THE STATE OF INDEPENDENT LEARNING OF STUDENTS USING VIRTUAL LEARNING ENVIRONMENT

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ABSTRACT
This study aimed to assess level of independent learning of the students and how does it vary when it is grouped according to the socio-demographic characteristics of the respondents. The study used a descriptive-comparative research design. An online survey was collected which consists of a 30 itemed questionnaire to the 75.23% respondents to the total population who answered on the survey. The statistical tools used in this study are the Frequency, Mean, and Analysis of Variance (ANOVA). The result of the study shows that the level of Independent Learning of students was high in terms of their Self-Motivation, moderate on Self-Regulation and Enabling Environment however, all of which do not have a significant relationship to the socio-demographic profile of the students. A recommendation was given to further improve the independent learning of the students.

Keywords: Independent Learning; Self-Motivation; Self-Regulation; Enabling Environment; COVID Crisis.

1. INTRODUCTION
COVID-19 pandemic has challenged all aspects of life in all over the world. It turned into a health crisis and a threat to life. According to the World Health Organization (2021), there are over 239 million people who have been infected with the virus globally and over 4 million death. The continual increase in the number of infected people and deaths, the government has opted to apply health protocols such as quarantine and lockdowns on cities and provinces all over the country (Djalante, et. el., 2020). With this problem, Education sector has been challenged on how to continue providing education for the Filipino people despite of the situation.

To adapt to the needs of the learners, Virtual learning environment is seen to be the most realistic strategy to continue to provide education. In the study of Daroedono, et. al. (2020), Indonesian President Joko “Jokowi” Widodo has also instructed the community members to study from home in order to prevent the spread of the virus. The new initiative to continue education has resulted to different problems as it is a dissimilar from the tradition face to face classroom setting of instruction. Some of which are the instructor’s capacity to the system of instruction, the learner's circumstance and context, and the learning environment's efficiency (Joaquin, 2020). In South Korea, students are perplexed on the definition on blended learning hence they tend to have psychological rejection or offensive on the idea of it. (Chen & Lu, 2013)

In the Philippines, the strategy practiced and other countries is also applied in the Philippines when President Rodrigo Duterte claims that securing primary and secondary schools closed is necessary to protect students and their families from the coronavirus (Gutierrez & Bilefsky, 2021). Hence, online learning is adapted.
In Davao City, online education has resulted into multiple problems such as physical and mental stress (Cagula, 2020) because of the new mode of learning. This kind of education is new for Filipino Learners. The reason for this occurrence is that Filipino Learners are used to the traditional way of education which is face-to-face (Avila, & Genio, 2020). This actively illustrates that independent learning is one of the major problems of learners today. Furthermore, this paper assessed the state of independent learning ability of the students using virtual learning environment.

2. LITERATURE REVIEW

Over the last 2 years, the world is facing a health crisis that is affecting everyone; from small children up to older adults. According to the World Health Organization 2021, Coronavirus disease (COVID-19) is a type of disease that is infectious and is caused by the SARS-CoV-2 virus that is a member of a family of viruses called coronaviruses (National Cancer Institute 2021). COVID-19 has been affecting the lives of every people all throughout the world. It caused panic and anxiety to the people because of its high mortality rate. (Qi, et. al, 2020)

These risks and the influx of infected persons escalated quickly killing thousands of people up to today. Hence, business establishments, entertainment activities, educational institutions, and other activities that needs face-to-face interaction with people are prohibited by the government. Herewith, many people lost their job, went to bankruptcy, and schools were shut down this now connotes those students stopped learning. They were deprived of their right to learn hence to continue education, the government, with the help of the colleges and universities, has decided to switch to online learning as an initiative to further ensure that students will receive their rights as well as to continue the practice of teaching while containing the virus as declared by the Department of Education Secretary in September 2020 as written in the official website of the Department of Education.

The educational institutions made the decision to resort to used virtual learning environment. As cited in the study of Moore, et al. (2010), authors such as Benson (2002), Carliner (2004), and Conrad (2002) has defined virtual learning environment as an exposure to learning opportunities using technology. Unlike in a traditional classroom setting, online learning occurs when the learner and the instructor, or knowledge source, are not physically present. Technology is used to transmit information, such as video conferencing, and online examinations. Online learning can be done synchronously, with real-time peer-to-peer interaction and cooperation, or asynchronously, with self-paced learning activities that don't require the presence of an instructor (Serdyukov, 2020).

This is the alternative way for the government to continuously provide the learners with their right to education. With online learning, students are forced to learn independently. Online learning has been the “new normal in education” (Ancheta & Ancheta, 2020), which is a mode of instruction in the Philippines. The problem with online learning is that this modality is new in the Philippines. The reason for this occurrence is that Filipino Learners are used to the traditional way of education which is face-to-face (Avila & Genio, 2020). This actively illustrates that independent learning is one of the major problems of learners today (Broad, 2006).
The new initiative to continue education has resulted to different problems as it is a dissimilar from the tradition face to face classroom setting of instruction. With this, there has been reports on the challenges of it which includes independent learning. Some of which are the instructor’s capacity to the system of instruction, the learner's circumstance and context, and the learning environment’s efficiency (Joaquin, 2020). In South Korea, students are perplexed on the definition on blended learning hence they tend to have psychological rejection or offensive on the idea of it (Chen & Lu, 2013). With these, the need to look into independent learning is significant to further understand the need of the learners to adapt to the situation that the world is facing (National Academies of Sciences, Engineering, and Medicine, 2018), hence this study is conducted.

