

Examining Academic Motivation and Self-Efficacy of The College Students in the Online-Distance Learning

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Abstract

Academic self-efficacy is a construct that could be learned. It is rooted in learning by observation and direct personal experience. This study examines the level of academic motivation and self-efficacy of college students in the online-distance learning utilizing the descriptive – comparative and correlational method of research through adapted and modified questionnaires. It was shown that most respondents were 18-20 years old and were female. Results showed a significant difference in the respondents' level of academic motivation in terms of age concerning intrinsic motivation; a considerable discrepancy exists in the level of academic motivation in terms of gender concerning extrinsic motivation and motivation. Furthermore, a significant difference in the respondents' level of academic motivation in terms of gender concerning extrinsic motivation, and a significant difference exists in the respondents' level of academic motivation in terms of course about intrinsic motivation. In addition, the result showed a significant difference between the respondents' levels of self-efficacy in terms of age. The respondents' level of self-efficacy in terms of online learning tasks showed considerable differences among the respondents' ages. Results showed that a significant difference in self-efficacy lies between ages 27 and above and 18-20. In addition, significant differences were found in the level of self-efficacy in terms of courses with online learning tasks. This study concluded that respondents' level of academic motivation in terms of intrinsic showed a significant relationship with their level of self-efficacy among respondents regarding technology use, online learning tasks, and instructor and peer collaboration. Thus, tertiary school education programs should be designed so that emphasis would be laid on allowing students to participate in school activities and decision-making. The results of this study can be used as a basis for further research in areas related to academic motivation and self-efficacy.

Keywords: Academic Motivation, College Students, Online-Distance Learning, Self-efficacy

1. Introduction

Changes in the educational system may affect students' self-efficacy, which is a component that influences motivation (Karaman, 2020). Self-efficacy refers to an individual's assessment of the capability to deal with challenging conditions in the future (Yardımcı, et. al., 2011). Individuals can analyze the outcomes of their acts and judge themselves after acting on their thoughts (Uğraş, 2018). Self-efficacy can intensify academic motivation because learners who contemplate their abilities are more likely to pay full attention in class, strive for excellence, and improve themselves (Erb, et. al., 2017). Motivation denotes the learner's

intrinsic desire to acquire knowledge. It comprises the anticipated derivative from the commotion and each willingness to complete the objective. Motivation is the apparent importance of an action that influences an interactive target. Motivated learners will be involved in self-regulation exercises to help them achieve their goals (Kemp, et. al., 2019). Higher Education Institutions (HEIs) are encouraged to increase their use of technology to enhance learning and teaching, according to CHED Memorandum Order (CMO) No.2 Series of 2020, subject to Guidelines on the Implementation of Flexible Learning.

Researchers have been conducting studies on online education for years, and dynamic online teaching and learning takes extensive instructional planning and designing (Hodges, et. al., 2020). On the other hand, due to the COVID-19 global epidemic, numerous learners worldwide were forced the switch from face-to-face teaching to a virtual classroom in the middle of the academic year. Individuals have low capabilities, and merging different learning modalities can precede intellectual overload, weakening learners' capacity to obtain innovative information efficiently. Additionally, learning objectives may agonize if learners lack trust in the types of machinery they are now utilizing or they do not have intellect on metacognition or societal association (Bower, 2019).

Consequently, due to the adaptation of online learning, some students were unmotivated to learn, while some were highly encouraged and motivated. Extrinsic elements, namely the educational environment, educational data, and contributory supports, had a substantial power on learners deficient in motivation, influencing their attainment (Cahyani, et. al., 2020). Meanwhile, learners attend online classes at home; several guardians believed they could still let their children assist with household errands during their virtual learning conferences (Cahyani, et. al., 2020). Intrinsic factors motivate university students to learn online (Fitriyani, et. al., 2020).

Online courses are critical for keeping students motivated and providing them with methods and strategies for self-regulating their learning (Quesada, et. al., 2019). Students who are highly driven partake in a high level of tenacity and minimal latency in their online learning engagement, allowing them to move quickly and seize opportunities to learn even when they have difficulty (Schunk, et. al., 2012). The fundamental reason for learners' achievement and drive to produce accomplishment is their self-efficacy and motivation. Most of the students are disinterested in their studies. Joining classes consistently, finishing coursework and activities on time, continuing in their reading, being prepared even before discussion, having time-management skills, and missing the motivation to accomplish their best due to the epidemic are just a few examples. However, many of the learners who valued education had a high degree of self and determination, which meant they had a better probability of settling on a career and staying focused on their life goals.

Academic motivation is critical to a student's learning process. It has the prospective to enhance learners' direct involvement in the production of education structures and learning determination and success (Widodo, et. al., 2018). Academic motivation is essential, and it must be executed in all disciplines through information exchange, the importance of the learning experience, pleasant cognitive activities, and recognition of the educational process (Widodo, et. al., 2018). As a result of the full significance of educational drive-in attaining learning, various studies were piloted to ascertain the latent concerning achievement engagement in education sectors, primarily focusing on exploring students' academic

motivation (Vanslambrouck, et. al., 2018). The connection between academic motivation and additional factors similarly academic-related to intellectual achievement attitude (Widodo, et. al., 2018). Academic motivation and perception dependence are aided, academic motivation and the utilization of practical learning methods in addition to the enhancement of study skills that can strengthen students' academic motivation (Vanslambrouck, et. al., 2018).

The worldwide epidemic of Coronavirus disease 19 (COVID-19) has also shaken the global education system; nevertheless, it has similarly displayed chances and risks to higher education establishments. Higher education institutions (HEIs) all through the country and the rest of the world must be reactive in their action to the pandemic's interference. COVID-19 has caused the closing of universities within the state as of March 2020. Consequently, the learning process experienced a radical shift, eventually leading to distance learning, wherein the instruction is essentially equipped on a digital device. More than just online learners, online learning is a strategic choice for some students to achieve a higher balance in their lives (Farrel, et. al., 2018). As a result, technology offers learners more malleability, easing information acquisition and successive commitment through self-directed education designed to fulfill their necessities (Wengrowicz, et. al., 2018). Furthermore, this research contributes to the literature by examining the levels of Academic Motivation and Self-Efficacy of the College Students in the Online Distance Learning as a mode of learning delivery in the Philippines due to the Covid-19 Pandemic.

2. Theoretical Background

This study is anchored on the Self-determination theory established by Edward L. Deci and Richard M. Ryan. The theory arose from a desire to learn more about intrinsic motivation, which is well-defined as performing a specific task for doing it out of inquisitiveness and pleasure (Gagne, 2014). Self-determination theory is a motivational theory that emphasizes the concept of free will and the ability to think critically that affect outcomes. People are considered organismic or living entities, according to Self-determination theory. It's a mistake to assume that motivation and engagement theories developed for traditional on-campus classrooms will apply to the online learning environment. Online learning refers to delivering online courses in whole or in part (i.e., 'blended') utilizing educational resources and learning administration systems (Meyer, 2014).

Once learners are given chances to gratify their primary psychological necessities for autonomy (being apparent as the foundation of one's conduct), proficiency (feeling active and proficient), and relatedness (feeling associated with others), they experience optimal motivation and, as a result, academic success (Ryan, et. al., 2012). According to SDT, higher levels of satisfaction in immediate needs psychologically progress welfare and motivation, whereas lower levels of perceived satisfaction can undermine individuals' motivation and well-being (Butz, 2015). Being self-determined entails more than just carrying out behaviors on one's own (Wehmeyer, 2003).

Social Cognitive Theory also supports this theory by Albert Bandura. Human behavior is observed as the result of a self-motivated interaction of individual, environmental, and communicative influences in social cognitive theory. Self-efficacy is demarcated as self-reliance in one's capability to execute a precise accomplishment is accentuated in Social Cognitive Theory (Sheng-Wuu, 2008). Social Cognitive Theory

provides an all-inclusive theoretical outline for accepting and grasping individual behavior (Zhou, et. al., 2020).

Bandura's social cognitive theory first introduced the idea of general self-efficacy. Self-efficacy is referred to one's belief in their capability to do well in particular circumstances or accomplish an actual task (Bandura, 2012). Self-efficacy indicates an individual's evaluation of their ability to complete an objective or certainty in their capacity. For instance, in a classroom setting, it can be presumed that learners with extraordinary self-efficacy are more encouraged to learn, which leads to developed academic accomplishment since those learners consider they have the aptitude to realize their aims. Sexual category, domain, and age are all known to impact self-efficacy (Yokoyama, 2019).

