소셜 네트워크 환경에서 국내 외국인 유학생의 미디어 정보 리터러시 현황분석

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An Analysis on the Status Quo of International Students' Media Information Literacy in Social Network Environment

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요 약

본 연구는 국내에서 영어로 수업을 진행하는 K대학 외국인 유학생들의 미디어 정보 리터러시 수준분석을 위해 설문조사를 실시하였다. 응답결과를 바탕으로 수집된 측정결과에 대해 타당성과 신뢰도를 검증하기 위해 통계분석프로그램인 SPSS 21.0으로 문항분석을 실시하였으며, 연구대상 집단별도 각 요인별 미디어 정보 리터러시 이용의 다양성을 분석하였다. 빈도분석, χ^2-test를 사용하여 분석한 결과를 근거로 영어로 수업을 하는 외국인 유학생의 국내 미디어 정보 리터러시 이용현황은 주로 인터넷 쇼핑, 은행 등의 일생생활에 초점이 맞추어져 있음을 확인하였다.

ABSTRACT

The purpose of this study is to analyze the level of Media Information Literacy of international students in K-university, who attend the courses in which the classes are delivered only in English. A survey was carried out to find out the level of media information literacy. In order to verify the validity and reliability of the measurement result gathered from the responses, an item analysis was carried out with SPSS21.0, a statistics analysis software, and the diversity of utilizing media information literacy was also measured according to the factors of each analysand group. The analysis result gathered through χ^2-test, a frequency analysis tool, shows that international students use domestic media information literacy mainly for daily life activities such as the internet shopping and the bank transaction.

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I. Introduction

The number of international students has shown a rapid increase in Korea since 2005. One of the several reasons for this phenomenon, an yearly influx of more than 10,000 international students, is said to be the attraction effect of the remarkable feat of the recent Korean economic advancement, which is often called as "the Miracle of Han River." Another effect is, what is commonly called, "Korean wave," which has been in vogue for the past several years. There is also another point of view on this phenomenon: many Korean Universities aggressively invite and admit international students to their campus to compensate for the shortage of domestic applicants, which was caused by the nationwide decrease of population.

According to the data revealed by Ministry of Education and National Institute of International Education(NIIED), as of April, 2017 the number of international students in Korea is 123,858[1]. In proportion to the increased number of international students, the number of dropouts is also increasing. The increased dropout is ascribed to the reason that many international students experience maladjustment to the circumstances due to the cultural difference and the language barrier.

Media Information Literacy can help international students adapt themselves to the new environments. UNESCO advocates the integration of media and Information literacy(MIL: Media and Information Literacy). Media and Information Literacy means, as shown in Fig.1, the ability to use media, the freedom of expression and use of information, utilization of a library, News reading, use of a computer and the internet use of digital devices and understanding of movie[2].

1) http://news.hankyung.com/article/2018020574521
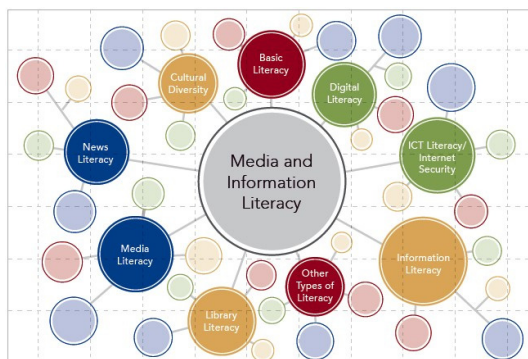2) https://nu.kz.libguides.com/MIL

Fig. 1 Composite concept of MIL

From the idea that Media Information Literacy can be an influential factor that helps international students' adaptation to Korean environments, and setting the international students of "K" University whose class delivery medium is English as its subject, this study will analyze their level of media information literacy in Social Network environments and will also try to derive significant implications.

The contents of this paper are as follows. Section II discusses related research, Section III describes the proposed method, and Section IV describes the discussions and conclusions.