Independent learning occurs when a student is able to think, act, and pursue their studies independently (Hardika, et. al., 2020), without the same levels of support that a teacher provides at school. This generally means that a student should be able to do his or her research rather than expecting the teacher to provide the materials needed. As mentioned in the study of Aliyyah, et. al. (2020), they mentioned that due to school closures in Finland, students have received instruction and guidance through distance learning, digital educational environments, and innovations, and, where required, independent learning.

As mentioned by Meyer, et. al. (2008) in their literature, independent learning is linked to the “personalization”, “student-centered learning”, and “ownership” approach to learning. The study also mentioned that having this kind of learning approach helps in improving the academic performance of the students, it increases motivation and confidence, a higher understanding of students' limitations as well as their ability to manage it, enabling teachers to give children separated challenges to fit for the student’s needs, and promoting social inclusion. (Gilbert, 2015)

Moreover, independent learning has resulted in positive different outcomes wherein the practice of independent learning should be encouraged among students (Mazenod, et. al., 2019). It is highlighted an article published in Massachusetts Institute of Technology which discusses the experiment conducted by an organization called One Laptop Per Child Organization (DeNeen, 2017). The content of the article will be further discussed in the succeeding pages of this paper.

As mentioned also in the study of Meyer, et. al. (2008) that through independent learning, the academic performance of the students in Thomas Telford School has improved where 100% of the students have an average grade of A-C because they claimed that the development of independent learning skills is one of the reasons as to why it succeeds. Although independent learning skill has improved the academic performance of the students, this is not the only factor to improve it (Dargo, & Dimas, 2021). Furthermore, several authors such as Hughes, (2001), Meyer, et. al. (2008), and Kopzhassarova, et. al., (2016) mentioned that in supporting the development of the independent learning skill of the students they must have self-regulation, self-motivation, and an enabling environment for it to succeed.

Moreover, Gillett-Swan (2017) has highlighted that the self-directed and self-regulated learning complicate an already difficult area of online learning delivery and practice. With this problem, independent learning can sometimes be a burden for the students. As mentioned by Black, (2007), changing classroom practices to create engaged and independent learners continues to be a
challenge for schools, particularly those in low-income areas. Hence, the need to look into this problem is relevant given the complexity of independent learning, it is poorly understood (Hockings, et. al., 2018), and it is practice today as students continue education through online classes and modules.

According in the theory of Holmberg entitled the Theory and Practice of Distance Education in 1995 states that the prevalent feature of an online class is based on seven hypotheses these are Personal sense of connection between the learning and teaching parties enhance study enjoyment and motivation (Koca, 2016). Next is that the Well-developed self-instructional information and two-way interaction can help to create feelings (Roblyer & Wiencke, 2003). Another is that the achievement of such goals as well as the implementation of correct study processes and approaches are aided by intellectual enjoyment and study motivation. Fourth hypothesis is that the atmosphere, language, and conventions of friendly discussion favor sentiments of intimate closeness (Wong, 2013) is based on postulate 1 (Holmberg, 1995).

Another hypothesis are the Conversational messages are easier to understand and recall than non-conversational messages. Next, the conversation idea can be directly translated to distance education using the available media. And lastly, for organized study, which is defined by explicit or implicit goal conceptions, planning and leading the activity, whether delivered by the educational organization or the student, is required (Holmberg, 1995).

When information technologies are used to circumvent an instructor-learner interaction through guided instructional discussion, Holmberg’s theory of theory and practice of distance education indicates that communication between the learner and the teacher is a crucial foundation in the process of teaching and learning in distance education. As a result, the enabling environment has a significant impact on a student's autonomous learning (Aripova, 2021) because, as indicated in the theory above, conversational engagement and jocund connection between the learner and the instructor provides pleasure, inspiring the student to learn (Koca, 2016).

Because of online learning, learners are forced to be independent because this concept emerged during the new instructional methods of learning hence for independent learning to be successful, notable authors has mentioned in their study that supporting the students in developing their self-regulation ability are more motivated to learn as they cited also from a study in the Netherlands. More so, as defined by Vohs and Baumeister (2004) in their literature, self-regulation is the exercise of self-control, especially in relation to bringing oneself into line with one's preferred lifestyle standards. The word self-regulation comes from the suggestion of psychology which is “regulation by the self” hence action is taken by the self, for the self. In relation to online learning, self-regulation is important because it plays an important role in which it demands effective independent learning because as shown in the study of Onah and Sinclair (2017) it said that learners who are low in self-regulated learning skills tend to perform lesser than those learners who exhibit the ability to self-regulate.

As explained by Zimmerman in the study of Onah and Sinclair (2017), self-regulated (SR) learners are aware of what they are capable of and when they are confident in a piece of given information that they have the skills to do the task successfully, as well as when they are unable to
do so. In a nutshell, self-regulation helps a learner identify his or her strengths and weaknesses hence overcoming the weaknesses and limiting the self from the things he or she cannot do. It was also mentioned that, unlike passive learners, SR learners tend to be proactive in finding different necessary information to understand a topic or to finish a task. They find a way out of the difficult situation they are in order to succeed. This claim has been proven true by Kim et al. (2009) as mentioned in the study of Dos Santos (2020) that Students with effective time management abilities and self-management skills were more likely to complete their programs than those who do not possess these skills.

Self-regulated learning is a broad term that addresses how students approach their studies, set goals, and assess their progress. The concept of self-regulated learning encompasses cognitive, metacognitive, and motivational techniques (Vanderstoep et al., 1996). Therefore, students who practice self-regulated learning can, in the end, enhance their overall academic performance, benefit from having their own learning process, and continue to be effective and efficient learners once they enter the industry they desire.

Aside from the external factors that affect the independent learning of a learner, one’s self should be motivated enough to drive towards meeting the goal. Having self-motivation creates room for optimism and resilience to look on the bright side or to think positively about the challenges as an independent learner. As a learner who studies independently, having self-motivation helps in believing in one’s ability to succeed because this demonstrates a higher desire for achievement than a fear of failing as cited by Steinmayr, et al. (2019) in the study of Brunstein and Heckhausen (2008).

