**STUDENTS USE OF SOCIAL MEDIA:  ITS RELATIONSHIP TO ACADEMIC PERFORMANCE AND TECHNOLOGY ETHICS DECISIONS**

**Fr. Cesar F. de Guzman, Jr.**
**Researcher**

# ABSTRACT

The use of social media in our digital age became active and viral among digital natives and immigrants. This became rampant and more attractive due to the technological innovations of  ICT gadgets that  enables everyone  to  participate and gain access in  social media platforms across  the globe. This accessibility may be a blessing or a curse because of ethical issues that influence students' moral decisions and academic performances.  The purpose of this study was to explore and analyzed the students' use of social media and its  relationship  to their academic performance and technology ethics decisions. Specifically, it sought to answer college students' profile, utilization of social media (computer and internet, smartphones, social networking sites and multitasking), the relationship of using  social media to academic performance and technology ethics decisions; students profile to academics performance and technology ethics decisions.

The students profile was analyzed using frequency count and percentage distribution while the relationship  of  the  other  variables  was  determined  using  Person's  Product  Moment  Correlation Coefficient and the $x^2$. The respondents technology ethics decisions was analyzed using  Lawrence Kohlberg's stages of moral development.
The study came out with the following findings:

It was found out that the profile of the respondents with regards to age had a mean average of 17.5 and female dominated.   Ilokanos are  the dominant ethnicity and most of them prefer to become an agriculturist. With regards to ICT gadgets possession, most of them have an access to social media using smartphones.   Most parents did not go beyond high school in their education with an average monthly income of Php 11,066.78. Generally, the students' level of academic performance is average or satisfactory as indicated by the mean of 2.16.
The extent of students' utilization of social media in general it to a moderate extent or average. The over-all technology ethics decisions of the respondents fell under the stage 3 (being seen as a good person) or conventional morality according to Kohlberg's three stages of morality.
There is  significant positive correlation in the extent of dealing with social media in relation to age, sex, ethnicity and parents' educational attainment; the higher  their ethical decisions seen as a good person rank as  level 3 or conventional type of morality in Kohlberg's Moral Development Theory.

Moreover, when the extent of utilization in social media increases (to a very small extent ton  a very large extent)  , the technology ethics decisions also increases( level 1 to level 5); when the extent of utilization in social media decreases (To a very large extent to a very small extent ), the technology ethics decisions also decreases ( level 5 to level 1).
In light of the above findings, the following conclusions were drawn:
Majority of  the respondents  are not fully oriented on the maximum benefits of  using social media in education and learning.  Majority of the respondents are not aware of their ethical level in dealing with issues and trends which has an impact in their academic performance and their use of social media.  The profile and the use of social media in some aspects influence the technology ethics decisions of the students. Some social media utilization affects the technology ethics decisions of the students.  Understanding the moral and ethical reasoning of the respondent cannot be fully realized by simply knowing  their  particular decisions through a questionnaire but by  knowing the reasons or context behind through a more in-depth studies.

# THE PROBLEM AND ITS BACKGROUND

## Introduction

Social media in our modern world context is like a wrecking ball that breaks the walls of exclusivity to improve interconnectivity in our pluralistic society. New information from different cultures and races regardless of distance trigger our interest to participate in online interactions because of the luxuries and abundance of accessible information it offers for our daily usage. Through these, we are obviously aware that modern technology became part of human development especially in the field of education.

Today, most of the online users are natives in technology which includes high school and college students who grew up with the knowledge and experience of digital technologies as a tool in entering to social media like computers, smartphones, and others. The curiosity of developing the blessings of social media according to Vijay Paul Reddy (2014) led the explosion Web 2.0 which include social networking sites like Facebook, Twitter and MySpace, wikis, blog sites, hosted services, video-sharing sites (e.g., YouTube, Vimeo, NetFlix, Hulu, Yahoo, etc.), and web applications, among others.

In this condition, trends and issues online has an effect to the students' ethical decisions making since environment is one of the determinants of human behavior. According to Harvard Research cited by Jayson (2014) "Facebook is transformed from a public space to a behavioral laboratory". Digital natives so as the immigrants became active in sharing their thoughts, feelings and opinion, personal information, pictures and videos especially when internet is within the work of their palm using smartphones in any place which has internet connections. According to Gross (2004) noted that ''students use social networking sites not only for leisure and personal socialization but also as a platform for more meaningful and serious deliberations, and students are using social networking for making friends, sharing links, online learning, finding jobs to accomplish their economic, educational, political and social being.''

If social media makes people more socially active in sharing their thoughts and feelings and become updated of the social issues which oftentimes viral, could it be possible that having an access to social media could affect boldly college students' ethical views and academic performance? Gotterbarn (2007) as cited by Stevenson (2010) pleads that to avoid eventual censorship from outside regulation "internet professionals should suggest and encourage self-censorship by the development of an ethics of the commons" by not doing or encouraging anything that would interrupt the preservation of this resource's value and maintain it as something to be respected.

This research sought to explore students' utilization of social media and their academic performance. This research aims to study further the relationship of students' utilizations on social media to their technology ethics decisions.

Through this research aimed to contextualize existing studies to the context of students of Apayao State College Luna Campus.