II. Related Researches

2.1 Researches on the International Students

The research on the international students and media information literacy in Korea up to now has seen a few literatures like Digital Literacy of ROTC cadets[1], Adaptation to Korean Culture[2], International students' college satisfaction[3], missionary strategy through international students[4], international students' stress from cultural adaptation[5], and international students' Korean language proficiency and the use of SNS[6]. Among these literatures, the study on international

students' ability to use media literacy information is rarely found. In this respect, it will be a significant effort to investigate the international students' media information literacy and suggest a direction of the media information literacy education for the international students in Korea.

2.2 The International Students' Level of Literacy

As Fig. 2 shows, in this study a survey was conducted utilizing a revised Digital Checklist[7] to measure the level of media information literacy from June 18, 2018 through June 22, 2018. The subject group was 179 international students of "K" University. and among those 179 students, 102 students' responses were used as the survey result.
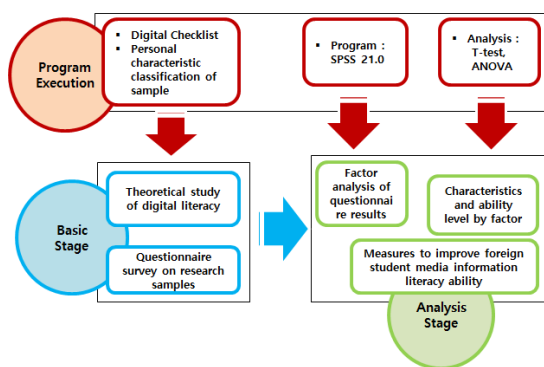

Fig. 2 Analysis model

In order to fine out the diversity of media information literacy use, some items of the Digital Literacy Checklist were revised[8-9]. These items were mainly composed of the computer literacy competence and the information literacy competence, and were widely used and cited in many researches that measures digital literacy competence. Each survey question uses the categorical data of the aspect of information literacy.

The most commonly used method in analysing the categorical data is the χ^2-test(Chi-square test), that uses χ^2 sample distribution. χ^2-test enables us to find out the exist of independence between the two categorical variables. Using the difference between the observed frequency and the expected frequency, the test statistic can be derived and its equation is as following[11-12]:

$$\chi^2 = \sum_{i=1}^{r}\sum_{j=1}^{c}\frac{(O_{ij}-E_{ij})^2}{E_{ij}} \tag{1}$$

$r =$ number of variables A
$c =$ number of variables B
$O_{ij} =$ observed frequency of row i and column j
$E_{ij} =$ expected frequency of row i and column j
$df = (r-1)(c-1)$

III. Empirical Analysis of Media Information Literacy level

3.1 General Characteristics of Survey Subjects

Prior to analyzing the level of media information literacy required for the age of the convergence education[10], an investigation on the individual characteristics of the respondents was carried out. Table. 1 shows the result of frequency analysis on individual characteristics of the 102 respondents by nationality, gender, the learning experience of computer and internet education, and the Korea language(k-lang.) learning experience.

By nations, most of the respondents are from the Southwestern Asian countries, and this is due to the fact that K-University focuses on the at area for the recruitment of the international students. By gender, males are 84 students(82.4%), and females are 18(17.6%). 74 students(72.6%) have studied in Korea for less than 2 years, which takes the majority of the responses, and 28(27.4%)of them, for more than 2 years. Regarding the experience of the computer or the internet education, 85(83.3%) responded that they have the experience of the computer or the internet education, but 17(16.7%) of them answered that they have had no experience at all. Those 17 students are from such countries as Nepal and Bangladesh which are generally known

as "underdeveloped" countries. Among those who have learned about the computer or the internet, 54 (72.%) learned the computer or the internet for less than 6 months, and 21(28.0%) answered that they have more than 6 months of the computer ot the internet learning. 31 students(30.4%) answered that they have learned Korean language and 71 students(69.9%) have not learned the Korean language.

99 students(97.1%) of have the Google account and use it as their main email account. this is probably because Google has easiest accessibility world widely.

