic characters and media behavior of the respondents who returned the questionnaire are the major concerns for the following parts.

Demographics

Respondents were asked to provide demographic information such as gender, age, academic level, length of residence in the United States, and nationality. Table 1 shows demographic results, including gender, age, academic level, length of residence in the United States, and plan to return home after completion of study in the United States.

Table 1. Demographic results

	Frequency (n=238)	%
Gender		
Male	154	64.7
Female	84	35.3
Age		
Under 20	16	6.7
21-25	88	37.0
26-30	90	37.8
31-35	30	12.6
36 or older	14	5.9
Academic level		
Bachelor's	78	32.8
Master's	65	27.3
Ph. D.	89	37.4
Others	6	2.5
Length of residence in the US		
Low (Less than 1 yr.)	57	23.9
Medium (1-2 years)	53	22.3
High (More than 2 yrs.)	128	53.8
Plan after completion of study in the US		
Yes	129	54.2
Not sure	22	9.2
No	87	36.6

One hundred and fifty-four male foreign students and eighty-four female foreign students were involved in this survey. Most respondents in the sample fell either in the 21-25 years old group or 26-30 years old group. Respondents were also asked their academic level. 78 of the respondents are undergraduate students and 154 are graduate students. Sixty-five of those graduate students are working on their master's degrees while 89 are working on Ph.D. degrees. Six students out of the 238 respondents are seeking for other types of education.

As to the length of residence in the United States, respondents were categorized into three groups according to their length of residence in the United States. For the purpose of further analysis, the length of residence was divided into three groups, "low", "medium", and "high". One hundred and twenty-eight respondents, which account for 53.8% of the sample, have been in the United States for more than two years.

Respondents were also requested to answer their future plan after completion of study in the United States. A total of 54.2% of the respondents indicated they plan to stay in the United States after they complete study, 36.6% of the respondents pointed out they don't plan to stay in the United States after completion of study, and 9.2% of the respondents said they are not sure if they would like to stay in the United States or not after they complete their study.

Table 2 presents the distribution of nationality of respondents. Respondents were categorized into eight groups according to the location of their home countries. A total 76.1% of the respondents are from Asia, followed by 9.2% of the respondents from Europe. The distribution of sample population reflected similarly to the composition of ethnic groups in the census data of foreigners at Iowa State University in Fall Semester 1999 provided by

Table 2. Distribution of Nationality

	Sample population (%) (n= 238)	Census compiled by IES (%) (n= 2, 891)
Asia	76.1	70.9
Europe	9.2	13.4
Africa	5.9	4.8
Mexico, Central & South America	4.2	3.9
Middle East	2.5	4.6
North America	1.3	1.6
Oceania	0.4	0.4
Caribbean	0.4	0.3

International Education Services (IES). Asians accounted for the biggest ethnic group of foreign students, staff, and faculty presently on campus, and Europeans were the second biggest group followed by Africans.

Media behavior

Table 3 presents respondents' media behavior, including respondents' subscription to home country mass media, US mass media subscription among respondents, and use of home country online resources. 89.9% of the respondents indicated that they don't subscribe to any of the home country mass media while 10.1% of the respondents subscribe to one or more than one type of home country mass media. A total of 42.4% of the respondents subscribe to one or more than one US mass media and 57.6% of the respondents don't subscribe to any of the US mass media. 230 respondents out of the 238 respondents indicated that they use home country online resources, but 8 of the respondents said they don't.

Table 3. Media behavior

(n= 238)	Yes (%)	No (%)
Subscription to home country mass media	10.1	89.9
Subscription to US mass media	42.4	57.6
Use of home country online resources	96.6	3.4

Table 4 shows the frequency of use of home country online resources among respondents. A total of 55.2% of the respondents indicated that they use home country online resources daily, 23.0% indicated using home country online resources two or more times per week, 11.3% indicated weekly usage, 5.2% of the respondents said they use home country online resources a few times a month, 1.3% indicated monthly usage, and 3.9% of the respondents said they use home country online resources less than once a month.

Table 5 shows how many hours per week respondents spend on home country online resources. A total of 12.6% of the respondents indicated average weekly usage of an hour on

Table 4. Frequency of use of home country online resources

VARIABLE	Value	Frequency	Percent
Daily	1.00	127	55.2
Two or more per week	2.00	53	23.0
Weekly	3.00	26	11.3
A few times a month	4.00	12	5.2
Monthly	5.00	3	1.3
Less than once a month	6.00	9	3.9
Missing cases	9.00	8	
Total valid cases		230	
Total		238	100.0
Median	1.00		

Table 5. Use of home country online resources per week

Hours/Week	Frequency	Percent	Valid Percent	Cumulative Percent
0	8	3.4	3.4	3.4
1	30	12.6	12.6	16.0
2	32	13.4	13.4	29.4
3	32	13.4	13.4	42.9
4	20	8.4	8.4	51.3
5	23	9.7	9.7	60.9
6	10	4.2	4.2	65.1
7	21	8.8	8.8	73.9
8	7	2.9	2.9	76.9
9	2	0.8	0.8	77.7
10	25	10.5	10.5	88.2
11	4	1.7	1.7	89.9
14	4	1.7	1.7	91.6
15	7	2.9	2.9	94.5
20	6	2.5	2.5	97.1
25	1	0.4	0.4	97.5
28	1	0.4	0.4	97.9
30	2	0.8	0.8	98.7
40	1	0.4	0.4	99.6
48	1	0.4	0.4	100.0
Missing cases	0			
Total valid cases	238			
Total	238	100.0	100.0	100.0

Mean	6.22
SD	6.68

home country online resources, 13.4% of the respondents indicated average 2 hours usage on home country online resources, another 13.4% had average 3 hours usage per week in average, and one respondent which accounts for 0.4% of the respondents indicated an average of 48 hours usage on home country online resources per week.

Table 6 further breaks down all the respondents in to 5 groups based on the average hours they spend on home country online resources per week. The table shows that 39.5%

of the respondents use home country online resources from 1 to 3 hours per week. A total of 31.1% of the respondents indicated they have an average weekly usage from 4 to 7 hours. Another 17.6% of the respondents said they use home country online resources from 8 to 14 hours per week. A total of 8.4% of the respondents indicated they use home country online resources 15 or more than 15 hours per week in average.

Table 6. Weekly usage of home country online resources in average

	Value	Frequency	Percent
0 hour	0.00	8	3.4
1-3 hours	1.00	94	39.5
4-7 hours	2.00	74	31.1
8-14 hours	3.00	42	17.6
15-21 hours	4.00	13	5.5
22 or more hours	5.00	7	2.9
Missing cases	9.00	0	
Total valid cases		238	
Total		238	100.0

Median   2.00

Respondents who have exposure to home country online resources were also asked to answer the applications they use from home country online resources. Table 7 shows that 92.2% of the respondents use World Wide Web (WWW) from home country online resources. A total of 66.1% of the respondents indicated that they use e-mail. Another 26.5% of the respondents use Telnet from their home country online resources. Internet Relay Chat (IRC) is used by 17.8% of the respondents and 17% of the respondents said they use News Groups from home country online resources. Multi-User Dungeons (MUDs) is used by 5.2% of the respondents and 2.2% of the respondents said they use other applications.

Table 7. Applications used on home country online resources

Variable	Percentage (%)
Internet Relay Chat (IRC)	17.8
File Transfer Protocol (FTP)	13.5
E-mail	66.1
Telnet	26.5
Multi-Use Dungeons (MUDs)	5.2
World Wide Web (WWW)	92.2
News Groups	17.0
Others	2.2

As to the location where foreign students most often access to home country online resources, a total of 49.2% of the respondents indicated that they often access to home country online resources from university computers. Another 47.5% of the respondents said they often access to home country online resources at home (where they currently live, including dormitories, rental apartments).

Respondents were also asked to rate the importance of the media they use to obtain information from home country. As shown in table 8, over 86% of the respondents raked home country online resources "important," "very important," or "extremely important" for obtaining information from home country. People from (in) home country was rated "important," "very important," or "extremely important" by 79% of the respondents. Home country newspapers was next rated as "important," "very important," or "extremely important" by 48.7% of the respondents. A total of 39.4% of the respondents indicated U.S. online resources as "important," "very important," or "extremely important" for them to get information from home country. Home country magazines, however, were ranked as "important," "very important," or "extremely important" by 33.1% of the respondents.

Table 8. Rank order of importance of media for obtaining home country information

Media	Rank order	Cumulative percent (important; very important, and extremely important)	MEAN	SD
Home country online resources	1	86.9	3.98	1.22
People from home country	2	79.0	3.63	1.37
Home country newspapers	3	48.7	2.60	1.66
U.S. online resources	4	39.4	2.29	1.38
U.S. TV	5	35.7	2.20	1.24
Home country magazines	6	33.1	2.07	1.49
People from the U.S.	7	22.2	1.74	1.22
U.S. newspapers	8	16.8	1.60	0.94
Home country short-wave radio	9	13.9	1.46	1.00
U.S. magazines	9	13.9	1.50	0.91
U.S. radio	11	10.1	1.33	0.73
Others	12	0.0	1.00	0.00

Note: 1= not important; 2= slightly important; 3= important; 4= very important; 5= extremely important
      (n= 238)

As presented in table 8, home country online resources outnumber other media with the cumulative percentage of 86.9. People from (in) home country ranked second among all the twelve media the cumulative percentage of 79, followed by home country newspapers with the cumulative percentage of 48.7. In comparison to the survey results conducted by Patachara on 132 foreign students at Iowa State University in 1989 (Patachara, 1990), which had 67.5% of the respondents rated home country newspapers as either important or very important, home country newspapers remain as important source of getting information. Similar to the results found in Patachara's study, Table 8 shows mass communication media were dominant over personal communication as sources of information. Moreover, because of the availability of home country online resources, home country online resources surpassed people from (in) home country or home country newspapers and became the leading home

country information source among all twelve sources. It was surprising though that U.S TV and U.S. online resources were ranked as the fourth and fifth leading sources for obtaining home country information followed by the sixth leading source, home country magazines.

