

**GENDER DIFFERENCES ON THE PERCEIVED EFFECTS
OF COMPUTER UTILIZATION IN KNOWLEDGE,
COMMUNICATION SKILLS, SOCIAL VALUES AND
HEALTH OF STUDENTS**

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ABSTRACT

Gender plays an important role in defining the character and the behaviour of the end-users of communication media. This study is another attempt to determine the gender differences of Filipino students enrolled in Lyceum of the Philippines University – Batangas City on the perceived influence of computer usage in the acquisition of knowledge, enhancement of communication skills and social values as well as its impact to physical and psychological health. Results showed that female students have longer hours of computer utilization and they have more reasons of using it for educational purpose than male students. Female students have also significantly higher perception regarding the effects of computer utilization to their knowledge, communication skills and social values compared to male students. Female students have higher tendency of experiencing headaches, neck pain, shoulder pain than male students could experience.

Keywords: Gender Differences, Computer Utilization, Knowledge, Communication Skills, Social Values, Health

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Introduction

Internet has a variety of functions like gathering the information needed for school paper, projects and assignments. The usefulness of the computer and the Internet sometimes varies from one user to another and between genders. Some studies showed that male students had more positive perceptions toward computer and web technologies (Liaw, 2002). Students used computers to play computer games especially males (Li & Kirkup, 2007), to download videos, audios and software necessary to satisfy one's interest most especially the males.

Computer connected to the Internet is a useful tool and a good source of news, entertainment and knowledge which students can use to sustain and survive an informed living. It also bonds and forms relationship among people from different areas of the country and even in any part of the world at large. It basically replaces the use of snail mail since the birth of email. Chat rooms were already made available together with Facebook, Twitter, LinkedIn and other sites which are especially designed to form a group or community of people via web. In short, Internet makes the way of life easier and process things faster.

The effect of computer may also vary in gender in the way it helps them to acquire certain skills in enhancing repetitive and routinely operations in the computer. Skills can be measured in varying degrees and it is very important to keep these updated to learn new things from different perspectives. Communication skills are brought about by experiences through exchanging of thoughts and ideas from different people living in various social economic statuses. These are the skills which can be influenced by the use of computer as well as the Internet.

Health is another consideration in determining the differences on gender of the students which could possibly be affected by the computer utilization. Most problems of physical health being experienced by many students are computer – related most especially if they are having long class hours in computer laboratory.

Literature shows that gender plays a key role in understanding the differences in perception towards usefulness of technology and ease of use (Suri & Sharma, 2013). Research generally supports that females have less overall experience with computers and are more likely than males to have negative attitudes towards computers. Although limited, research on Internet experiences

and attitudes has found parallel gender differences, with females reporting lower levels of experience and more negative attitudes (Schumacher & Morahan-Martin, 2001). Past research in gender differences in the overall Internet use has been contradictory. Some asserted men used it more than women, while others asserted there were no gender differences (Kimbrough et al., 2013).

Gender differences on how male and female differ on their reasons of computer utilization and their perceptions on the effect of computer on enhancing their knowledge, communication skills and social values is also the main focus of this study.

Materials and Methods

The descriptive type of quantitative research method was utilized in the study. In quantitative descriptive research, the researcher's purpose is to answer questions about a variable status by creating numerical descriptions of the frequency with which one of the variables occurs (Zulueta and Costales, 2003).

The respondents of the study were 1,035 out of 9,500 or 10.89 percent randomly selected Filipino students enrolled in 10 different colleges at Lyceum of the Philippines University (LPU) in Batangas City. Respondents were chosen based on Stratified Random Sampling technique to ensure that different colleges were adequately represented in the sample with at least 10 percent of the total population of students each college. There were 464 Male students and 584 Females students.

The survey questionnaire used to determine the frequency of computer usage per week and average number of hours per day, years of using computer, reasons of computer utilization, and effects of this utilization to students' knowledge, communication skills, social values and health.

On the part of the instrument regarding the students' health, the respondents were asked to rate the frequency of the 15 cited health problems that could be possible symptoms related to

computer utilization. The respondents were given four (4) options such as: Always, Sometimes, Seldom and Never.

The instrument for determining the reasons of computer utilization and its perceived effect to the enhancement of knowledge, communication skills and social values were tested the reliability using the test-retest method to the student – respondents not included in the study. The researcher administered the pilot testing personally and after a week, the researcher asked the same group to answer again the same set of questions. The computed 0.79 Cronbach – alpha signified that the questionnaire was acceptable based on “rule of thumb” which lies within the range of “Acceptable”.