Academic motivation can be referred to as a student's eagerness or interest in their learning experiences (Hulleman, et. al., 2016). According to research, academically motivated students value school and learning, enjoy learning, and participate in learning-related activities (Zimmerman, et. al., 2012). Due to the continuous structure of education faculties, motivation is essential in students' academic performance. For example, becoming an instructor necessitates practice in university courses (Kusurkar, 2013). Although there are many different types of motivation, they are categorized into two categories. Intrinsic motivation is the first type (e.g., being concerned about becoming a goal-oriented teacher or following the academic challenges of educational science). The second type of motivation is extrinsic motivation, which is goal-oriented. Extrinsic motivation, for instance, is attributed to being motivated to look for work or continue pursuing a career as a teacher (Cook, et. al., 2016).

Experts in the field of education are also fascinated by self-efficacy. The subjective evaluation of an individual's remarkable ability to complete a precise task is known as self-efficacy (Doğru, 2020). Self-efficacy is attributed to the learner's perceived confidence level in achieving the desired goals in success-oriented educational environments. Self-efficacy influences how students make decisions, how much mental effort they put in, and how long they stick with a task (Kaleli, 2020). Self-efficacy beliefs are at the heart of human functioning. People must have the necessary skills and competencies to execute a job; they also need to be convinced that they can accomplish the important accomplishments effectively beneath typical and, more importantly, challenging circumstances (Artino, 2012).

3. Methods

This study utilized the descriptive – comparative and correlational method of research using adapted and modified questionnaires with 341 student respondents. Frequency count and percent, weighted mean, Chi-square, Kruskal Wallis, and Mann Whitney U Test statistical tools were used to analyze and interpret the data. The comparative design was used to know whether there was a significant difference between the respondents' profile and their level of academic motivation and a considerable difference between the respondents' profile and their level of self-efficacy. Further, correlational design was used to determine the significant relationship between the respondents' level of academic motivation and level of self-efficacy.

4. Data Analysis and Interpretation

4.1 Profile of the Respondents

Table 1: Respondents' Profile		
Profile	Frequency	Percentage
Age		
18 – 20	196	57.5
21 – 23	132	38.7
24 -26	5	1.5
27 and above	8	2.3
Gender		
Male	124	36.4
Female	217	63.6
Course		
College of Computer Studies	33	9.7
College of Commerce	93	27.3
College of Teacher Education	81	23.8
College of Criminal Justice	121	35.5
Psychology Department	13	3.8

Table 1 manifests the respondent's age, gender, and course profile. This study showed that 57.5 percent of the respondents belonged 18-20 years old, 21-23 years old at 38.7 percent, 27 and above at 2.3 percent, and 24 -26 years old at 1.5 percent. Meanwhile, in terms of gender, most of them (63.6 %) were female respondents, and (36.4%) were male respondents. Table 2 also reflected that majority of the respondents came from the College of Criminal Justice Education at 35.5 %, followed by the College of Teacher Commerce at 27.3%, College of Teacher Education at 23.8%, College of Computer Studies at 9.7%, and Psychology Department at 3.8%.

Age, gender, and course of the respondents were essential variables in examining their level of academic motivation and self-efficacy in online distance learning. As a result, in the case of college students, it examined the level of their academic motivation and self-efficacy in online distance learning. Their success and failure were considered to investigate their level of academic motivation and self-efficacy in online distance learning.

4.2 Respondents' Level of Academic Motivation

The level of Academic Motivation of respondents was assessed in the study regarding intrinsic, extrinsic, and motivation. The motivation of students toward technology will determine the success of e-learning. Their involvement in the class, their experience with ICT, and their attitude towards it assess their motivation to accept e-learning (Hamzah, et. al., 2015). Lack of students' motivation can be a factor that fades the success of e-learning (Baber, 2020). To determine the success of e-learning, students' motivation to learn in the online environment plays a pivotal role (Rhema, et. al., 2014). Students will be motivated by online learning when they perceive that their goal of education is meeting and they have the competency to use technology and e-learning tools (Kim, et. al., 2011).

4.2.1 Intrinsic

Table 2 shows the level of academic motivation of the respondents in terms of intrinsic motivation. The overall mean is 3.35, interpreted as “a little.” Top 3 in rank among the items include: The most satisfying thing for me in this course is trying to understand the content as thoroughly as possible (M=3.74), preceded by I can motivate myself to perform well in my online courses by seeing how these courses can move me closer to my career goals (M= 3.50) and followed by, In a mode of learning like online distance learning, I prefer course material that challenges me so I can learn new things (M= 3.40). It indicates that the respondents find themselves less motivated to explore to learn online by seeing how their course can move closer to their career goals.

While the bottom 3 in rank among the indicators involve: I can motivate myself to learn online through the pleasure and satisfaction I experienced in my online courses (M= 3.29), followed by I can motivate myself to persist in my online courses when facing difficulties or setbacks (M=3.18) and I can motivate myself to learn in my online courses without the presence of instructors to assist me (M=2.88). Intrinsic motivation is influenced by interest, ambition, aspiration, awareness, competency, and physical and psychological conditions (Gustiani, 2020).

Respondents mostly have less opportunity to learn online through the belief that their online courses can broaden their knowledge about subjects that appeal to them. Students need to motivate themselves to know online through the pleasure and satisfaction they experienced in their online courses. When intrinsically motivated, extrinsic incentives are unnecessary as the reward lies in the doing of the activity (Harnett, 2015).

Motivation plays a crucial role in learning and can influence what, when, and how we learn and is a significant performance factor (Schunk, et. al., 2012). It has been shown to play an essential role in determining whether a learner persists in a course, the level of engagement shown, the quality of work produced, and the level of achievement attained. Understanding the nature of motivation and how personal histories, social factors, experiences, and circumstances may influence learners' motivation, therefore, has important practical implications for those involved in online teaching and learning (Harnett, 2021). Academic motivation can most simply be defined as the factors influencing a person to attend school and obtain a degree (Hakan, et. al., 2014).

Table 2. Respondents’ Level of Academic Motivation in terms of Intrinsic

Indicators	Mean	Description	Rank
1. In a mode of learning like online distance learning, I prefer course material that really challenges me so I can learn new things.	3.40	A Little	3
2. In mode of learning like online distance learning, I prefer course material that arouses my curiosity, even if it is difficult to learn.	3.37	A Little	6
3. The most satisfying thing for me in this course is trying to understand the content as thoroughly as possible.	3.74	Quite a Bit	1

4. When I have the opportunity in this class, I choose course assignments that I can learn from even if they don't guarantee a good grade.	3.35	A Little	7
5. I can motivate myself to explore content related questions in my online courses.	3.39	A Little	4
6. Even in the face of technical difficulties, I can motivate myself to learn the materials presented in an online course.	3.35	A Little	8
7. I can motivate myself to learn online through the belief that my online courses can broaden my knowledge about subjects which appeal to me.	3.38	A Little	5
8. I can motivate myself to perform well in my online courses by seeing how these courses can move me closer to my career goals	3.50	Quite a Bit	2
9. I can motivate myself to learn in my online courses without the presence of instructors to assist me.	2.88	A Little	11
10. I can motivate myself to persist in my online courses when facing difficulties or setbacks.	3.18	A Little	10
11. I can motivate myself to learn online through the pleasure and satisfaction I experienced in my online courses.	3.29	A Little	9
Total	3.35	A Little	

4.2.2 Extrinsic

Another essential aspect investigated in this study involved the academic motivation of the respondents in terms of extrinsic motivation. From table 3, it was found that the overall mean (M= 3.60) was interpreted as quite a bit which indicates that respondents had quite a bit of difficulty motivating themselves to learn online because they wanted to prove themselves that they are capable of earning a degree by completing online courses.

Online learning has caused some students to lack motivation to learn, whereas others are highly motivated. Students with a lack of encouragement were significantly affected by external factors like learning environment, learning time, and instrumental support, which affected their achievement. As the online learning was conducted from home, many parents thought they still could ask for help in doing household from their children during their online learning time. Improper internet connections and gadgets to access distance learning also caused frustration. (Cahyani, et. al., 2020). Students reported a loss of motivation, poor focus, and impaired memory due to the COVID-19 crisis, making learning difficult (Lovri'c, et. al., 2020).

