



## Website Preferences of Finnish and Mexican University Students: A Cross-Cultural Study

### **Miguel Santiago**

Department Educational Sciences and Teacher Education, Faculty of Education, University of Oulu

Email: miguel.santiagobustos@student oulu.fi

### **Pirkko Hyvönen**

Department Educational Sciences and Teacher Education, Faculty of Education, University of Oulu and University of Lapland

Email: pirkko.hyvonen@ oulu.fi or pirkko.hyvonen@ ulapland.fi

### **Abstract**

*This paper is focused on understanding Internet use and comparing cross-cultural differences according to the contents and preferences of the websites that are most visited by two groups of university students from Finland (n = 30) and Mexico (n = 30). The following research is an exploratory qualitative study with some basic statistics. A questionnaire was used in this study as a data collection instrument. The findings show that in both groups, university students prefer websites about social networking (Facebook), sending email (MSN), videos (YouTube), multiplatform applications (Google), educational sites (University of Oulu), and wikis (Wikipedia). This demonstrated that both groups have an interest in sharing ideas and meeting friends. The differences reveal that Finnish students use their university's website more regularly than the Mexican student respondents and that they tend to implement their ideas more often. Furthermore, this study explored how university students use the Internet and what type of influence the Internet has on them. The emotional effects suggest that almost quarter of students reported using the internet to escape negative feelings, such as depression or nervousness. The findings provide information for university teachers about students' habits and prior knowledge regarding Internet use for educational purposes. The information will be helpful when designing learning and teaching in multicultural student groups.*

**Keywords:** Internet, websites, Finland, Mexico, contents, cross-cultural differences

## **Introduction**

The Internet is a mediator of person-to-person communication patterns because of the constant interrelations it creates, affecting the people's lives both online and offline. People use the Internet to carry out important developmental tasks, such as identity formation, social interaction, and the development of autonomy. In addition, the Internet can provide a learning environment, and people can learn how to transfer their new skills from the Internet to real-life interactions (Amichai-Hamburger & Furnham, 2007).

Several previous studies have evaluated the positive and negative effects the Internet has on everyday life. For instance, Stepanikova et al. (2010) found a positive relationship between Internet use and loneliness and a negative relationship between Internet use and life satisfaction. In the same way, several classifications have been performed to categorize the amount of time that people spend on the Internet (e.g., the addicts and the affiliated) and the positive and negative consequences this has for quality of life (Amichai-Hamburger et al., 2007; Meyen, Pfaff-Rüdiger, Dudenhöffer & Huss, 2010; Weinstein & Lejoyeu, 2010). Also, Huang and Chang (2009) carried out a study using a database of 101 countries. They evaluated the similarity (e.g., language and religion) of websites among countries and found that Internet users in countries sharing common social norms were likely to visit the same websites. In general, previous studies have been focused on evaluating a group of users in a specific country, evaluating the positive and negative consequences that the Internet has regarding quality of life, and the time that users spend on the Internet. However, few studies have assessed the type of information that is published on the Internet, the contents that are consulted by users on websites, and whether users from different countries access the same websites.

Therefore, this study makes an effort to fill a gap by determining how students use the Internet (websites) in formal and informal contexts and what factors influence this process. This research is focused on the comparison of cross-cultural factors regarding Internet use between groups of university students from Finland and Mexico, specifying the characteristics of and preferences regarding the websites that are most visited by both groups.

## **Literature Review**

### **Role of the Internet**

The Internet influences people's lives in many ways. McKenna et al. (2002) mention that the Internet not only provides an opportunity for people to talk among themselves, but it may also be the preferred place for self-expression because the Internet environment may be perceived as sufficiently safe for expressing various aspects of people's identities. Meyen et al. (2010) have developed a typology with seven types of Internet users (the virtuosos, the professionals, the addicts, the aficionados, the companions, the cautious, and the affiliated). This typology of Internet users shows that access to the Internet varies widely in terms of the ability to take full advantage of the Internet. This ability and the relevance of Internet use to daily life are influenced by the habits of users, for example, socialization, gender, and personal environment.

Likewise, the Internet can create a safe environment, which has a particular significance for people with social inhibitions, such as introversion and neuroticism. The Internet has a positive effect on these individuals because it

enables them to acquire more information about social anxiety disorder and provides a medium through which socially inhibited people can acquire social skills and confidence (Amichai-Hamburger et al., 2007). Additionally, adults tend to learn new ways of carrying out traditional tasks, e.g., a conference using Skype rather than a traditional conference call. In the same sense, for younger generations, the Internet is the “normal way” to perform all kinds of activities. These people are involved in a world guided by the Internet. This is an intrinsic and innate part of their lives, and it is not possible for them to complete many tasks without this tool. It includes all kinds of activities, such as social interactions, study, leisure, playing, etc. The current generation is clearly the generation of the Internet (Amichai-Hamburger & Barak, 2009). The magnitude and the abilities of the Internet are part of every aspect of our lives, both social and professional, and this has only increased over the years (Amichai-Hamburger, 2002). Moreover, Anderson et al. (2004) have described how the Web’s capacity building via hyperlinking may be compared to the way in which human knowledge is stored in mental schema and to the subsequent development of mental structures.