Survey questionnaires were administered personally by the researcher and some of these were administered by the department secretaries of different colleges during enrolment period. The respondents were informed regarding the main purpose of the study.

The following statistical tools were applied in interpreting the data obtained from the instrument used in the survey, including the frequency count, percentage, weighted mean, rank, Cronbach – alpha for testing the reliability of the instrument, and the reasons of computer usage while Independent Sample T-test was used to determine the differences between male and female respondents.

Results and Discussion

Table 1 presents the difference between male and female students in terms of the frequency of using computer per week, hours per day and number of years of using computer.

Table 1

Difference between Male and Female students in Terms of Computer Utilization

| Utilization | Mean | | Std. Deviation | | t-value | Sig. (2-tailed) |
|----------------|-----------------|-------------------|----------------|--------|---------|-----------------|
| | Male N = 464 | Female N = 584 | Male | Female | | |
| Frequency/week | 3.90 | 4.02 | 1.39 | 1.39 | -1.378 | .168 |

| | | | | | | |
|-----------|------|------|------|------|-----------|------|
| Hours/day | 2.83 | 3.02 | 1.35 | 1.25 | -2.439(*) | .015 |
| Years | 3.12 | 3.26 | 1.26 | 1.16 | -1.884 | .060 |

Filipino female students have significantly longer hours of computer utilization including internet than male students but in the study conducted by Durndell and Haag (2002) in United Kingdom taken some East European sample that males have longer use of the Internet than females. The present and the previous study shows significant differences in the results of whose group is really taking longer hours in the computer. In the case of the Lyceum of the Philippines University, females have longer hours in the computer than males.

The frequency of computer utilization and the number of years of utilizing computer of the students do not vary significantly. This implies that there is a little variation in the mean differences of these variables which is not enough to show considerable distinction between groups. Liaw (2002) emphasized that when students had more years in computer-related experience, they had more positive perceptions to computer and web technologies.

Table 2 reveals the differences on the reasons of computer utilization of male and female students

Female students have significantly higher reasons of using computer for educational purposes than male students. Internet is used mainly for academic purposes by the medicine and health colleges students in Turkey, the same result have obtained from the present study that the foremost reason of the Filipino students in Lyceum of the Philippines University in utilizing computers is also for educational purposes.

They have more tendencies of sending messages using email to their relatives and friends on special occasions and watching videos and hear new sounds rather than buying CDs; to professionally educate themselves in various topics and social issues.

Table 2

Differences on the Reasons of Computer Utilization of Male and Female Students

| Rank | I use computer... | Male N= 464 | Female N= 584 | Total | t-value | Sig. |
|------|---|----------------|------------------|-------|------------|-------|
| 1 | in school for educational purposes | 3.32 | 3.49 | 3.41 | -3.908(**) | 0.000 |
| 2 | to send messages using e-mail to my relatives and friends on special occasions rather than sending letters or special holiday cards. | 3.2 | 3.41 | 3.32 | -4.465(**) | 0.000 |
| 3 | to watch new music videos and hear new sounds rather than buying CDs. | 3.2 | 3.3 | 3.26 | -2.093(*) | 0.037 |
| 4 | to look for the answers to my assignments and projects rather than going to school library | 3.22 | 3.29 | 3.26 | -1.606 | 0.109 |
| 5 | to make new friends and develop relationships using social networking sites like Facebook, Friendster, etc. | 3.22 | 3.28 | 3.25 | -1.184 | 0.237 |
| 6 | to professionally educate myself in various topics and social issues | 3.18 | 3.30 | 3.25 | -2.703(**) | 0.007 |
| 7 | at home to check my social networking site and email accounts | 3.12 | 3.35 | 3.25 | -4.926(**) | 0.000 |
| 8 | to make myself aware of what's happening inside and outside the country through newspapers online | 3.14 | 3.26 | 3.21 | -2.574(*) | 0.010 |
| 9 | to submit my school requirements like assignments and projects to my professors | 3.06 | 3.18 | 3.13 | -2.531(*) | 0.012 |
| 10 | to download application software | 3.16 | 3.09 | 3.12 | 1.446 | 0.149 |
| 11 | to watch online movies rather than going to cinemas | 3.03 | 2.95 | 2.98 | 1.533 | 0.126 |
| 12 | at my friends house to make assignments | 2.92 | 2.92 | 2.92 | -0.048 | 0.961 |

