



The Role of School Administrators in the Impact of Internet Connectivity on the Academic Performance of Senior High School Learners

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ABSTRACT: The study aimed to investigate the role of the school administrators in the impact of internet connectivity on the academic performance of senior high school learners. The researcher used descriptive method of research with the use of survey structured researcher-made questionnaire as the primary instrument for gathering data. The design believed to be reliable and objective, it is also fast and focused using specific statistical tools such are: frequency percentage distribution and weighted mean. Additionally, this design was used to describe the demographic profile of the respondents, their preferences, and perceptions on internet connectivity. In selection of the respondents, the research determined the target population of the study and computed for the actual sample and at least fifty-two (52) participated on the study. Moreover, the results of the study revealed that 59.62% of the respondents were female, and at least 34.62% or most of them were 18 years old. The over-all results on the impact of internet connectivity on the academic performance of learners as perceived by the respondents conveyed that the school administrators face several challenges related to the learners' access on internet. Results suggest that an adequate system and conducive learning environment for learners.

KEYWORDS: Academic Performance Impact, Internet Connectivity, School Administrator.

1. INTRODUCTION

Nowadays, the world is fully dependent on the Internet in all areas of activity. It is used to interact with the people from one place to another place easily. It is the global system that connects the networks and devices by using the Internet protocol. The olden days' communication devices like radio, telephony, newspaper, television, paper mail, etc. devices are redefined by the new devices by using the Internet, such as email, Internet telephony, online music, online newspapers, websites, etc.

As time passed by, it is proven that nothing is permanent in this world except change. Changes occurred now and then and it affected everyone. New inventions and creations such as computer and internet have both benefited and hindered the way of life. The whole world is running beyond the Internet because it is used to share the information from one place to another place all over the world like email, video calls, online messaging, and many online websites. It is the fastest way to deliver the messages to the people. Without the Internet the whole world runs very slowly. Nowadays, the schools and colleges are fully dependent on the Internet by online classes and practical labs. By using the Internet, students can gain more knowledge rather than listening to lecture and students will more interact on it.

Indeed, slow internet connectivity problem is a global issue. Learners are often affected especially when they take online examination, assignments, quizzes, oral recitation, and other online activities; they suddenly find that the internet connection is lost, so submission is delayed or interrupted. The effects of such dilemma on the learners are it can cause headache, stress, irritation, and pressure in their academic performance. Thus, nowadays the Internet has a huge number of benefits and plays a very important role in the daily life of every person in the world. Without the Internet it is quite difficult to handle many things and it takes more time. Therefore, having slow or poor internet connection can mean missing out information or losing out on a direct line of communication in academic learning that shall influence the learners' academic performance.

2. METHODOLOGY

This section comprises the research design, setting of the study, research instruments, research respondents, data gathering procedures and the statistical tools used in the study. The descriptive method of research was used in the study with the use of survey structured researcher-made questionnaire as the primary instrument for data gathering. Descriptive method of research is a fact-finding study with adequate and accurate interpretation of the findings. Since researcher intend to investigate a certain phenomenon,



then this method of research is appropriate for this study. The main purpose of the study was to investigate the role of school administrators in the impact of internet connectivity on the academic performance of senior high school learners on the academic year 2020–2021 which includes the following queries: learners’ demographic profile, and learners’ perceptions on internet access and the impact of slow internet connection to academic performance. The respondents of this study were the fifty-two (52) senior high school learners of Technical Vocational Livelihood (TVL) major in Information, Communication, and Technology (ICT) strand; in which 27 students from grade 11 and 25 students from grade 12 who are currently enrolled at MSU–LNCAT, Marawi City, Lanao del Sur, for the academic school year 2020-2021. The table 1 presents the distribution of respondents.

Table 1. Frequency and Percentage Distribution of the Respondents

| Respondents | | |
|--|---------------|----------------|
| Senior High School (TVL/ICT Strand) Learners | Frequency (f) | Percentage (P) |
| Grade 11 | 27 | 51.92% |
| Grade 12 | 25 | 48.08% |
| Total | 52 | 100% |

Moreover, the instrument used in this research is a structured researcher–made questionnaire. The main reason why the researcher used this instrument is, it is easy to construct, distribute, tabulate, inexpensive and the replies of the respondents are free. Likewise, the frequency counts and percentage, weighted mean and the four (4) point–Likert scale with verbal interpretation were used as statistical tools in the analysis of the obtained data. The tabulation and calculation of data gathered were properly presented using charts and tabular form.