Respondents also ranked the importance of different media they use to obtain U.S. information. As shown in Table 9, U.S. TV was the leading source among all the twelve media with the cumulative percentage of 85.3. U.S. newspapers was the second leading source with a total of 66% of the respondents indicated it as "important", "very important" or "extremely important". U.S. online resources, with the cumulative percentage of 65.9, was the third leading source for obtaining U.S. information. People from the U.S., with the total of 60% of the respondents rated it as "important," "very important," or "extremely important," ended up as the fourth leading source among all twelve media.

Table 9. Rank order of importance of media for obtaining U.S. information

Media	Rank order	Cumulative percent (important; very important, and extremely important)	MEAN	SD
U.S. TV	1	85.3	3.89	1.26
U.S. newspapers	2	66.0	3.01	2.55
U.S. online resources	3	65.9	3.11	1.53
People from the U.S.	4	60.0	2.87	1.50
U.S. magazines	5	50.8	2.55	1.51
Home country online resources	6	38.2	2.14	1.36
U.S. radio	7	36.2	2.08	1.30
People from (in) home country	8	35.6	2.10	1.35
Home country newspapers	9	22.6	1.68	1.09
Home country magazines	10	15.5	1.50	0.99
Home country short-wave radio	11	4.6	1.16	0.56
Others	12	0.0	1.00	0.00

Note: 1= not important; 2= slightly important; 3= important; 4= very important; 5= extremely important
(n=238)

Mass communication media again were found dominant over personal communication as sources of obtaining U.S. information. The results were also similar to the findings in Patachara's study (Patachara, 1990), which found U.S TV and U.S. newspapers the leading two sources of getting current news for foreign students in the U.S. Beside U.S. mass communication media and people from the U.S., home country online resources was ranked as sixth among all twelve media with the cumulative percentage of 38.2. That is, a total of 38.2% of the respondents rated home country online resources as "important," "very important," or "extremely important" as the source of getting U.S. information. People from (in) home country was ranked as the eighth with the cumulative percentage of 35.6. Home country newspapers, with the cumulative percentage of 22.6, ended up as the ninth leading source of obtaining U.S. information. Similar to the findings in Patachara's study (Patachara, 1990), home country media, either in the way of mass communication or personal communication, had their own importance for foreign students in the U.S. when they need U.S. information.

It should be emphasized that home country U.S. online resources were ranked as the first and the third leading information sources of home country and U.S. information separately by foreign students.

The following parts aim at answering the five research questions.

Research Question 1. What gratifications are foreign students seeking from home country online resources?

Table 10 presents the factor analysis results of gratifications sought. Nineteen items of statement were loaded into SPSS 8.0 for factor analysis (see Appendix C for codebook). Statements were set on a six point Likert scale ranging from (1) strongly disagree, (2)

disagree, (3) somewhat disagree, (4) somewhat agree, (5) agree, and to (6) strongly agree. Varimax factor analysis was used to identify the factor structure. Cronbach's alpha was used to test the reliability of items loaded in the same factor.

According to Kim and Mueller (1978), a value of .40 is the least loading value for an item to be loaded in a factor. To form a factor, there should be at least two items loaded on it. Besides, if an eigenvalue equals 1, the factor explains as much of the items' common variance as the average variance explained by the items in the analysis. Thus, an eigenvalue of 1 was used as the criteria for keeping a factor because smaller eigenvalue than this suggests that a single item would have more explanatory power than the factor associated with the eigenvalue. Furthermore, researchers also suggested a minimum difference of .15 between factor loadings of an item be used to decide whether it could be loaded on a particular factor or not (Dimmick, et. al, 1994, p.654).

Adopting to the rules mentioned in above paragraph, four factors out of the five extracted factors meet all the criteria for forming a factor. As shown in Table 10, Factor 1 loaded heavily on the following seven items: "Because it entertains me (Entertain GS)," "To relieve boredom (Boredom GS)," "To relax (Relax GS)," "Because I have nothing better to do (Nothing GS)," "Because I feel I'm not alone when I use it (Not alone GS)," "To have fun (Fun GS)," and "To distract from tedious life affairs (Distract GS)." Factor 1 with seven items loaded on it accounted for 33.93% of the total variance (Eigenvalue of 6.45). The leading loading item was "To relieve boredom" (Boredom GS) with a loading value of 0.773. The common theme among the variables could be categorized as escape, which was similar to the escape theme categorized in Use of the Internet in Malta study (Abela, 1997).

Factor 2 shows high loading on items related to social interaction with a variance of 9.38 (Eigenvalue of 1.78) with alpha of 0.80. The loading items in Factor 2 included "To socialize with friends/relatives (Socialize GS)," "To feel closer to family and friends (Feel close GS)," and "To exchange information (Exchange info.GS)," with the loading value of 0.81, 0.84, and 0.76 respectively. "To feel closer to family and friends (Feel close GS)" was the leading loading item with a value of 0.84. The main theme in Factor 2 was categorized as social interaction Abela's (1997) study of Use of the Internet in Malta.

Factor 3 loaded on the following two items, "For research purpose (Research GS)," and "To download software (Download GS)" with a variance of 7.7% (Eigenvalue of 1.46) and the alpha level of 0.55. The leading loading item was "For research purpose (Research GS)" with the loading value of 0.78, followed by "To download software (Download GS)" with a value of 0.68. These two items however, didn't fall into any of the motivation categories developed in Abela's study of Use of the Internet in Malta. However, it could be seen that both of these two items were somehow related to personal goal-directed activities. Thus, the researcher named it as "Personal Utility" based on the common theme of certain personal goal attainment in these two items.

Factor 4, had items "To learn new things" and "To find out what's happening in the world" loaded on it with 6.80% of the total variance (Eigenvalue of 1.29) and the alpha level at 0.48. The two items in this factor fell into the categorization of browsing in Maltese Internet subscribers study (Abela, 1997). However, it could be seen that these two items suggested a strong information-seeking orientation. The loading value of items "To learn new things" and "To find out what's happening in the world" were 0.60 and 0.83 respectively.

The extracted Factor 5, although had items "To find information" and "To do financial management loading on it, it seemed to have no common theme between these two items. Besides, with a comparatively low variance of 5.3% and Eigenvalue of 1.0, it seemed reasonable to exclude this factor into further discussion.

Table 11 further presents the factor analysis results, item means, and standard deviations loaded on Factor 1, Factor 2, Factor 3, and Factor 4. Similar to the study of the Maltese Internet subscribers (Abela, 1997), factors related to the theme of "Escape" accounted for the largest proportion of variance. In Abela's study, "Escape" was the leading theme of motivations which led the Maltese connected to the Internet. The "Escape" theme, as the leading factor, explained the greatest amount of variance (26.2%) in Abela's study. Escape was thus found as one of the major motivation themes for Internet use in Malta. Interesting, in this study of the gratifications foreign students are seeking from home country online resources, "Escape" was also found as the major gratification theme foreign students expect to obtain from home country online resources.

"Social Interaction," which accounted for 9.38% of the total variance, was found also one of the important gratification themes foreign students expect from home country online resources. Different from the Maltese Internet subscribers with information seeking as their second biggest motivation theme, foreign students were found seeking gratifications related to social interaction aspect from home country online resources. However, items loaded on "Social Interaction" dimension were also found loaded as the third factor in Maltese Internet subscribers study (Abela, 1997).

Factor 3, including items of "For research purpose (Research GS)" and "To download

Table 11. Factor analysis results of gratifications sought, item means, and standard deviations

FACTORS AND LEADING ITEMS	FACTOR LOADING	ITEM MEAN	SD
FACTOR 1-ESCAPE (33.9% of variance) Eigenvalue: 6.45 Cronbach's alpha = 0.86 (n=230)			
To relieve boredom.	0.77	3.89	1.60
To relax.	0.76	4.07	1.43
Because it entertains me.	0.75	4.62	1.33
To have fun.	0.75	4.10	1.47
Because I have nothing better to do.	0.66	2.43	1.51
To distract from tedious life affairs.	0.63	3.24	1.63
Because I feel I'm not alone when I use it.	0.56	3.00	1.69
FACTOR 2-SOCIAL INTERACTION (9.38% of variance) Eigenvalue: 1.78 Cronbach's alpha = 0.80 (n=230)			
To feel closer to family and friends.	0.84	4.31	1.47
To socialize with friends/relatives.	0.81	3.90	1.60
To exchange information.	0.76	4.13	1.46
FACTOR 3-PERSONAL UTILITY (7.66% of variance) Eigenvalue: 1.46 Cronbach's alpha = 0.64 (n=230)			
For research purposes.	0.78	2.93	1.74
To download software.	0.68	2.60	1.64

Table 11. (continued)
FACTOR 4-INFORMATION-SEEKING
(6.8% of variance)
Eigenvalue: 1.29
Cronbach's alpha = 0.48
(n=230)

To find out what's happening in the world.	0.83	4.67	1.42
To learn new things.	0.60	4.17	1.48

Note: Questions were set on a six point Likert scale ranging from (1) strongly disagree, (2) disagree, (3) somewhat disagree, (4) somewhat agree, (5) agree, and to (6) strongly agree.

software (Download GS)" was totally different from any of the motivation theme found in Abela's study. Judging from the common theme existed among these two loading variables, "Personal Utility" was adopted as the gratification theme for Factor 3 found in this study. Factor 3, although accounted only for 7.7% of the total variance, it could be interpreted as the unique gratification theme found in this study.

"To learn new things (Learn GS)" and "To find out what's happening in the world (world GS)" were also the two motivations found in Abela's study of Maltese Internet subscribers (Abela, 1997). He categorized these two items into "Browsing" dimension of gratifications according to the common theme these two shared. However, "Browsing," which refers to information seeking without any specific purpose, seemed not quite pertinent in describing the strong "Information-Seeking" orientation in these two items. Thus the researcher decided to categorize Factor 4 as "Information-Seeking" dimension of gratifications instead of adopting Abela's categorization of "Browsing."

Items such as "Because it entertains me," "To have fun," "To relax," and "To relieve boredom" had the first three highest mean for Factor 1 of 4.62, 4.10, and 4.07 respectively.