**Conceptual Framework**

This study was guided by Blumler and Katz's (1974) gratification theory. This theory suggests that media users play an active role in choosing and using the media. Users take an active part in the communication process and are goal oriented in their media use. The theorist says that a media user seeks out a media source that best fulfills the needs of the user. Uses and gratifications assume that the user has alternate choices to satisfy their need.

Also, expatiating on the theory, McQuail (2010) has it that "the central question posed is: why do people use media, and what do they use them for? He further posits that: Functionalist sociology Wright, (1974) viewed the media as serving the various needs of the society-e.g. for cohesion, cultural continuity, social control and a large circulation of public information of all kinds. This, in turn, presupposes that individuals also use media for related purposes such as person guidance, relaxation, adjustment, information and identity formation. (Eke Miss et al., 2014) This theory was used as a basis on the utilization of social media in relation to academic performance.

In order to get a perspective on ethical or moral judgment, this study was guided generally by the theory in moral philosophy namely Moral Development of Lawrence Kohlberg. This theory can contribute to the development of the ethical perception of students on social media.

According to the study conducted by Kiser, Angelia, et al. (2009), Kohlberg's research led him to develop six stages of moral development, and he claimed that each new stage was psychologically better than the previous stage. The scoring method itself went through several changes before the final development of the Structural Issue and Standard Issue Scoring system that achieved greater objectivity and reliability. Because of this scoring system, Stage 6 was dropped and was simply considered a hypothetical endpoint (Lapsley 1996). Scoring manuals do not even contain directions for scoring Stage 6, and Kohlberg felt that intercoder reliability was improved by omitting it as a scoring possibility (Rest 1994).

Each stage is categorized into one of three levels: 1. Preconventional (Stages 1 and 2), 2. Conventional (Stages 3 and 4), and 3.Postconventional (Stage 5 and hypothetical Stage 6). In the pre-conventional level, moral rules and norms are imposed on people from external authorities. People whose responses fall within the conventional level internalize the expectations of authority. And lastly, at the post conventional level, moral options are best defined by self-chosen principles (Lapsley 1996).

## RESEARCH METHODOLOGY
### Research Design

The study used the descriptive survey method of research with questionnaire, as data gathering tool. This method is necessary for an adequate understanding of students' utilization of social media in relation to their academic performance and technology ethics decisions.

### Respondents and Sampling Procedure

The respondents of this study are the students of Apayao State College, Luna Campus. From a total population of 1141 students, 307 were selected as samples. The stratified random sampling and Slovin Formula was adapted in the selection of respondents. Slovin's formula is written as $n = N/(1+Ne2)$. In the formula, n = the number of samples needed, N = total population and e = error tolerance.

This descriptive study employed survey with questionnaire in gathering data. The survey was used to gather qualitative and quantitative data using fill in the blanks, multiple choice, extended response questions and scenarios in ethical dilemmas. Quantitative questions were used to gather data on how much information they are currently involve with social media. Qualitative questions were used to gather students' emotions, perceptions and opinions toward the use of social media in the college. Each of the respondents will be assisted in filling up the tools used in the study to ensure quality of information.

In order to gauge the ethics decisions of the research sample, the researcher adapted the study of Kiser, Angelia, et al. (2009) who surveyed the level of reasoning of 179 undergraduate students according to Lawrence Kohlberg's stages of moral development.

Basing from their study the researcher used levels 1-5 for coding the student responses, and these levels will correspond to Kohlberg's Stages 1-5 listed as follows:
1) Level 1 – being obedient in order to avoid punishment;
2) Level 2 – concerned with own self-interests;
3) Level 3 – being seen as a good person;
4) Level 4 – respect for law and authority; and
5) Level 5 – doing something simply because it is the right thing to do.

This survey includes eight scenarios instead of the original six to equally distribute examples of ethical dilemmas on the four areas (computer and internet, mobile social networking, social networking sites, multitasking) in using social media. Example of the scenario dealt with sharing confidential video using social networking sites. Some of the wordings and examples were edited to encompass mainly on the use of social media in relation to the students ethical decisions.

## Data Gathering Procedure

       In the conduct of this study, the following procedures were undertaken. First the researcher asked permission from the President of the College to conduct the study. Second, after the permission was granted, the researcher with the help of the other faculties administered personally the questionnaire to the respondents.

       Third, the questionnaires was floated to the respondents and each of them was given ample time to accomplish the questionnaire in their vacant periods.

       Fourth, the academic performance of the respondents during the first semester SY 2016-2017 was requested from the Registrar's Office.

       All data was collated, tabulated and interpreted using statistical instrument of this study.

       The table below shows the distribution of the respondents from their different curricular programs

### Table 1. Respondents of the Study

| Curricular Programs | Total population | Respondents sampling |
|---|---|---|
| Bachelor of Science in Secondary Education | 212 | 57 |
| Bachelor of Elementary Education | 230 | 62 |
| Bachelor of Science in Information Technology | 180 | 48 |
| Bachelor of Science in Agriculture | 289 | 77 |
| Bachelor of Science in Business Administration | 62 | 17 |
| Bachelor of Science in Technical Teacher Education | 42 | 12 |
| Bachelor of Science in Forestry | 65 | 18 |
| Bachelor of Science in Hotel and Restaurant Management | 61 | 16 |
| **Total** | **1141** | **307** |

**Analysis of Data**

The researcher employed a variety of statistical techniques in analyzing the data gathered for the study. Frequency counts and percentages distribution was used to describe the profile of the students. Percentages mean, and standard deviation was used to describe the student utilization on social media and their academic performance.