Now, one of the major changes in communication practices and social interaction is social networking sites. By using the social networks, an individual can find others with similar interests for both romantic and social purposes (Ross, Orr, Sisic, Arseneault, Simmering, & Orr, 2009). The overwhelming success of social networks such as Facebook poses a number of important questions regarding their impact (Ryan & Xenos, 2011). Also, Facebook is associated with all generations of Internet users, being a notable communications tool among the student population and academic institutions. This means that social networks are frequently involved in the area of education by connecting current and potential students and delivering instructional content (Paul, Baker, & Cochran, 2012). Nadkarni et al. (2012) developed a model suggesting that Facebook use is motivated by two primary needs. The first is the need to belong, and the second is the need for self-presentation. Demographic and cultural factors may contribute to the need to belong. The use of new applications such as social networks creates new communication patterns in the digital age (Movius, 2010).

Through the Internet, others with similar interests can be found without difficulty while preserving anonymity. This process allows people to share aspects of themselves online with far fewer risks (Amichai-Hamburger et al., 2007). Some people see the Internet as a venue in which they can express their emotions openly. Also, there are risks associated with anonymity. For instance, some people obtain benefits by deceit, extortion, human trafficking, selling drugs, or stealing information from others. Additionally, as defined by Colley (2008), the impact of the Internet on different social groups and genders are a significant area of research. Their study provided an analysis of the impact of the Internet on men’s and women’s lives. Amichai-Hamburger et al. (2011) have assessed the influence of Internet use on social interactions in separate life domains (e.g., with family members, friends, or colleagues). Their investigation has confirmed that Internet use can enhance the social lives of its users.

In addition, Internet use may have psychological effects. For example, Johnson et al. (1991) argues that the relationship between Internet use and psychological well-being may be positive or negative, depending on how Internet use influences social processes. Robinson et al. (2000) found that the Internet may reduce stress and provide social support. It may enable the creation of new supportive social ties that would not otherwise exist, improving the social integration and psychosocial health of individuals (Stepanikova et al., 2010). Regarding the risks of Internet use, Yu et al. (2013) argue in their study that problematic Internet use can be described as an

excessive preoccupation that has resulted in academic difficulties and physical health problems for the people involved.

### **Cultural factors**

Culture is defined as the shared cognition and patterns designed by a set of people for identifying, describing, explaining, and responding to the social factors around them (Lederach, 1995). Hofstede defines culture as “the collective programming of the mind that distinguishes the members of one group or category of people from others” (Hofstede, Hofstede & Minkov, 2010). This definition emphasizes that culture is always learned; it is not inherited. It is derived from one’s social environment, not from one’s genes. In addition, it explains that culture is a collective action that is perceived as a dynamic process rather than a passive one and supports individual and group identity formation (Hofstede et al., 2010). Culture is shared and is factor in an individual’s social interactions. Therefore, people in human societies generally perceive that their society is distinct from other societies in terms of shared traditions and expectations. Moreover, in contemporary culture, identity is connected much more loosely to group membership. People have a place within a multitude of cultures, and their identities are different in each one. However, in many cases, an identity is only partial or temporary (Curtis & Pettigrew, 2009). Today, globally influential factors have effects on societies and their cultures because these norms determine a set of values and beliefs that are largely shared around the world (Castells, 2009).

**Cross-cultural differences** manifest themselves in several forms: they provide the basic value orientations, beliefs, and worldviews that are prevalent in a given context. However, these differences can be understood by recognizing and describing cultures according to a series of dimensions (Markus & Hamedani, 2007). Hofstede (2010) describes how every person belongs to a number of different groups and categories. Consequently, individuals unavoidably contain several layers corresponding to the various levels of their cultures. Cross-cultural differences relate to country (where there is a dominant culture regarding practices and values throughout a nation), region (some minorities are at the crossroads between the dominant culture of the nation and their own traditional group culture), religion (the result of previously existing cultural value patterns), gender (how cultural groups understand and relate to members of the opposite sex; in many cultures, there are different rules for men and women), generation (this separates grandparents from parents and parents from children; there are differences in practices and values between generations), and social classes (this is associated with educational opportunities and a person’s occupation, profession, and income). Because cross-cultural differences are related to race, gender, physical and mental abilities, and religion, this has an impact on cultural orientations. It is hard to identify any person using a single cultural label.

**Learning is considered a cultural activity.** The human capacity to learn is universal, and learning has performed a historically important role in constructing communities within specific cultures (Curtis et al., 2009). Some people view learning as the transmission of knowledge from experts to novices. Other people base their view of learning on a learning approach in which beginners learn by collaborating and interacting with people who are more experienced. Although the effectiveness of collaborative learning - particularly computer-supported collaborative learning - is substantiated by scientific evidence, its success depends entirely on certain conditions in which students interact actively (Dillenbourg, Järvelä, & Fisher, 2009). Today, learning is seen as a social activity in which students set goals for their

learning, monitor them, and make changes that are needed to achieve their goals. During the process, students regulate their emotions, motivation, behaviour, and cognition (Zimmerman, 1989). Learning involves an awareness of how people think, understand, and learn about language, culture, knowledge, and how these are related. It also includes concepts such as identity, experiences, diversity, and individuals' own cultural thoughts and feelings (Scarino & Liddicoat, 2009).

### **The Internet has a significant effect on cultures.**

The implementation of new technology makes us think that societies will become more and increasingly similar and connected. People use the Internet to carry out important developmental tasks, such as identity formation, social interaction, and the development of autonomy. The impact of the Internet on people is increasingly exponentially (Mesch, 2009). In addition, Internet use can, unfortunately, be associated with problems, such as a lack of technological skills, the consumption of time (Internet addiction), and making poor use of time.