The top rank among the statements stated: Getting a good grade in this class is the most satisfying thing for me right now (M= 3.75), which tied up with the information The most important thing for me right now is improving my overall grade point average, so my main concern in this class is getting a good grade

(M= 3.75) and followed by I can motivate myself to learn online because I want to prove to myself that I am capable of earning a degree by completing online courses (M=3.65) interpreted as quite a bit.

Table 3: Respondents’ Level of Academic Motivation in terms of Extrinsic

Indicators	Mean	Description	Rank
1. Getting a good grade in this class is the most satisfying thing for me right now.	3.75	Quite a Bit	1.5
2. The most important thing for me right now is improving my overall grade point average, so my main concern in this class is getting a good grade.	3.75	Quite a Bit	1.5
3. If I can, I want to get better grades in this class than most of the other students.	3.28	A Little	5
4. I want to do well in this class because it is important to show my ability to my family, friends, employer, or others.	3.57	Quite a Bit	5
5. I can motivate myself to work hard in my online courses through the belief that my online courses can help me get a degree allowing me to get a better salary later on.	3.62	Quite a Bit	4
6. I can motivate myself to learn online because I want to prove to myself that I am capable of earning a degree by completing online courses.	3.65	Quite a Bit	3
Total	3.60	Quite a Bit	

They were followed by motivating me to work hard in my online courses through the belief that my online courses can help me get a degree allowing me to get a better salary later on (M=3.62), interpreted as quite a bit. While the last in rank stated: If I can, I want to get better grades in this class than most of the other students (M= 3.28).

Although most respondents showed agreement among the statements, these were the least frequent answers found in the bottom rank. Therefore, the school and the teachers should consider them for potential improvement, which includes motivating the students to work hard in their online courses through the belief that their online courses can help them get a degree, allowing them to get a better salary later on. Students who are extrinsically motivated undertake activities for reasons separate from the action itself, for example, gaining good grades, avoiding negative consequences, or because the task has utility value, such as passing a course to earn a degree (Harnett, 2015). The extrinsic motivation is influenced by studying conditions, social conditions, family conditions, and supporting facilities (Gustiani, 2020). The need to gain mastery over the challenges drives the participants to conduct behaviors such as following their schedule strictly to achieve their goals. People are more often motivated by external reinforcement, such as money, praises, and prizes, known as extrinsic motivation (Ying, et. al., 2022).

4.2.3 Amotivation

Table 4 shows the respondents’ level of academic motivation in terms of inspiration. The overall mean (M=2.19) indicated that the respondents would likely have a little concern in this area. These items received a general very little agreement from the respondents. This means that respondents believed that they might not think that online distance learning is beneficial to them, but they also find a reason to learn online. The absence of both intrinsic and extrinsic motivation is called motivation. It generates when learners have an unwillingness or lack of motivation to learn. They have low self-efficacy and feel incapable because the learning will result in no desired outcome, and doing the tasks has no value (Harnett, 2015). Motivated individuals experience incompetence and expectancies of uncontrollability. They perceive their behavior as caused by forces out of their control. They feel undeceived and start asking themselves why they go to school in the world. Eventually, they may stop participating in academic activities (Ayub, 2010).

Table 4: Respondents’ Level of Academic Motivation in terms of Amotivation

Indicators	Mean	Description	Rank
1. I keep away from learning in an online distance learning since it has a negative effect on social life.	2.33	Very Little	1
2. I do not want to learn through online distance learning because it hurts my personality.	2.11	Very Little	7
3. I am not interested in information technology since it leads to addiction.	2.06	Very Little	8
4. I am against learning online because it isolates people.	2.27	Very Little	3
5. I do not think online distance learning is beneficial to me.	2.31	Very Little	2
6. I cannot find any reason to learn online.	2.12	Very Little	5.5
7. I find online distance learning unnecessary.	2.12	Very Little	5.5
8. Honestly, I do not know why I learn online distance learning.	2.23	Very Little	4
Total	2.19	Very Little	

The top in rank stated: I keep away from learning in an online distance learning since it harms social life (M=2.33), which was agreed upon by most of the respondents, followed by the statement I do not think online distance learning is beneficial to me (M=2.31) followed by I am against learning online because it isolates people (M=2.27) interpreted as Very Little. While the bottom rank among the indicators involves: I cannot find any reason to learn online (M=2.12), which is tied up with I find online distance learning unnecessary (M=2.12). I do not want to learn through online distance learning because it hurts my personality. (M=2.11). The last in rank stated: I am not interested in information technology since it leads to addiction (M=2.06) interpreted as very little. A motivated individual lacks intention because they feel incompetent or have low self-efficacy. They think that whatever they do will not affect the outcome, or they place low value on the task being undertaken (Harnett, 2015). In motivated motivation, individuals are neither intrinsically motivated nor extrinsically motivated. A motivated individual experiences three feelings of incompetence and expectancies of uncontrollability. They perceive their behavior as caused by

forces out of their control. They feel undeceived and start asking themselves why they go to school in the world. Eventually, they may stop participating in academic activities (Ayub, 2010).

4.2.4 Summary of the Respondents’ Level of Academic Motivation

Table 5 shows the summary of the level of academic motivation of the respondents. The grand mean is 3.05, which is interpreted as a little. Top 1 in rank is extrinsic motivation (M=3.35), followed by intrinsic motivation (M=3.35) and motivation (M=2.19). It indicates that most of the students are extrinsically motivated, and the most important thing for them right now is improving their overall grade point average. In addition, their main concern in the class is getting a good grade. They motivate themselves to work hard in their online courses by believing that their online courses can help them get a degree, allowing them to get a better salary later on. Students who are extrinsically motivated undertake activities for reasons separate from the activity itself (Ryan, et. al., 2000), for example, gaining good grades, avoiding negative consequences, or because the task has utility value, such as passing a course to earn a degree" (Hartnett, et. al., 2011). The concept of extrinsic motivation is the opposite of intrinsic motivation. It is related to instrumental motivation – it is the motivation related to external incentives and rewards to engage in activities. Extrinsic motivation is understood as a potential reward (Morillo, et. al., 2018). If a teacher gives a bonus to a student and the controlling aspect of the prize is considered dominant, then intrinsic motivation decreases since the student will perceive the teacher to be externally manipulating their performance (Ryan, et. al., 2017).

Intrinsic motivation promotes activities where the individual experiences inherent satisfaction; they find this activity exciting and enjoyable (Ryan, et. al., 2017). In this sense, "rewards" are characteristic of activities that activate brain reward areas (Lee, et. al., 2012). Intrinsically motivated students do not need extrinsic incentives. From a functional point of view, what intrinsically motivates students is pleasure, especially in terms of competence and autonomy (Lee, et. al., 2012). The factors, which hinder the realization of the need for competence and independence, hinder intrinsic motivation (Lee, et. al., 2012). Thus, inherent cause arises from self-awareness, and the pleasure felt during a particular activity (Morillo, et. al., 2018). "This model conceptualizes a continuum of regulation that ranges from motivation (lack of motivation) at one end to intrinsic motivation at the other" (Hartnett, et. al., 2011). The balance between extrinsic motivation and self-determined types of motivation becomes crucial in online education (Hartnett et al., 2011).

Table 5: Summary Table of the Level of Academic Motivation

Variables	Overall Mean	Description	Rank
Intrinsic	3.35	A Little	2
Extrinsic	3.60	Quite a Bit	1
Amotivation	2.19	A Little	3
Grand Mean	3.05	A Little	

4.3 Respondent's Level of Self-Efficacy

Another aspect being assessed in this study involved the level of self-efficacy of the respondents in terms of technology use, online learning tasks and instructor-peer interaction, and communication self-efficacy.