Self-motivation was identified by Meyer et. al. (2008) as a necessary element in independent learning because it is an essential life skill as it paves the way in achieving future goals. As mentioned by Andrew Carnegie an American industrialist, “People who are unable to motivate themselves has to contend with the mediocrity, no matter how impressive their other skills/ talents are.” Hence, self-motivation drives the learner to do their best at their study in order to succeed in a task that may be given to them or to meet their goals in life. In the literature of notable authors, they have mentioned that learners who have a high level of intrinsic motivation generally outperform those who have a low level of intrinsic motivation (Martens et. al., 2004).

In the study of Dos Santos (2019), he mentioned that distance learning students need to have self-discipline and self-motivation abilities if they are to finish their programs owing to the pressures of self-directed pathways. He also said that although self-regulation and a reasonable level of computer literacy are required for distance learning, distance learning students say that additional factors, such as self-management, time management, low levels of engagement, motivation, and interaction, are some of the obstacles to completing their programs. Hence, the need to look into this problem is a must in creating an intervention for students as it is the most important factor in independent learning (Balapumi, & Aitken, 2012) as it is to ensure that they are motivated to finish their courses.

According to Kember & Kwan, (2000) External factors that help independent learners include a strong and close relationship between the student and the teacher. This relationship creates a
positive impact on the students’ motivation as well as ensures that students are proactive in the involvement of learning by assisting the students in becoming more independent learners. As mentioned by Meyer et al. (2008), there are a number of strategies found that supports the students’ ability to independently learn with the help of the teacher. These are Scaffolding, Providing students with opportunities to self-monitor, offering models of behavior, Developing communication that included language focused on learning, and Providing feedback on homework. Scaffolding is a term that refers to the function that creates that trained others. With this, teachers provide to help children learn (Marshall & Rowland, 2013). The goal is to gradually deflect responsibility from the instructor to the student, with the instructor responding flexibly to the reactions of the learners rather than pursuing a predefined teaching path (Wingate, 2007).

Another strategy mentioned by Meyer et al. (2008) is the Providing students with opportunities to self-monitor it implies that self-monitoring is based on two processes: setting objectives and obtaining feedback from everyone and oneself. Teachers should encourage students to self-monitor by guiding them through the process of evaluating feedback internally and externally to determine whether the tactics they were employing were helpful in reaching their learning objectives (Pratt & Urbanowski, 2016).

Offering models of behavior on the other hand promotes independent learning by encouraging pupils to imitate their teachers' actions, such as teachers demonstrating how categorizing material made it simpler to remember. Next strategy is the Developing communication that included language focused on learning, this allowed students to become even more aware of the procedures involved in learning, to better understand their individual learning styles, and to share their ideas with their classmates and professors (DeLong, 2009). Lastly, the strategy on Providing feedback on homework. Students' confidence in studying independently was shown to improve, as was their ability to develop the reflective part of autonomous learning (North & Pillay, 2002).

Therefore, the above-mentioned strategies provide a basis on how the ‘environment’ of the students helps them become more effective and efficient independent learnings. The role of the teacher has shifted from being an expert in the field to being the ‘coach’ in helping the students learn the strategies needed for being independent learners according to Meyer et al. (2008). Teachers assisting students in creating their own representations of learning objectives ensures that students are equipped with the ability to succeed in the learning path they are in.

In the article written by Julie DeNeen (2017), she mentioned how independent learning should be encouraged among students because it has its own benefits that will be used in the student’s future endeavors as well as a component in positively influencing the character development of the students. The benefits of being independent learning are; students are able to learn how to learn, this means that students who are given the opportunity to learn independently will learn how to understand and examine ideas from different angles. It allows the natural curiosity of the student to shine through. (Powers, 2008)

Another benefit is that it helps them focus on the process and not the goal, the process of learning is an exhilarating experience that can be disrupted if the classroom’s primary focus is on
the objective (Kandaiah, T, n.d.). Hence, with the experiment done to the Ethiopian kids wherein they are given a material for learning which is a tablet, they are able to learn bit by bit without the help of an instructor or a teacher which usually provides the goal therefore they have learned the process of learning without the focus on the goal.

More so, independent learning promotes flexibility for the different levels of intelligence because every student learns or works at a different method and a different pace. Therefore, by independent learning, students are in control of their learning pace hence it promotes flexibility (Mankad, 2015). Another benefit of being an independent learner is that it promotes time management since the student controls his or her pace in learning, he or she will be able to manage his or her time well (DeNeen, 2017). To attain their goals, independent learning necessitates the development of other secondary skills such as planning, developing priority lists, and setting deadlines. They must also learn how to efficiently deal with distractions.

As a flexible type of learning, independent learning provides an education that is fitting to the needs of the students hence it promotes passion and curiosity (Stokoe, 2012) because a topic that piques the interest of the student may motivate him or her to do the task. When a student is given the option of choosing which educational mountain to climb first, motivation to overcome hurdles is significantly easier to summon.

Another benefit of being an independent learner is that it provides internal satisfaction to the student (Huang, 2021). When a student is able to accomplish tasks and learn independently, he or she will be more likely to be satisfied internally rather than relying on others' validation to his or her success. Moreover, independent learning also shows awareness of the student's strengths and weaknesses (DeNeen, 2017) because, through the educational process, students are forced to confront both their own strengths and weaknesses.