Because questions were set on a six point Likert scale ranging from (1) strongly disagree, (2) disagree, (3) somewhat disagree, (4) somewhat agree, (5) agree, and (6) strongly agree, it could be concluded from the leading three mean scores that most foreign students somewhat agree or agree that they are seeking "Escape" dimension of gratificatons from home country online resources.

The extracted Factor 2 loaded on three items with a common theme of "Social Interaction." They were "To feel closer to family and friends," "To exchange information," and "To socialize with friends/relatives." The mean scores of the three items above were 4.31, 4.13, and 3.90 respectively. Items "To feel closer to family and friends" and "To exchange information" both had mean scores more that 4.0. It could be thus concluded that "To feel closer to family and friends" and "To exchange information" are the two reasons which motivates them to home country online resources. However, the mean score of item "To socialize with friends/relatives" might imply that "To socialize with friends/relatives" is the less important item of gratifications they are seeking from home country online resources in comparison to the other two items in Factor 2.

Factor 3, which accounted for 7.66% of the total variance, had two items loaded on it. They were "For research purposes," and "To download software." The common theme in this factor was called "Personal Utility" based on the goal-directed obtainment nature in the two items. It is worth noticing that though these two items clustered as a factor, they all had average low mean scores in comparison with item means in Factor 1 and Factor 2. For example, item "For research purposes" had a mean score of 2.93 while item "To download software" had a mean score of 2.60. The average low mean scores in both items suggested

that these two were not the main reasons that motivate foreign students to home country online resources.

Factor 4 accounted for 6.8% of the total variance. The two loading items were "To learn new things" and "To find out what's happening in the world" with the mean scores of 4.17 and 4.67 respectively. Thus, The "Information-Seeking" theme found in Factor 4 implied that "Information-Seeking" dimension gratifications are what foreign students are seeking from home country online resources. With both mean scores more than 4, it could be further concluded that Information-Seeking dimension gratifications are important gratifications foreign students are seeking from home country online resources.

To answer research question one regarding about what gratifications foreign students are seeking from home country online resources, the following conclusion could be reached from data analysis results. "Escape," "Social interaction," "Personal Utility," and "Information-Seeking" were found the four factors extracted from the 19 items. However, among these four, "Escape," "Social Interaction," and "Information-Seeking" are the important dimensions of gratifications foreign students are seeking from home country online resources while "Personal Utility" is not.

Question 2. What gratifications are foreign students obtaining from home country online resources?

Factor analysis was used again to answer research question two. Nineteen items of statements on gratifications obtained were loaded in SPSS 8.0 to decide which items cluster together as groups. Table 12 presents the preliminary factor analysis of gratifications obtained. Table 13 shows the four factors solution, mean scores, and standard deviations of

Table 12. Preliminary factor analysis results of gratifictions obtained

	Factor 1	Factor 2	Factor 3	Factor 4
Boredom GO	.813	.156	.133	.097
Nothing GO	.794	.145	.012	.130
Relax GO	.790	.143	.190	.094
Not alone GS	.762	.207	.243	.092
Fun GO	.708	.064	.241	.091
Distract GO	.698	.145	.112	.191
Entertain GO	.664	.041	.329	.172
Financial GO	.122	.788	.135	-.017
Order GO	.086	.778	.177	-.049
Research GO	.131	.759	.065	.116
Download GO	.163	.664	.074	.026
Ideas GO	.345	.405	.282	.331
Socialize GO	.270	.169	.822	.031
Feel close GO	.141	.133	.799	.033
Exchange info. GO	.194	.212	.653	.239
Conversation GO	.363	.056	.560	.343
World GO	.222	.026	.037	.752
Information GO	.071	-.109	.081	.714
Learn GO	.151	.200	.211	.675
Eigenvalue	6.82	2.03	1.53	1.25

Note: Rotation method: Varimax with Kaiser Normalization.

gratifications obtained items. As shown in table 13, Factor 1 of gratifications obtained loaded heavily on items related to the "Escape" theme and accounted for 35.9% of the total variance (Eigenvalue of 6.82) with the alpha level at 0.90. The leading loading items were "Helps me to relieve boredom (Boredom GO)," "Makes me feel relaxed (Relax GO)," and "Is my best choice when I have nothing to do (Nothing GO)" with the loading value of 0.81, 0.79, and 0.79 respectively. The other items loaded on Factor 1, including "Keeps me away from the loneliness when I use it (Not alone GO)," "Makes me happy when I use it (Fun GO)," "Helps me to escape from my daily routines (Distract GO)," and "Brings me entertainment (Entertain GO)," were also related to the "Escape" theme.

Table 13. Factor analysis results of gratifications obtained, item means, and standard deviations

FACTORS AND LEADING ITEMS	FACTOR LOADING	ITEM MEAN	SD
FACTOR 1- ESCAPE (35.9% of variance) Eigenvalue: 6.82 Cronbach's alpha = 0.90 (n= 230)			
Helps me to relieve boredom	0.81	3.77	1.57
Makes me feel relaxed.	0.79	3.77	1.49
Is my best choice when I have nothing to do.	0.79	3.33	1.68
Keeps me away from the loneliness when I use it.	0.76	3.20	1.59
Makes me happy when I use it.	0.70	3.90	1.43
Helps me to escape from daily routines.	0.70	3.21	1.55
Brings me entertainment.	0.66	4.59	1.37

Table 13. (continued)

FACTORS AND LEADING ITEMS	FACTOR LOADING	ITEM MEAN	SD
FACTOR 2-PERSONAL UTILITY (10.69% of variance) Eigenvalue: 2.03 Cronbach's alpha = 0.76 (n= 230)			
Helps me manage my finance.	0.79	1.80	1.02
Sells the things I would like to buy.	0.78	1.95	1.20
Helps me with my academic work.	0.76	2.34	1.38
Provides the software I need for downloading.	0.66	2.29	1.55
Gives me support for my ideas.	0.41	3.19	1.47
FACTOR 3-SOCIAL INTERACTION (8.04% of variance) Eigenvalue: 1.53 Cronbach's alpha = 0.80 (n=230)			
Helps me to socialize with friends/relatives	0.82	3.58	1.57
Makes me feel closer to family and friends.	0.80	4.06	1.49
Allows me to exchange information.	0.65	4.04	1.40
Provides me with topics for conversation.	0.56	3.75	1.45
FACOTR 4-INFORMATION-SEEKING (6.56% of variance) Eigenvalue: 1.25 Cronbach's alpha = 0.62 (n=230)			
Helps me to find out what's happening in the world.	0.75	4.67	1.42
Helps me to find information.	0.71	5.13	1.09
Helps me to learn new things.	0.68	4.08	1.43

Note: Questions were set on a six point Likert scale ranging from (1) strongly disagree, (2) disagree, (3) somewhat disagree, (4) somewhat agree, (5) agree, and to (6) strongly agree.

Factor 2 had high loading on items related to the "Personal Utility" theme with a variance of 10.69% (Eigenvalue of 2.03) and the alpha level at 0.76. Items such as "Helps me manage my finance (Financial GO)," "Sell the things I would like to buy (Order GO)," and "Helps me with my academic work (Research GO)" were the top three loading items with a value of 0.79, 0.78, and 0.76 respectively. Note that even though items related to the "Personal Utility" theme clustered together in Factor 2, they all had low values on item means. Item "Gives me support for my ideas (Ideas GO)" was the only one within Factor 2 had a mean of 3.19 and the other four items all had a mean score below 3. Besides, item "Gives me support for my ideas (Ideas GO)" had the lowest loading value within Factor 2 which explained why it had a higher mean score compared to other items. Because questions were set on a six point Likert scale ranging from (1) strongly disagree, (2) disagree, (3) somewhat disagree, (4) somewhat agree, (5) agree, to (6) strongly agree, the average low mean scores in Factor 2 implied that "Personal Utility" dimension gratifications were not frequent obtained gratifications for foreign students when they access to their favorite home country online resources.

Factor 3 had high loadings on items related to the "Social Interaction" theme. It accounted for 8.04% of the total variance (Eigenvalue: 1.53) with the alpha level at 0.80. "Helps me to socialize with friends/relatives (Socialize GO)," "Makes me feel closer to family and friends (Feel close GO)," and "Allows me to exchange information (Exchange info. GO)" were the three leading loading items with a loading value of 0.82, 0.80, and 0.65. The item means were 3.58, 4.06, and 4.04 respectively. The results indicated that respondents from somewhat agree or agree that they are obtaining social interaction dimension of gratifications

home country online resources.

Factor 4 loaded heavily on items related to the "Information-Seeking" theme with 6.56% of the total variance (Eigenvalue: 1.25) and the alpha level at 0.62. Item "Helps me to find out what's happening in the world (World GO)," "Helps me to find information (Information GO)," and " Helps me to learn new things (Learn GO)" had the loading values of 0.75, 0.71, and 0.68 respectively. The mean scores of those three item were 4.67, 5.13, and 4.08. The results suggested that most foreign students somewhat agree or agree that they are obtaining "Information-Seeking" dimension of gratifications from home country online resources.

Judging from the results from factor analysis on items about gratifiactions obtained, it could be concluded that "Escape," "Social Interaction," and "Information-Seeking" are the three most frequent dimensions of gratifications most foreign students are obtaining from home country online resources, while "Personal Utility" is the least frequent.

To compare the patterns items clustered as factors, "Escape" dimension of gratifications accounted for the most proportion of the total variance in both gratifications sought and gartifiactions obtained items. The "Escape" theme of gratifications sought in Factor1 had 7 items loaded within the factor. The seven reworded items of gratifications sought were again clustered together as the Factor 1 among all gratifications obtained items. "Personal Utility" dimension of gratifications appeared as the second leading factor within gratification obtained items. Three more reworded items loaded on "Personal Utility" theme among all gratifications obtained items in comparison with the two items within Factor 3 among all gratifications sought items. It improved the reliability from 0.64 in the personal

utility items of gratifications sought to 0.76 in the personal utility items of gratifications obtained. "Social Interaction" was found the third leading factor among all gratifications obtained items. Item "Provides me with topics for conversation" loaded on Factor 3 with other social interaction dimension of gratifications obtained with a comparatively lower loading value of 0.56. The reworded item "Provides me with topics for conversation" did not load on any of the factor within gratifications sought items. Information-Seeking theme of gratifications were found as the last factor among both gratifications sought and gratifications obtained items. The reworded item "Helps me to find information" clustered in Factor 4 of gratifications obtained and improved the reliability of Information-Seeking dimension of gratifications to 0.64 in comparison with the low reliability of 0.48 found in items clustered in Information-Seeking dimension of gratifications sought.