Table 1. General Characteristics of the Subjects

Classification		Nationality							
		Bangladesh	Nepal	Vietnam	India	Indonesia	Cameron	Total	Ratio(%)
Gender	Male	49	26	1	6	1	1	84	82.4
	Female	0	7	7	0	4	0	18	17.6
How long studied in Korea	> 6 Months	1	11	0	0	0	0	12	11.8
	> 1 Year	8	6	0	3	0	0	17	16.7
	> 2 Years	22	11	3	3	5	1	45	44.1
	> 3 Years	18	4	5	0	0	0	27	26.5
	≤ 3 Years	0	1	0	0	0	0	1	1.0
Trained Computer/ Internet	My Country	29	22	4	2	5	1	63	61.8
	Korea	0	1	0	2	0	0	3	2.9
	Both	12	4	1	2	0	0	19	18.6
	Never	8	6	3	0	0	0	17	16.7
Eeducated Time (Response)	> 1 Week	6	0	0	0	0	0	6	8.0
	> 1 Month	6	2	1	0	1	0	10	13.3
	> 2 Months	6	2	1	2	0	0	11	14.7
	> 3 Months	5	6	0	0	0	0	11	14.7
	> 6 Months	7	6	1	1	1	0	16	21.3
	≤ 6 Months	4	9	2	2	3	1	21	28.0
Learned K-Lang.	Yes	16	9	2	3	0	1	31	30.4
	No	33	24	6	3	5	0	71	69.6
Usually Use E-mail	Google	48	32	8	6	5	0	99	97.1
	Naver	0	0	0	0	0	0	0	0.0
	Daum	0	1	0	0	0	0	1	1.0
	email of my Country	0	0	0	0	0	0	0	0.0
	Other	1					1	2	2.0

Based on the data gathered from the individual characteristics of the respondents, it is possible to surmise that they have low competence of media information literacy. The fact that 81 students (79.4%) have less than 6 months of experience on the computer, or no experience at all supports the probability of that surmise.

3.2 Students with Experience of Korean language Learning

Table. 2 shows the results of analysis on the level of the media information literacy of 31 international students who answered they have learned the Korean language.

Table 2. Information Media Literacy Level(Korean language Learning)

Classification		Trained Computer			Pearson χ^2	p-value
		Yes	No	Total		
Frequency of Using Internet in k-lang.	Never	12	6	18	5.373	0.146
	1~3 days per week	10	0	10		
	4-6 days per week	2	0	2		
	everyday	1	0	1		
Portal used in K-lang.	Google	19	4	23	0.220	0.639
	Naver	6	2	8		
Purpose of using internet	Searching for informations	13	6	19	4.699	0.32
	such as Banking and Shopping	4	0	4		
	Checking e-mail	4	0	4		
	Visiting others' Blogs	3	0	3		
	Making inquiries through Bulletin Board System	1	0	1		
Frequently visiting Korean Website (Multiple Response)	Korean Embassy, ROK Government etc	9	0	9	8.716	0.648
	Portal Sites	2	0	2		
	Banks	6	2	8		
	Communications Company	6	0	6		
	Broadcasting Company	2	0	2		
	Internet shopping Sites	8	3	11		
	Booking sites for Travel etc.	3	0	3		
	Booking sites for concert	1	0	1		
	Internet Bookstore	2	0	2		
	Online Leaning	6	1	7		
	Car Dealer's sites	0	0	0		
	Others	1	0	1		
Device used to access to internet (Multiple Response)	Computer(Desktop/ Laptop)	10	1	11	3.739	0.154
	Tablet PC	0	0	0		
	Smart Phone	17	6	23		
	Others	0	0	0		
Using Korean SNS(1)	Yes	15	4	19	0.091	0.763
	No	10	2	12		
Frequently Used Korean SNS (1)=YES	Facebook(Korean Version)	1	0	1	0.281	0.536
	Naver Band	0	0	0		
	KakaoTalk	14	4	18		
	Twitter(Korean Version)	0	0	1		
	Instagram	0	0	0		
Communi. with Koreann	Yes	9	3	12	0.305	0.581
	No	6	1	7		
Opportunities to experience K-lang. and culture through Korean SNS	Never	4	1	5	2.610	0.625
	Seldom	2	1	3		
	Sometimes	15	2	17		
	Often	3	2	5		
	Quite often	1	0	1		
Writing K-lang. in Website	Yes	8	1	9	0.552	0.457
	No	17	5	22		

For all their experience of the Korean language learning, 18 students(58.1%) answered they seldom

use the internet in the Korean language. And 13(41.9%) students answered they use the internet in the Korean language oftener than once a week. But, it was found that most(74.2%) of these students use Google as their internet portal, and few uses the domestic portal for their internet use.