Brought by independent learning is the ability to educate others, this means that through his or her connection on the topic he or she is learning a student will more likely be able to teach what he or she has learned. Second to the last benefit mentioned by DeNeen (2017) is that students who are independent learners are more effective in self-critiquing. Failure is not as frightening when the process is part of the objective. It is much easier to develop the art of self-criticism after the fear of failure is gone. Because everything is predicated on grades and tests, traditional teachers and classrooms leave little tolerance for failure. Lastly, independent learning promotes resourcefulness as mentioned by Deneen, (2017) that was also mentioned in the literature of Ponton & Carr, (2000). Independent learners are prepared and capable of navigating the process, however, students who are provided knowledge from the teacher may become disheartened when they go it alone (Kennett & Keefer, 2006).

The related literature provides a comprehensive definitions and problems based on the variables of the study. This supports the verification of the researcher’s assumption on the topic as well as provides a framework in composing the interpretation and the survey questionnaire.
Research Objectives
RO1: To describe the socio-demographic characteristics of the respondents.
RO2: To identify the learning independence of students in virtual learning environment.
RO3: To find out the significant difference of level of independent learning when grouped according to socio-demographic profile.

Research Questions
RQ1: What is the socio-demographic characteristics of the respondents in terms of:
a) Age; 
b) Gender; and 
c) Year Level?
RQ2: What is the level of learning independence of the students in this time of COVID-19 in terms of:
a) Self-Regulation; 
b) Self-Motivation; and 
c) Enabling Environment?
RQ3: Is there a significant difference in the level of independent learning when grouped according to socio-demographic profile?

Research Framework
To better understand the relationship between the Independent learning of the students when they are grouped according to their Socio-Demographic Profiles, a figure is shown to further present the indicators of each variable applied in the study. Thus, the research framework is shown below in Figure 1.

In this study, the researcher is going to measure the level of independent learning of the students when they are grouped according to the socio-economic profile of the respondents as gathered in the survey questionnaire. The data that was gathered from the respondents are the Age, Gender, and Year Level for their Socio-Demographic Profile as well as their extent in independent learning particularly their level of self-regulation, self-motivation, and their enabling environment.
2. MATERIALS AND METHODS

Research Design

In this study, non-experimental design using survey method is utilized particularly descriptive comparative research design since the objective of the study is to describe the respondent’s characteristics socio demographic profile in terms of age, sex, and year level. It is appropriate since the researcher is intended to describe the difference between the independent learning of students using virtual learning environment in terms of measuring their self-regulation, self-motivation, and the enabling environment. According to Frank Esser and Rens Vliegenhart who mentioned in their study in 2017 this type of research design is applied because it describes the phenomenon wherein it involves collecting data from the respondents and comparing each emerged group found hence not promoting manipulation.

Sources of Data

The data used in this study is a result of the answered questionnaires given to 159 respondents to fulfill the objective of this study which is to find out the association of level of independent learning of the students using virtual learning environment.

Figure 1. Research Framework of the Study
Sampling Technique
This study utilized a purposive type of sampling technique particularly the convenient sampling since the respondents are college students in Davao Region which were chosen according to how easily they can be reached. Convenient sampling is the most suitable for this study because it is the easiest way for the researcher to gather credible data from purposely-selected individuals that will qualify to this study.

Statistical Treatment
The following statistical tools were used in the study. The frequency and percentage this tool is used in identifying and representing the personal information variables as well as the number of respondents based on each category given. Mean is utilized in this study since mean is necessary to summarize that variable across all participants it can also answer research questions by providing the average of the data tabulated. ANOVA is used in this study because the researcher is going to compare the means of every indicator and if they are significantly different from each other. More so, the result will show if one group is more independent than the other.

3. PRESENTATION, ANALYSIS, AND INTERPRETATION OF DATA
The population of this study was undergraduate students who were 18 years old and above. The sample size was 79 respondents, determined by using frequency and percentage, mean and ANOVA.

Socio-Demographic Characteristic
The socio demographic characteristic of the respondents are categorized according to age, gender, and year level wherein it will be presented in tables below.
Age. Among the 79 students who answered on the survey, 20-year-olds are the majority with a total number of 25 followed by 21-year-olds with 19 respondents, 22-year-olds with 18 respondents, 19-year-olds with 12 respondents, and lastly, 18-year-olds with 5 respondents, out of the 79 respondents.
Gender. Out of the 79 respondents, majority of which are female with a total number of 66 and a percentage of 83.5. On the other hand, there are 13 respondents who are male with a percentage of 16.5.
Year Level. Among the 79 respondents, 27 of which are First Year students. Third Year and Fourth Year students both have the same number of respondents who answered the survey with 21 respondents. Lastly, 10 of the 79 respondents are Second Year students.
Learning Independence of the Students

This section presents the table for the overall level of independent learning of the respondents and its variables. The variables for the level of independence of the respondents are categorized according to self-regulation, self-motivation, and enabling environment wherein it will be presented in tables below.

Presented at the Table 2 is the level of self-regulation of the respondents. The results demonstrate a rating of 3.49. This means that the students are moderate self-regulator. The following items and their mean ratings, arranged from highest to lowest, prompted to the overall rating: 3.84 or High for Self-Motivation, 3.35 or Moderate for Enabling Environment, and 3.27 or Moderate for Self-Regulation.

Independent Learning is the ability of the student to learn independently or without the help of an instructor. Although as mentioned in the study of Gillett-Swan (2017), self-directed and self-regulated learning complicate an already difficult area of online learning delivery and practice, this implies that students has settled in the “new normal” modality based on the results presented in the table below.
The respondents are moderate independent learners. This means that students are able to do his or her own research rather than expecting the teacher to provide the materials needed as it concurred to the study of Moore (1973) wherein he states that independent learning occurs when a student is able to think, act, and pursue their studies independently, without the same levels of support that a teacher provides at school.