3. RESULTS AND DISCUSSION

This chapter presented the primary data obtained with structured survey-questionnaires. It includes analysis and interpretation of data from the responses obtained from the distributed questionnaires among the Senior High School students. The instrument was composed of two (2) parts: the first part is the learners’ demographic profile, the second part is the learners’ perceptions on internet access and the impact of slow internet connection to academic performance, as provided by the school administrator. The data gathered from the respondents are presented using pie and column graphs, and tabular forms.

Part I. Learners’ Demographic Profile

As shown in table 2, twenty-one (21) or 40.38% of the respondents are males while thirty-one (31) or 59.62% of them are females. Based on the analysis, it could be concluded that majority of the respondents are female learners. It indicated that more females in senior high school – TVL/ICT strand learners in the school than the male learners who were influenced by the slow internet connectivity problem on their academic performance. This showed that female enrollees dominated than males.

Table 2. Frequency and Percentage Distribution of the Respondents’ Sex

| SEX | Grade 11 | Grade 12 | Total Frequency (f) | Percentage (P) |
|--------|----------|----------|---------------------|----------------|
| Male | 10 | 11 | 21 | 40.38% |
| Female | 17 | 14 | 31 | 59.62% |
| Total | 27 | 25 | 52 | 100% |

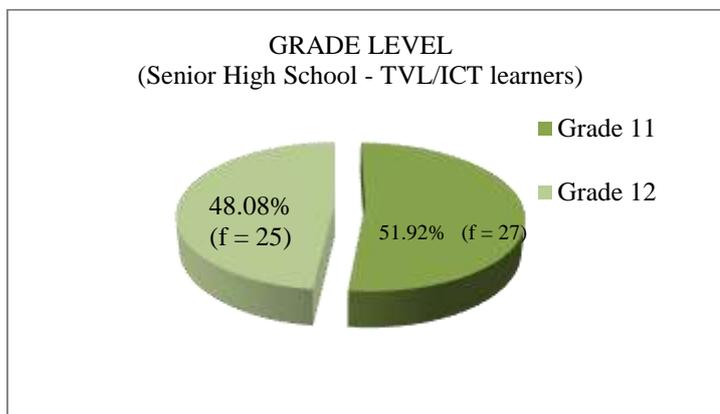


Figure 1. Distribution of Respondents According to Grade Level

Pie graph in Figure 1 shows the distribution of the respondents according to grade level. It revealed that twenty-seven (27) or 51.92% of the respondents were from grade 11 and twenty-five (25) or 48.08% of them were from grade 12. This presented that majority of the respondents were from grade 11 of senior high school – TVL/ICT strand learners of MSU-LNCAT.

Table 3. Frequency and Percentage Distribution of the Respondents' Age

| AGE | Grade 11 | Grade 12 | Frequency (f) | Percentage (P) |
|----------------------|----------|----------|---------------|----------------|
| 15 years old & below | 0 | 0 | 0 | 0% |
| 16 years old | 2 | 0 | 2 | 3.85% |
| 17 years old | 6 | 1 | 7 | 13.46% |
| 18 years old | 10 | 8 | 18 | 34.62% |
| 19 years old | 4 | 8 | 12 | 23.08% |
| 20 years old & above | 5 | 8 | 13 | 25% |
| Total | 27 | 25 | 52 | 100% |

Table 3 shows the distribution of respondents according to age. None of the respondents was within the age of 15 and below, 2 (3.85%) were within the age of 16, 7 (13.46%) were within the age of 17, many of respondents 18 (34.62%) were within the age of 18, 12 (23.08%) were within the age of 19, and 13 (25%) were within the age of 20 and above. The findings manifested that most of the senior high school – TVL/ICT strand learners were within the age range from 18 to 20 years old and above.