The subsequent discussions cover the constructs under the level of self-efficacy of the respondents. Self-efficacy makes someone's initiative appear to undertake activities or persevere in the face of difficulties. When students meet obstacles in their learning and try to learn it or do not, that is where student self-efficacy comes into the role. Self-efficacy is very important and needed to complete the given task (Akib et. al., 2018). Self-efficacy raises students' awareness of the importance of the mission given for now and future goals and makes the students find and directly involved in the study. While efficacy is not a fixed state, it is influenced by social circumstances (Day, 2018). To maintain self-efficacy, the teachers or lecturers in charge of the class should guide and help the students since they understand and have more experience with the given task. This corresponds with (Wijaya, et. al., 2020), who asserts that the teacher's action makes the students "feel accepted, appreciated, and motivated." Hence, the students keep going the right way and are in a conducive learning environment to achieve a successful learning outcome. Online learning self-efficacy describes individuals' perceptions of their abilities to complete specific tasks required in online learning (Zimmerman, et. al., 2016). Self-efficacy is one of the critical aspects of motivation and a necessary factor in online learning (Zimmerman, et. al., 2016). Self-efficacy beliefs hold a significant role as well. Self-efficacy refers to how persistent the infants are and how much effort is put into particular tasks to accomplish a specified goal (Wang, et al., 2018). Self-efficacy is paramount because if ones have high self-efficacy, the better their performance, more focused, more determined and resilient in learning also in achievement than those who have low self-efficacy that would likely to experience self-doubt, demotivated, anxiety, and depression (Bingöl, et. al., 2018). Efficacy beliefs can influence individuals to become committed to achieving their desired outcome successfully. People who have high confidence in their capabilities have a strong sense of efficacy. They don't take complex tasks as obstacles to avoid; instead, they take them as a challenge to develop their skills. They set challenging goals for themselves, commit to them, and quickly recover their sense of efficacy if they fail in a task (Alqurashi, 2016).

4.3.1 Technology Use

Table 6: Respondents' Level of Self-efficacy in terms of Technology Use

Indicators	Mean	Description	Rank
I feel confident in downloading and installing a software or application from a website.	2.85	A Little	9
I feel confident in visiting a website.	2.96	A Little	7
I feel confident in downloading (saving) an image from a website	3.03	A Little	4
I feel confident in bookmarking a website.	2.85	A Little	10
I feel confident in copying a block of text from a web site and pasting it to a document in a word processor.	2.63	A Little	13
I feel confident in opening and using different web browsers.	2.82	A Little	11
I feel confident in accessing links to web resources.	2.85	A Little	8
I feel confident in creating a simple web page with text, images, and links.	2.74	A Little	12
I feel confident in conducting an Internet search using one or more keywords	2.98	A Little	6

I feel confident in using online tools assigned by my online instructor to finish course projects/assignments.	3.14	A Little	2
I feel confident in attaching a file (image, text, or video) to an email and then sending it off.	3.26	A Little	1
I can overcome technical difficulties on my own.	3.01	A Little	5
I can learn to use a new type of technology efficiently	3.14	A Little	3
Total	2.94	A Little	

Respondents' level of self-efficacy in terms of technology use is outlined in table 6. The overall mean (M=2.94) indicated a narrow interpretation, indicating less frequent agreement in this area.

From the table, the top rank among the indicators includes I feel confident in attaching a file (image, text, or video) to an email and then sending it off (M=3.26), followed by I feel confident in using online tools assigned by my online instructor to finish course projects/assignments (M=3.14), while the bottom 3 in rank among the indicators involve: I feel confident in opening and using different web browsers (M=2.82), followed by I feel confident in creating a simple web page with text, images, and links (M=2.74), and I feel satisfied in copying a block of text from a web site and pasting it to a document in a word processor (M=2.63). This means that few respondents feel confident in using online tools assigned by their online instructor to finish projects. In the online learning environment, technology self-efficacy is linked to learners' belief in the ability to use technology in learning. Some students think it is challenging to learn how to use technology to serve their learning process (Bailey, et. al., 2017). Lack of confidence resulted in low-level searches to locate information," where high perceived self-efficacy leads to more exploration and finding desired information (Alqurashi, 2016).

Each learner accomplishes the tasks and activities assigned to him anytime and anywhere through the available simultaneous online interaction tools. This is done by using text, audio, and image-based applications for distance discussions, using e-mail, web pages, file-sharing sites, and more (Radha, et. al., 2020).

4.3.2 Online Learning Task

Indicators	Mean	Description	Rank
I feel confident in seeking clarification from my online instructors on course topics and content.	3.08	A Little	11
I feel confident in seeking clarification from my online instructors on due dates/time frames for learning activities.	3.09	A Little	9
I feel confident in taking an online quiz/test.	3.08	A Little	10
I feel confident in asking my online instructors questions on course topics.	3.01	A Little	15

I feel confident in viewing my grades in the grade book of the Learning Management System (e.g., BlackBoard).	3.00	A Little	16
I feel confident in viewing my online course materials in the Learning Management System (e.g., BlackBoard).	3.14	A Little	7
I feel confident in submitting course assignments through the Learning Management System (e.g., BlackBoard).	3.22	A Little	4
I feel confident in participating in online course discussions.	3.16	A Little	6
I feel confident in understanding my strengths and weaknesses through feedback from my online instructors.	3.30	A Little	2
I can navigate online course materials efficiently.	3.10	A Little	8
I can complete all assignments on time.	3.32	A Little	1
I can search over the Internet to find the answer to a course-related question.	3.04	A Little	13
I can search the online course materials.	3.06	A Little	12
Meet deadlines with very few reminders.	3.18	A Little	5
Focus on schoolwork when faced with distractions.	3.04	A Little	14
Develop and follow a plan for completing all required work on time	3.28	A Little	3
Use the library's online resources efficiently.	2.92	A Little	17
Total	3.12	A Little	

Table 7 shows the level of self-efficacy of the respondents in terms of Online Learning tasks which is indicated to be a little agreed on among the respondents in terms of doing online learning tasks.

The indicators' overall mean (M=3.12) was interpreted a little, which entails a significant concern in this area. From table 8, the top 3 in rank among the statements are as follows: I can complete all assignments on time (M=3.32), and I feel confident in understanding my strengths and weaknesses through feedback from my online instructors (M=3.30). Develop and follow a plan for completing all required work on time (M=3.28). This means that few students feel confident in seeking clarification from their online instructors on course topics, contents, and learning activities. The interaction between the student and the content is more interactive and positive within the virtual classroom if written, audio, or visual educational materials excite their senses, involving the learner in actively thinking about specific content to understand and remember the information. The learner can be applied individually or in groups through questions, exercises, and activities that stimulate thinking and constructive interaction with the materials (Vlachopoulos, et. al., 2019).

Meanwhile, the bottom 3 in rank among the indicators involve: I feel confident in asking my online instructors questions on course topics (M=3.01), followed by I think satisfied in viewing my grades in the

grade book of the Learning Management System (e.g., BlackBoard) (M=3.00) and Use the library's online resources efficiently (M=2.92). This means that the respondents feel less confident in understanding their strengths and weaknesses through feedback from their online instructors. Experts on online education have suggested that individuals with low self-efficacy or those who do not believe that they have the needed skills to succeed in an online learning program are less likely to complete it. Others may opt not to enroll (Zimmerman, et. al., 2016).

4.3.3 Instructor and Peer Interaction and Communication

Table 8 shows respondents' level of self-efficacy in terms of the instructor and peer interaction and communication, which is indicated to be a little agreed on among the respondents in terms of the instructor and peer interaction and communication. The indicators' overall mean (M=3.10) was interpreted as minor, which implicates less frequent agreement among the respondents. From table 9, the top 3 in rank among the statements are as follows: I can complete a group project entirely online (M=3.22), followed by I can develop a sense of collaboration through teamwork/schemes in my online courses (M= 3.21), and I can gain a sense of belonging in my online courses by getting to know other course participants (M= 3.18).

Meanwhile, the bottom 3 in rank among the indicators involve: I can rely on other participants in my online courses for help (M=2.98) followed by I can communicate effectively with my instructor via e-mail (M=2.98), and I can share my problems with my online classmates, so we know what we are struggling with and how to solve our problems (M=2.97). This means that most of the respondents can't interact well with other participants in the online courses through online or web-based communication and can't develop a sense of collaboration through teamwork projects in the online classes. The discussion in the classroom should start from either side, which motivates students to speak and participate in it. Collaborating in the debate will make the classroom lively and enhance the knowledge and confidence of the learners. The shy students will find it easy to discuss things online rather than in the school behind the screen. The collaboration will make the learning two-way and overcome monotonous monologue learning (Baber, 2020).

Although interaction via the electronic environment does not provide face-to-face interaction among students, it may be more effective for students to interact with their mates to discuss, debate, and participate in building knowledge and improving the process of recalling academic content through the process of discussion and interaction with peers (Almaleki, 2021).