| | | | | | | |
|-----------------------|--|-------------|-------------|-------------|-----------|-------|
| | and projects | | | | | |
| 13 | to communicate with my friends rather than seeing them in person. | 2.84 | 2.78 | 2.81 | 0.969 | 0.333 |
| 14 | in computer shops to play video games with my friends | 2.66 | 2.11 | 2.35 | 8.981(**) | 0.000 |
| 15 | during my spare time rather than going out with family and friends. | 2.37 | 2.23 | 2.29 | 2.564(*) | 0.010 |
| 16 | to say "I Love You" to my love ones rather than saying it personally. | 2.35 | 2.22 | 2.28 | 2.258(*) | 0.024 |
| 17 | in making courtship and/or working out with relationship | 2.52 | 2.02 | 2.24 | 9.080(**) | 0.000 |
| 18 | to play online games alone rather than to play with my friends. | 2.41 | 2.05 | 2.21 | 6.247(**) | 0.000 |
| 19 | to buy new clothes and shop online rather than going to malls. | 2.04 | 2.06 | 2.05 | -0.343 | 0.732 |
| 20 | to personally engaged in an online relationships over real life relationships. | 2.02 | 1.64 | 1.81 | 6.902(**) | 0.000 |
| Composite Mean | | 2.85 | 2.79 | 2.82 | | |

Female students have more tendencies of using computer at home to check their accounts in social networking sites and email; to make them aware of what's happening inside and outside the country through newspapers online; and to submit their school requirements like assignments and projects to their professors compared to male students. Female and male students report comparable amounts of computer usage for their studies (Imhof et al., 2007) but based on the result of the present study it shows that female respondents have significantly used the computer and the internet for educational purposes higher than males.

The Internet skills of girls in Netherland as result of study conducted by Kuhlemeier and Hemker (2010) were hardly less developed than those of boys. Furthermore, women make less intense use of technology and computers than their male counterparts according to Sáinz and López-Sáez' (2010) study conducted in Spain. But in the result of this present study conducted in the

Philippines showed that there are some areas that females have significantly higher reasons in the way they utilized the computer and the internet. Boys and girls used the Internet for significantly different purposes suggesting that the Internet played different roles for boys and girls in Taiwan (Tsai & Tsai, 2010) as well as in the case of the students in Lyceum of the Philippines University.

Male and female do not differ significantly when using the computer to look for the answers to their assignments and projects and to make new friends and develop relationships using social networking sites like Facebook, Twitter, etc; to watch online movies rather than going to cinemas; using computer at their friends house to make assignments and projects; to communicate with my friends rather than seeing them in person; and to buy new clothes and shop online rather than going to malls. There was no significant gender difference in students' Internet using experience. (Tsai & Tsai, 2010)

Gender differences in computer experience and skill levels had diminished in some areas (Schumacher & Morahan-Martin, 2001). Likewise, women would conform to a higher degree than men in the internet had received no support from the study conducted by Rosander and Eriksson (2012).

Result showed no significant difference in the way respondents download application software in the internet whereas in the study of Birgin, Çoker and Çatlıoğlu (2010) which was done in Turkey, significant difference was found favouring males in terms of using it with the aims of entertainment and downloading programs. This implies that different results could be generated using different set of respondents in other settings comparing the results from Turkey and Philippines.

Male students have more tendencies of using computer in Internet shops to play online games with their friends. Men played more computer games than women (Li & Kirkup, 2007). During their spare time they also prefer to use computer rather than going out with family and friends; to say "I Love You" to their love ones rather than saying it personally; in making courtship and/or working out with relationship; to play online games alone rather than to play with their friends;

and to personally engaged in an online relationships over real life relationships. Male students seem to have had a more positive attitude toward the Internet-related Toy and Telephone dimensions than did female students (Chou, Wu & Chen, 2011).