**Self-Regulation.** Presented at the Table 2.1 is the level of self-regulation of the respondents. The results demonstrate a rating of 3.27. This means that the students are moderate self-regulator. The following items and their mean ratings, arranged from highest to lowest, prompted to the overall rating: 4.11 or high for When I don’t understand the topic, I usually do research or ask questions to understand it, 3.74 or Moderate for I think of a way to effectively and efficiently finish the tasks given to me, 3.55 or Moderate for I know what my strengths and weaknesses and utilize it efficiently. Furthermore, a mean score of 3.39 or Moderate for I am aware of where I am good at or the skills I possess, was gathered and 3.37 or Moderate for When I do my assignments, I focus on it until I finish, 3.31 or Moderate for I finished my school works before the due date, 3.08 or Moderate for I am good at managing my academic tasks, 2.96 or Moderate for I set up study goals to identify important lessons that is needed to be studied, 2.81 or Moderate for I distance myself to distraction like social media sites to continue my task, and 2.34 or Low for I am good at avoiding distractions especially when doing assignments.

### Table 2.1. Level of Independent Learning in terms of Self-Regulation

<table>
<thead>
<tr>
<th>Items</th>
<th>SD</th>
<th>Mean</th>
<th>Descriptive Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am good at managing my academic tasks.</td>
<td>.89</td>
<td>3.08</td>
<td>Moderate</td>
</tr>
<tr>
<td>I finished my schoolwork before the due date.</td>
<td>1.23</td>
<td>3.31</td>
<td>Moderate</td>
</tr>
<tr>
<td>I set up study goals to identify important lessons that is needed to be studied.</td>
<td>1.01</td>
<td>2.96</td>
<td>Moderate</td>
</tr>
<tr>
<td>I think of a way to effectively and efficiently finish the tasks given to me.</td>
<td>1.03</td>
<td>3.74</td>
<td>Moderate</td>
</tr>
</tbody>
</table>
When I do my assignments, I focus on it until I finish. | 1.27 | 3.37 | Moderate
---|---|---|---
I am good at avoiding distractions especially when doing assignments. | 1.20 | 2.34 | Low
I am aware of where I am good at or the skills I possess. | 1.14 | 3.39 | Moderate
When I don’t understand the topic I usually do research or ask questions to understand it. | 1.06 | 4.11 | High
I distance myself to distraction like social media sites to continue my task. | 1.08 | 2.81 | Moderate
I know what my strengths and weaknesses and utilize it efficiently. | .95 | 3.55 | Moderate

**Overall** | **.77** | **3.27** | **Moderate**

These results signify that students are moderately self-regulating. As mentioned by Onah and Sinclair (2017) said that learners who are low in self-regulated learning skills tend to perform lesser than those learners who exhibit the ability to self-regulate. Based on the result, it can be concluded that the students are performing moderately because they are moderately self-regulating as based on the theory (Onah and Sinclair, 2017).

Therefore, they are good independent learners because as mentioned by Julie DeNeen in her literature in 2017, this indicator contributes to influencing the character development of the students as learners. This supports the claim of DeNeen (2017) that being self-regulated means that students are able to learn how to study through understanding and examining ideas from different angles independently. More so, allows them to control their phase in learning.

The top three highest mean score are: When I don’t understand the topic, I usually do research or ask questions to understand it with a mean score of 4.11 or high; I think of a way to effectively and efficiently finish the tasks given to me with a total mean of 3.74 or Moderate; and I know what my strengths and weaknesses and utilize it efficiently with a mean score of 3.55 or Moderate. On the other hand, the top three lowest items are: I set up study goals to identify important lessons that is needed to be studied with a total mean score of 2.96 or Moderate; I distance myself to distraction like social media sites to continue my task with a mean of 2.81 or Moderate; and I am good at avoiding distractions especially when doing assignments with a mean of 2.34 or Low.

Moreover, the results indicate that students practice self-control by doing the research on their own without expecting a help from an instructor, acknowledging their strength and weaknesses and utilizing it, and finishing tasks efficiently as concurred also on the idea of Vohs and Baumeister (2004) in which they stated that self-regulation is the exercise of self-control, especially in relation to bringing oneself into line with one's preferred lifestyle standards. However as seen on the result,
students are low on avoiding distractions especially when making assignments with a mean of 2.34. This only validates that although their overall performance in school is good because they can pass their assignments on time, but the process of making the assignments itself is quite hard for the respondents because of the external distractions hence making the students a moderate self-regulator.

**Self-Motivation.** Presented at the Table 2.2 is the level of self-motivation of the respondents. The results demonstrate a rating of 3.84. This means that the students are highly self-motivated. The following items and their mean ratings, arranged from highest to lowest, prompted to the overall rating: 4.29 or High for I know the tasks are not easy but I am determined to finish my school activities, 4.10 or High for I believe in myself, 3.98 or High for Even when I do poorly on a test I try to learn from my mistakes, 3.91 or High for I know what my weaknesses are and I do my best to learn from it, 3.88 or High for I always look on the brighter side of the situation.