The factor analysis results of gratifications sought and gratifications obtained indicated that foreign students are seeking and obtaining the same three dimensions of gratifications from home country online resources, including "Escape," "Social Interaction," and "Information-Seeking." "Escape" and "Information-Seeking" were the two most important dimensions of gratifications foreign students are seeking from home country online resources, followed by "Social Interaction." On the contrast, "Personal Utility" appeared to be the least important dimension of gratifications foreign students would seek from home country online resources. As to gratifications foreign students are obtaining from their favorite home country online resources, "Information-Seeking" dimension gratifications were the most frequent gratifications foreign students receive from their favorite home country online resources, followed by "Escape" and "Social Interactions" dimensions of gratifications. "Personal

Utility" dimension was however found the least frequent obtained gratifications foreign students receive from their exposure to their favorite home country.

The factor analysis results on gratifications sought and gratifications obtained also suggested that there is a relationship between gratifications sought and gratifications obtained. On the one hand, foreign students expected to find "Escape," "Social Interactions," and "Information-Seeking" dimensions of gratifications from home country online resources, but "Personal Utility" appeared not what they are seeking. On the other hand, the results of gratifications obtained from their favorite home country online resources also implied that "Information-Seeking," "Escape," and "Social Interactions" the three most frequent dimensions of gratifications they are obtaining while "Personal Utility" as the least frequent one. Judging from above, foreign students' favorite home country online resources seemed to play a good role on providing what foreign students are seeking from home country online resources.

Question 3. Are there relationships or differences between gratifications sought (GS) and gratifications obtained (GO) from home country online resources?

In order to investigate the relationships between gratifications sought (GS) and gratifcation obtained, sets of correlations were presented to test the relationship between each item of gratifications sought from home country resources in general and the corresponding items of graticiations obtained from favorite home country resources. Table 14 presents correlations of corresponding gratifications.

As shown in Table 14, each item of gratifications sought (GS) from respondents' home country online resources was correlated with its corresponding item of gratifications

Table 14. Correlations (Pearson r) of GS with corresponding GO items

Items of gratifications	Gratification sought (GS) vs. Gratification obtained (GO) (n=230)
(ESCAPE)-	
Because it entertains me	.664
To relieve boredom	.660
Because I have nothing better to do	.478
Because I feel I'm not alone when I use it	.677
To relax	.596
To have fun	.488
To distract from tedious life affairs	.557
(SOCIAL INTERACTION)-	
To provide topics for conversation	.618
To socialize with friends/relatives	.601
To feel closer to family and friends	.719
To exchange information	.593
(PERSONAL UTILITY)-	
To order things	.600
To do financial management	.637
For research purpose	.547
To download software	.698
To give me support from my ideas	.621
(INFORMATION-SEEKING)-	
To find information	.474
To learn new things	.634
To find out what's happening in the world	.569
	Mean = .602

All correlations significant at p < .000 (2 tailed)

obtained (GO) from the respondents' favorite home country online resources. It indicated a strong and highly significant relationship between gratifications sought items and their corresponding gratifications obtained items. Furthermore, the examination of the entire (19x19) GS versus GO correlation matrix (not shown) found that the correlation between every single gratifications sought item and its corresponding gratifications obtained item is stronger than the correlation between a specific gratification sought items and other non-corresponding gratifications obtained items. The results indicated that foreign students gratifications sought from all kinds of home country online resources will be most strongly correlated to corresponding gratification obtained they receive from their favorite home country online resources.

To test the differences between gratifications sought (GS) and corresponding gratifications obtained (GO) items, paired grouped t-Tests were used. The mean score of every single gratifications sought item from home country online resources was compared with its corresponding gratifications obtained item from respondents' favorite home country online resources. Table 15 presents the results.

The results in Table 15 indicated that 13 out of 19 items have a significant difference between gratifications sought and its corresponding gratifications obtained items ($p < 0.05$). In "Escape" dimension of gratifications, GS and GO was found significantly different on items "Because I have nothing better to do," "Because I feel I'm not alone when I use it," "To relax" and "To have fun." In "Social Interaction" dimension of gratifications, "To provide topics for conversation," "To socialize with friends/relatives," and "To feel closer to family and friends" were found significantly different between gratifications sought and gratifications

Table 15. T-Test (correlated groups) comparison of GS with corresponding GO

Gratifications (n = 230)	GS	GO	T	DF	Sig. (2-tailed)
(ESCAPE)-					
Because it entertains me	4.62	4.59	.477	229	.634
To relieve boredom	3.89	3.77	1.361	229	.175
Because I have nothing better to do	2.43	3.33	-8.422	229	.000 *
Because I feel I'm not alone when I use it	3.00	3.20	-2.347	229	.020 *
To relax	4.07	3.77	3.467	229	.001 *
To have fun	4.10	3.90	2.068	229	.040 *
To distract from tedious life affairs	3.24	3.21	.308	229	.758
(SOCIAL INTERACTION)-					
To provide topics for conversation	3.39	3.75	-4.221	229	.000 *
To socialize with friends/relatives	3.90	3.58	3.404	229	.001 *
To feel closer to family and friends	4.31	4.06	3.438	229	.001 *
To exchange information	4.13	4.04	1.123	229	.262
(PERSONAL UTILITY)-					
To order things	2.21	1.95	3.400	229	.001 *
To do financial management	1.85	1.80	.831	229	.407
For research purpose	2.93	2.34	5.864	229	.000 *
To download software	2.60	2.29	3.770	229	.000 *
To give me support from my ideas	3.21	3.19	.298	229	.766
(INFORMATION SEEKING)-					
To find information	5.34	5.13	3.192	229	.002 *
To learn new things	4.17	4.08	1.164	229	.000 *
To find out what's happening in the world	4.93	4.67	3.222	229	.001 *

* $p<0.05$

obtained. In "Personal utility" dimension of gratifications, "To order things," "For research purpose," and "To download software" were found significantly different between GS and GO. Moreover, in "Information-Seeking" dimension of gratifications, all three items "To find information," "To learn new things," and "To find out what's happening in the world" were found significant different between GS and GO.

However, to further investigate 13 items which have significant difference between gratifications sought (GS) and the corresponding gratifications obtained (GO), it is surprising that the group means showed only three items "Because I have nothing better to do," "Because I feel I'm not alone when I use it," and "To provide topics for conversation" had a GO mean score greater than GS mean score. That is, in these three items respondents indicated that they are obtaining higher level of gratifications from their favorite home country online resources than they are seeking from home country online resources in general. On the contrary, in the other ten items, foreign students rated their obtainment of gratifications from their favorite home country online resources lower than the level they are seeking from home country online resources in general ($p < 0.05$).

Question 4. Are gratifications sought (GS) or gratifications obtained (GO) more strongly related to a media dependency score?

Respondents were asked to answer Question 32: "I always turn to my favorite home country online resources whenever I need information about my home country resources" to measure their dependency on their favorite home country online resources. Question 32 was set on a six point Likert scale ranging from "strongly disagree" to "strongly agree (refer to Appendix B)."

Multiple regression analyses was used to test the influence of both gratifications obtained (GO) and gratifications sought (GS) in predicting media dependency after controlling the influences of demographic variables, habitual media exposure, and attention level. The stepwise procedure was used for analyses in deciding how and whether independent variables should be entered in the equation. Table 16 shows the influences gratifications

Table 16. Regression analysis for dependency on favorite home country online resources

Variables	Beta weights	t	P
(a) Demographic variables: R^2= .031			
Plan after completion of study	-.127	-1.738	.084
Length of residence in the US	-.107	-1.223	.223
Age	-.022	-.247	.805
Gender	.145	.954	.341
Education	.029	.319	.750
Nationality	-.105	-1.834	.068
(b) Habitual exposure: R^2= .157			
Frequency of consumption	.303	5.068	.000**
Less Time on traditional mass media	.057	1.029	.305
(c) Attention level: R^2= .067	.279	5.004	.000**
(d) Gratifications sought (GS): R^2= .017			
Escape	.178	1.713	.088
Social interaction	-.089	-1.167	.245
Personal utility	-.073	-1.172	.243
Information-Seeking	-.055	-.660	.510
(e) Gratifications obtained (GO): R^2= .055			
Escape	-.224	-2.248	.026*
Social interaction	.011	.120	.904
Personal utility	.081	.835	.404
Information-Seeking	.360	3.814	.000**

Total variance accounted for: R^2= .327, Multiple R= .572, n=238
*p< .05, **p< .000

obtained and gratifications sought had in predicting the dependency score of foreign students'

favorite home country online resources. When all variables were entered into the regression

equation, 32.7% of the total variance in the dependency score was explained. The

dependency score used was worded as follows: "I always turn to my favorite home country

online resources whenever I need information about my home country." According to the

results, the GO measures significantly accounted for 5.5% of the variance and the GS measures significantly accounted for 1.7% of the variance. Habitual media exposure was found as the best predictor of dependency on foreign students' favorite home country online resources which accounted significantly 15.7% of the variance. Attention level was found the second best predictor of dependency score that accounted for also significantly 6.7% of the variance. Demographic variables were found accounted for 3.1% of the variance but not a significant predictor. Among all the dimensions of gratifications obtained, higher level of Information-Seeking dimension gratifications (Beta= .360, t= 3.814, p< .000) and lower level of escape dimension gratifications (Beta= -.224, t= -2.248, p< .03) were the only two significant predictors of foreign students' dependency on their favorite home country online resources. Of all four dimensions of gratifications obtained, social interaction dimension (p= .904) was least affected by the dependency on favorite home country online resources. In other words, foreign students tended to be more dependent on their favorite home country online resources if they obtain higher level of "Information-Seeking" gratfications from their exposure to their home country online resources.