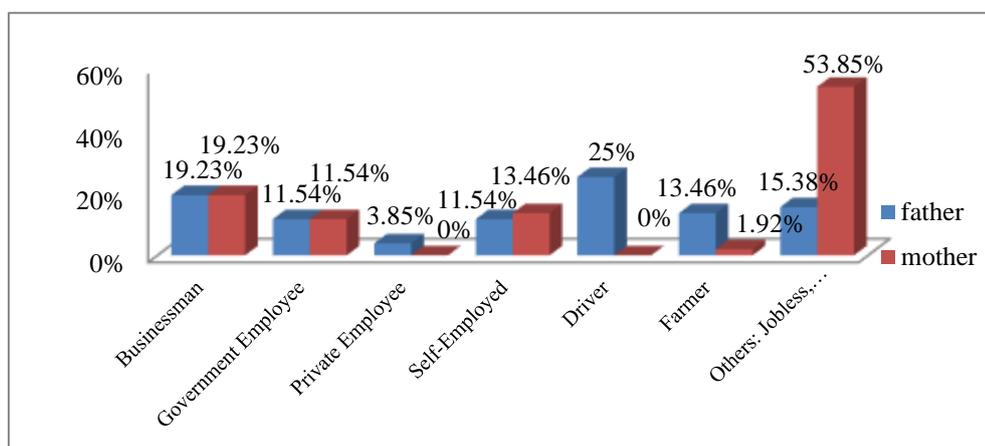


Figure 2: Parents' Occupation of the Respondents



In Figure 2, it shows the distribution of respondents according to the occupation of their parents. Firstly, in terms of the occupation of their fathers: many 13 (25%) of their fathers were drivers; 10 (19.23%) of them were businessman; 8 (15.38%) were belong to other jobs such as jobless etc.; 7 (13.6%) were farmers; both 6 (11.54%) were government and self-employed; while only 2 (3.85%) of them were private employed. Secondly, in terms of the occupation of their mothers: majority 28 (53.85%) of their mothers were belong to other jobs such as housewives, jobless etc.; 10 (19.23%) of them were businesswoman; 7 (13.46%) were self-employed; 6 (11.54%) were government employed while only 1 (1.92%) of them was farmer. But, none (0%) of them belonged to private employment and driver. As a result, in terms of the occupation of the learners' fathers, it indicated that many of their fathers were drivers and businessman. Whereas, in terms of the occupation of their mothers, it indicated that majority of their mothers were housewives and/or jobless. And there was no significant relationship between the respondents' parents' occupation and the impact of slow internet connectivity to their academic performance. However, parents' occupations are important. The findings revealed that parents' occupation contributes to students' academic achievement through learning morale, absenteeism, child labor, and unconducive home environments. As displayed from Figure 3, it discloses the frequency and percentage distribution of respondents' parents' net monthly income. As it appeared in the figure that seven (7) or 13.6% of respondent's parents had a net income of Php 500.00 and below every month; eleven (11) or 21.15% among them had monthly income of Php 501.00 to Php 3,000.00; twelve (12) or 23.08% among them had monthly income of Php 3,001.00 to Php 5,000.00; thirteen (13) or 25% of them had income of Php 5,001.00 to Php 10,000.00 a month; and only nine (9) or 17.31% among them had monthly income of Php 10,001 and above. The findings connoted that many or 23.08% of the respondents' parents were having a net monthly income ranged from Php 3,001.00 to Php 5,000.00 a month and 25% of the respondent's parents' were having a net monthly income ranged from Php 5,001.00 to Php 10,000.00 a month. It revealed that the parents of the respondents belong to the line of poverty which their income may only afford the basic daily need of their family now that basic goods such as foods are expensive. It is widely understood that poverty is a situation where the head of a family cannot afford to provide his family with basic nutrients, higher education, and cannot cover payment of rent and foods.