The relationship between the profile of the respondents and their academic performance so as profile and technology ethics decisions were analyze using Chi-square. The relationship between students' utilization on social media and their academic performance so as their technology ethics decision to their utilization on social media was analyze using the Pearsons's Product Moment Correlation Coefficient.

In the students technology decisions the researcher use a priori or theoretical coding system to evaluate each individual student response. Qualitative research often calls for researchers to identify themes within responses or text (Ryan and Bernard 2003). In this study, it sought out common words or phrases within the body of the responses to determine into which level each response fell in Kohlberg's five stages of moral development. To ensure reliability, according to the research of Kiser, Angelia, et al. (2009) an agreed coding of the student responses individually and assigned a 1, 2, 3, 4 or 5 to each scenario for each student. Then the researcher checked for consistency. In the responses that were not coded the same the researcher and the adviser discussed the issue and came to a consensus.

**DISCUSSION OF FINDINGS**

**Profile of the Respondents**

Findings on the profile of the respondents with regards to age had a mean average of 17.5. Out of 307 respondents, 51% or 158 are female and 49% or 149 are male. Ilokanos are the dominant ethnicity in Apayao State College, Luna Campus. It also reveals that among the 307 students 77 prefers to become an agriculturist. In terms of year level there is a close percentage distribution among respondents in different year level. Smartphone is the highest in rank in the possession of gadgets since smartphones are very accessible among the respondents. In terms of scholarship, CHED-TD has the most number scholars among other private and public institution. High number of the students prefer studying in less than an hour per day because of Facebook addiction that affects their time in studying lessons. Majority students are not involving in extracurricular activities. Most parents did not go beyond high school in their education. Parents' average monthly income which ranged from 5,000 and below to 20001 and above with an average income of Php 11,066.78. Generally, the students' level of academic performance is average as indicated by the mean of 2.16. This indicates that grades of students in general is satisfactory.

**Over – All   Students Extent of Social Media Utilization**

The tables below show an overall moderate students extent in utilizing social media specifically in computer and internet as overall mean rating of 3.32, mobile social networking utilization and multitasking, social networking sites having a neutral or mixed feelings as indicated by their overall mean rating of 3.39.

This means that the students are moderately confident in utilizing the full usage of social media. It can be explain further that, they are active only in times of emergency or important matters calling their attention. It can be noted further that social media are normal for the student to utilize its benefits every day. This entails that explaining deeply its application and usage in a questionnaire or an actual interview method would not be necessary for them to explain.

Nonetheless, with the student's moderate extent of social media is still in line with claims of the researches conducted by Arnold & Paulus (2010); Junco et al., (2011) and Rambe (2008) that students leveraging social media feel emotional connection with their peers as they feel that they may take help from them in case they need to. These peer linkage encourages the participation of all students, specifically those who are hesitant to discuss matters face-to-face.

**Table 2. Extent of Computer and Internet Utilization**

| Indicators | Weighted Mean | Descriptive Value | Descriptive Equivalent |
|---|---|---|---|
| 1. I do homework on the computer | 3.41 | Often | To a Large Extent |
| 2. I search the Internet for information for schoolwork. | 3.43 | Often | To a Large Extent |
| 3. I visit online communities or fora related to the subjects I study | 3.38 | Sometimes | To a Moderate Extent |
| 4. I participate actively in online communities or forums related to the subject I study | 3.33 | Sometimes | To a Moderate Extent |
| 5. I use other online tools (Instant Messenger, Facebook, etc.) to contact other students about schoolwork | 3.13 | Sometimes | To a Moderate Extent |
| 6. I participate in online learning programs | 3.17 | Sometimes | To a Moderate Extent |
| Over – all Weighted Mean | 3.32 | Sometimes | **To a Moderate Extent** |

**Table 3. Extent of Mobile Social Networking Utilization**

| Indicators | Weighted Mean | Descriptive Value | Descriptive Equivalent |
|---|---|---|---|
| 1. I use my cell phone/Smartphone more than my computer to check my SNS account(s) | 3.03 | Neutral | To a Moderate Extent |
| 2. When I wake up, the first thing I do is checking my Smartphone. | 3.24 | Neutral | To a Moderate Extent |
| 3. My Smartphone is part of my everyday activities | 3.23 | Neutral | To a Moderate Extent |
| 4. I am proud to tell people I'm a Smartphone user | 2.78 | Neutral | To a Moderate Extent |
| 5. My Smartphone has become part of my daily routine | 3.12 | Neutral | To a Moderate Extent |
| 6. I would be disappointed if I could not use my Smartphone for a week because of losing it. | 2.87 | Neutral | To a Moderate Extent |
| 7. I feel I am part of the Smartphone users' community | 2.95 | Neutral | To a Moderate Extent |
| 8. My smartphone has become part of my daily routine | 3.07 | Neutral | To a Moderate Extent |
| Over – all Weighted Mean | **3.04** | **Neutral** | **To a Moderate Extent** |

| Legend : | Descriptive Value | Descriptive Equivalent |
|---|---|---|
| | Strongly Disagree | To a very small extent |
| | Disagree | To a small extent |
| | Neutral | To a moderate extent |
| | Agree | To a large extent |
| | Strongly Agree | To a very large extent |