Cross-cultural differences have varying influences on people due to race and ethnicity, gender, physical and mental abilities, and religious and other beliefs; these influence cultural orientations. It is therefore important to identify the effects the Internet has on different groups of people.

## **Method**

### **Aim and Research Questions**

The aim of this study was to know, compare, and describe the contents (characteristics) and preferences of websites that are most frequently visited by groups of university students from Finland and Mexico (whose cultures are different). Additionally, this paper is focused on determining the cross-cultural differences between participants in both countries regarding Internet use.

This research project attempts to answer four questions:

1. What do university students in Mexico and Finland use the Internet for?
2. What are the most visited websites by respondents in both countries?
3. What characteristics do these websites have?
4. Are there cross-cultural differences in Internet use among Mexican and Finnish students?

### **Research Context**

The research context is higher education in Finland and Mexico. Finland is located in Europe's north-eastern region, and it shares a border with Russia to the east, the Gulf of Finland and Estonia to the south, the Gulf of Bothnia and Sweden to the west, and Norway to the north and northwest. The Finnish education system is comprised of the following: 1) one year of voluntary pre-primary education, 2) a nine-year basic education (comprehensive school), 3) upper secondary education, comprised of general education and vocational, and 4) higher education provided by universities and polytechnic colleges (bachelors, masters, and doctoral studies). The entire

educational system is provided free of charge by the state (Ministry of Education and Culture of Finland et al., 2014).

Mexico is located in North America, and it shares a border with the United States to the north, Guatemala and Belize to the south-east, the Gulf of Mexico and Caribbean Sea to the east, and the Pacific Ocean to the west. The Mexican educational system is comprised of the following: 1) two years of pre-primary education, 2) six years of basic education (primary), and 3) three years of secondary education. Pre-primary, primary and secondary are denominated as basic education, which is compulsory; this education is provided for free by the state. In addition, 4) upper secondary education is provided after secondary education (high school), and 5) higher education consists of four types of institutions: universities, technical institutes, colleges, and technical universities (bachelors, masters, and doctoral studies) (Secretariat of Public Education, 2014).

### **Internet penetration**

The population of Finland is about 5.4 million people; in Finland, 92.4 individuals per 100 people can access the Internet via some device type (computer or mobile) and connection, according to the statistics of the World Bank in 2014. In the case of Mexico, its population was about 123 million people in 2014. In Mexico, 44.4 individuals have access to the Internet per 100 people. In summary, there is a notable difference between both countries in terms of access to the Internet; in Finland, the number of people who can access the Internet is quite high, while in Mexico, less than half of population can access the Internet (The World Bank, 2014).

### **Participants**

Volunteer university students (n = 60) took part in this study. The Finnish student participants (n = 30) were from the Faculty of Education (University of Oulu, Finland). Questionnaires were handed out to students at the University of Oulu. In Mexico, the surveys were conducted in the Faculty of Agriculture (Department of Biology) at the Autonomous University of Nayarit; student population (n = 30). In Finland, 73.3% of participants were between 20 and 29 years old. Only 26.7% of respondents were between 30 and 44 years old. In Mexico, 96.7% of respondents were aged between 19 and 27 years old. Only one respondent was between 28 and 31 years old. In this research, 73.3% of Finnish students were female, and 26.7% were male. Also, 56.7 % of Mexican students were male, and 43.3 % were female.

### **Questionnaire**

Questionnaires are a major tool of inquiry for teachers, sociologists, and other social scientists. They can provide information about people's attributes, such as their age, gender, social characteristics, etc. (Buckingham & Saunders, 2004). In order to find answers to the research questions of this study, a questionnaire was developed that consisted of questions to enable the students to provide information. University student volunteers were requested to complete these questionnaires. There were a total of twelve questions, and the questionnaires were written in English. In addition, we added some comment boxes so that the respondents could provide personal responses to any specific question. The main idea of these questionnaires was to identify and describe Internet use by students in Finland and Mexico. The individual questionnaires contained the following questions: (1) How often do you access the Internet? (2) How many hours do you spend surfing the Internet per day? (3) Where do you use the Internet most often? (4) How often do you use the Internet to

escape feelings of depression, moodiness, or nervousness? (5) When you access the Internet where do you prefer to be? (6) Do you prefer having online friends to real friends? (7) What do you use the Internet for? (8) What kind of Internet sources do you use? (9) What browser do you use? (10) What search engine do you use? (11) What are the websites you most often visit? (12) What are the characteristics of these websites? (See Appendix A for more information on the questionnaires).

## Data analysis

Based on the questionnaires, as a next step, we have conducted this research project using descriptive methods, measuring and obtaining frequencies and percentages from the answers to the survey questions. These analyses were conducted with IBM SPSS Statistics 22. This process enables us to examine and describe Internet use in accordance with the most-visited websites and contents for Finnish respondents and Mexican students. The research findings from the analysis of the questionnaires are presented and interpreted in the following section.

## Results

Table 1 presents the frequencies and percentages of the answers of respondents (Finland and Mexico) to questions (1), (2), and (3).