As for the main purpose of using the internet, 19(61.3%) students answered they use the internet mainly for the information search, and others answered "bank transaction," "shopping," and "email" are their main usage of the internet. Regarding the question about their most frequently visiting Website, 31 students gave 52 answers(multiple responses were allowed for this question), and the websites of the internet shopping, Korean Embassy, and the banks were found to be the most frequently visited website. They were also found to use a personal computer and a "smart phone" to access to the internet. But of the two, a "smart phone" is the more frequently used device. In short, the international students' use of the internet is confined to basic activities required for their daily life in Korea such as getting information, shopping and bank transaction, and does not show any other diverse usages.

19(61.3%) students answered that they use SNS in the Korean language, and they mainly use "KaKaoTalk" for their SNS in the Korean language. Among these 19 students, 12(63.7%) students answered they are communicating with Koreans through SNS.

To the question whether they can have opportunities to experience the Korean language and culture through SNS in Korean language, 8(25.8%) students answered "Never"or "Rarely." This suggests that opportunities to experience the Korean language and culture through SNS in Korean language should be provided to them.

About all the items that have been analyzed up to now, the result of the cross-tabulation analysis (χ^2-test) on the experience of the computer or the internet education does not show a statistical significance. This suggests that the experience of the computer or the internet education does not have anything to do with the level of media information literacy gained through using SNS. And this also means that the computer or the internet education does not indicate the level of using media information literacy, but the media information literacy has become a necessity for all.

3.3 Students with No Experience of Korean Language Learning

The result of Analysis on the media information literacy of those who answered they have not learned the Korean language is shown in Table 3.

The great majority(95;95.8%) of the respondents answered that the main language is English when they use the internet. To the question asking their experience of using the internet in the Korean language, 50 student(70.4%) answered negatively. And 43(60.6%) answered that they have never used the internet in the Korean language because they can not understand the Korean language. this is because the international students in "K" University attend the classes whose medium of delivery is only English and they don't feel any necessity to use the internet in the Korean language.

To the question that how often they use the internet in any language, 19 students(26.8%) answered that they never use the internet. Among these students, 17 students were found that they have the computer education experience. And 33 (45.1%) answered they use the internet everyday. Among these students, 26 students answered they have the computer education experience. But the difference in the experience of the computer education does not show statistical significance.

For the internet portal they mainly use in Korea, 58 students(81.7%) answered they use "Google", and only 12 students(16.9%) answered they use domestic portals such as "Naver" and

"Daum". This shows some similarity with the answer that they use English when they use the internet. This is probably because that the domestic portals are made Korean friendly and, consequently, not mase useful for the foreigners in Korea.

The multiple answers to the question, "What they are mainly searching for through the internet when they are in Korea" show that they are searching for information for their assignments(33; 27.7%), email(20;16.8%), and Watching Korean T.V. shows(18;15.1%). There are 151 multiple answers to the question whether they have used the websites in Korean language. They use Korean website for shopping(37;24.5%), Bank Transaction(31;20.5%), and Access to portal sites(23;15.2%).

For the bank transaction, 73 students(76.6%) depend on ATM(Automatic Teller Machine), to get information for the daily life, 34(47.9%) gain the information through English web sites, to find a part time job, they get the information through the face to face conversation with their peers.

69 students(97.2%) answered the devices they mainly use to access to the internet are a personal computer and a "smart phone," and 61 students(85.9%) are using SNS. 51 students(78.9%) answered they are sharing the social media through SNS, regardless of the language. When using SNS, 38students(63.3%) answered they use "Facebook," and 15 students(25.0%) use "KakaoTalk" as their SNS. among these students, 34 students(55.7%) are communicating with Koreans through SNS.