Table 3 presents the differences on the effect of computer utilization in terms of enhancing the knowledge of male and female students

Table 3
Differences on the Effect of Computer Utilization in Terms of Knowledge

| Rank | Knowledge By using computer, it... | Gender | | | t-value | Sig. |
|------|--|-------------|-------------|-------------|------------------|-------------|
| | | Male | Female | Total | | |
| 1 | enhances my interest and knowledge towards my course | 3.42 | 3.47 | 3.45 | -1.259 | 0.208 |
| 2 | enhances my ability to do research projects and assignments with enthusiasm | 3.33 | 3.44 | 3.39 | -2.715(**) | 0.007 |
| 3 | enhances my ability to solve problems related to course being taken | 3.29 | 3.34 | 3.32 | -1.185 | 0.236 |
| 4 | helps me explore the world and be globally competitive individual | 3.25 | 3.35 | 3.31 | -2.382(*) | 0.017 |
| 5 | enhances my proficiency to demonstrate the technical skills related to course | 3.25 | 3.28 | 3.26 | -0.608 | 0.544 |
| 6 | keeps me updated in terms of entertainment, fashion and sports | 3.19 | 3.30 | 3.25 | -2.584(*) | 0.01 |
| 7 | enhances my ability to excel in academics | 3.21 | 3.28 | 3.24 | -1.627 | 0.104 |
| 8 | helps me think critically | 3.18 | 3.18 | 3.18 | 0.123 | 0.902 |
| 9 | enhances my knowledge through reading daily news and trivia | 3.11 | 3.20 | 3.16 | -2.081(*) | 0.038 |
| 10 | increases the amount of time spending on my studies because of the internet | 2.97 | 3.04 | 3.01 | -1.37 | 0.171 |
| | Composite Mean | 3.22 | 3.29 | 3.26 | -2.076(*) | .038 |

Both groups of students believed that in using computer, it enhances their interest and knowledge towards their course with the highest result of perceived effect. They also both agreed that in using computer, it enhances their ability to solve problems related to course being taken; enhances their proficiency to demonstrate the technical skills related to course; enhances their ability to excel in academics; helps them think critically. In increasing the amount of time spending on their studies considered as the last indicator with the least effect.

Female students have perceived significantly higher in the effect of using computer in enhancing their ability to do research projects and assignments with enthusiasm; helping them explore the world and be globally competitive individual; keeping them updated in terms of entertainment and sports ; and enhancing their knowledge through reading daily news and trivia.

The result of this study contradicted the findings of the study conducted by the group of Birgin, Çoker & Çatlıoğlu, (2010) which shows no significant difference in terms of accessing knowledge, using the Internet with the purpose of communication and learning of the pre-service teachers. It shows that in the case of students of Lyceum of the Philippines University that computer has considerable effect on the female students' acquisition of knowledge higher than male students.

Table 4 shows the differences on the effect of computer utilization in terms of enhancing communication skills.

Female students have perceived significantly higher in the effect of using computer in enhancing their writing skills with correct grammar and enhancing their ability to utilize the internet for personal/social communications through writing emails and correspondence.

Table 4

Differences on the Effect of Computer Utilization in Terms of Communication Skills

| Rank | Communication Skills By using computer, it... | Gender | | | t-value | Sig. |
|------|--|--------|--------|-------|------------|-------|
| | | Male | Female | Total | | |
| 1 | enhances my writing skills with correct | 3.22 | 3.33 | 3.43 | -2.619(**) | 0.009 |

| | | | | | | |
|----|---|-------------|-------------|-------------|-------------------|--------------|
| | grammar | | | | | |
| 2 | enhances my ability to utilize the internet for personal/social communications | 3.34 | 3.51 | 3.31 | -4.114(**) | 0.000 |
| 3 | enhances my English vocabulary | 3.28 | 3.34 | 3.28 | -1.464 | 0.144 |
| 4 | enhances my confidence to speak extemporaneously. | 3.09 | 3.14 | 3.27 | -1.087 | 0.277 |
| 5 | enhances my visual communication skills | 3.23 | 3.3 | 3.27 | -1.604 | 0.109 |
| 6 | helps me bridge the gap of long distance relationship | 3.16 | 3.21 | 3.24 | -0.838 | 0.402 |
| 7 | helps me realize and understand the significance of friendship and relationship through proper communication | 3.18 | 3.3 | 3.24 | -2.664(**) | 0.008 |
| 8 | helps me communicate with my friends easily | 3.33 | 3.51 | 3.19 | -4.337(**) | 0.000 |
| 9 | helps me express my thoughts, feelings and ideas most often with my family and friends through e-mail and social networking sites | 3.14 | 3.32 | 3.19 | -3.897(**) | 0.000 |
| 10 | helps me contribute opinions appropriately to group discussion | 3.14 | 3.22 | 3.12 | -1.768 | 0.077 |
| | Composite Mean | 3.21 | 3.32 | 3.44 | -3.112(**) | .0020 |

Both groups have agreed that it also enhances their English vocabulary; their confidence to speak extemporaneously; their visual communication skills and helps them bridge the gap of long distance relationship and helps them contribute opinions appropriately to group discussion as the last indicator with the least perceived effect. Both groups have either high or low responses on the following cited variables.