The results in some way were similar to the results from the 60 Minutes dependency analysis conducted by Wenner (Wenner, 1982). That is, gratifications obtained (GO) were again found accounted for more variance than gratifications sought (GS) in predicting media dependency. Besides, habitual media exposure was the best predictor in both studies. In contrast to Wenner's research findings, demographic variables were found in this study not significantly predictive of high levels of dependency on favorite home country online resources.

Question 5. Do respondents believe that home country online resources will be able to replace traditional forms of home mass media?

To answer this question, respondents were asked to evaluate the possibility whether home country online resources will be able to replace traditional forms of home mass media in an open-ended question. Respondents were then asked to give reasons for their evaluations. Another two open-ended questions asked respondents to answer the advantages and disadvantages they have from using home country online resources. Table 17 presents foreign students' evaluations on home country online resources in comparison with traditional forms of home mass media.

Table 17. Evaluation of the possibility of home country online resources' replacing traditional home mass media

	Value	Frequency	Percent	Valid percent
Yes	1.00	87	36.6	40.1
Not sure	2.00	15	6.3	6.9
No	3.00	115	48.3	53.0
Total valid cases		217	91.2	100.0
Missing cases	9.00	21	100.0	
Total		238		

A total of 217 respondents completed the open-ended questions. A total of 48.3% of the respondents indicated that they don't think home country online resources can replace traditional home country mass media. Still another 6.3% of the respondents said they are not sure whether home country online resources can replace home country mass media in the near future. The reasons why 36.6% of the respondents hold a positive view on the possibility of home country online resources replacing traditional home country mass media as following:

Home country online resources:

(1) Are more convenient than traditional home country mass media.

(2) Have more colorful content.

(3) Are cheap or free.

(4) Are easy to access.

(5) Have higher availability when you are abroad.

(6) Allow you to access information without time limit.

(7) Are fast and always newly updated.

The advantages home country online resources have follow:

(a) More interactive than home country traditional mass media.

(b) Provide information about what is happening in home country.

(c) Provide conversation topics to talk with family and friends back home.

(d) Make foreign students feel close to home when they are abroad.

(e) Allow more freedom of speech and present different voices.

(f) More ecological and environmental friendly than traditional home country mass media.

The disadvantages home country online resources have as following:

(A) Less coverage, not as detailed as their traditional media counterparts.

(B) Slow connection and net congestion happened frequently.

(C) Limited links; not most major home country traditional media have electronic versions on the net.

(D) Complicated to use. Related computer knowledge required.

(E) Slower update than their traditional mass media counterparts.

(F) Not comfortable, not so relaxing or entertaining than traditional mass media.

(G) Lower quality on graphic, visual, and audio presentations.

(H) Special language converter software required.

(I) Not so common and handy as traditional forms of mass media.

(J) Biased; most home country online resources are controlled by the government.

Generally speaking, many respondents still prefer the traditional forms of mass media which have certain characters that online resources can not compete with. For example, many respondents mentioned they feel much more relaxed when they read news on newspapers or magazines than from home country online resources. They also indicated that TV is more entertaining for them than online resources. However, many foreign students pointed out that they use home country online resources because they are the best of the few choices they could have during their stay in the U.S. If they could choose between online resources and traditional forms of home country mass media, they prefer the latter. Several respondents indicated that online resources have become a necessity and trend in daily life, they thus prefer it than the traditional forms of mass media. In conclusion, although foreign students seemed not satisfied with the services home country online resources are providing, they basically agree that home country online resources have certain influence in their life and bring more convenience to them during their stay in the U.S.

Additional Findings

No gender differences on gratification sought and gratification obtained

There were significant differences on six out of eight gratification dimensions found in Abela's study of the Internet use in Malta (Abela, 1997). In Abela's research, males and

females utilized the Internet equally except on seeking "information seeking" and "Information-Seeking" dimensions gratifications. It was found that female users seek higher level of "escape" and "social interaction" dimensions gratifications from the Internet.

Table 18 presents the relationships found between gender and gratification dimensions on home country online resources. Independent samples test (T-tests) was conducted to explore whether there is significant difference between gender and gratifications seeking and obtaining from home country online resources. The results indicated that there are no significant differences between male and female foreign students in seeking and obtaining gratifications from home country online resources. "Social Interaction" dimension gratifications sought was found the only dimension almost reached the significantly different level (p= .051). It implied that female respondents are seeking higher level of "Social Interaction" gratifications than male respondents from home country online resources.

Table 18. T-tests: Gender and gratification dimensions

Gratification dimension	Male (Mean)	Female (Mean)	t	Sig. (2-tailed)
Escape (GS)	3.54	3.78	-1.556	.121
Personal utility (GS)	2.66	2.95	-1.501	.135
Social interaction (GS)	3.99	4.33	-1.961	.051
Information-Seeking (GS)	4.49	4.67	-1.150	.251
Escape (GO)	3.60	3.82	-1.358	.176
Personal utility (GO)	2.27	2.38	-.773	.440
Social interaction (GO)	3.78	3.98	-1.219	.224
Information-Seeking (GO)	4.63	4.59	.313	.754

Demographic variables and weekly usage of home country online resources

To explore the relationships between the time foreign students spend on home country online resources weekly and demographic variables, Chi-square was conducted. Foreign students were divided to three groups according to the time they spend on home country online resources per week. Those who spend less than 4 hours per week were categorized to "low exposure" group. Students who spend from 4 to 13 hours per week were categorized to "medium exposure" group. Students who have from 14 hours or more weekly exposure to home country online resources were in the "high exposure" group.

Tables 19 to 23 present the relationships between weekly home country online resources exposure and demographic variables. Among all the demographic variables, gender was the only one which has a significant relationship with the weekly exposure on home country online resources ($X^2 = 8.903$, d.f.= 2, $p < .05$).

Table 19. Weekly exposure and plan after completion of study

	Plan to stay in the US n= 129	Plan to return home n= 87
Low exposure (0-3 hours/per week)	51.9% (67)	48.3% (42)
Medium exposure (4-13 hours/per week)	38.8 (50)	39.1 (42)
High exposure (14 – 48 hours/per week)	9.3 (12)	12.6 (11)

$X^2 = .684$ d.f.= 2   p= .710
Note: Respodents who indicated "not sure" were excluded.

Table 20. Weekly exposure and length of residence in the US

	Less than 1 year n= 57	1-2 years n= 53	More than 2 years n= 128
Low exposure (0-3 hours/per week)	52.6% (30)	45.3% (24)	53.1% (68)
Medium exposure (4-13 hours/per week)	36.8 (22)	43.4 (23)	36.7 (47)
High exposure (14 – 48 hours/per week)	8.8 (5)	11.3 (6)	10.2 (13)

X^2= 1.088   d.f.= 4 p= .896

Table 21. Weekly exposure and age

	Under 20 n= 16	21-25 n= 88	26-30 n= 90	31-35 n= 30	36 or older n= 14
Low exposure (0-3 hours/per week)	56.3% (9)	50.0% (44)	47.8% (43)	56.7% (17)	64.3% (9)
Medium to high exposure (4-48 hours/per week)	43.8 (7)	50.0 (35)	52.2 (35)	43.3 (10)	35.7 (5)

X^2= 1.954   d.f.= 4 p= .744

Table 22. Weekly exposure and gender

	Male n= 154	Female n= 84
Low exposure (0-3 hours/per week)	45.5% (70)	61.9% (52)
Medium exposure (4-13 hours/per week)	40.9 (63)	34.5 (29)
High exposure (14 – 48 hours/per week)	13.6% (21)	3.6 (3)

X^2= 8.903   d.f.= 2 p= .012*   (* p< .05)

Table 23. Weekly exposure and degree seeking

	Bachelor n= 78	Master n= 65	Ph. D. n= 89
Low exposure (0-3 hours/per week)	53.8% (42)	50.8% (33)	48.3% (43)
Medium exposure (4-13 hours/per week)	37.2 (29)	40.0 (26)	39.3 (35)
High exposure (14 – 48 hours/per week)	9.0 (7)	9.2 (6)	12.4 (11)

X^2= .902   d.f.= 4   p= .924

According to Table 22, male foreign students tended to have a higher level of weekly exposure than female foreign students. A total of 54.5% of all the male foreign students indicated they spend more than 4 hours per week on home country online resources, while 38.1 % of the female foreign students indicated a medium to high weekly exposure. Thus, except gender, there were no significance found between weekly exposure and the other demographic variables (refer to Table 19-23).

The investigations of the relationships between demographic variables and weekly home country online resources showed different results from previous research on foreign students' home country media exposure. Lee (1984) indicated in his research that there was a positive correlation between length of residence and the use of home news media. Plan after completion of study was also found significantly related to the foreign students' exposure to home country media in Lee's study. However, this study indicated that neither length of residence or plan after completion of study has a significant relationship with foreign students' weekly exposure to home country online resources.

CHAPTER 5. CONCLUSIONS

This chapter states the conclusions reached from the results of this study, along with a discussion of the contributions and limitations.

General Conclusions

This was a quantitative study aimed at investigating foreign students' exposure to home country online resources during their stay in the United States. The major concerns of this study were to identify gratifications foreign students are seeking from their home country online resources and whether they report obtaining the gratifications they say they are seeking. Five research questions were presented based on a combination of previous literature on foreign students and the Internet from a uses and gratifications perspective.

According to the uses and gratifications theory, people are motivated by their needs in media consumption behaviors. Their selective and goal-directed communication behaviors aim at satisfying their needs from the media. Social and psychological factors may also influence individual on their media seeking behaviors among different communication channels. In addition, people are able to give reasons why they choose certain media instead of others (Katz, 1974; Palmgreen, 1984).