**Table 4 Extent of Social Networking Site Utilization**

| Items | Weighted Mean | Descriptive Value | Descriptive Equivalent |
|---|---|---|---|
| I use my SNS account for school work. | 3.84 | Agree | To a Large Extent |
| I use my SNS account to communicate with my classmates. | 4.01 | Agree | To a Large Extent |
| I use my SNS account to communicate for group projects. | 3.80 | Agree | To a Large Extent |
| I use my SNS account as a break while studying. | 3.26 | Neutral | To a Moderate Extent |
| I use my SNS account as a free time activity. | 3.46 | Neutral | To a Moderate Extent |
| I use my SNS account to procrastinate when I should be studying. | 3.23 | Neutral | To a Moderate Extent |
| I use my SNS account to procrastinate if I am struggling. | 3.05 | Neutral | To a Moderate Extent |
| SNS(s) are time consuming. | 3.29 | Neutral | To a Moderate Extent |
| SNS(s) are academic distractions. | 3.33 | Neutral | To a Moderate Extent |
| SNS(s) decrease my academic performance. | 3.09 | Neutral | To a Moderate Extent |
| SNS(s) take time away from studying. | 3.09 | Neutral | To a Moderate Extent |
| SNS(s) distract me from studying. | 3.13 | Neutral | To a Moderate Extent |
| I multitask with my SNS account while studying. | 3.10 | Neutral | To a Moderate Extent |
| I am a responsible person about school work. | 3.68 | Agree | To a Large Extent |
| I am good at multitasking with SNS(s). | 3.45 | Neutral | To a Moderate Extent |
| No one on my SNS account is worth me getting failing grades. | 3.49 | Neutral | To a Moderate Extent |
| I do not spend excessive amount of time on my SNS account. | 3.22 | Neutral | To a Moderate Extent |
| I do not go on SNS(s) during class. | 3.44 | Neutral | To a Moderate Extent |
| I check my SNS account during class. | 2.93 | Neutral | To a Moderate Extent |
| I do not have SNS(s) up while doing homework. | 2.93 | Neutral | To a Moderate Extent |
| I don't allow SNS(s) to impact my academics. | 3.47 | Neutral | To a Moderate Extent |
| My academics are my main focus. | 3.87 | Agree | To a Large Extent |
| When I am doing my work for school; I do not check my SNS account | 3.58 | Neutral | To a Moderate Extent |

| | | | |
|---|---|---|---|
| I only use SNS(s) when I have the time for it. | 3.75 | Agree | To a Large Extent |
| **Over-all Weighted Mean** | **3.39** | **Neutral** | **To a Moderate Extent** |

*for negative statements the scale was inverted*

*Legend        :        **Descriptive Value*** **Descriptive Equivalent**

| *Strongly Disagree* | *To a very small extent* |
|---|---|
| *Disagree* | *To a small extent* |
| *Neutral* | *To a moderate extent* |
| *Agree* | *To a large extent* |
| *Strongly Agree* | *To a very large extent* |

### Table 5. Multitasking in Using Social Media

| Indicators | Weighted Mean | Descriptive Value | Descriptive Equivalent |
|---|---|---|---|
| 1. I find multitasking easy | 2.76 | No Opinion | To a Large Extent |
| 2. I am capable of effectively multitasking | 3.42 | Agree | To a Large Extent |
| 3. Multitasking does not interfere with the main task/activity in which I am engaged | 3.23 | No Opinion | To a Moderate Extent |
| Over – all Weighted Mean | 3.14 | No Opinion | To a Moderate Extent |

*Legend        :        **Descriptive Value*** **Descriptive Equivalent**

| *Strongly Disagree* | *To a very small extent* |
|---|---|
| *Disagree* | *To a small extent* |
| *No Opinion* | *To a moderate extent* |
| *Agree* | *To a large extent* |
| *Strongly Agree* | *To a very large extent* |

## Respondents' Academic Performance

It can be noted from Table 6 that the performance of students ranged from very low (2.76–3.0) to very high (1.0 – 1.25). Furthermore, it is shown in the table that 156 or 50.82% had the highest number of student with a descriptive value of satisfactory, followed by a fair descriptive value (100 or 32.57%), very satisfactory (37 or 12.05%), poor (13 or 4.23%) and outstanding (1 or .33%) in academic performance.

Generally, the students' level of academic performance is average as indicated by the mean of 2.16. This indicates that grades of students in general is satisfactory.