Finland's results			Mexico's results		
How often do you access the Internet? (n = 30)			How often do you access the Internet? (n = 30)		
	Frequency	Percent		Frequency	Percent
Every day	30	100%	Every day	30	100%
Several times a week	0	0	Several times a week	0	0
Once a week	0	0	Once a week	0	0
Daily Internet usage of respondents (n = 30)			Daily Internet usage of respondents (n = 30)		
	Frequency	Percent		Frequency	Percent
More than 8 hours	10	33,3 %	2 - 5 hours	14	46,7 %
5 - 8 hours	9	30 %	Less than two hours	10	33,3 %
2 - 5 hours	8	26,7 %	5 - 8 hours	5	16,7 %
Less than two hours	3	10 %	More than 8 hours	1	3,3 %
Where do you use the Internet most often? (n = 30)			Where do you use the Internet most often? (n = 30)		
	Frequency	Percent		Frequency	Percent
Home	25	83,3 %	Home	23	76,6 %
School	5	16,7 %	Other	3	10 %
Library	0	0 %	School	2	6,7 %
Other	0	0 %	Library	2	6,7 %

Table 1: Descriptive methods (access to the Internet, daily Internet usage, and the location of Internet access)

As expected, there are some similarities and differences between the answers of the Finnish respondents and Mexican students. For instance, 33.3% of Finnish respondents answered that they spent 'more than 8 hours' using the Internet per day, while in Mexico, the most-mentioned amount of time spent on the Internet was between '2 and 5 hours' per day (46.7%). The results indicate that Finnish people use the Internet more per day.

Additionally, 83.3% of Finnish students indicated that they prefer to access the Internet at home. The results in Mexico were very similar (76.6%). This shows that people in both countries prefer to access the Internet at home. In addition, it was very clear that all respondents from both countries accessed the Internet every day.

Table 2 shows the results regarding respondents' feelings about using the Internet to escape feelings of depression, moodiness, or nervousness (question 4).

Escape feelings such as depression or nervousness (n =30)			Escape feelings such as depression or nervousness (n =30)		
	Finland's results			Mexico's results	
	Frequency	Percent		Frequency	Percent
Rarely	13	43, 3 %	Rarely	12	40 %
Never	10	33, 3 %	Never	11	36, 7 %
Occasionally	5	16, 7 %	Occasionally	4	13, 3 %
Often	2	6, 7 %	Often	3	10 %

Table 2 Results regarding escaping feelings of depression, moodiness, or nervousness (frequencies and percentages)

The Finnish and Mexican respondents indicated that they rarely used the Internet to escape such feelings. It is notable that 23 percent of students in both countries reported escaping such feelings occasionally or often. There was some degree of similarity within the results for this category.

Table 3 illustrates the findings regarding preferences in accessing the Internet and having online friends or real friends (questions 5 and 6).

When you access to Internet, do you prefer to be? (n = 30)					
	Finland's results			Mexico's results	
	Frequency	Percent		Frequency	Percent
sometimes alone, sometimes with friends	27	90 %		21	70 %
always alone	3	10 %		9	30 %
always with friends	0	0		0	0

  

Preferences to have online friends or real friends (n = 30)			Preferences to have online friends or real friends (n = 30)		
online friends or real friends	Frequency	Percent	online friends or real friends	Frequency	Percent
never	25	83.3 %	never	21	70 %
yes	3	10 %	sometimes	8	26, 7 %
sometimes	2	6.7 %	yes	1	3, 3 %



*Table 3 Results regarding preferences in Internet access and having online friends or real friends (frequencies and percentages)*

Ninety percent of Finnish respondents said that they prefer to be ‘sometimes alone, sometimes with friends’ when they visit the Internet; no one answered ‘always with friends,’ and few people responded with ‘always alone.’ The Mexican students mostly indicated they preferred to use the Internet ‘sometimes alone, sometimes with friends’; the second most frequent response was ‘always alone,’ and no one answered ‘always with friends.’ According to the survey, the results are very similar to those of Finnish students. The difference is that Mexican students responded with ‘always alone’ more often. Also, the majority of people in both groups ‘always prefer to have real friends over online friends.’

Table 4 indicates the results for question (7).

What do you use the Internet for?					
Frequency (Percent) Finland's results					
Internet use	often	Internet use	sometimes	Internet use	never
Online Shopping	0 (0 %)	Studies	2 (6,7 %)	Get information (literature, news, science)	0 (0 %)
Playing games	0 (0 %)	Use a social networking, chatting	3 (10 %)	Send or receive email	0 (0 %)
Work / Business	3 (10 %)	Get information (literature news, science)	4 (13,3 %)	Studies	0 (0 %)
Downloading or watching music, videos, films etc.	6 (20,0 %)	Other	10 (33,3 %)	Use a social networking, chatting	0 (0 %)
Other	9 (30 %)	Playing games	13 (43,3 %)	Check the weather	1 (3,3 %)
Check the weather	11 (36,7 %)	Check the weather	18 (60,0 %)	Downloading or watching music, videos, films etc.	4 (13,3 %)
Get information (literature, news, science)	26 (86,7 %)	Downloading or watching music, videos, films etc.	20 (66,7 %)	Work / Business	7 (23,3 %)
Use a social networking, chatting	27 (90,0 %)	Work / Business	20 (66,7 %)	Online Shopping	9 (30 %)
Studies	28 (93,3 %)	Online Shopping	21 (70,0 %)	Other	11 (36,7 %)
Send or receive email	29 (96,7 %)			Playing games	17 (56,7 %)
Frequency (Percent) Mexico's results					
Internet use	often	Internet use	sometimes	Internet use	never
Online Shopping	0 (0 %)	Other	0 (0 %)	Other	0 (0 %)
Other	0 (0 %)	Studies	4 (13,3 %)	Studies	0 (0 %)
Work / Business	1 (3,3 %)	Get information (literature, news, science)	6 (20,0 %)	Get information (literature, news, science)	0 (0 %)
Playing games	1 (3,3 %)	Online Shopping	7 (23,3 %)	Use a social networking, chatting	0 (0 %)
Check the weather	3 (10 %)	Check the weather	8 (26,7 %)	Send or receive email	0 (0 %)
Send or receive email	11 (36,7 %)	use a social networking, chatting	9 (30 %)	Downloading or watching music, videos, films etc.	2 (6,7 %)
Downloading or watching music, videos, films etc.	13 (43,3 %)	Work / Business	13 (43,3 %)	Playing games	13 (43,3 %)
Use a social networking, chatting	21 (70,0 %)	Downloading or watching music, videos, films etc.	15 (50,0 %)	Work / Business	16 (53,3 %)
Get information (literature, news, science)	24 (80,0 %)	Playing games	16 (53,3 %)	Check the weather	19 (63,3 %)
Studies	26 (86,7 %)	Send or receive email	19 (63,3 %)	Online Shopping	23 (76,7 %)