The results in many ways conform to previous study of the uses and gratifications theory on different media (eg., Abela, 1997; Palmgreen et al., 1980; Wenner, 1982). First, the emerged gratifications dimensions found in this study were similar to those appeared in previous research although the importance of different dimensions may vary. In this study, the "Escape" dimension of gratifications was found the one of the leading reasons which motivates foreign students to home country resources. The "Escape" dimension of

gratifications was also found the frequent gratifications foreign students are obtaining from their exposure to their favorite home country online resources. The "Social Interaction" dimension of gratifications emerged as another gratifications theme respondents are seeking from home country online resources. The "Information-Seeking" dimension of gratifications was also one of the gratifications themes found in this study. The average high mean scores suggested that "Information-Seeking" dimension gratifications are important gratifications foreign students are seeking from home country online resources. However, the "Personal Utility" dimension, with average low mean scores, appeared as the least important gratifciatons sought theme.

As to what gratifications foreign students are obtaining from their home country online resources, the results showed that they are obtaining most frequent escape, browsing, and social interactions gratifications from their favorite home country online resources. Personal utility gratifications, which were found the least important gratifications foreign students are seeking from home country online resources, again appeared as the least frequent of the gratifications obtained from their favorite home country online resources.

Second, the results also suggested there are significant correlations between gratifications sought and the corresponding gratifications obtained items. This is similar to the results in a previous study of network evening news programs and 60 Minutes (Wenner, 1982). The overall strong, but not perfect, correlations suggested that the audience members are selective, but not always able to get whatever they want. The differences of gratifications sought and gratifications obtained items better reflect the teleological criticism to the uses and gratifications theory: "a gratification sought is not necessarily a gratifications obtained"

(Palmgreen et al., 1980; Wenner, 1982). More specifically, the survey results indicated that, in general, foreign students are not obtaining the satisfactory level of gratifications they are expecting from their home country online resources except on three aspects: "Because I have nothing better to do," "Because I feel I'm not alone when I use it," and "Providing topics for conversation."

The answers gathered from open-ended questions in the survey might in some way provide a reasonable explanation for the difference. Although most foreign students agreed the convenience and advantages home country online resources bring them, most of students also emphasized the advantages they find only from conventional mass media. Many of them indicated online resources are less entertaining and less comfortable in comparison with traditional mass media such as TV, newspapers, and magazines. They also mentioned that, if they were not abroad, they would prefer using traditional mass media and home country online resources would be seen only as supporting sources. It seemed like for most of the foreign students, home country online resources are the best alternatives for traditional mass media they find while staying in the United States. However, this issue needs more investigation before reaching any conclusions.

Finally, previous research found gratifications obtained (GO) to be a better predictor of audience members' media dependency than gratifications sought (GS) (Wenner, 1982). In this study, gratifications obtained (GO) measures were also found to be the stronger predictors of media dependency than gratifications sought (GS) measures. Although habitual exposure was found the best predictor for foreign students' dependency on their favorite home country online resources, the gratifications obtained (GO) were able to explain

significant amounts of additional variance. Demographic variables were however, found not significantly explaining the variance.

Descriptive Statistics

The results of the survey showed that foreign students at Iowa State University spend an average of 6.22 hours on home country online resources each week. World Wide Web and e-mail were the two most common Internet applications used by foreign students from home country online resources. They often access to home country online resources either from home or from university computers and over 86% of the respondents indicated that home country online resources are "important," "very important," or "extremely important" for them to obtain information from home country. Only 48.7% of the respondents gave the same evaluation to home country newspapers in comparison with home country online resources. It appears there is a shift from relying on home country newspapers to home country online resources compared to the results found in previous research. Because of the availability of home country online resources, they are actually becoming the most important home country information source among all types of media. For example, when asked about the importance of various media for U.S. information, 38% of the respondents rated home country online resources as an important information source. This might be due to the convenience of reading news in respondent's mother tongue. The results found in this study indicate that online resources have become the favorite alternative for foreign students to obtain home country information when they stay in the US. Further investigation of the relationships between demographic variables and weekly exposure to home country online resources found no significant difference except for gender in general. Male foreign students spent more time

on home country online resources per week than female foreign students. Table 22 showed about 62% of the female students were in the lowest usage group (0-3 hours per week), whereas about 45% of the male students were in the same usage group.

Contributions and Limitations

This study explored foreign students' exposure to home country online resources from a uses and gratifications perspective. Compared to previous studies on foreign students' media behavior, this study re-evaluated the importance of home country media and foreign students' gratifications sought and obtained from them. The prevalence of Internet access on the U.S. campuses provides foreign students with another alternative to access to home country information. However, due to the development of the new technology and its related environment in different countries, it may take more time for home country online resources fully compete with conventional mass media.

One of the problems encountered in this study was how to define home country online resources. There are various online applications existing on the Internet and there are sometimes across-country technologies and management approaches. It may be difficult to categorize some online resources as only from home country or from foreign country. This problem causes confusion for survey respondents and can lead to inaccurate evaluation of foreign students' media behavior. To address this, further research may consider ways to narrow the topic down to certain Internet applications. Comparison of consumption on U.S. media and home country media could be another interesting topic. In addition, a web survey could help increase the response rate and decrease the cost for similar studies if survey methods are chosen.

APPENDIX A: COVER LETTER

November 11, 1999.

Dear Foreign Students,

I am conducting a survey for my thesis on foreign students' use of home country on-line resources. I would like to request your help in filling out the enclosed questionnaire. As a foreign student here in Iowa State University, I use on-line resources from my home country whenever I need information or just for relaxation. It might also happen to many of you and I would like to know how home country on-line resources serve your needs while your staying in the U.S. The data gathered from this survey will give me a picture of how ISU foreign students use their home on-line resources and the role of the fast developing Internet technology.

It will take you approximately 15-20 minutes to complete this questionnaire. Please make sure you complete all the questions before you seal it. Any information you provide will be kept strictly confidential and used only for research purposes. Your participation is greatly appreciated and purely voluntary.

Your help is greatly appreciated and I wish you success in study and a wonderful life in the U.S. Please complete the questionnaire and mail it back by *November 19th*, in the stamped, self-addressed envelope enclosed.

Sincerely,

_____

Yuh-Rong Daphne Her
Graduate student of the Greenlee
School of Journalism and Communication

APPENDIX B: QUESTIONNAIRE

Questionnaire

Before you start answering the questions, I would like to give a brief definition of **"home country on-line resources."** Home country on-line resources refer to all Internet applications available *from your home country*. They could be websites, email accounts, chatrooms, FTP services, news groups, or any other forms of Internet applications from your home country.

Part I. (Please **circle** the appropriate answers)
1. Do you use any home country on-line resources?

    1.   No (if so, why not? _____)

    0.   Yes (How long approximately do you spend on them per week? _____)

2. Where do you usually access to home country on-line resources?
    1.   University
    2.   Home (where you currently live, such as the dorm, rental apartment…)
    3.   Cyber café
    4.   Other (please specify) _____

3. Which of the following home country on-line resources do you use: (please check all applicable items)
    1.   Internet Relay Chat (IRC)
    2.   File Transfer Protocol (FTP)
    3.   E-Mail
    4.   Telnet
    5.   Multi-User Dungeons (MUDs)
    6.   World Wide Web (WWW)
    7.   News Groups (USENET, LISTSERVS)
    8.   Others (please specify) _____

4. How do you get information about your home country? (**please circle items you really use only**)
    ◆Please also tell how important or unimportant each of the circled items is by choosing the appropriate number (**1= not important; 2= slightly important; 3= important; 4= very important; 5= extremely important**)
    a. U. S. newspapers
        1   2   3   4   5
    b. U. S. magazines
        1   2   3   4   5
    c. U. S. radio
        1   2   3   4   5
    d. U. S. TV
        1   2   3   4   5

(1= not important; 2= slightly important; 3= important;

4= very important; 5= extremely important)

e. U. S. on-line resources
1   2   3   4   5
f. Home country newspaper
1   2   3   4   5
g. Home country magazines
1   2   3   4   5
h. Home country short-wave radio
1   2   3   4   5
i. Home country on-line resources
1   2   3   4   5

j. Talking with people from (or in) your home country
1   2   3   4   5
k. Talking with people from the U. S.
1   2   3   4   5
l. Others (please specify) _____
1   2   3   4   5

5. How do you get information about the U. S.? **(please circle items you really use only)**
◆Please also tell how important or unimportant each of the circled items is by choosing
the appropriate number **(1= not important; 2= slightly important; 3= important; 4=
very important; 5= extremely important)**

a. U. S. newspapers
1   2   3   4   5
b. U. S. magazines
1   2   3   4   5
c. U. S. radio
1   2   3   4   5
d. U. S. TV
1   2   3   4   5
e. U. S. on-line resources
1   2   3   4   5
f. Home country newspaper
1   2   3   4   5
g. Home country magazines
1   2   3   4   5

h. Home country short-wave radio
    1   2   3   4   5

i. Home country on-line resources
    1   2   3   4   5

J. Talking with people from (or in) your home country
    1   2   3   4   5

k. Talking with people from the U. S.
    1   2   3   4   5

l. Others (please specify) _____
    1   2   3   4   5

6. Do you subscribe to any home country mass media (newspapers, magazines…)?

0 No
1 Yes (please specify) _____

7. Do you subscribe to any U.S. mass media (newspapers, magazines…)?

0 No
1 Yes (please specify) _____

Part II. (Please **circle** one number for each of the following statements)

Now I would like to know what motivates you to use home country on-line resources. At this point please ignore whether or not these motivations are actually met as you use these resources.

1= Strongly Disagree 2= Disagree 3= Somewhat Disagree
4= Somewhat Agree 5= Agree 6= Strongly Agree

I use home country on-line resources…

8. To find information.   1 2 3 4 5 6

9. Because it entertains me.   1 2 3 4 5 6

10. To provide topics for conversation.   1 2 3 4 5 6

11. To learn new things.   1 2 3 4 5 6

12. To relieve boredom.   1 2 3 4 5 6

13. Because I have nothing better to do.   1 2 3 4 5 6

14. Because I feel I'm not alone when I use it.   1   2   3   4   5   6

15. To relax.   1   2   3   4   5   6

16. To socialize with friends/relatives.   1   2   3   4   5   6

17. To feel closer to family and friends.   1   2   3   4   5   6

18. To exchange information.   1   2   3   4   5   6

19. To order things.   1   2   3   4   5   6

20. To do financial management.   1   2   3   4   5   6

21. For research purposes.   1   2   3   4   5   6

22. To download software.   1   2   3   4   5   6

23. To have fun.   1   2   3   4   5   6

24. To give me support for my ideas.   1   2   3   4   5   6

25. To distract from tedious life affairs.   1   2   3   4   5   6

26. To find out what's happening in the world.   1   2   3   4   5   6

27. Could you please tell me (a)what is your *favorite* home country on-line resource and (b)give a brief description about it and (c)what you use it for? (eg:http://www.cts.com.tw; the website of a Taiwanese TV station; I read texts news on it, watch programs on it by realplayer...)