**Table 6. Respondents' Academic Performance.**

| Grade | Frequency | Descriptive Value | Level |
|---|---|---|---|
| 1.0 – 1.25 | 1 | Outstanding | Very High |
| 1.26 – 1.75 | 37 | Very Satisfactory | High |
| 1.76 – 2.25 | 156 | Satisfactory | Average |
| 2.26 – 2.75 | 100 | Fair | Low |
| 2.76 – 3.0 | 13 | Poor | Very Low |
| **Mean Grade  =** | **2.16** | **Satisfactory** | **Average** |

## Over – All   Students' Technology Ethics Decisions in Using Social Media

The table below shows the overall students' ethics decisions in the four areas of social media utilization.   The results indicated that the students  ethical decisions had the highest frequency  and percentage of level 2 responses with 97 or 31.6%, which indicated as concerned with own self-interests. This is followed by level 4 with 83 or 27% which indicated as respect for law and authority, while  a total of 94 or 30.62% of the responses were coded as levels 1, 3 and 5 respectively.

The mean of 3.10 indicates that generally, the students have ethical decisions being seen as a good person. Therefore using social media in relation to technology ethics decisions is not necessary doing things because of self-interest by consideration for the students being seen as good person in society.  In this case, the over-all technology ethics decisions of the respondents fell under the stage 3 conventional morality according to Kohlberg's three stages of morality.

The findings are consistent with the findings of the study of Kiser, Angelina. (2009) that the greatest percentage of students' responses fell into the level 3 coding category, which indicated the intention to be seen as a good person. Moreover, Nidich, and Alexander (2000) posit that a very small percentage of the adult population actually reaches Kohlberg's stage 5 of moral development, and the predominance lies within stages 3 and 4. Stages 1 and 2 are typically present prior to the development of the "intellect", while the remaining stages are present after the development of the "intellect".

**Table 7. Over – all   Students' Technology Ethics Decisions in Using Social Media**

| Range | Frequency | Descriptive Value | Level |
|---|---|---|---|
| 4.20 – 5.0 | 38 | Doing something simply because it is the right thing to do. | 5 |
| 3.40 – 4.19 | 83 | Respect for law and authority | 4 |
| 2.60 – 3.39 | 32 | Being seen as a good person | 3 |
| 1.80 – 2.59 | 97 | Concerned with own self-interests | 2 |
| 1.0 – 1.79 | 24 | Being obedient in order to avoid punishment | 1 |
| Mean   = | **3.10** | **Being seen as a good person** | |

## Relationship between the Profile of the Students and their Academic  Performance

The results reveals that, there are three parts of  respondents' profile that are not significantly related to their academic performances. These parts include: age(r=0.077), course (r=29.332), year level (r=7.885) and paid work activities (r=4.823). In explaining the results, it can be stated that as long as the students are mentally stable, they can still perform well in academics regardless of the above mentioned parts of students' profile.

For hours spent in studying lessons it is found  significant at 0.1 level  since it leads to  a fruitful future in educational status. The result establishes the fact that if the students devote more time in their studies shows a positive impact to their class standing. A higher and better academic performance means a higher tendency of becoming  an asset or a productive citizen in the country. Civil status is found to be  significant at 0.1 level in the sense that, singles have more time in  focusing  their  studies compare to married students who have lesser time to in studying lessons  because of time allotted also for their family. Sex was also found significant at 0.1 level which can be stated that women excel more than men in academics as we observe in the college that there was indeed a fact that female are more patients in understanding student's daily lessons.

With regards to ethnicity, it was also found significant at 0.1 level in the sense that for some races in remote areas still carried their beliefs about traditional way of living. As we observe in the college, students were obliged to help their parents in farming even during regular classes. Moreover, probably this was influenced by some in their ethnic groups of escaping from their old way of living by means of engaging into early marriage from the low land people which in fact lead to the  increase of teenage pregnancy in the college that affected the academic performances of the pregnant students.  Another one is the extracurricular activities ($x^2$=31.036) which is significant at 0.5 level  in the sense that in CHED  extracurricular activities has a bearing in the academic rank of the students which could be positive or negative. For the educational attainment ($x^2$=32.836+ $x^2$=35.961) and average monthly income of parents (r=0.018) is found to be significant for the reason that if parents are educated and earn more income they served as an inspiration strive more in their studies. However, it can also be stated that the lower the income means lower tendency of academic performance since there are still expenses incurred in finishing some important projects or papers which students cannot immediately provide.  Likewise for the possession of ICT gadgets ($x^2$=84.846) is significant at .01 level for the reason that these are very important while students are studying but it can decrease their academic performance if they don't use it properly.

This significant positive correlations indicates that the more involvement in terms of hours spent in studying lessons, civil status, sex, ethnicity, extracurricular activities, educational

attainment, average monthly income of parents and  possession of ICT gadgets; the higher is their academic performance.