Female students have perceived significantly higher in the effect of using computer in helping them realize and understand the significance of friendship and relationship through proper communication; helping them communicate with their friends easily and helping them express their thoughts, feelings and ideas most often with their family and friends through e-mail and

social networking sites. The present study confirmed the findings of the research conducted by Tsai and Tsai (2010) in Taiwan that females were more communication-oriented Internet users than males. Result of Colley and Maltby's (2008) study showed that more women's postings mentioned having made new friends or having met their partner, renewing old friendships, accessing information and advice, studying online, and shopping and booking travel online. Women communicated more frequently than men did (Sussman & Tyson, 2000).

Table 5 reveals the differences on the effect of computer utilization in terms of developing social values

Table 5
Differences on the Effect of Computer Utilization in Terms of Social Values

| Rank | Social Values By using computer, it... | Gender | | | t | Sig. |
|------|---|--------|--------|-------|-------------|-------|
| | | Male | Female | Total | | |
| 1 | helps me get closer to the people I love. | 3.16 | 3.37 | 3.28 | -4.524(**) | 0.000 |
| 2 | helps me send inspirational quotes and personal messages to my friends | 3.10 | 3.31 | 3.22 | -4.599(**) | 0.000 |
| 3 | helps me build good friendship and camaraderie | 3.15 | 3.24 | 3.20 | -1.964 | 0.050 |
| 4 | increases my social awareness and responsibility through news online | 3.16 | 3.19 | 3.18 | -0.794 | 0.427 |
| 5 | helps me understand the feelings and emotions of people through social networking sites | 3.07 | 3.19 | 3.13 | -2.636 (**) | 0.009 |
| 6 | helps me to develop and strengthen relationships | 3.06 | 3.19 | 3.13 | -2.614(**) | 0.009 |
| 7 | increases my social skills and peer interactions online | 3.05 | 3.17 | 3.12 | -2.514(*) | 0.012 |
| 8 | helps me know more the character of a person through social networking sites | 3.06 | 3.15 | 3.11 | -1.979(*) | 0.048 |

| | | | | | | |
|-----------------------|--|-------------|-------------|-------------|-------------------|--------------|
| 9 | improves my social ability to join online groups | 3.03 | 3.06 | 3.05 | -0.657 | 0.512 |
| 10 | helps set my schedule on-time and venues for meetings | 3 | 3.03 | 3.02 | -0.482 | 0.630 |
| Composite Mean | | 3.09 | 3.19 | 3.14 | -2.822(**) | .0050 |

Females students have perceived significantly higher in the effect of using computer in helping them get closer to the people they love; send inspirational quotes and personal messages to their friends; understand the feelings and emotions of people through social networking sites; increase their social skills and peer interactions online; and know more the character of a person through social networking sites.

Female students have significantly higher tendency of developing and strengthening relationships than male students. Men reported using social networking sites for forming new relationships while women reported using them more for relationship maintenance (Muscanell & Guadagnom, 2012).

Both groups have agreed that in using computer, it helps them build good friendship and camaraderie; increases their social awareness and responsibility through news online; improves their social ability to join online groups and helps to set their schedule on-time and venues for meetings as the last indicator with the least effect.

Female students have more tendency of developing their social values through the use of computer. They appreciate more the usefulness of the computer in enhancing their social skills through maintaining proper communication and valuing common and mutual relationships than men did.

Table 6 reveals the differences on the effect of computer utilization in terms of acquiring health problems.

Table 6
Differences on the Effect of Computer Utilization in Terms of Health Problems