**Table 2.2. Level of Independent Learning in terms of Self-Motivation**

<table>
<thead>
<tr>
<th>Items</th>
<th>SD</th>
<th>Mean</th>
<th>Descriptive Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>The most satisfying thing for me is trying to understand the content</td>
<td>1.05</td>
<td>3.74</td>
<td>High</td>
</tr>
<tr>
<td>as thoroughly as possible.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I know the tasks are not easy but I am determined to finish my school</td>
<td>.97</td>
<td>4.29</td>
<td>High</td>
</tr>
<tr>
<td>activities.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I always look on the brighter side of the situation.</td>
<td>1.08</td>
<td>3.88</td>
<td>High</td>
</tr>
<tr>
<td>I like what I am learning in the class.</td>
<td>1.09</td>
<td>3.78</td>
<td>High</td>
</tr>
<tr>
<td>I believe in myself.</td>
<td>1.24</td>
<td>4.10</td>
<td>High</td>
</tr>
<tr>
<td>I believe in my abilities.</td>
<td>1.15</td>
<td>3.69</td>
<td>High</td>
</tr>
<tr>
<td>I motivate myself to finish my tasks right away.</td>
<td>1.16</td>
<td>3.56</td>
<td>High</td>
</tr>
<tr>
<td>I know what my weaknesses are, and I do my best to learn from it.</td>
<td>1.08</td>
<td>3.91</td>
<td>High</td>
</tr>
<tr>
<td>I look at online class as a good idea to continue education rather</td>
<td>1.15</td>
<td>3.50</td>
<td>High</td>
</tr>
<tr>
<td>than being sour about it.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Even when I do poorly on a test I try to learn from my mistakes.</td>
<td>.98</td>
<td>3.98</td>
<td>High</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td><strong>.77</strong></td>
<td><strong>3.84</strong></td>
<td><strong>High</strong></td>
</tr>
</tbody>
</table>

Furthermore, following items and their mean ratings are also arranged from highest to lowest, 3.78 or High for I like what I am learning in the class, 3.74 or High for The most satisfying thing for me is trying to understand the content as thoroughly as possible, 3.69 or High for I believe in my abilities, 3.56 or High for I motivate myself to finish my tasks right away, and lastly, 3.50 or High for I look at online class as a good idea to continue education rather than being sour about it. The results show that the students are highly motivated internally. This means that the respondents believe in themselves and that they finish the task given to them.
The top three highest mean score are: I know the tasks are not easy but I am determined to finish my school activities with a mean of 4.29 or High, I believe in myself with a mean of 4.10 or High, and Even when I do poorly on a test, I try to learn from my mistakes with a mean of 3.98 or High. On the other hand, the top three lowest items are: I believe in my abilities with a total mean score of 3.69 or High; I motivate myself to finish my tasks right away with a mean of 3.56 or High; and I look at online class as a good idea to continue education rather than being sour about it with a total mean of 3.50 or High.

Motivation is the driving force of the students to perform individually in school. It explains why so many people choose a certain activity and how long they spend at it. They are motivated to persevere in it, and they are happy to put up the work (Dornyei, 2001 as cited in the study of Kormos, & Csizer, 2014). Therefore, this only validates as to how the respondents are motivated and how they are as an independent learner. This now creates an identity of being a learner. As mentioned by DeNeen (2017), independent learning is a flexible type of learning wherein it emphasizes providing motivation for the students because the lessons given to them promotes passion and curiosity where lessons or topics piques their interests. As mentioned by Alice and David Kolb (2009), people who have a learning identity perceive oneself as learners, they seek out and engage in life situations with a learning mindset, and have confidence in the ability to learn. With this, it promotes their ability to learn individually through the lens of being a highly motivated learner.

**Enabling Environment.** Presented at the Table 2.3 is the level of self-motivation of the respondents. The results demonstrate a rating of 3.35. This means that the students has a moderate enabling environment. The following items and their mean ratings, arranged from highest to lowest, prompted to the overall rating: 4.29 or High for The instructors responds to questions, clearly, completely, and in a timely manner, 4.10 or High for The instructors motivate me to do my best in my studies, 3.91 or High for The instructors became a facilitator for us in learning, 3.88 or High for The instructors provides the guidance I need to be successful in the class, 3.78 or High for The instructors presents the material in a way that makes it relevant to me.

<table>
<thead>
<tr>
<th>Items</th>
<th>SD</th>
<th>Mean</th>
<th>Descriptive Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am comfortable asking my teacher(s) for help.</td>
<td>1.10</td>
<td>3.74</td>
<td>High</td>
</tr>
<tr>
<td>The instructors respond to questions, clearly, completely, and in a timely manner.</td>
<td>.89</td>
<td>4.29</td>
<td>High</td>
</tr>
<tr>
<td>The instructors provide the guidance I need to be successful in the class.</td>
<td>.94</td>
<td>3.88</td>
<td>High</td>
</tr>
<tr>
<td>The instructors present the material in a way that makes it relevant to me</td>
<td>.97</td>
<td>3.78</td>
<td>High</td>
</tr>
<tr>
<td>The instructors motivate me to do my best in my studies.</td>
<td>1.03</td>
<td>4.10</td>
<td>High</td>
</tr>
<tr>
<td>The instructors I have are a positive role model for me to do my best.</td>
<td>1.01</td>
<td>3.69</td>
<td>High</td>
</tr>
</tbody>
</table>
The instructors assist us in becoming more independent learners. | .92 | 3.56 | High 
---|---|---|---
The instructors became a facilitator for us in learning. | 1.00 | 3.91 | High 
---|---|---|---
The instructors help me self-monitor. They help me evaluate feedback internally and externally. | .92 | 2.98 | Moderate 
---|---|---|---
The instructors provide regular feedback that helps me gauge my performance in the class. | 1.03 | 3.20 | Moderate 
---|---|---|---
Overall | .72 | 3.35 | Moderate 
---|---|---|---

Furthermore, following items and their mean ratings are also arranged from highest to lowest, 3.74 or High for the question I am comfortable asking my teacher(s) for help, 3.69 or High for The instructors I have are a positive role model for me to do my best, 3.56 or High for The instructors assist us in becoming more independent learners, 3.20 or Moderate for The instructors provides regular feedback that helps me gauge my performance in the class, and 2.98 or Moderate for The instructors help me self-monitor. They help me evaluate feedback internally and externally.