In online learning, autonomy-supportive teachers will consider student perspectives, allow for choices around education, give a rationale when the option is constrained, avoid the use of controlling language, and reduce unnecessary stress and demands on students (Alamri, et. al., 2020). For example, teachers should give students access to varied learning resources in several languages and navigation support to choose different learning materials (Bedenlier, et. al., 2020) and should provide personalized learning opportunities by respecting and accepting students' interests and allowing flexibility to customize learning activities (Alamri, et. al., 2020). Then students can make their own choices and decisions about their personal goals and self-efficacy, use their voices to seek help, and feel empowered in learning (Alamri, et. al., 2020). In online learning, structuring teachers will design well-structured discussion forums and multiple user-friendly functions, organize peer moderation to allow students to share information with

peers, provide strong guidance during online lessons, demarcate the boundaries of learning activities, give competence-relevant feedback, express confidence in student abilities, and distribute effective learning materials to achieve desired outcomes (Chiu, et. al., 2020).

Table 8: Respondents’ Level of Self-efficacy in terms of Instructor and Peer Interaction and Communication

Indicators	Mean	Description	Rank
I can develop a sense of community through interactions with other online course participants.	3.14	A Little	5
I can feel connected to others in my online courses.	3.11	A Little	7
I can rely on other participants in my online courses for help.	2.98	A Little	10
I can develop a sense of community through interactions with my online instructors.	3.08	A Little	8
I can share my problems with my online classmates so we know what we are struggling with and how to solve our problems.	2.97	A Little	12
I can still maintain a sense of trust while disagreeing with other course participants	3.02	A Little	9
I can develop a sense of collaboration through team work/projects in my online courses.	3.21	A Little	2
I can communicate with my online classmates to find out how I am doing in my online classes	3.16	A Little	4
I can gain a sense of belonging in my online courses by getting to know other course participants.	3.18	A Little	3
I can interact well with other participants in my online courses through online or web-based communication.	3.12	A Little	6
I can communicate effectively with my instructor via e-mail.	2.98	A Little	11
I can complete a group project entirely online.	3.22	A Little	1
Total	3.10	A Little	

When confronted with problems, students seek help from teachers, particularly on how the required competencies are performed or when students cannot solve particular problems. This jives with the result that a learner who engages in help-seeking shows awareness of difficulty they cannot overcome alone and remedies that difficulty by seeking help from peers or instructors when needed. Students seek other students whenever they encounter problems and in other subjects. Students have adaptive help-seeking involves a student asking for hints about the solution to a problem, examples of similar issues, or clarification of the situation from others (Ryan, et. al., 2017).

4.3.4 Summary of the Respondents’ Level of Self-efficacy

Table 9 shows the summary of the level of self-efficacy of the respondents. The grand mean is 3.05, which indicates “a little.” Top 1 in rank is online learning task (M=3.12), followed by instructor and peer and communication (M=3.10) and technology use (M=2.94). It indicates that most of the respondents have an average level of self-efficacy in terms of the online learning task. They can search over the Internet to find the answer to a course-related question. The respondents can develop and follow a plan for completing all required requirements work on time.

Table 9: Summary Table of the Level of Self-efficacy

Variables	Overall Mean	Description	Rank
Technology Use	2.94	A Little	3
Online Learning Task	3.12	A Little	1
Instructor and Peer and Communication	3.10	A Little	2
Grand Mean	3.05	A Little	

Wang, et al., (2013) identified technology self-efficacy, including general computer self-efficacy and learning management systems self-efficacy as determinants for online student success. Therefore, students' self-efficacy about technology and technology use in online learning is a critical aspect in gauging students' preparedness for online learning. Computer and Internet-based technologies are indispensable in distance education. Learning activities and instructor-student and student-student interactions and communications are accomplished in the online learning environment through technology uses. Moreover, the respondents' self-efficacy was a significant concern in this area since most of them don't feel confident in using online tools assigned by their online instructor. To finish course projects/assignments, few can overcome technical difficulties independently and learn to use a new type of technology efficiently.

4.4 Significant Difference in the Respondents' Level of Academic Motivation in terms of Age

Table 10: Significant Difference of the Respondents' Level of Academic Motivation in terms of Age

Group	Mean Rank	P-value	Decision on Ho $\alpha = 0.05$	Interpretation
Intrinsic				
18-20	159.24	0.002	Reject Ho	Significant Difference
21-23	182.09			
24-26	163.1			
27 and above	280.94			
Extrinsic				
18-20	173.72	0.451	Failed to Reject Ho	No Significant Difference
21-23	165.29			
24-26	143.4			
27 and above	215.69			

Amotivation				
18-20	161.01	0.073	Failed to Reject Ho	No Significant Difference
21-23	188.22			
24-26	158.1			
27 and above	91.27			

When Table 10 was examined, no significant difference was found in the level of academic motivation of the respondents in terms of age, considering the extrinsic motivation and motivation.

However, respondents' level of academic motivation in terms of age considering intrinsic motivation showed a significant difference among the respondents with a P-value of 0.002, which is less than the significance level of 0.05. Older students report fewer surface and more deep learning approaches than younger students (Rubin, et. al., 2018). Older students might be more motivated by intrinsic goals such as improving their knowledge rather than by extrinsic goals related to their career progression (Richardson, 2013).

4.5 Significant Difference in the Respondents' Level of Academic Motivation in terms of Gender

When Table 11 was examined, no significant difference was found in the level of academic motivation of the respondents in terms of intrinsic motivation in relation to gender. However, respondents' level of academic motivation in terms of extrinsic motivation in relation to gender showed a significant difference among the respondents' gender with a P-value of 0.001, which is less than the significance level of 0.05.

It is unknown if female and male students are motivated differently. Sex differences in motivation could be rooted in evolutionary biology and/or overwhelming social differences. There is an emotional debate regarding questions about innate or social differences between men and women; however, despite the passions and political correctness encountered by addressing these questions, these are important issues that must be addressed by the academic community if we are to provide quality education for everyone.

Consequently, a significant difference was also shown with respondents' level of academic motivation in terms of gender in relation to motivation with a P-value of 0.006, which is less than the significance level of 0.05. (D'Lima, et. al., 2014), male college students have been found to report more adherence to performance goal orientations than female college students.

Table 11: Significant Difference of the Respondents' Level of Academic Motivation in terms of Gender

Group	Mean Rank	P-value	Decision on Ho $\alpha = 0.05$	Interpretation
Intrinsic				
Male	165.2	0.411	Failed to Reject Ho	No Significant Difference
Female	174.31			
Extrinsic				
Male	144.14	0.001	Reject Ho	

Female	186.35			Significant Difference
Amotivation				
Male	190.46	0.006	Reject Ho	Significant Difference
Female	159.88			

However, for female college students, mastery goal orientation has been shown to decrease over an academic semester, whereas male college students' mastery goal orientation increases. Studies examining gender differences in students' intrinsic and extrinsic motivation have reported mixed results. The study revealed that women are more intrinsically motivated than men according to classroom curiosity levels. On the contrary, other studies have indicated that female students were more extrinsically motivated specifically by adult approval than men. College women have been found to outperform men as a group and to receive more extrinsic rewards historically from parents and teachers than boys, who may be one explanation for female students being more extrinsically motivated than men (D'Lima, et. al., 2014).

4.6 Significant Difference in the Respondents' Level of Academic Motivation in terms of Course

Table 12 shows the significant difference in the respondents' level of academic motivation in terms of course. From table 12, no significant difference was found in the level of academic motivation of the respondents in terms of course in relation to extrinsic motivation and motivation.

Table 12: Significant Difference of the Respondents' Level of Academic Motivation in terms of Course

Group	Mean Rank	P-value	Decision on Ho $\alpha = 0.05$	Interpretation
Intrinsic				
CCS	144.98	0.033	Reject Ho	Significant Difference
COC	160.73			
CJE	166.89			
CTE	181.8			
PSYCH	235.62			
Extrinsic				
CCS	137.26	0.233	Failed to Reject Ho	No Significant Difference
COC	175.38			
CJE	181.93			
CTE	167.71			
PSYCH	187.88			
Amotivation				
CCS	167.71	0.111	Failed to Reject Ho	No Significant Difference
COC	161.11			
CJE	159.06			
CTE	190.09			
PSYCH	146.81			

However, a significant difference was found in the level of academic motivation of the respondents in terms of course in relation to intrinsic, with a P-value of 0.033, which is less than the significance level of 0.05. Educational levels could greatly predict online learning outcomes (Huang, et. al., 2013).