*Table 4 Findings regarding Internet use by participants in this study*

Finnish students mentioned that they often preferred to use the Internet to obtain information (literature, news, etc.), send or receive emails, study, and engage in social networking. The respondents indicated that they sometimes accessed the Internet for online shopping; work/business; downloading or watching movies, music, etc.; and checking the weather. They never reported, as the main answer, using the Internet for playing games. Some people indicated that they visit the Internet to do other things. The Mexican respondents reported that they often access the Internet to obtain information, study, and engage in social networking. These students commented that they sometimes use the Internet for sending or receiving emails, playing games,

and downloading and watching movies. They do not use the Internet for work/business, online shopping, checking the weather, etc. According to the data, there are some similarities regarding Internet use, such as obtaining information, sending or receiving emails, studying, and social networking. The differences were mainly in the areas of online shopping, work/business, checking the weather, playing games, and the 'other' category.

Table 5 Shows student perceptions about Internet use to access Internet sources (question 8).

<b>Respondents' preferred Internet sources for studying</b>					
<b>Frequency (Percent) Finland's results</b>					
Sources	often	Sources	sometimes	Sources	never
Online courses	8 (26,7 %)	Wikis, blogs etc.	15 (50,0 %)	Wikis, blogs etc.	0 (0 %)
Online encyclopedias	9 (30,0 %)	Databases	15 (50,0 %)	Online encyclopedias	0 (0 %)
Databases	14 (46,7 %)	Online courses	20 (66,7 %)	Databases	1 (3,3 %)
Wikis, blogs etc.	15 (50,0 %)	Online encyclopedias	21 (70,0 %)	Online courses	2 (6,7 %)

  

<b>Respondents' preferred Internet sources for studying</b>					
<b>Frequency (Percent) Mexico's results</b>					
Sources	often	Sources	sometimes	Sources	never
Online courses	0 (0 %)	Online courses	9 (30,0 %)	Databases	0 (0 %)
Databases	11 (36,7 %)	Wikis, blogs etc.	13 (43,3 %)	Online encyclopedias	1 (3,3 %)
Online encyclopedias	14 (46,7 %)	Online encyclopedias	15 (50,0 %)	Wikis, blogs etc.	3 (10 %)
Wikis, blogs etc.	14 (46,7 %)	Databases	19 (63,3 %)	Online courses	21 (70,0 %)

*Table 5 Findings for studying on the Internet (Internet sources)*

The following category relates to Internet use for study. The Finnish respondents mentioned that they 'often' use learning resources, such as wikis, blogs, etc., and 'sometimes' use online courses, online dictionaries, and databases. The Mexican respondents reported that they 'often' use wikis, blogs, etc. and 'sometimes' use databases and online dictionaries for study purposes. The main response was 'never' regarding online courses. This indicates that there is a similarity regarding the use of wikis, blogs, online courses, and online dictionaries. The major difference was related to the category of online courses; the two groups of respondents provided opposite answers.

Table 6 presents the findings regarding the most-used web browsers and search engines for Finnish and Mexican students (questions 9 and 10).

---

**What browser do you use?**

Finland's results			Mexico's results		
Web browser	Frequency	Percent	Web browser	Frequency	Percent
Firefox	11	36,7 %	Google chrome	18	60 %
Google chrome	9	30 %	Firetox	6	20 %
Safari	6	20 %	Internet Explorer	6	20 %
Internet Expiorer	3	10 %			
Opera	1	3,3 %			

---

**What search engine do you use?**

Finland 's results			Mexico's results		
Search engine	Frequency	Percent	Search engine	Frequency	Percent
Google	27	90 %	Google	28	93,3 %
Bing	3	10 %	Ask	1	3,3 %
			Metacrawler	1	3.3 %

---

*Table 6 Results for web browser and search engines*

We found some similarities and differences between the responses of the Finnish and Mexican students. It is important to establish respondent preferences for web browsers and search engines because these applications enable students to search for content on the Internet. In response to the question about web browsers, Finnish student respondents reported that 36.7% used Firefox to search for information on the Internet. Google Chrome was the second most preferred option, followed by Safari and Internet Explorer (one student preferred Opera). In the case of the Mexican student respondents, the most popular browser was Google Chrome (60%), followed by Firefox and Internet Explorer with the same number of mentions. No additional browsers were mentioned by Mexican students. This indicates that the Finnish student respondents tended to use more web browsers than the Mexican student participants. In addition, in both countries, the popular web browsers are the same; only the orders of preference are slightly different. According to the questionnaire results regarding search engines, the majority of students from Finland use Google, and only three people mentioned Bing as their preferred option. The Mexican findings show that 93.3% of students said that Google was the best option for them, and Ask and Metacrawler were mentioned only once. This shows that Google was preferred as the best option for students in both countries; this result is clear and concise.