_____

_____

_____

_____

28. Please describe the benefits (as detailed as possible) you receive from using your *favorite* **home country on-line resources**.

_____

_____

_____

_____

29. Please list the frustrations or problems you encounter when you use **home country on-line resources** (as detailed as possible).

_____

_____

_____

_____

30. In your opinion, can home on-line resources replace the traditional home country mass media? Why or why not (as detailed as possible)?

_____

_____

_____

_____

31. How frequently do you visit your *favorite* home country on-line resource?
    1. Daily
    2. Two or more times per week
    3. Weekly
    4. A few times a month
    5. Monthly
    6. Less than once a month

32. I always turn to my *favorite* home country on-line resource whenever I need information about my home country.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6

33. There are no alternatives I can find here to replace my *favorite* home country on-line resource.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6

34. I give all my attention to my *favorite* home country on-line resource when I use it (not doing anyting else when you use it).

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6

35. Because I use home country on-line resources, I spend less time on traditional mass media
(TV, newspaper…).

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6

Early you were asked to indicate your motivations for using home country on-line resources. **Here please keep only your** *favorite home country on-line resource* **in mind and indicate what benefits you actually derive from them.** (circle one number for each of the following statements)

1= Strongly Disagree   2= Disagree 3= Somewhat Disagree
4= Somewhat Agree   5= Agree   6= Strongly Agree

My favorite home country on-line resource:

36. Helps me to find information.   1   2   3   4   5   6

37. Brings me entertainment.   1   2   3   4   5   6

38. Provides me with topics for conversation.   1   2   3   4   5   6

39. Helps me to learn new things.   1   2   3   4   5   6

40. Helps me to relieve boredom.   1   2   3   4   5   6

41. Is my best choice when I have nothing to do.   1   2   3   4   5   6

42. Keeps me away from the loneliness when I use it.   1   2   3   4   5   6

43. Makes me feel relaxed.   1   2   3   4   5   6

44. Helps me to socialize with friends/relatives.   1   2   3   4   5   6

45. Makes me feel closer to family and friends.   1   2   3   4   5   6

1= Strongly Disagree   2= Disagree   3= Somewhat Disagree
4= Somewhat Agree   5= Agree   6= Strongly Agree

46. Allows me to exchange information.   1   2   3   4   5   6

47. Sells the things I would like to buy.   1   2   3   4   5   6

48. Helps me manage my finance.   1   2   3   4   5   6

49. Helps me with my academic work.   1   2   3   4   5   6

50. Provides the software I need for downloading.   1   2   3   4   5   6

51. Makes me happy when I use it.   1   2   3   4   5   6

52. Gives me support for my ideas.   1   2   3   4   5   6

53. Helps me to escape from daily routines.   1   2   3   4   5   6

54. Helps me to find out what's happening in the world.   1   2   3   4   5   6

55. Do you plan to stay in the U.S. after you complete your study?
    0   No
    1   Yes

56. How long have you been in the U.S.?
    1.   Less than 6 months
    2.   6 months – 1 year
    3.   1.5 year – 2 years
    4.   More than 2 years

57. Which of the following best describes your age?
    1.   Under 20
    2.   21 to 25
    3.   26 to 30
    4.   31 to 35
    5.   36 or older

58. What is your gender?
    1.   Male
    2.   Female

www.manaraa.com

59. What degree are you working toward?
    1. Bachelor
    2. Master
    3. Ph. D.
    4. Others

60. Where are you from? _____ Where is it located (Please circle one of the following)?
    1. Africa
    2. Caribbean
    3. Mexico, Central & South America
    4. North America
    5. Asia
    6. Middle East
    7. Europe
    8. Oceania (Australia included)

Thank you very much for your help!

APPENDIX C: CODEBOOK

Variable Name	Col/s	"Type"	Value Label	Miss.	Var. label
ID	1-3	N	-	999	Subject No.
USE	4	C	1 YES 2 NO	9	Use of on-line resources
TIME	5-6	N	-	99	Hours/per week
PLACE	7	C	1 University 2 Home 3 Cyber Café 4 Other	9	Access to on-line resources
APPLICATION 1	8	C	1 YES 2 NO	9	IRC
APPLICATION 2	9	C	1 YES 2 NO	9	FTP
APPLICATION 3	10	C	1 YES 2 NO	9	E-mail
APPLICATION 4	11	C	1 YES 2 NO	9	Telnet
APPLICATION 5	12	C	1 YES 2 NO	9	MUDs
APPLICATION 6	13	C	1 YES 2 NO	9	WWW
APPLICATION 7	14	C	1 YES 2 NO	9	News Groups
APPLICATION 8	15	C	1 YES 2 NO	9	Others
HC 001	16	?	1 Not important To 5 Extremely important	8(Not applied)	US newspapers1

Variable Name	Col/s	"Type"	Value Label	Miss.	Var. label
HC 002	17	?	1 Not important To 5 Extremely important	8(Not applied)	US magazines1
HC 003	18	?	1 Not important To 5 Extremely important	8(Not applied)	US radio1
HC 004	19	?	1 Not important To 5 Extremely important	8(Not applied)	US TV1
HC 005	20	?	1 Not important To 5 Extremely important	8(Not applied)	US on-line resources1
HC 006	21	?	1 Not important To 5 Extremely important	8(Not applied)	Home country newspaper1
HC 007	22	?	1 Not important To 5 Extremely important	8(Not applied)	Home country magazine1
HC 008	23	?	1 Not important To 5 Extremely important	8(Not applied)	Home country short-wave radio1

Variable Name	Col/s	"Type"	Value Label	Miss.	Var. label
HC 009	24	?	1 Not important To 5 Extremely important	8(Not applied)	Home country on-line resources1
HC 010	25	?	1 Not important To 5 Extremely important	8(Not applied)	People from (in) home country1
HC 011	26	?	1 Not important To 5 Extremely important	8(Not applied)	People from the US1
HC 012	27	?	1 Not important To 5 Extremely important	8(Not applied)	Other1
US 001	28	?	1 Not important To 5 Extremely important	8(Not applied)	US newspapers2
US 002	29	?	1 Not important To 5 Extremely important	8(Not applied)	US magazines2
US 003	30	?	1 Not important To 5 Extremely important	8(Not applied)	US radio2

Variable Name	Col/s	"Type"	Value Label	Miss.	Var. label
US 004	31	?	1 Not important To 5 Extremely important	8(Not applied)	US TV2
US 005	32	?	1 Not important To 5 Extremely important	8(Not applied)	US on-line resources2
US 006	33	?	1 Not important To 5 Extremely important	8(Not applied)	Home country newspaper2
US 007	34	?	1 Not important To 5 Extremely important	8(Not applied)	Home country magazine2
US 008	35	?	1 Not important To 5 Extremely important	8(Not applied)	Home country short-wave radio2
US 009	36	?	1 Not important To 5 Extremely important	8(Not applied)	Home country on-line resources2
US 010	37	?	1 Not important To 5 Extremely important	8(Not applied)	People from (in) home country2

Variable Name	Col/s	"Type"	Value Label	Miss.	Var. label
US 011	38	?	1 Not important To 5 Extremely important	8(Not applied)	People from the US2
US 012	39	?	1 Not important To 5 Extremely important	8(Not applied)	Other2
HCMM	40	C	1 YES 2 NO	9	Subscription to home country mass media
USMM	41	C	1 YES 2 NO	9	Subscription to US mass media
HCR 001	42	?	1 Strongly Disagree To 6 Strongly Agree	9	Information GS
HCR 002	43	?	AS HCR 001	9	Entertain GS
HCR 003	44	?	AS HCR 001	9	Conversation GS
HCR 004	45	?	AS HCR 001	9	Learn GS
HCR 005	46	?	AS HCR 001	9	Boredom GS
HCR 006	47	?	AS HCR 001	9	Nothing GS

Variable Name	Col/s	"Type"	Value Label	Miss.	Var. label
HCR 007	48	?	AS HCR 001	9	Not alone GS
HCR 008	49	?	AS HCR 001	9	Relax GS
HCR 009	50	?	AS HCR 001	9	Socialize GS
HCR 010	51	?	AS HCR 001	9	Feel close GS
HCR 011	52	?	AS HCR 001	9	Exchange info. GS
HCR 012	53	?	AS HCR 001	9	Order GS
HCR 013	54	?	AS HCR 001	9	Financial GS
HCR 014	55	?	AS HCR 001	9	Research GS
HCR 015	56	?	AS HCR 001	9	Download GS
HCR 016	57	?	AS HCR 001	9	Fun GS
HCR 017	58	?	AS HCR 001	9	Ideas GS
HCR 018	59	?	AS HCR 001	9	Distract GS
HCR 019	60	?	AS HCR 001	9	World GS
REPLACE	61	C	1 YES 2 NOT SURE 3 NO	9	Replacement of traditional home country mass media
DEPENDENCY 1	62	C	1 Daily 2 Two or more per week 3 Weekly 4 A few times a month 5 Monthly 6 Less than once a month	9	Frequency

Variable Name	Col/s	"Type"	Value Label	Miss.	Var. label
DEPENDENCY 2	63	?	1 Strongly Disagree To 6 Strongly Agree	9	Need Info.
DEPENDENCY 3	64	?	AS DEP.2	9	Alternatives
DEPENDENCY 4	65	?	AS DEP.2	9	Attention
DEPENDENCY 5	66	?	AS NEED INFO.	9	Traditional
FHC 001	67	?	1 Strongly Disagree To 6 Strongly Agree	9	Information GO
FHC 002	68	?	AS FHC 001	9	Entertain GO
FHC 003	69	?	AS FHC 001	9	Conversation GO
FHC 004	70	?	AS FHC 001	9	Learn GO
FHC 005	71	?	AS FHC 001	9	Boredom GO
FHC 006	72	?	AS FHC 001	9	Nothing GO
FHC 007	73	?	AS FHC 001	9	Not alone GO
FHC 008	74	?	AS FHC 001	9	Relax GO
FHC 009	75	?	AS FHC 001	9	Socialize GO
FHC 010	76	?	AS FHC 001	9	Feel close GO