The result of χ^2-test to verify the difference between the above mentioned analysis and the experience of computer or the internet education shows there is no statistical significance. This means that there is no statistical difference between the experience of the computer or the internet education and media information literacy.

Table 3. Information Media Literacy Level of Studnets with No Korean Language Learning.

Classification		Trained Computer			Pearson χ^2	p-value
		Yes	No	Total		
Main Lang. used in the Internet using	Korean	0	0	0	0.574	0.449
	English	57	11	68		
	My own Mother tongue	3	0	3		
Experience of using K-lang. in Korean website	Yes	19	2	21	0.812	0.368
	No	41	9	50		
Reason of not using Korean Website lang.	can't understand K-lang..	36	7	43	0.585	0.900
	can't find the information that Korean Web Sites	3	1	4		
	more comfortable in English or in mother tongue	20	3	23		
	Others	1	0	1		
Frequency of internet Using (regardless of lang.	Never	17	2	19	1.003	0.801
	1~3 days/week	15	3	18		
	4~6 days/week	2	0	2		
	everyday	26	6	32		
Maily used portal in you use in Korea	Google	47	11	58	2.918	0.405
	Naver	11	0	11		
	Daum	1	0	1		
	Others	1	0	1		
Contents of the internet (Multiple Response)	Searching for informations	30	3	33	3.04	0.932
	Reading news article	14	1	15		
	Watching T.V. shows of my country	10	1	11		
	Watching Korean T.V shows	15	3	18		
	Checking e-mail	17	3	20		
	Visiting others' Blogs or SNS Pages	5	1	6		
	Managing my own Blog	2	0	2		
	Others	13	1	14		
What site do you mainly use when you use the internet in K-lang. (Multiple Response)	Korean Embassy, Government etc	15	2	17	17.769	0.166
	Portal Sites	19	4	23		
	Banks	28	3	31		
	Communications Company	2	2	4		
	Broadcasting Company	6	1	7		
	Internet shopping Sites	33	4	37		
	Booking sites for Trave etc	11	2	13		
	Booking sites for concert	3	2	5		
	Internet Bookstore	5	0	5		
	Online Leaning	3	0	3		
	Car Dealer's sites	2	0	2		
	never accessed to any Korean web site	3	0	3		
	Others	0	1	1		
Way of bank Transaction in Korea	I do not transact with Korean banks	5	0	5	1.006	0.605
	I usually use ATM to withdraw money ffrom my account	44	9	53		
	I usually use Internet Banking	11	2	13		
	I go to the Bank counter in person	0	0	0		
Daily life information in Korea	from face-to-face talking with my colleague students	21	5	26	1.853	0.763
	from SNS(KakoTalk, twitter)	6	0	6		
	from Korean Web sites	1	0	1		
	from English Web sites	29	5	34		
	Others	3	1	4		
Ways to get information about part time job	from face-to-face	45	9	54	1.877	0.866
	from SNS(KakoTalk, twitter)	3	1	4		
	from Korean Web sites	0	0	0		
	from English Web sites	4	1	5		
	I visit a business in person	3	0	3		
	from Classified Advertise	2	0	2		
	Others	3	0	3		
Devices to access to the internet	Computer(Desktop/ Laptop)	31	6	37	0.382	0.826
	Tablet PC	2	0	2		

Classification		Trained Computer			Pearson χ^2	p-value
		Yes	No	Total		
	Smart Phone	27	5	32		
	Others	0	0	0		
Use of SNS	Yes	51	10	61	0.268	0.605
	No	9	1	10		
Name of SNS	Facebook	31	7	38		
	Naver Band	2	0	2		
	Kakao Talk	14	1	15	3.524	0.318
	Twitter	0	0	0		
	Instagram	3	2	5		
Ccommunication with Korean through SNS	Yes	30	4	34	1.201	0.273
	No	21	6	27		
Sharing social media through SNS in more than two lang.	Yes	47	9	56	0.068	0.795
	No	13	2	15		

3.4 A Suggestion to enhance the Media Information Literacy of the International Students

In the research of the media information literacy of the international students, it is hard to compare the results of the analysis on those who have learned Korean language and that of thos who have not learned directly. But in this paper, an indirect comparison of similar items was attempted to identify the differences in the level of the media information literacy.