**Table 8. Relationship between the Profile of the Students and their Academic Performance.**

| Profile | r – value | prob – value | Remarks |
|---|---|---|---|
| Age | 0.077 | 0.178 | Not Significant |
| Hours spent in studying lessons | 0.248** | 0.001 | Significant |
| Parents' average monthly income | 0.018 | 0.751 | Significant |

| Variables | $x^2$ computed | $x^2$ critical value(@.05) | prob-value | Remarks |
|---|---|---|---|---|
| Sex      (2 x 5) | 21.713** | 9.488 | 0.0002 | Significant |
| Ethnicity (9 x 5) | 59.722** | 46.194 | 0.0021 | Significant |
| Civil Status (2 x 5) | 24.443** | 9.488 | 6.54E^-05 | Significant |
| Course (8 x 5) | 29.332 | 41.337 | 0.278 | Not Significant |
| Year Level (4 x 5) | 7.885 | 21.026 | 0.794 | Not Significant |
| Extracurricular activities (5 x 5) | 31.036* | 26.296 | 0.0133 | Significant |
| Paid work activities (6 x 5) | 4.823 | 31.410 | 0.992 | Not Significant |
| Scholarship (9 x 5) | 14.705 | 46.194 | 0.996 | Not Significant |
| Educ'l Attain. of Father (6 x 5) | 32.836* | 31.410 | 0.035 | Significant |
| Educ'l Attain  of Mother (5 x 5) | 35.961** | 26.296 | 0.002 | Significant |
| Possession of ICT Gadgets (15 x 5) | 84.846** | 74.468 | 0.0077 | Significant |

**Correlation is significant @ .01 level
*Correlation is significant @ .05 level

**Relationship between Students' Extent of Utilizations of Social Media and their Academic Performance**

It can be noted, that the scores of the students in the other sub-variables namely; mobile social networking (r= 0.093) and multitasking (r=-0.026) are not significantly related to their academic performance as indicated by the obtained coefficients of correlation which are not significant at the 0.05 level of significance. This implies that the students' extent of utilizations of social media do not significantly affect the academic performance of the students.

It can also be deduced from the results of the correlation analysis that the students' use of computer and internet as well as their use in social networking sites are significantly related to their academic performance as indicated by the obtained coefficients of correlation 0.469 and -0.145 respectively which are significant at the 0.1 and 0.05 level of significance. This implies that using computer and internet and their use of social media can affect academic performance positively or negatively depending on their time management. The negative impact might be due to the amount of time on social media particularly on non-academically related sites.

This significant positive correlation indicates that the more extent of usage of computer and internet as well as their use in social networking sites; the higher is their academic performance.

These findings concurred with Rahmi & Othman pilot study about the impact of social media use on academic performance among university students, pp. 1-10., concluded that social media facilitates the academic experience with the majority of the participants but need to control and manage their time. Unless will affect the use of social media negatively on the academic performance of students.

**Table 9. Relationship between Students' Extent of Utilizations of Social Media and their Academic Performance**

| Student Utilizations of Social Media | r – value | prob – value | Remarks |
|---|---|---|---|
| Computer and Internet | 0.469** | 0.000 | Significant |
| Mobile Social Networking | 0.093 | 0.115 | Not Significant |
| Social Networking Sites | -0.145* | 0.014 | Significant |
| Multitasking | -0.026 | 0.658 | Not Significant |

**Correlation is significant @ .01 level
*Correlation is significant @ .05 level

**Over- All Relationship between the Profile of the Students and their Technology Ethics Decisions in Using Social Media**

For hours spent in studying lessons (r=-0.092), parents' average monthly income (r=0.103), civil status ($x^2$=4.156), course ($x^2$=18.811), year level ($x^2$=14.839), extracurricular activities ($x^2$=24.700), paid work activities ($x^2$=24.050),scholarship ($x^2$=39.915) possession of ICT Gadgets ($x^2$=65.324) were found not significant in the sense that it doesn't have any deep bearing when it comes of seeing people as a good person in the society in using social media in the case of the students of ASC.

It can also be deduced from the results of the correlation analysis that the students age (r= 0.493) is significant with a significant level of  0.05, which probably influenced by the differences in their  age of  maturity in handling oneself as a being seen as a  good person. For sex ($x^2$=9.697) is  found significant at 0.05 level which establishes the fact that men and women differs in viewing their own self in seeing what is good for them. In ethnicity ($x^2$=49.734)  with 0.5 level of significance, it can be stated that participation in social media helps students gauge what is morally and generally  accepted good or bad  in accordance to their culture and beliefs.

In parents' educational attainment ($x^2$=34.841+ $x^2$=33.306) )  with 0.01 and 0.5 level of significance respectively, suggest that the higher the educational attainment means the higher the tendency of teaching  and demonstrating professionally to the students regarding the generally accepted god and bad behavior in our society.

This significant positive correlation indicates that the more extent in dealing with social media in relation to age, sex, ethnicity and parents' educational attainment; the higher  their ethical decisions seen as a good person rank as  level 3 or conventional type of morality in Kohlberg's Moral Development Theory.

**Table 10. Over- All Relationship between the Profile of the Students and their Technology Ethics Decisions in  Using Social Media**

| Profile | r – value | prob – value | Remarks |
|---|---|---|---|
| Age | 0.493* | 0.039 | Significant |
| Hours spent in Studying | -0.092 | 0.107 | Not Significant |
| Parents' average monthly income | 0.103 | 0.072 | Not Significant |