Pairwise Comparison using the Mann-Whitney U test showed significant differences in the level of academic motivation in terms of intrinsic motivation lie between the psychology students and college of computer studies students, also between the psychology students and college of commerce students, as well as psychology students and college of criminal justice education students and between psychology students and college of teacher education students.

4.7 Significant Difference of the Respondents' Level of Self-Efficacy in terms of Age

Table 13 shows the significant difference between the respondents' levels of self-efficacy in terms of age. The respondents' level of self-efficacy in terms of online learning tasks showed a significant difference among the respondents' ages using the Kruskal Wallis test with a P-value of 0.004, which is less than the significance level of 0.05. Further, to determine where the differences lie, a Mann-Whitney U test was conducted.

The e-learning program was designed by also carefully considering older trainees' needs which should thus enable them to learn successfully with the program. Therefore, overall positive development of self-efficacy during training is expected. Furthermore, if older learners start with lower self-efficacy and perceive the training to be easily manageable, this should enhance their self-efficacy, thereby resulting in more positive self-efficacy development in the older learner group (Bausch, 2014).

Older trainees are often perceived as being less confident in their learning abilities. This is hardly surprising, considering that in training literature, they are frequently reported to be slower, less motivated, and less effective than younger trainees.

Table 13: Significant Difference of the Respondents' Level of Self-Efficacy in terms of Age

Group	Mean Rank	P-value	Decision on Ho $\alpha = 0.05$	Interpretation
Technology Use				
18-20	160.45	0.087	Failed to Reject Ho	No Significant Difference
21-23	186.79			
24-26	136.6			
27 and above	190.5			
Online Learning Task				
18-20	158.98	0.004	Reject Ho	Significant Difference
21-23	182.37			
24-26	180.4			
27 and above	271.94			
Instructor and Peer Interaction and Communication				

18-20	164.67	0.137	Failed to Reject Ho	No Significant Difference
21-23	174.84			
24-26	210.2			
27 and above	238.19			

Age-related self-efficacy differences have been shown in various learning contexts (Bausch, et. al., 2014). For example, compared with younger trainees, older trainees showed reduced ‘self-efficacy for development and training’ and ‘self-efficacy for learning’ (Touron, et. al., 2004).

Table 13.1a: Pairwise Comparison of Respondents’ Self-Efficacy with age

Ranks				
	Age	N	Mean Rank	Sum of Ranks
Online	18-20	196	100.21	19640.50
	27 and above	8	158.69	1269.50
	Total	204		

Table 13.1b: Test Statistics of Respondents’ Self-efficacy with age

	Online
Mann-Whitney U	334.500
Wilcoxon W	19640.500
Z	-2.748
Asymp. Sig. (2-tailed)	.006
a. Grouping Variable: age	

Tables 13.1a and 13.1b showed the Pairwise Comparison using the Mann-Whitney U test to determine where the differences lie. Results showed that a significant difference in self-efficacy lies between ages 27 and above and 18-20 with a P-value of .006, which is less than the significance level of 0.05 in terms of doing the online learning tasks.

Table 13.2a Pairwise Comparison of Respondents’ Self-Efficacy with age

Ranks				
	Age	N	Mean Rank	Sum of Ranks
Online	21-23	132	68.15	8995.50
	27 and above	8	109.31	874.50
	Total	140		

Table 13.2b: Pairwise Comparison of Respondents’ Self-Efficacy with age

Test Statistics ^a	
	Online
Mann-Whitney U	217.500
Wilcoxon W	8995.500
Z	-2.789
Asymp. Sig. (2-tailed)	.005
a. Grouping Variable: age	

Tables 13.2a and Table 13.2b showed the Pairwise Comparison using the Mann-Whitney U test to determine where the differences lie. Results showed that a significant difference in self-efficacy lies between ages 27 and above and 21-23 with a P-value of .005, which is less than the significance level of 0.05 in terms of doing the online learning tasks.

4.8 Respondents' Level of Self-Efficacy in terms of Gender

When Table 14 was examined, a significant difference was not found in self-efficacy dimensions in terms of gender considering technology use, online learning tasks, and instructor and peer interaction and communication.

Gender difference in education has been recognized as an important issue for research for a long time. Generally, males and females reacted differently regarding Internet self-efficacy and attitudes toward computers. Liu & Chang (2010) investigated how gender influences student blogging, and it found no significant difference between male and female students (Chang, et. al., 2014).

Females had stronger self-regulation than males, which also led to their significantly more positive online learning outcomes than males (Alghamdi, et. al., 2020). However, no significant gender differences were revealed in learning outcomes because males were more stable in attitudes while females performed well in engagement (Nistor, 2013). Furthermore, no significant gender differences in learning outcomes were found based on learning styles. There were also no significant gender differences in the learning satisfaction of online millennial learners (Harvey, et. al., 2017). Some research indicated that there were no differences between women and men in academic self-efficacy (Rivera-Heredia, et. al., 2016).

Table 14: Significant Difference of the Respondents' Level of Self-Efficacy in terms of Gender

Group	Mean Rank	P-value	Decision on Ho $\alpha = 0.05$	Interpretation
Technology Use				
Male	169.47	0.828	Failed to Reject Ho	No Significant Difference
Female	171.88			
Online Learning Task				

Male	163.74	0.304	Failed to Reject Ho	No Significant Difference
Female	175.15			
Instructor and Peer Interaction and Communication				
Male	160.59	0.14	Failed to Reject Ho	No Significant Difference
Female	176.95			

4.9 Significant Difference in the Respondents' Level of Self-Efficacy in terms of Course

Table 15: Significant Difference of the Respondents' Level of Self-Efficacy in terms of Course

Group	Mean Rank	P-value	Decision on Ho $\alpha = 0.05$	Interpretation
Technology Use				
CCS	142.5	0.095	Failed to Reject Ho	No Significant Difference
COC	157.01			
CJE	175.2			
CTE	186.85			
PSYCH	169.77			
Online Learning Task				
CCS	149.44	0.03	Reject Ho	Significant Difference
COC	159.47			
CJE	164.72			
CTE	182.89			
PSYCH	236.73			
Instructor and Peer Interaction and Communication				
CCS	147.36	0.066	Failed to Reject Ho	No Significant Difference
COC	158			
CJE	181.2			
CTE	174.55			
PSYCH	227.42			

When Table 15 was examined, no significant difference was found in the self-efficacy mean scores of the respondents according to their course in terms of technology use and instructor and peer interaction and communication. However, significant differences were found in the level of self-efficacy in terms of course in relation to online learning tasks with a P-value of 0.03, which is less than the significance level of 0.05.

Pairwise Comparison using the Mann-Whitney U test showed significant differences in the level of self-efficacy in terms of course in relation to online learning tasks lie between the psychology students and college of computer studies students, also between the psychology students and college of commerce

students, as well as psychology students and college of criminal justice education students and between psychology students and college of teacher education students.

Academic self-efficacy is a variable to be considered in the university context, as it indicates students' future goals according to their abilities, such as achievement motivation, access to scholarships, academic performance, or permanence in higher education (Borzzone, 2017). But, in this time of confinement, when we have quickly moved from face-to-face teaching to remote emergency teaching (Abreu, 2020), it was important to analyze whether this improvised change could affect the expectations of perceived self-efficacy of university students to achieve academic success, since students were not prepared. The reasons might be either that undergraduates were subject to the distractions of visual stimulation such as online videos or that they failed to spend enough time watching the online videos to acquire knowledge (Evans, 2014).

4.10 Relationship between Respondents' Level of Academic Motivation and Level of Self-Efficacy

Table 16: Relationship between Respondents' Level of Academic Motivation and Level of Self-Efficacy

Variable	P-value	Decision on Ho $\alpha = 0.05$	Interpretation	Strength
Intrinsic in relation to:				
Technology Use	0.001	Reject Ho	Significant	0.664
Online Learning Task	0.001	Reject Ho	Significant	0.75
Instructor and Peer Interaction and Collaboration	0.001	Reject Ho	Significant	0.686
Extrinsic in relation to:				
Technology Use	0.001	Reject Ho	Significant	0.552
Online Learning Task	0.001	Reject Ho	Significant	0.624
Instructor and Peer Interaction and Collaboration	0.001	Reject Ho	Significant	0.553
Amotivation in relation to:				
Technology Use	0.006	Reject Ho	Significant	0.391
Online Learning Task	0.001	Reject Ho	Significant	0.373
Instructor and Peer Interaction and Collaboration	0.013	Reject Ho	Significant	0.353

Table 16 showed the relationship between the respondents' level of academic motivation and level of self-efficacy. From Table 16, respondents' level of academic motivation in terms of intrinsic showed significant relationship ($p < 0.05$) with their level of self-efficacy among respondents in relation to technology use ($C = 0.664$), online learning tasks ($C = 0.75$), instructor and peer collaboration ($C = 0.686$). The strength in correlation based on eta coefficient showed a low to high strength which indicates that their relationship is of average.