Variable Name	Col/s	"Type"	Value Label	Miss.	Var. label
FHC 011	77	?	AS FHC 001	9	Exchange info. GO
FHC 012	78	?	AS FHC 001	9	Order GO
FHC 013	79	?	AS FHC 001	9	Financial GO
FHC 014	80	?	AS FHC 001	9	Research GO
FHC 015	81	?	AS FHC 001	9	Download GO
FHC 016	82	?	AS FHC 001	9	Fun GO
FHC 017	83	?	AS FHC 001	9	Ideas GO
FHC 018	84	?	AS FHC 001	9	Distract GO
FHC 019	85	?	AS FHC 001	9	World GO
PLAN	86	C	1 YES 2 NOT SURE 3 NO	9	Stay in theUS
LENGTH	87	C	1 Less than 1 yr. 2 1-2 years 3 More than 2 yrs	9 9	Length of residence in the US
AGE	88	C	1 Under 20 2 21 to 25 3 26 to 30 4 31 to 35 5 36 or older	9	Age
Gender	89	C	1 Male 2 Female	9	Gender
DEGREE	90	C	1 Bachelor 2 Master 3 Ph. D. 4 Others	9	Education

Variable Name	Col/s	"Type"	Value Label	Miss.	Var. label

HOME	91	C	1 Africa
			2 Caribbean
			3 Mexico, Central
			  & South America
			4 North America
			5 Asia
			6 Middle East
			7 Europe
			8 Oceania
			  (Australia included)
				9	Nationality

REFERENCES

Abela, D. (1997). Clicking the Night Away: A Uses and Gratifications Approach to Internet Use in Malta [On-line]. Available: http://www.oberonlabs.com/dabela/abstract.htm.

Ball-Rokeach, S. J., & DeFleur, M. L. (1976). A dependency model of mass media effects. Communication Research, 3, 3-21.

Blumer, J. G. (1979). The role of theory in uses and gratifications studies. Communication Research, 6, 9-36.

Bitterner, J. R. (1977). Mass Communication: An Introduction. Englewood Cliffs, NJ: Prentice-Hall, Inc.

Bryman, A., & Cramer, D. (1999). Quantitative Data Analysis with SPSS Release 8 for Windows: A Guide for Social Scientists. New York, NY: Routledge.

Dimmick, J. W., Sikand, J., & Patterson, S. J. (1994). The gratifications of the household telephone: Socialbility, instrumentality, and reassurance. Communication Research, 21, (5), 643-663.

Eighmey, J., & McCord. L. (1997). Profiling user response to commercial web sites. Journal of Advertising Research. May-June, 59-66.

Eighmey, J., & McCord. L. (1998). Adding value in the information age: Uses and gratifications of sites on the World Wide Web. Journal of Business Research, 41, 187-194.

Ellison, J., & French. P. (1958). What foreign students think of our press. Journalism Quarterly, 35, 183-185.

Fact Book 1998-1999. (1998). Full-time and part-time enrollment: Fall semester headcount and percent by level (p. 34). USA: Iowa State University, Office of Institution Research.

Foreign students in the U.S. increasing. (1999, November 08). Muzi Lateline News [On-line]. Available: http:// lateline.muzi.net/cgi/lateline/news?p=1108.

Hwang, B. H., & He, Z. (1999). Media uses and acculturation among Chinese immigrants in the USA: A uses and gratifications approach. Gazette, 61(1), 5-22.

Hunter, C. D. (1996). The Uses and Gratifications of Project Agora: Executive Summary [On-line]. Available:http://www.asc.upenn.edu/usr/chunter/agora_uses/exec_sum. html.

Iowa StateUniversity. (1999). Census of persons from other countries. USA: Iowa State University, International Education Services.

Johnson, D. C. (1971). Problem of foreign students. International Education and Culture Exchange, 7, 61-68.

Kang, T. S. (1972). A foreign students group as an ethnic community. International Review of modern Sociology, 2, 44-78.

Katz, E., Blumer, J.G., & Gurevitch. M. (1974). The Use of Mass Communication: Current Perspectives on Gratifications Research. Beverly Hills, CA: SAGE Publication, Inc.

Kim, J. O., & Mueller, C. W. (1978). Factor Analysis: Statistical Methods and Practical Issues. Newbury Park, CA: Sage Publication, Inc.

Kim, Y. Y. (1977). Communication patterns of foreign immigrants in the process of acculturation. Human Communication Research, 4, 34-47.

Lee, H.O. (1984). <u>News-seeking behavior by foreign students in the U.S. and its effect on perceptions of the U.S.</u> Master's thesis. Iowa State University.

Lo, S.L. (1989). <u>Media use of Taiwan students at Iowa State University.</u> Master's thesis. Iowa State University.

McQuail, D., Blumer, J. G., & Brown, J. R. (1974). The television audience: A revised perspective. McQuail, D. (Ed.). <u>Sociology of Mass Communications.</u> (pp. 135-165). Middlesex, England: Penguin.

Meng, S. H.(1990). <u>An analysis of relationship between interpersonal communication and mass media use by foreign students in the United States.</u> Master's thesis. Iowa State University.

Moghrabi, K. (1972). Educating foreigners in the United States. <u>Improving College and University Teaching, 20,</u> 329-332.

Moore, D. F. (1976). <u>A comparison of selected characteristics of LSU women graduates for the 1930s and 1950s (A study of changing roles and alienation).</u> Doctoral dissertation, Louisiana State University.

Mustaffa, C, S. (1990). <u>A survey of foreign students' adjustment at Iowa State University.</u> Master's thesis. Iowa State University.

National Center for Education Statistics (NCES). (1996). <u>Foreign students enrolled in institutions of higher education in the United States and outlying areas, by continent, region, and selected countries of origin: 1980-81 to 1994-95</u> (The Digest of Education Statistics 1996) [On-line]. Available: http://nces.ed.gov/pubs/D96/D96T408.html.

Netratings. (2000). Nielsen//NetRatings: Internet Usage Statistics for the Month of February 2000, Home [On-line]. Available: http//209.249.142.16/nnpm/owa/Nrpublicreports .usagemonthly

Nortey, G. D. (1998). An investigation of how suffers of chronic illnesses use On-line resources: A uses and gratifications perspective. Master's thesis. Iowa State University.

Palmgreen, P., Wenner, L. A., & Rayburn II, J. D. (1980). Relations between gratifications sought and obtained: A study of television news. Communication Research, 7(2), 161-192.

Palmgreen, P., & Rayburn, J. D. (1984). Uses and gratifications: Theoretical perspective. R. N. Boston (Ed.). Communications Yearbook 8. (pp.20-55). Beverly Hills, CA: SAGE Publication, Inc.

Patchara, W. (1990). Foreign students' mass media use before and during their sojourn in the U.S. Master's thesis. Iowa State University.

Rosengren, K.E., & Windahl, S. (1972). Mass media consumption as a functional alternative. D. Maquail (Ed.). Sociology of Mass Communications. (pp. 166-194). Middlesex, England: Penguin.

Rubin, A. M., &Windahl, S. (1982). Mass media uses and dependency: A social systems approach to uses and gratifications. Paper presented at the meeting of the International Communication Association. Boston.

Rubin, A. M. (1984). Ritualized and instrumental television viewing. Journal of Communication, 34(3), 67-77.

Rubin, A. M. (1986). Uses, gratifications, and media effects research. Bryant, J., & Zillmann, D. (Eds.). Perspectives on Media effects. (pp. 281-301). Hillsdale, NJ: Lawrence Erlbaum Associates.

Ryu, J. S. (1976). Neo-Socialization of mass media working among foreign students: A study of foreign students families at the University of Oregon. Master's thesis. University of Oregon.

Semlak, W. D (1979). Effects of media use on foreign students perceptions of U.S. political leaders and U.S, political institutions. Journalism Quarterly, 56(1), 153-156.

Seyfi, H. R. (1979). U.S. mass media and foreign students: Exposure, uses, and effects. Master's thesis. Iowa State University.

Tai, S.K. (1972). A foreign students group as an ethnic community. International Review of Modern Sociology, 2(1), 72-82.

Wedver, D. H. (1979). Personal needs and media use. ANPA News Research Report, 21,1-7.

Wenner, L. A. (1982). Gratifications sought and obtained in program dependency: A study of network evening news programs and 60 Minutes. Communication Research, 9, 539-560.

Wenner, L. A. (1985). The nature of news gratificataions. Rosengren, K. E., Wenner L. A., & Palmgreen P. (Eds.). Media Gratifications Research: Current Perspective. (pp. 171-193). Beverly Hills, CA: SAGE Publication, Inc.

ACKNOWLEDGMENTS

Finally I can move on!

To my parents, Xiu-Ying and Jin-Cheng Her. Thank you for supporting me in all the ways. Thanks for being my strength. And especially to my Dad, who passed away a few months before I got the admission from Iowa State University: "Dear Daddy, I know you are happy for me."

To my two brothers, Winston and Mark Her. You are not only my brothers but my good friends. For Mark who already receives his Master's degree, I hope you will have a success in your career. For Winston, who is working now on his Master's degree in History years after he graduated from Law School: "I know you can make it, brother. And I'm happy you are working on your interest now."

Special thanks to my boyfriend, Bjarke Rollmann. You have been my best audience and friend since I came to the United States. Thank you for supporting me as being who I am and broadening my views.

Lots of thanks to my committee, Dr. John Eighmey, Dr. Kim Smith, and Dr. Carl Roberts, for being supportive and helping me so much on my study. I appreciate very much for your time and help.

To Pui Khin Yong and Ya-ya Kang, You're my best friends in Iowa. I'll always remember the days when we're together here in Ames.