Table 7 indicates the websites that were most frequently accessed by respondents in both countries (question 11).

Finland's results			Mexico's results		
Websites most visited by respondents (n = 30)			Websites most visited by respondents (n = 30)		
129 responses from students			104 responses from students		
	Frequency	Percent		Frequency	Percent
Facebook	22	17,1 %	Facebook	27	26 %
University of Oulu	20	15,5 %	YouTube	23	22,1 %
Google	19	14,7 %	Google	13	12,5 %
MSN	9	7,0 %	MSN	12	11,5 %
HS	6	4,7 %	Wikipedia	7	6,7 %
YouTube	6	4,7 %			

**Top five websites most visited by students**

*Table 7 Frequency and percentages for the websites visited most frequently by respondents*

These websites are the most preferred websites according to the students; we mention the responses per country and their content. In Finland, Facebook was the most preferred (17.1%). The second was the University of Oulu's site (15.5%), followed by Google (14.7%), MSN (7%), and HS and YouTube with 4.7%. According to the results from the Mexican student participants, Facebook was the most popular (26%). The second most popular was YouTube (22.1%), followed by Google (12.5%), MSN (11.5%), and Wikipedia (6.7%). This shows that the most preferred website is the same in both countries (Facebook). This is a social networking website. The second most popular website in Finland was that of the University of Oulu, which is related to student studies. In the case of the Mexican student participants, the second most popular site was YouTube, which is the most popular website in the world and shows various types of videos. In Finland and Mexico, the next option was the same, Google, which is a website with multiplatform applications, such as Google Drive. The fourth most popular website was MSN in both countries. This website is used for sending and receiving emails and checking information such as news and gossip, among other things. The next most popular sites in Finland were HS and YouTube. The first is a newspaper, and the second was mentioned above. In the case of Mexico, the next most popular site was Wikipedia. It is a popular website which is used to search for all types of information.

Regarding the characteristics of these websites, as seen in the responses to question (12), websites about social networking (Facebook) were the most popular, with percentages of 17.1% (Finland) and 26% (Mexico). Sending and receiving emails, gossip and news (e.g., MSN), videos (YouTube), multiplatform applications (e.g., Google), educational content and universities (e.g., University of Oulu), and blogs and wikis (e.g., Blogilista and Wikipedia) were the most frequently accessed websites in terms of content characteristics. There are many similarities between both countries. In addition, most people seldom visit websites related to sports or playing games. Additionally, almost no one visited websites related to religion.

There were, however, notable differences, such as the fact that some people in Finland visited websites reporting the weather (Ilmatieteenlaitos). In Mexico,

no one mentioned a similar site. The Finnish student participants said that they visit newspapers whereas this was not the case for Mexican student participants. Students from Mexico visited websites related to Japanese anime, while Finnish student participants did not. Similarly, Mexican student participants visited online shopping sites (e.g., Mercado libre), while in Finland, this was not as common. The Mexican student respondents accessed websites such as Skype and websites for watching or downloading movies and TV series more frequently than those in Finland. The final observation was that accessing the website of the respondent's home university was common among Finnish respondents, while in Mexico, the university website was used, but not frequently. In addition, websites with blogs and wikis are very popular in Finland, while in Mexico, the respondents showed a preference for Wikipedia.

## **Discussion**

This study has identified cultural similarities regarding websites accessed by students from Finland and Mexico; Facebook is the most popular website visited by students in both countries. This means that they prefer, and have an interest in, sharing ideas, information, pictures, and social interactions (social networking). This is in accordance with Ross et al. (2009), who indicates that by using social networks, individuals may find others with similar interests for both romantic and social purposes. In the typology developed by Meyen et al. (2010), the respondents belong to "companions" category, because they have favourite websites such as Facebook, where the students interact socially. In addition, these findings are related to the work of Movius et al. (2010), in which he describes how social networks have a significant impact on communication patterns in contemporary society.

Websites containing videos, such as YouTube, are very popular, as well as websites devoted to gossip, news, and sending emails, such as MSN; websites containing blogs, such as Blogilista; and websites of multiplatform applications, such as Google. This demonstrates the global influence of Internet use, which may even represent a form of cultural imperialism (Castells et al., 2009). Some of these applications have useful functions, such as Google (a set of applications); share scientific or positive information within groups or blogs, such as on Facebook or wikis; or contain tutorials or guides in videos, such as YouTube. The cultural approach of the respondents with regard to religion was clear. These people do not visit these types of websites or those dedicated to sport. We also found that participants had a very positive attitude towards learning through Internet use (study reasons) using all types of available resources.

Interestingly, almost one-quarter of the students reported escaping feelings such as depression or nervousness by using the Internet. This suggests that these students find a safe environment by accessing the Internet, which affects them positively. This is because the Internet may provide a medium that allows freedom, reduces stress, increases social support and social integration, improves the mental and psychological well-being of individuals, and creates new ties and strong feelings that otherwise would not exist (Amichai-Hamburger et al., 2007; Stepanikova et al. (2010).