| Variables | $x^2$ computed | $x^2$ critical value(@.05) | prob - value | Remarks |
|---|---|---|---|---|
| Sex     (2 x 5) | 9.697* | 9.488 | 0.045 | Significant |
| Ethnicity (9 x 5) | 49.734* | 46.194 | 0.023 | Significant |
| Civil Status (2 x 5) | 4.156 | 9.488 | 0.385 | Not Significant |
| Course (8 x 5) | 18.811 | 41.337 | 0.903 | Not Significant |
| Year Level (4 x 5) | 14.839 | 21.026 | 0.250 | Not Significant |
| Extracurricular activities (5 x 5) | 24.700 | 26.296 | 0.075 | Not Significant |
| Paid work activities (6 x 5) | 24.050 | 31.410 | 0.240 | Not Significant |
| Scholarship (9 x 5) | 39.915 | 46.194 | 0.157 | Not Significant |
| Educ'l Attain. of  Father (6 x 5) | 34.841* | 31.410 | 0.021 | Significant |
| Educ'l Attain  of Mother (5 x 5) | 33.306** | 26.296 | 0.007 | Significant |
| Possession of ICT Gadgets (15 x 5) | 65.324 | 74.468 | 0.184 | Not Significant |

**Correlation is significant @ .01 level
*Correlation is significant @ .05 level

## Relationship between Students' Extent of Utilizations of
## Social Media and their Technology Ethics Decisions

The results establishes the fact that technology ethics decisions in using social networking sites in relation to the usage of computer and internet is found significant at 0.05 level. This could be interpreted as whenever the students use computer and internet in a moderate extent, their ethical decisions in using social networking sites is concerned with their own interest.

For relationship of technology ethics decisions in using mobile social networking to the extent of utilization in computer and internet is found to be significant at .01 level. This findings suggest that whenever the students use mobile social networking with a moderate extent, their technology ethics decisions in using mobile social networking suggest that they have respect for law and authority.

For the relationship between the students' technology ethics decisions in using social networking sites and the extent of utilization of mobile social networking is found significant at .05 level. This implies that every time the students use mobile social networking in a moderate extent, their technology ethics decisions in social networking is concerned with own self-interests.

In the case of the relationship between the students' technology ethics decisions in using multitasking and the extent of utilization in mobile social networking is found significant at 0.05 level. This can be stated that, when the students use mobile social networking in a moderate extent, their technology ethics decisions using multitasking is seen as a good person.

For the relationship between the students' technology ethics decisions in using computer and internet and the extent of utilization in multitasking is found significant at 0.01 level. This implies that every time the students use multitasking in moderate extent their technology ethics in using computer and internet suggest that they have respect for law and authority.

In the case of the relationship between the student's technology ethics decisions in using multitasking and the extent of utilization in multitasking is significant at level 0.05 and 0.01 respectively. The results establishes the fact that when the students' use multitasking in a moderate extent, their technology ethics decisions in multitasking is being seen as a good person in the society.

With these results, the researcher developed an impression that all the above mentioned significant relationship shown a direct relationship i.e. when the extent of utilization in social media increases(to a very small extent ton a very large extent), the technology ethics decisions also increases( level 1 to level 5); when the extent of utilization in social media decreases (To a very large extent to a very small extent ), the technology ethics decisions also decreases ( level 5 to level 1).

**Table 11. Relationship between Students' Extent of Utilizations of Social Media and their Technology Ethics Decisions.**

| Extent of Utilizations | Technology Ethics Decision in Using | | | |
|---|---|---|---|---|
| | Computer and Internet | Mobile Social Networking | Social Networking Sites | Multitasking |
| Computer and Internet | 0.106 | -0.005 | 0.120* | 0.020 |
| Mobile Social Networking | 0.053 | 0.270** | 0.137* | 0.184* |
| Social Networking Sites | 0.051 | 0.060 | 0.110 | -0.013 |
| Multitasking | -0.325** | 0.105 | 0.042 | 0.129* |

*Correlation is significant @ .05 level
**Correlation is significant @ .01 level

## Findings

The study came out with the following findings:

It was found out that the profile of the respondents with regards to age had a mean average of 17.5 and female dominated. Ilokanos are the dominant ethnicity and most of them prefer to become an agriculturist. With regards to ICT gadgets possession, most of them have an access to social media using smartphones. Most parents did not go beyond high school in their education with an average monthly income of Php 11,066.78. Generally, the students' level of academic performance is average or satisfactory as indicated by the mean of 2.16.

The extent of students' utilization of social media in general is to a moderate extent or average. The over-all technology ethics decisions of the respondents fell under the stage 3 (being seen as a good person) or conventional morality according to Kohlberg's three stages of morality.

Hours spent in studying, lessons, parents' average monthly income, sex, ethnicity, civil status, extracurricular activities, educational attainment of father and mother, and possession of ICT Gadgets are significantly related to the academic performance of the students.

There is also a positive correlation in the extent of dealing with social media in relation to age, sex, ethnicity and parents' educational attainment; the higher their ethical decisions seen as a good person rank as level 3 or conventional type of morality in Kohlberg's Moral Development Theory.

Moreover, when the extent of utilization in social media increases(to a very small extent ton a very large extent) , the technology ethics decisions also increases( level 1 to level 5); when the extent of utilization in social media decreases (To a very large extent to a very small extent ), the technology ethics decisions also decreases ( level 5 to level 1).