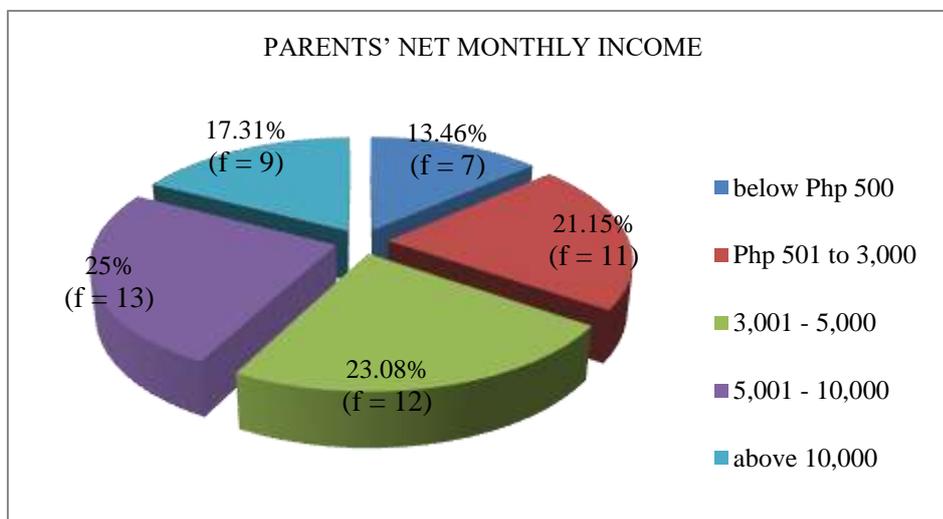


Figure 3: Distribution of Parents' Net Monthly Income of the Respondents

Part II. The Role of School Administrators in the Impact of Internet Connectivity on the Academic Performance of Senior High School Learners

Table 4 show that indicator “make academic activities difficult”, garnered the lowest WM of 2.65, interpreted as “disagree”, while “make academic activities much easier” and “improved academic performance” was perceived to “agree”, this suggest that internet is important for the learners. As it provides an access to high amount of information through online resources. Internet also provide convenience for students learning and access to international issues.



Table 4. The Usefulness of Internet for Academic Activities

| Usefulness of Internet on Academic Activities | Strongly Agree (4) | | Agree (3) | | Disagree (2) | | Strongly Disagree (1) | | Weighted Mean (WM) | Verbal Interpretation |
|---|--------------------|----|-----------|----|--------------|----|-----------------------|----|--------------------|-----------------------|
| | f | % | f | % | f | % | f | % | | |
| The school administrator ensures reliable internet access to make academic activities much easier using internet. | 10 | 19 | 34 | 65 | 4 | 8 | 4 | 8 | 2.96 | Agree |
| The School Administrator encourage to use internet to improved academic performance. | 14 | 27 | 21 | 40 | 13 | 25 | 4 | 8 | 2.87 | Agree |
| Inadequate technological resources for students make academic activities difficult. | 12 | 23 | 16 | 31 | 18 | 35 | 6 | 12 | 2.65 | Agree |
| No Internet connection, learners decrease in academic performance. | 12 | 23 | 15 | 29 | 20 | 38 | 5 | 10 | 2.65 | Agree |

Legend: Strongly Agree (3.25 – 4.00), Agree (2.50 – 3.24), Disagree (1.75 – 2.49), Strongly Disagree (1.00 – 1.74)

Table 4 presents the role of school administrators on the usefulness of internet on academic activities of the learners. “The school administrator ensures reliable internet access to make academic activities much easier using internet” 65% perceived it “agree”, “the School Administrator encourage to use internet to improved academic performance”, 40% perceived it “agree”, while “Inadequate technological resources for students make academic activities difficult” was perceived into 35% disagree, 31% agree and 23% agree, and “No Internet connection, students decrease in academic performance” was also perceived to 38% disagree. The results implied that school administrator are concerned about the learners lack of computer and internet access for school activities, as this inequality can impede students’ learning. Moreover, students without computer and internet at home face substantial hurdle in completing home works, research and participate in online activities. According to LinkedIn (2024) poor internet connection significantly impacts the timely completion of homework, quizzes, and exams. For learners in virtual or hybrid learning environments, even minor delay in internet speed can result in missed deadline or incomplete submissions. Moreover, according to Jonathan Douglas, Director of the National Literacy Trust, said: “Technology is ever present in children and young people’s daily lives – and it’s here to stay. Teachers believe that technology has the potential to transform pupils’ literacy and learning, yet limited access to hardware, software, wifi and training presents significant challenges to teachers seeking to use technology in the most effective way for their pupils, excerpts from EB News (2019). Moreover, the results also implicit that lack of stable internet connection hamper learners’ academic performance imposing a great challenge for the school administrators.