Moreover, respondents' level of academic motivation in terms of extrinsic showed significant relationship ($p < 0.05$) with their level of self-efficacy in relation to technology use ($C = 0.552$), online learning tasks ($C = 0.624$), instructor and peer interaction and collaboration ($C = 0.553$). The strength in correlation based on eta coefficient showed a high strength which indicates that their relationship is strong. Students become self-motivated in online education over a period of time as this learning is self-regulated (Kauffman, 2015).

Accordingly, respondents' level of academic motivation in terms of amotivation showed a significant relationship ($p < 0.05$) with their level of self-efficacy in relation to technology use ($C = 0.391$), and online learning tasks ($C = 0.373$), instructor and peer interaction and collaboration ($C = 0.353$). The strength in correlation based on the eta coefficient showed a low to high strength, which indicates that their relationship is on average. Student motivation is an important aspect of student characteristics which is determined by self-efficacy. A student who is active and engages in classroom discussions and activities is most likely to be motivated (Baber, 2021).

5. Conclusions

Academic self-efficacy is a construct that could be learned. It is rooted in learning by observation and direct personal experience. Thus, tertiary school education programs should be designed in a way that emphasis would be laid on giving students the opportunity to participate in school activities and decision-making. Student motivation and self-regulation both have important roles to play in college student learning. Students who feel efficacious about their ability to learn and to do the work are more likely to be engaged and to do better. Likewise, students who are focused on learning, mastery, and self-improvement are more likely to be involved in learning and perform better.

6. Recommendations

Students should be more convinced and confident about achieving practical goals and achieving their academic and life decisions. They should be more effective. Additionally, teachers should continually develop their skills and enthusiasm for teaching to improve students' tasks, self-efficacy, motivation, and school achievements amidst this new adaptation to the E-learning environment. The teachers and policymakers consider the factors affecting self-efficacy and academic motivation during this pandemic by planning, creating exciting activities, and policymaking. Each student should actively be involved in the classroom activities. Flexible techniques involving individual students should be adopted. Classroom activities should be made very interesting and challenging to students' efforts. The difficulty level of the task given to each child should be commensurate with his/her capability. Support and encouragement should be given to each student as he/she does his/her best to complete the assigned task. Teachers and counseling psychologists should be free of praise and constructive criticism. Negative comments should pertain to particular performances and not the performer. Non-judgmental feedback should be offered on students' work. Teachers should stress opportunities for each student to improve and look for ways to stimulate advancement.

In addition, instructors have to be familiar with the online learning environment and platform so they can help students to participate in online courses. In order to do so, they can provide introductory sessions which include the information students need to take online courses at the beginning of the class and

provide prompt feedback when students have problems. Further, instructors have to pay attention to students who are taking their first online course by encouraging them to participate and persist in their online courses. Institutions also play important roles in online learning environments. They can provide a friendly and easy-to-use online learning platform to increase students' willingness to take online courses and their levels of online learning technology self-efficacy. They can also provide workshops or training sessions to both instructors and students to help them become familiar with the online learning platform.

For future scholars, future research is needed to identify the factors affecting the level of academic motivation and self-efficacy of college students in online distance learning. Finally, it is suggested that the study's proposed action plan for an enrichment program to advance the level of academic motivation and self-efficacy among college students in online distance learning be implemented.

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8. References

1. Karaman, M. A. (2020). Middle school students' academic motivation in Turkey: Levels of perfectionism and self-efficacy. *Middle School Journal*, 51(5), 35-45.
2. Yardımcı, F., & Başbakkal, Z. (2011). The study of self-efficacy levels among primary education students and investigation of affecting variables. *Ege Üniversitesi Hemşirelik Yüksek Okulu Dergisi*, 27(2), 19-33.
3. Uğraş, M. (2018). An examination of the relationship between seventh-grade students' motivation and self-efficacy beliefs with science achievement. *Bingöl Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 8(16), 495-508.
4. Erb, S., & Drysdale, M. T. (2017). Learning attributes, academic self-efficacy and sense of belonging amongst mature students at a Canadian university. *Studies in the Education of Adults*, 49(1), 62-74.
5. Kemp, A., Palmer, E., & Strelan, P. (2019). A taxonomy of factors affecting attitudes towards educational technologies for use with technology acceptance models. *British Journal Education Technology*, 50, 2394-2413.
6. Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). The difference between emergency remote teaching and online learning. *EDUCAUSE Review*.
7. Bower, M. (2019). Technology- mediated learning theory. *British Journal Education Technology*, 50, 1035-1048.
8. Cahyani, A. L., & Larasati, S. P. (2020). Motivasi Belajar Siswa SMA pada Pembelajaran Daring di Masa Pandemi Covid-19. *Jurnal Pendidikan Islam*, 3(1), 123-140.
9. Fitriyani, Y., Fauzi, I., & Sari, M. Z. (2020). Motivasi belajar mahasiswa pada pembelajaran daring selama pandemik Covid-19. *Jurnal Kependidikan: Jurnal Hasil Penelitian dan Kajian Kepustakaan di Bidang Pendidikan, Pengajaran dan Pembelajaran*, 6(2), 165-175.
10. Quesada-Pallarès, C. S.-M.-C., & Pineda-Herrero, P. (2019). Online vs. classroom learning: Examining motivational and self-regulated learning strategies. *Front Psychology*, 10, 1-13.
11. Schunk, D. H., & Zimmerman, B. J. (2012). *Motivation and selfregulated learning: Theory, research, and applications*. Lawrence Erlbaum Associate.

12. Widodo, M., Ariyani, F., & Setiyadi, A. B. (2018). Attitude and motivation in learning a local language. *Theory and Practice in Language Studies*, 8(1), 105-112.
13. Vanslambrouck, S., Zhu, C., Lombaerts, K., Philipsen, B., & Tondeur, J. (2018). Students' motivation and participative task value of participating in online and blended learning environments. *The Internet and Higher Education*, 36, 33-40.
14. Farrel, D. R., & Jennigs, L. (2018). A meta-analysis of approaches to engage social work students online. *Journal of Teaching in Social Work*, 38(2), 183-197.
15. Wengrowicz, N. S., & Dori, Y. J. (2018). Students' collaborative learning attitudes and their satisfaction with online collaborative case-based courses. 32(4), 283-300.
16. Gagne M. (2014). *The Oxford Handbook of Work Engagement, Motivation, and Self-Determination Theory*. Oxford University Press.
17. Meyer, K. A. (2014). Student engagement in online learning: what works and why. *ASHE Higher Education Report*, 40(6), 1-114.
18. Ryan, R.M., Deci, E.L. (2017). *Self-Determination Theory. Basic Psychological Needs in Motivation, Development, and Wellness*. NewYork: The Guilford Press.
19. Butz, N. T., & Stupnisky, R. H. (2015). Improving student relatedness through an online discussion intervention: The application of self-determination theory in synchronous hybrid programs. *Computers & Education*, 114, 117-138.
20. Wehmeyer, M. L. (2003). *Theory in Self-determination : Foundations for Educational Practice*.
21. Sheng-Wuu Joe, &., & Lin., C.-P. (2008). Learning Online Community Citizenship Behavior: A Socio-Cognitive Model. *CyberPsychology & Behavior*, 11(3), 367-370.
22. Zhou, Q., Lee, C. S., Sin, S.-C. J., Lin, S., Hu, H., & Bin, F. F. (2020). Understanding the use of YouTube as a learning resource: a social cognitive perspective. *Aslib Journal of Information Management*, 72(3), 339-359.
23. Bandura, A. (2012). "Social cognitive theory," in *Handbook of Theories of Social Psychology* (Vol. 1). Thousand Oaks, CA: Sage Publications Ltd.
24. Yokoyama, S. (2019). Academic self-efficacy and academic performance in online learning: A mini review. *Frontiers in psychology*, 2794.
25. Hulleman, C. S., & Lazowski, R. A. (2016). *Student motivation: Current theories, constructs, and interventions within an expectancy-value framework*. Springer International Publishing.
26. Zimmerman, W. A., & Kulikowich, J. M. (2016). Online learning self-efficacy in students with and without online learning experience. *American Journal of Distance Education*, 30(3), 180-191.
27. Kusurkar, R. T. (2013). How motivation affects academic performance: a structural equation modelling analysis. *Adv Heal Sci Education*, 18(1), 57-9.
28. Cook, D., & Artino, A. (2016). Motivation to learn: an overview of contemporary theories. *Med Education*, 50(10), 997-1014.
29. Dođru, O. (2020). An investigation of pre-service visual arts teachers' perceptions of computer self-efficacy and attitudes towards web-based instruction. *International Journal of Research in Education and Science (IJRES)*, 6(4), 629-637.
30. Kaleli, Y. S. (2020). Investigation of the relationship between pre-service music teachers' attitudes towards teaching profession and their self-efficacy beliefs. *International Journal of Research in Education and Science (IJRES)*, 6(2), 580-587.