Common interests may develop due to social networks such as Facebook. These social networks are notable communication tools within the student population and academic institutions, as described by Paul et al. (2012). Finland and Mexico are countries with high Internet penetration and similar social norms. Therefore, as was cited by Huang (2009), people in countries with similar social norms access similar websites. In addition, for example, the respondents in this study accessed the Internet for all types of activities (e.g., studies, social interactions, etc.). Today, Internet use is particularly relevant to

every aspect of their lives, both professionally and socially (Amichai-Hamburger et al., 2009; Amichai-Hamburger et al. (2002).

Some cross-cultural differences were identified by comparing the characteristics of the most-visited websites and Internet use by participants from Finland and Mexico. This study found that the respondents from Finland tended to perform new processes or implement their ideas more often (innovation). For example, in the case of the use of web browsers, the students from Finland use a variety of browsers, while participants from Mexico use only a few. As another example, Finnish students visit and use websites where they interact and develop creative applications more often (e.g., the University of Helsinki and wikis). In the case of Mexico, these processes are used infrequently and with some restrictions. Other differences that we have identified include the use of media in the form of newspapers and weather channels. This was identified in the students from Finland. The Mexican respondents indicated that they did not check this sort of material frequently.

## **Conclusion**

This research project has examined in detail the effects that the Internet has on various groups of people. As researchers, our intention is to ensure the implementation of improvement measures for Internet use among students according to their needs. Therefore, this study suggests that the Internet should be used as a learning environment in the educational and learning processes and that emphasis should be placed on developing University websites that provide multifaceted interaction. In addition, it is important that we understand that the Internet is a technological tool that should enable us to grow as people and societies. Individuals must be able to identify and use its features properly. The tool facilitates the acquisition of considerable knowledge (e.g., science), access job opportunities, and information that is hidden or censored regarding political issues, among other things. We also recommend that future studies should consider how the Internet impacts students of all ages (e.g., their feelings and emotions) and focus on sensitizing parents to monitoring the content that their children are exposed to on the Internet. In addition, this study should be repeated in order to determine whether the trends it has found remain constant or change.

We would like to mention some potential limitations that may have influenced the study results. First, the respondents in this research project were from different faculties; in Mexico, the respondents were from the Faculty of Agriculture, while the participants from Finland were from the Faculty of Education. This could have impacted the research findings, due to differences in the participants' chosen interests given their respective backgrounds. However, our chief concern in this research project was to involve students from one university in Mexico and from another in Finland, without giving undue weight to (considering) whether these students were from different faculties.

Second, the rather small number of respondents in this research project may suggest results that cannot be generalized. This exploratory study only can provide some interesting preliminary cross-cultural differences. Third, the possibility that some students felt that not all website content was culturally acceptable in their society cannot be ruled out, and this in turn may account for their decision to access only commercial and traditional websites rather than others.

## **Acknowledgments**

We would like to acknowledge the Autonomous University of Nayarit and Dr. Rocío Vega-Frutis for practical support in carrying out this research in Mexico.

## References

- Amichai-Hamburger, Y. (2002). Internet and personality. *Computers in Human Behavior*, 18 (1), 1-10.
- Amichai-Hamburger, Y., & Furnham, A. (2007). The Positive Net. *Computers in Human Behavior*, 23 (2), 1033-1045.
- Amichai-Hamburger, Y., & Barak, A. (2009). Internet and well-being. In Y. Amichai-Hamburger (Ed.), *Technology and Psychological well-being* (pp. 34–76). Cambridge, UK: Cambridge University Press.
- Amichai-Hamburger, Y., & Hayat, Z. (2011). The impact of the Internet on the social lives of users: A representative sample from 13 countries. *Computers in Human Behavior*, 27 (1), 585-589.
- Anderson, T., & Elloumi, F. (2004). Toward a Theory of Online Learning. In T. Anderson (Ed.), *Theory and practice of online learning* (pp. 33–60). Athabasca, Canada: Athabasca University Press.
- Castells, M. (2009). *Communication Power*. New York: Oxford University Press.
- Colley, A., & Maltby, J. (2008). Impact of the Internet on our lives: Male and female personal perspectives. *Computers in Human Behavior*, 24 (5), 2005-2013.
- Curtis, W., & Pettigrew, A. (2009). *Learning in contemporary culture: Perspectives in Education Studies*. Exeter, UK: Learning Matters.
- Dillenbourg, P., Järvelä, S., & Fisher (2009). The evolution of research on computer-supported collaborative learning: From design to orchestration. In N. Balacheff, S. Ludvigsen & T. De Jong, A. Lazonder, & S. Barnes (Eds.), *Technology-Enhanced Learning: Principles and Products* (pp. 3–19). Amsterdam: Springer.
- Hofstede, G., Hofstede, G. J., & Minkow, M. (2010). *Cultures and Organizations: Software of the Mind: Intercultural Cooperation and Its Importance for Survival*. New York: McGraw-Hill.
- Huang, C. Y., & Chang, S. S. (2009). Commonality of Web site visiting among countries. *Journal of the American Society for Information Science and Technology*, 60(6), 1168–1177.
- Johnson, T. P. (1991). Mental health, social relations, and social selection: A longitudinal analysis. *Journal of Health and Social Behavior*, 32(4), 408-423.
- Lederach, J. P. (1995). *Preparing for peace: Conflict transformation across cultures*. Syracuse, NY: Syracuse University Press.
- Markus, H. R., & Hamedani, M. G. (2007). Sociocultural Psychology: The dynamic interdependence among self-systems and social systems. In S. Kitayama & D. Cohen (Eds.), *Handbook of Cultural Psychology* (pp. 3-39). New York, NY: Guilford.
- McKenna, K. Y. A., Green, A. S., & Gleason, M. E. J. (2002). Relationship formation on the Internet: What's the big attraction? *Journal of Social Issues*, 58 (1), 9-31.
- Mesch, G. (2009). The Internet and youth culture. *The Hedgehog Review*, 11(1), 50-60.
- Meyen, M., Pfaff-Rüdiger, S., Dudenhöffer, K., & Huss, J. (2010). The Internet in everyday life: A typology of Internet users. *Media, Culture & Society*, 32 (8), 73-882.
- Ministry of Education and Culture of Finland (2014). Religious communities. Retrieved from [http://www.minedu.fi/OPM/Kirkollisasat/uskonolliset\\_yhdyskunnat/?lang=en](http://www.minedu.fi/OPM/Kirkollisasat/uskonolliset_yhdyskunnat/?lang=en).
- Movius, L. (2010). Cultural globalisation and challenges to traditional communication theories. *Journal of Media and Communication*, 2(1), 6-18.
- Nadkarni, A., & Hofmann, S. (2012). Why do people use Facebook? *Personality and Individual Differences*, 52 (3), 243–249.
- Paul, J. A., Baker, H. M., & Cochran, J. D. (2012). Effect of online social networking on student academic performance. *Computers in Human Behavior*, 28 (6), 2117–2127.