Table 5. Problems Encountered on Internet Access

| Problems encountered of Internet services | Strongly Agree (4) | | Agree (3) | | Disagree (2) | Strongly Disagree (1) | | Weighted Mean | Verbal Interpretation | |
|---|--------------------|----|-----------|----|--------------|-----------------------|---|---------------|-----------------------|----------------|
| | F | % | f | % | | f | % | | | |
| Slow internet speed. | 30 | 58 | 13 | 25 | 4 | 8 | 5 | 10 | 3.31 | Strongly Agree |
| No signal. | 21 | 40 | 16 | 31 | 10 | 19 | 5 | 10 | 3.02 | Agree |
| Power failure/interruption. | 18 | 35 | 19 | 37 | 10 | 19 | 5 | 10 | 2.96 | Agree |
| School administrator worried on Expensive paying online services. | 13 | 25 | 24 | 46 | 9 | 17 | 6 | 12 | 2.85 | Agree |



| | | | | | | | | | | |
|---|----|----|----|----|----|----|----|----|------|----------|
| School administrators concerned on students' lack of computers/smartphones. | 9 | 17 | 26 | 50 | 12 | 23 | 5 | 10 | 2.75 | Agree |
| Poor computer skills. | 10 | 19 | 13 | 25 | 16 | 31 | 13 | 25 | 2.38 | Disagree |

Legend: Strongly Agree (3.25 – 4.00), Agree (2.50 – 3.24), Disagree (1.75 – 2.49), Strongly Disagree (1.00 – 1.74)

Table 5 presents the problems encountered by the learners on internet access. The indicators, “Slow internet speed”, garnered 58% agreed, “No signal” perceived into 40%, “Power failure/interruption”, 35% agreed, “School administrator worried on Expensive paying online services”, 50% agreed, while “School administrators concerned on students’ lack of computers/smartphones”, 50% agreed, and “Poor computer skills”, 25% agreed while 25% disagreed.

The results signify that power interruptions significantly disrupt internet connectivity for learners, particularly when they have home works. This lead to hindered their learning and comply their school requirements on time. Actually, students in Marawi City, may always experience this challenge due to power outages in the region. Moreover, frequent power interruptions substantially disrupt students online learning especially those learners living in rural areas. These findings revealed that due to slow internet connection disrupts students’ active performance. The results implied that slow internet connected truly hinder student’s academic performance. Their difficulties in accessing from online resources increase their frustration and somehow reduce their productivity. Students also may find hard in collaborating with their peers. Furthermore, Musa, E. and Adamu, A. (2025) asserts that power supply is key in the delivery of educational service in tertiary institutions because both teachers and learners need power for their academic activities. Inadequate power supply affects the learners’ academic performance. It also reduced the time spent by learners on their studies, especially when students who preferred study at night sometimes walk to school campuses to access electricity. While Rosa, A., et al. (2025) argued that the rising expenses among students have become a significant concern, affecting their daily lives and academic performance. while financial support alleviates economic constraints, it may also contribute to higher spending among students.

4. CONCLUSION

Based on the findings, it is concluded that on the respondents’ demographic profile, majority of the respondents were females and grade 11 learners. Most of them were within the age range from 18 – 20 years. Many of their fathers were drivers and businessman while their mothers were housewives and/or jobless. However, there was no significant relationship between the respondents’ parents’ occupation and the impact of slow internet connectivity to their academic performance. Furthermore, 25% of the respondents’ parents were having a net monthly income ranged from Php 5,001.00 to Php 10,000.00 a month. Parents’ socioeconomic status is important. Jabar et al. (2020) found out that parents in relatively higher income group showed parental involvement both at home and in school. On the other hand, the problem on the role of the school administrators on the impact of internet connectivity in the academic performance of senior high school students, the school administrators truly concerned about expensive online services due to the financial stability of the parents which could lead to the students lack of access in internet. The inconsistent internet connectivity leads to students lower their grades. And the unstable power supply. The school administrators face several challenges related to the access on internet for students. Moreover, results suggest that an adequate system and conducive learning environment for learners.

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