As for a portal site, most international students mainly uses Google, regardless of their experience of the Koran language learning, and the frequency they use domestic portal such as "Naver," or "Daum" is low. This is because domestic portals are constructed to be more Korean friendly in reading news articles, and searching information, and rarely provide such services in English.

Even when they use Korean language web sites, both groups, regardless of the experience in Korean language learning, access to only the sites that are closely related with their daily life such as shopping, bank transactions, Korean embassy. This suggests that they can not get much help in acquiring various informations through the domestic website.

From the fact that a "smart phone," is mentioned as their main device to access to the internet, it will be safely claimed that a 'smart phone" is the commonest tool used to access to media information literacy through the internet or SNS. This is probably because a "smart phone" is a more convenient device than personal computer to access to the information media in exchanging the daily-life information.

At least more than 60% of the total respondents from both the groups answered they use SNS. In using different SNS, both groups show difference: those who have learned the Korean Language use "KakaoTalk," and those who have not learned use mainly "Facebook." 63.2% of those who have learned the Korean language answered they communicate with Koreans through SNS, and among those who have not learned, 55.7% of the respondents answered they also communicate with Koreans through SNS. This fact hints a possibility that "KakaoTalk" can expend their users by providing international students-friendly services.

According to Table 4 which shows the analysis on the frequency of the internet use of the International students with no Korean language learning experience by their nationality, though there is no statistical significance, most of those students who never use the internet are from , what they call, "the underdeveloped" countries such as Bangladesh and Nepal. it seems that ther should be a special computer education or media information literacy education be provided for them.

Table 4. Frequency of Internet Use of Students with No Korean Language Learning by Nationality

Classification	Nationality						Pearson χ^2	p-value
	Bangladesh	Nepal	Vietnam	India	Indonesia	Total		
Never	9	5	2	2	1	19		
1~3 days/week	9	4	3	0	2	18		
4~6 days/week	1	1	0	0	0	2	8.407	0.753
everyday	14	14	1	1	2	32		
Total	33	24	6	3	5	71		

Ⅳ. Conclusion

Having its foundation on the Information Communications Technology(ICT), the media information literacy is a comprehensive literacy that utilize various literacies such as News, Culture, information search, media search and SNS. This paper carried out a research on the status of the media information literacy use of "K" University's international students whose class delivery medium is English. Based on the result of this research, several suggestions are derived.

First, it is necessary that domestic portal sites should provide the international students and foreigners who are not good at the Koren language with English service such as a English website and information search service in English. The reason that those who have not learned the Korean language do not access to Korean websites is that they can't understand the Korean language. It is difficult for them to search information and use the search result from " Naver," or "Daum" which are said to hit the most frequent hit in Korea. this is why most of the international students and foreigners use Google in which they can find and use what they want easily. Thus, making it possible for foreigners to search information in English will be greatly helpful not only to the foreigners in Korea but to the spread of "Korean Wave."

Second, a curriculum to educate the computer or the internet, and the media information literacy to those students from "the underdeveloped countries" shoud be created. Though most of the international students have an access to the media information literacy through the computer, the internet and SNS, since most of the students who don't use the internet are from "the underdeveloped countries of the South western Asia, it is necessary that the media information literacy education should be established.

In this paper, to measure the use of the media information literacy of the international students, the use of the internet, the mainly used devices, portal sites, and the information search contents of "K" University's international students were analysed. The analysis shows that those who have low or no Korean language competency rarely use the domestic portal sites that provide domestic informations. This is because those domestic media portals provide scanty amount of information in English, and thus it is inconvenient for foreigners to use those domestic portal sites. In conclusion, domestic sites need to consider providing English services with foreigners in Korea. By doing this, the "Korean Wave" will be spread more widely, and Korea can leap into the position of the leading country in the media information literacy.

For further study, a continuous study on the accurate measurement of the international students' media information literacy level and its application will be carried out.

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