- Prasad, A., & Prasad, P. (2006). Global transitions: The emerging new world order and its implications for business and management. *Business Renaissance Quarterly*, 1(3), 91–113.
- Robinson, J. P., Kestnbaum, M., Neustadt, A., & Alvarez, A. (2000). Mass media and social life among Internet users. *Social Science Computer Review*, 18(4), 490-501.
- Ross, C., Orr, E. S., Sisic, M., Arseneault, J. M., Simmering, M. G., & Orr, R. R. (2009). Personality and motivations associated with Facebook use. *Computers in Human Behavior*, 25(2), 578-586.
- Ryan, T., & Xenos, S. (2011). Who uses Facebook? An investigation into the relationship between the Big Five, shyness, narcissism, loneliness, and Facebook usage. *Computers in Human Behavior*, 27 (1), 1658-1664.
- Scarino, A., & Liddicoat, A. J. (2009). *Teaching and learning languages: A Guide*. Melbourne, Australia: Australian Government Department of Education, Employment and Workplace Relations.
- Secretariat of Public Education (2014). Structure of the education system in Mexico. Retrieved from [http://www.sep.gob.mx/work/models/sep1/Resource/1447/1/images/sistema\\_edumex09\\_01.pdf](http://www.sep.gob.mx/work/models/sep1/Resource/1447/1/images/sistema_edumex09_01.pdf)
- Stepanikova, I., Nie, N., & He, X. (2010). Time on the Internet at home, loneliness, and life satisfaction: Evidence from panel time-diary data. *Computers in Human Behavior*, 26 (3), 329-338.
- The World Bank (2014). Internet users. Retrieved from <http://data.worldbank.org/indicator/IT.NET.USER.P2>.
- Weinstein, A., & Lejoyeux, M. (2010). Internet addiction or excessive Internet use. *The American Journal of Drug and Alcohol Abuse*, 36 (5), 277-283.
- Yu, J. J., Kim, H., & Hay, I. (2013). Understanding adolescents' problematic Internet use from a social/cognitive and addiction research framework. *Computers in Human Behavior*, 29 (6), 2682-2689.
- Zimmerman, B. J. (1989). A social cognitive view of self-regulated academic learning. *Journal of Educational Psychology*, 81(3), 329-339.

## Appendix A

Contents of websites (Internet) questionnaire

*Please complete the survey, mark your responses "x" (close questions) and write your responses into the box (open questions)*

1) How often do you access the Internet?

Once a week	Several times a week	Every day
-------------	----------------------	-----------

2) How many hours do you spend surfing the Internet per day?

Less than two hours	2 - 5 hours	5 - 8 hours	More than 8 hours
---------------------	-------------	-------------	-------------------

3) Where do you use the Internet most often?

Home	School	Library
------	--------	---------



Other (please specify)

--

4) How often do you use the Internet to escape feelings of depression, moodiness or nervousness?

Never	Rarely	Occasionally	Often
-------	--------	--------------	-------

5) When you access the Internet where do you prefer to be?

Always alone	Sometimes alone, sometimes with friends	Always with friends
--------------	---	---------------------

6) Do you prefer having online friends to real friends?

Yes	Sometimes	Never
-----	-----------	-------

7) What do you use the Internet for?

	Often	Sometimes	Never
Get information (literature, news, science etc.)			
Send or receive email			
Online Shopping			
Work / Business			
Studies			
Playing games			
Downloading music, video, films etc.			
Use a social networking, chatting			
Check the weather			
Other activities			

If you use the Internet for “other activities” in the last question, please specify

--

8) What kind of Internet sources do you use?

	Often	Sometimes	Never
Databases			
Online courses			
Online encyclopedias, dictionaries etc.			
Wikis, blogs			
Others			

If you use other sources, please specify

--

9) What browser do you use? (E.g., Mozilla Firefox and Internet Explorer)

--

10) What search engine do you use (E.g., Google, and Yahoo)

--

11) What are the websites you most often visit? (Please list your top five websites)


12) What are the characteristics of these websites?

--