| Rank | Health Problems | Male | Female | Total | t | Sig. |
|-----------------------|--|-------------|-------------|-------------|------------|-------|
| 1 | Headaches | 2.48 | 2.74 | 2.62 | -4.491(**) | 0.000 |
| 2 | Neck pain | 2.5 | 2.62 | 2.57 | -2.123(*) | 0.034 |
| 3 | Eye Strain | 2.4 | 2.49 | 2.45 | -1.726 | 0.085 |
| 4 | Shoulder Pain | 2.3 | 2.54 | 2.44 | -4.295(**) | 0.000 |
| 5 | Blurred Vision | 2.23 | 2.51 | 2.39 | -4.767(**) | 0.000 |
| 6 | Eye Irritation | 2.3 | 2.47 | 2.39 | -2.981(**) | 0.003 |
| 7 | Muscular Strain | 2.15 | 2.27 | 2.21 | -2.099(*) | 0.036 |
| 8 | Increase/decrease appetite or eating | 2.14 | 2.08 | 2.1 | 1.101 | 0.271 |
| 9 | Fatigue or loss of energy | 2.15 | 2.07 | 2.1 | 1.458 | 0.145 |
| 10 | Depressed mood with marked feeling of sadness | 2.09 | 2.03 | 2.06 | 1.171 | 0.242 |
| 11 | Bad-tempered/ Moody | 2.08 | 2.05 | 2.06 | 0.58 | 0.562 |
| 12 | Insomnia | 2.09 | 2.04 | 2.06 | 0.784 | 0.433 |
| 13 | Intense fear of gaining/losing weight | 2.06 | 1.92 | 1.98 | 2.736(**) | 0.006 |
| 14 | Anxiety/ uneasiness | 1.98 | 1.95 | 1.96 | 0.712 | 0.476 |
| 15 | Stomach ache | 1.98 | 1.88 | 1.92 | 1.970(*) | 0.049 |
| Composite Mean | | 2.20 | 2.24 | 2.22 | | |

* Significant at 0.05

** Significant at 0.01

Female students have higher tendency of experiencing headaches, neck pain, shoulder pain, blurred vision and muscular strain compared to male students. On the other hand, male students have more possibility of experiencing intense fear of gaining/losing weight and stomach ache from spending too much time in the computer compared to female students. Meanwhile, the rest of the health problems have experienced by both respondents in different levels. Therefore,

distinction between genders does not occur on the remaining health problems aside from those already mentioned which is more possible to experience by females than male students in Lyceum of the Philippines University.

Conclusions and Recommendations

Differences in the reviewed studies showed that gender gaps in computer and internet utilization varies from one setting to another considering the nature of the respondents and time adjustment to technology. Social use was positively associated with college adjustment, but only for males and negative aspects of use was associated with poorer adjustment regardless of participant gender (Lanthier & Windham, 2004).

Usefulness of computer to students had written a lot of researches and reviews from personal, educational, psychological and entertainment values. Assessing the effects of this usefulness to a certain group of students in the Lyceum of the Philippines University provides a clear view of how males and females had been influenced by the technological revolution and innovations.

Results showed that females have longer hours of computer usage than males while other studies revealed the other way around. Male students must be given enough exercises to convert their online leisure activities into something educational that would enhance their knowledge, skills and values. Teachers must create an online environment that anyone especially the male students can express freely and can share their feeling or opinions related to the topics being or to be discussed in the classroom. Social networking sites would be a good facility to handle forums. Teachers can provide additional activities to lessen the time being spent by the students to stay longer in the computer just playing games or watching movies. Research projects would be enjoyable for the students if they could access different journal websites and teachers could provide interesting topics related to their subjects or courses being taken. They can discover a lot of information through research activity and it could also enhance their critical and analytical thinking as well as their written communication skills. Male students with lower response to this effect must be given enough emphasis on the activities.

Students have many reasons to stay online and teaching them how to become responsible end-users of technology is a responsibility of teachers and parents as well. Parents must also monitor the social activities of their children to give them advice regarding how to deal with strange people and share personal information in the public website. Female students must be oriented to be careful on how they communicate with people over the net for some safety reasons.

Results of this study confirmed the characteristics of females to become more sociable and outgoing than males. They appreciate more the value of computer for social communication while males are just enjoying the benefits of what computer can give to them. They enjoy developing online relationships than females and saying affectionate messages through online than personal. They learn how to become expressive but only through written communication wherein the value of personal feelings on how they say it was already neglected and too far away to be appreciated.

The effect of using computer on health of the female students must be addressed properly. Because they have longer hours of computer use than males, they are more likely to encounter computer-related health problems like headaches, neck pain and eye strain. Although, the result showed low level of effect to only few female students but still, they must be given proper information regarding how to limit their time, instead of continuously staying in front of the computer, they need to do few minutes of rest and do some seating and eye exercises.

This study was only limited to the Filipino College students of the Lyceum of the Philippines University (LPU) in Batangas City and the result could not be generalized for all Filipino students. The findings could only be true to LPU students and the result of related studies in another setting could possibly generate similar or different conclusions. Another study could be conducted in different regions in the Philippines so that it could generate another set of findings to affirm or contrast the result of this study.

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