## Conclusions

Based on the above findings the study concludes that students of Apayao State College are moderately associated on the benefits of using social media in education and learning. Majority of the respondents are moderately aware of their ethical level in dealing with issues and trends which has an impact in their academic performance and their use of social media. The profile and the use of social media in some aspects influence the technology ethics decisions of the students. Some social media utilization affects the technology ethics decisions of the students. Understanding the moral and ethical reasoning of the respondent cannot be fully realized by simply knowing their particular decisions through a questionnaire but by knowing the reasons or context behind through a more in-depth studies.

## Recommendations

Based on the findings and conclusions, the following recommendations are offered to the current administration and the faculty of the Apayao State College:
1. Conduct seminars on the maximization of Information and Communication Technology (ICT) and Social Media utilization in the field of education and research to further improve academic performance of students.

2. Reinforce the current curriculum of all program offerings with education on ICT ethical issues and standards to reinforce awareness and proper conduct on the use of Information Communication Technology and Social Media.
3. Enhance the existing official webpage of the college to develop a more socially active server for communications among students, faculties and staffs in catering issues and concerns pertaining to social and moral development thus improving the technology ethics decisions of the students.
4. Similar studies can be conducted every three to four years to determine the same parameters which can be useful for improving quality of instructions along utilization of social media.
5. Focus groups with students might provide some more in-depth information that could be used to validate the results achieved in this study through triangulation methodology. With these focus groups, the researcher could continue to investigate why students make the decisions they make.

## BIBLIOGRAPHY

**A. Unpublished Materials**

**Dissertation:**

Afsahi, A. (2015). *Social Networking Dilemmas for Psychologists: Privacy, Professionalism, Boundary Issues, and Policies* . (Electronic Thesis or Dissertation). Retrieved from https://etd.ohiolink.edu/

Lyons, V. (2013). *Moral Reasoning of Collegiate Athletes and Intramural Sport Athletes: An Investigation of the Influence of Religiosity, Gender, and Type of Sport Played.*(Electronic Thesis or Dissertation). Retrieved from https://etd.ohiolink.edu/

OZER, I. (2014). *FACEBOOK® ADDICTION, INTENSIVE SOCIAL NETWORKING SITE USE, MULTITASKING, AND ACADEMIC PERFORMANCE AMONG UNIVERSITY STUDENTS IN THE UNITED STATES, EUROPE, AND TURKEY: A MULTIGROUP STRUCTURAL EQUATION MODELING APPROACH.* (Electronic Thesis or Dissertation). Retrieved from https://etd.ohiolink.edu/

**Thesis:**

Feng, Y. (2014). *Analysis of Moral Argumentation in Newspaper Editorial Contents with Kohlberg's Moral Development Model.* (Electronic Thesis or Dissertation). Retrieved from https://etd.ohiolink.edu/

Higgins, V. (2010). *Faculty and Students' Perceptions of Cheating Behavior; A journey into moral development.* (Electronic Thesis or Dissertation). Retrieved from https://etd.ohiolink.edu/

Reddy, V. (2014). *The Influence of Social Media on International Students Choice of University and Course.* MIT. Queensland University of Technology.

Schemrich, Coleen M. (2003). *Applying Principles of Kohlberg's Theory of Moral Development to Classroom Instruction, Classroom Discipline Procedures, School-Wide Discipline Procedures, District Programs and Community Programs"* MAed, DMAFConSci., University of Akron.

Voorhees, B. (2012). *Student Perceptions on Social Media at Bowling Green State University.* (Electronic Thesis or Dissertation). Retrieved from <u>https://etd.ohiolink.edu/</u>


**Case Study:**

Oskouei, Rozito Jamili. "*Impact of Non-Academic Websites Usage on Female Students Academic Performance (A Case Study)".* 2010 International Conference on Educational and Network Technology. Computer Science & Engineering Dept. Motilal Nehru National State of Technology.

**Journal:**


Al- Rahmi, W. & Othman, M. *"The Impact of Social Media Use on Academic Performance among University Students: A Pilot Study"* pp. 1-10. Journal of Information Systems Research and Innovation., http://seminar.utmspace.edu.my/jisri/

Correos C. (2014), Teachers' ICT Literacy and Utilization in English Language Teaching, 'ICT & Innovations in Education' International Electronic Journal, 2 (1), 1-25.

Kiser, Angelina. (2009)*"The Application of Kohlberg's Moral Development Model to College Students Technology Ethic Decisions; 6(5)"* pp. 89- 96. Journal of College Teaching & Learning.

Owusu-Acheaw, M. & Larson A. (2015) *"Use of Social Media and its Impact on Academic Performance of Tertiary Institution Students: A Study of Students of Koforidua Polytechnic, Ghana; 6(6)"* pp. 94-100. Journal of Education and Practice.

Wang, Q., Chen, W., & Liang, Y. (2011). *"The Effects of Social Media on College Students"* John and Wales University. Feinstein Graduate School.


**Internet:**

Jonha R. Philippines: A Digital Lifestyle Capital in the Making? Retrieved from http://www.huffingtonpost.com/jonha-revesencio/philippines-a-digital-lif_1_b_7199924.html


Fleire C. Social Media And Digital Stats In The Philippines 2016 (We Are Social) Retrieved from http://fleirecastro.com/guides/social-media-and-digital-stats-in-the-philippines-2016-wearesocial-data/

The Official Website of the Province of Apayao. http://www.apayao.gov.ph/