The top three highest mean score are: The instructors respond to questions, clearly, completely, and in a timely manner with a total mean score of 4.29 or High; The instructors motivate me to do my best in my studies with a mean of 4.10 or High; and The instructors became a facilitator for us in learning with a mean of 3.91 or High. On the other hand, the top three lowest items are: The instructors assist us in becoming more independent learners with a total mean score of 3.56 or High; The instructors provide regular feedback that helps me gauge my performance in the class with a mean of 3.20 or Moderate; and The instructors help me self-monitor. They help me evaluate feedback internally and externally with a mean of 2.98 or Moderate.

This means that the external help that the students get from the instructors are moderately enabling them to understand lessons as well as motive them by being the role model for them to do better. External factors that help independent learners include a strong and close relationship between the student and the teacher as mentioned by Kember & Kwan (2000) in their study. This relationship creates a positive impact on the students’ motivation as well as ensures that students are proactive in the involvement of learning by assisting the students in becoming more independent learners. Teachers play an important role in building the ability of the student to self-learn as they provide help in teaching the students how to learn (La Marca, & Longo, 2017). With the results, it suggests that the instructors of the respondents has been a good role model towards them to look up to hence making the environment moderately enabled.

As mentioned in the theory used in this study, Holmberg (1995) elucidates that the communication between the learner and the teacher is a crucial foundation in the process of teaching and learning in distance education wherein when information technologies are utilized to bypass or circumvent instructor-learner contact through guided didactic discussion. Therefore, the result shows that the teacher’s communication.
Significant Difference of Independent learning using VLE when grouped according to Age

The table below shows the difference of Independent Learning when grouped according to the age of the respondents. As seen below, when the level of independent learning is differentiated to age it shows that there is no significant difference for each given indicator. The following items and their mean ratings, arranged from highest to lowest, prompted to the overall p-value rating: .463 or Not Significant for Enabling Environment, .451 or Not Significant for Self-Motivation, and .206 or Not Significant for Self-Regulation. It only shows that the level of independent learning of the students does not vary when they are grouped according to their age.

As mentioned by Bronson & Bronson (2001) in their book entitled Self-Regulation in Early Age, the human potential to self-regulate is astonishing, given that it is essentially reactive to external events and internal biological requirements with reflexes laying the scene for organizing, modulating, and regulating responses. Hence, as maturity and experience the increase in the capability to proactive, planning, and the ability to control. The external behaviors also impact the ability of the child to learn independently.

A good home environment at an early age is essential in developing the child to self-regulate. This connotes that in order for the children to be independent learners they must have a good self-regulation, self-motivation, and an enabling environment (Meyer et. al., 2008). Hence, as innate a

Table 3. Significant Difference of Independent learning when grouped according to Age

<table>
<thead>
<tr>
<th>Level of Independent Learning</th>
<th>Age</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>F-Value</th>
<th>Sig.</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Regulation</td>
<td>18</td>
<td>3.80</td>
<td>.374</td>
<td>1.517</td>
<td>.206</td>
<td>NS</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>3.20</td>
<td>.994</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>3.07</td>
<td>.713</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>3.50</td>
<td>.754</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>22 and up</td>
<td>3.20</td>
<td>.729</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Motivation</td>
<td>18</td>
<td>4.36</td>
<td>.134</td>
<td>.930</td>
<td>.451</td>
<td>NS</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>3.95</td>
<td>.746</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>3.78</td>
<td>.724</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>3.91</td>
<td>.799</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>22 and up</td>
<td>3.66</td>
<td>.915</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enabling Environment</td>
<td>18</td>
<td>3.56</td>
<td>.482</td>
<td>.910</td>
<td>.463</td>
<td>NS</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>3.41</td>
<td>.775</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>3.15</td>
<td>.764</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>3.53</td>
<td>.708</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>22 and up</td>
<td>3.36</td>
<td>.698</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*-significant at .05 level, ns- not significant
self-regulation is the need for it to be develop through having a good and enabling environment is a very important in a child’s development.

Self-Regulation as an indicator of age as manifested in the f-value of 1.517 with a p-value of .206 which is higher than the alpha 0.05 level of significance. This shows that the result is not significant. This means that the ability to self-regulate of the students does not vary regardless with age.

Self-Motivation as an indicator of age as manifested in the f-value of .930 with a p-value of .451 which is higher than the alpha 0.05 level of significance. This shows that the result is not significant. This means that the ability to self-motivate of the students does not vary regardless with age.

Enabling Environment as an indicator of age as manifested in the f-value of .910 with a p-value of .463 which is higher than the alpha 0.05 level of significance. This shows that the result is not significant. This means that the enabling environment of the students does not vary regardless with age.

**Significant Difference of Independent learning using VLE when grouped according to Gender**

The table below shows the difference of Independent Learning when grouped according to the gender of the respondents. As seen below, when the level of independent learning is differentiated to gender it shows that there is no significant difference for each given indicator. The following items and their mean ratings, arranged from highest to lowest, prompted to the overall p-value rating: .991 or Not Significant for Enabling Environment, .280 or Not Significant for Self-Motivation, and .214 or Not Significant for Self-Regulation. It only shows that the level of independent learning of the students does not vary when they are grouped according to their gender.

**Table 4. Significant Difference of Independent Learning when grouped according to Gender**

<table>
<thead>
<tr>
<th>Level of Independent Learning</th>
<th>Gender</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>F-Value</th>
<th>Sig.</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Regulation</td>
<td>Male</td>
<td>3.51</td>
<td>.749</td>
<td>1.572</td>
<td>.214</td>
<td>NS</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>3.22</td>
<td>.772</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Motivation</td>
<td>Male</td>
<td>4.06</td>
<td>.765</td>
<td>1.184</td>
<td>.280</td>
<td>NS</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>3.80</td>
<td>.775</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enabling Environment</td>
<td>Male</td>
<td>3.36</td>
<td>.666</td>
<td>.000</td>
<td>.991</td>
<td>NS</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>3.35</td>
<td>.739</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*-significant at .05 level, ns- not significant

As mentioned by Baxter Magolda (1992), he claims that the pattern of reasoning of a person is related to gender hence the learning process of each gender differs from one another. As seen
on the table above, we can see that the males are more self-regulated with a mean of 3.51, more self-motivated with a mean of 3.36, and more enabled in their environment with a mean of 3.36 as compared to female with a mean of 3.22 for self-regulation, a mean of 3.80 for self-motivation, and 3.35 for enabling environment. Hence, it concurs to the idea presented by Severiens & Ten Dam (1998), that the learning pattern of each gender differs because of the fact that experiences of both male and female is different from one another due to socialization process.

Self-Regulation as an indicator of gender as manifested in the f-value of 1.572 with a p-value of .214 which is higher than the alpha 0.05 level of significance. This shows that the result is not significant. This means that the ability to self-regulate of the students does not vary regardless with gender.

Self-Motivation as an indicator of gender as manifested in the f-value of 1.184 with a p-value of .280 which is higher than the alpha 0.05 level of significance. This shows that the result is not significant. This means that the ability to self-motivate of the students does not vary regardless with gender.

Enabling Environment as an indicator of gender as manifested in the f-value of .000 with a p-value of .991 which is higher than the alpha 0.05 level of significance. This shows that the result is not significant. This means that the enabling environment of the students does not vary regardless with gender.

**Significant Difference of Independent Learning using VLE when grouped according to Year Level**

The table below shows the difference of Independent Learning when grouped according to the year level of the respondents. As seen below, when the level of independent learning is differentiated to year level it shows that there is no significant difference for each given indicator. The following items and their mean ratings, arranged from highest to lowest, prompted to the overall p-value rating: .697 or Not Significant for Self-Regulation, .472 or Not Significant for Enabling Environment, and .427 or Not Significant for Self-Motivation. It only shows that the level of independent learning of the students does not vary when they are grouped according to their year level.

**Table 5. Significant Difference of Independent learning when grouped according to Year Level**

<table>
<thead>
<tr>
<th>Level of Independent Learning</th>
<th>Year Level</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>F-Value</th>
<th>Sigma</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Regulation</td>
<td>1st yr</td>
<td>3.32</td>
<td>.745</td>
<td>.480</td>
<td>.697</td>
<td>NS</td>
</tr>
<tr>
<td></td>
<td>2nd yr</td>
<td>3.00</td>
<td>.806</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3rd yr</td>
<td>3.27</td>
<td>.789</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4th yr</td>
<td>3.31</td>
<td>.800</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Motivation</td>
<td>1st yr</td>
<td>4.04</td>
<td>.602</td>
<td>.938</td>
<td>.427</td>
<td>NS</td>
</tr>
<tr>
<td></td>
<td>2nd yr</td>
<td>3.67</td>
<td>.812</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3rd yr</td>
<td>3.71</td>
<td>.771</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4th yr</td>
<td>3.81</td>
<td>.944</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Enabling Environment

<table>
<thead>
<tr>
<th>Year</th>
<th>Mean</th>
<th>SD</th>
<th>F</th>
<th>P</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>3.44</td>
<td>.626</td>
<td>.848</td>
<td>.472</td>
<td>NS</td>
</tr>
<tr>
<td>2nd</td>
<td>3.13</td>
<td>.798</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd</td>
<td>3.23</td>
<td>.716</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4th</td>
<td>3.48</td>
<td>.815</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*-significant at .05 level, ns- not significant

Independent learning was seen in the United Kingdom as a poor substitute to the traditional teaching which is face to face (Hockings, et. al., 2018). With this, they frequently use homework model as a benchmark in independent learning however it has its fair share of negative impact because when they realized there would be no monitoring communication and no regular follow up at campus, many thought they lacked the self-motivation and organization as required by independent learning. Therefore, this was the most difficult task for first-year students in particular as they will adjust to university life as well as adjust in learning independently.

Moreover, this idea by Hockings, et. al. (2018) emphasizes that the students undertaking their final year more likely to employ these higher-level skills, implying that this behavior was influenced by the nature and complexity of the task being assessed hence concurring to the idea that higher level students are more independent learners. However, based on the results presented above, this statement is not true. First years are more self-regulated and more self-motivated than that of the Fourth years. While Fourth years has a more enable environment than that of the lower years.

Self-Regulation as an indicator of year level as manifested in the f-value of .480 with a p-value of .697 which is higher than the alpha 0.05 level of significance. This shows that the result is not significant. This means that the ability to self-regulate of the students does not vary regardless with year level.

Self-Motivation as an indicator of year level as manifested in the f-value of .938 with a p-value of .427 which is higher than the alpha 0.05 level of significance. This shows that the result is not significant. This means that the ability to self-motivate of the students does not vary regardless with year level.

Enabling Environment as an indicator of year level as manifested in the f-value of .848 with a p-value of .472 which is higher than the alpha 0.05 level of significance. This shows that the result is not significant. This means that the enabling environment of the students does not vary regardless with year level.

4. CONCLUSION

This study concluded that the level of independent learning of the respondents when it is grouped according to their socio-demographic profile are not significant with each other. This only means that their socio-demographic characteristics do not factorize how they are as a learner, meaning those who are older does not generally mean that they are more independent learners that those younger ones. Therefore, the null hypothesis is accepted.
REFERENCES


Kandaiah, T. Problem-based Learning for Independent Learning in Pre-university Students.