31. Artino, A. R. (2012). Academic self-efficacy: from educational theory to instructional practice. *Perspectives on medical education*, 1(2), 76-85.
32. Hamzah, W. M. A. F. W., Ali, N. H., Saman, M. Y. M., Yusoff, M. H., & Yacob, A. (2015). Influence of gamification on students' motivation in using e-learning applications based on the motivational design model. *International Journal of Emerging Technologies in Learning (iJET)*, 10(2), 30-34.
33. Baber, H. (2020). Determinants of students' perceived learning outcome and satisfaction in online learning during the pandemic of COVID-19. *Journal of Education and E-Learning Research*, 7(3), 285-292.
34. Rhema, A., & Miliszewska, I. (2014). Analysis of student attitudes towards e-learning: The case of engineering students in Libya. *Issues in informing science and information Technology*, 11, 169-190.
35. Kim, K. J., & Frick, T. W. (2011). Changes in student motivation during online learning. *Journal Of Educational Computing Research*, 44(1), 1-23.
36. Gustiani, S. (2020). Student's Motivation in an Online Learning During the COVID-19 Pandemic Era: A case Study. *Holistics*, 12(2).
37. Hartnett, M. K. (2015). Influences that undermine learners' perceptions of autonomy, competence and relatedness in an online context. *Australasian Journal of Educational Technology*, 31(1), 86-99.
38. Schunk, D. H., & Usher, E. L. (2012). Social cognitive theory and motivation. *The Oxford handbook of human motivation* (pp. 13-27). Oxford, UK: Oxford University Press.
39. Hakan, K., & Münire, E. (2014). Academic motivation: Gender, domain and grade differences. *Social and Behavioral Sciences*, 143, 708-715.
40. Cahyani, A. L., & Larasati, S. P. (2020). Motivasi Belajar Siswa SMA pada Pembelajaran Daring di Masa Pandemi Covid-19. *Jurnal Pendidikan Islam*, 3(1), 123-140.
41. Lovrić, A., Farci, N., Vcev, A. (2020). Studying during the COVID-19 pandemic: A qualitative Inductive content analysis of nursing *Jurnal Psikologi Malaysia* 35 (3).
42. Ying, B. A. S., Mir, S., Xin, L. G., Zheng, N. W. Y., & Jia, W. J. (2022). Challenges and Experiences Faced by Malaysian Undergraduates in Coping with Low Academic Motivation During the COVID-19 Pandemic. *JURNAL PSIKOLOGI MALAYSIA*, 35(3).
43. Ayub, N. (2010). Effect of intrinsic and extrinsic motivation on academic performance. *Pakistan business review*, 8(1), 363-372.
44. Morillo et al., 2018 – Morillo, J.P., Reigal, R.E., Hernandez-Mendo, A. (2018). Motivational Orientations, Autonomy Support, and Psychological Needs in Beach Handball. *Revista Internacional de Medicina y Ciencias de la Actividad Física y el Deporte*. 18(69): 103-117
45. Lee, W., Reeve, J., Xue, Y., Xiong, J. (2012). Neural differences between intrinsic reasons for doing versus extrinsic reasons for doing: An fMRI study. *Neuroscience Research*. 73(1): 68-72.
46. Akib, M., Haryanto, H., Iskandar, I., & Patak, A. A. (2018). Investigating the motivation, participation, and achievement of students. *International Journal of Humanities and Innovation (IJHI)*, 1(2), 78-87.
47. Day, C. (2018). Professional identity matters: Agency, emotions, and resilience. In *Research on teacher identity* (pp. 61-70). Springer, Cham.
48. Wijaya, K. F., & Mbato, C. L. (2020). Graduate Students' Perceptions on their Self-Efficacy in Writing Academic Papers. *ELT Worldwide: Journal of English Language Teaching*, 7(1), 31-41.

49. Zimmerman, W. A., & Kulikowich, J. M. (2016). Online learning self-efficacy in students with and without online learning experience. *American Journal of Distance Education*, 30(3), 180-191.
50. Bingöl, T. Y., Batık, M. V., Hoşoğlu, R., & Kodaz, A. F. (2018). Psychological Resilience and Positivity as Predictors of Self-Efficacy. *Asian Journal of Education and Training*, 5(1), 63–69.
51. Alqurashi, E. (2016). Self-efficacy in online learning environments: A literature review. *Contemporary Issues in Education Research*, 9(1), 45-52.
52. Bailey, A. A., Pentina, I., Mishra, A. S., & Mimoun, M. S. B. (2017). Mobile payments adoption by US consumers: An extended TAM. *International Journal of Retail & Distribution Management*, 16(12), 46–63.
53. Radha R., Mahalakshmi, K. Kumar V.S. and Saravanakumar A.R. (2020). “E-Learning during lockdown of Covid-19 pandemic: A global perspective,” *Int. J. Control Autom.*, vol. 13, no. 4, pp. 1088–1099.
54. Vlachopoulos, D. and Makri A. (2019). “Online communication and interaction in distance higher education: A framework study of good practice,” *Int. Rev. Educ.*, vol. 65, no. 4, pp. 605–632.
55. Baber, H. (2020). Determinants of students’ perceived learning outcome and satisfaction in online learning during the pandemic of COVID-19. *Journal of Education and E-Learning Research*, 7(3), 285-292.
56. Almaleki, D. A., Alhajaji, R. A., & Alharbi, M. A. (2021). Measuring Students' Interaction in Distance Learning Through the Electronic Platform and its Impact on their Motivation to Learn During Covid-19 Crisis. *International Journal of Computer Science & Network Security*, 21(5), 98-112.
57. Alamri, H., Lowell, V., Watson, W., & Watson, S. L. (2020). Using personalized learning as an instructional approach to motivate learners in online higher education: Learner self-determination and intrinsic motivation. *Journal of Research on Technology in Education*, 52(3), 322–352.
58. Bedenlier, S., Bond, M., Buntins, K., Zawacki-Richter, O., & Kerres, M. (2020). Facilitating student engagement through educational technology in higher education: A systematic review in the field of arts and humanities. *Australasian Journal of Educational Technology*, 36(4), 126–150.
59. Chiu, T. K. F., & Lim, C. P. (2020). Strategic use of technology for inclusive education in Hong Kong: A content level perspective. *ECNU Review of Education*, 3(4), 715–734.
60. Wang, C., Shannon, D. M., & Ross, M. E. (2013). Students’ characteristics, self-regulated learning, technology self-efficacy, and course outcomes in online learning. *Distance Education*, 34(3), 302–323.
61. Rubin, M., Scevak, J., Southgate, E., Macqueen, S., Williams, P., and Douglas, H. (2018). Older women, deeper learning, and greater satisfaction at university: age and gender predict university students’ learning approach and degree satisfaction. *J. Divers. High. Educ.* 11, 82–96.
62. Richardson, J. T. (2013). Approaches to studying across the adult life span: Evidence from distance education. *Learning and Individual differences*, 26, 74-80.
63. D’Lima, G. M., Winsler, A., & Kitsantas, A. (2014). Ethnic and gender differences in first-year college students’ goal orientation, self-efficacy, and extrinsic and intrinsic motivation. *The Journal of Educational Research*, 107(5), 341-356.
64. Huang, S., & Fang, N. (2013). Predicting student academic performance in an engineering dynamics course: A comparison of four types of predictive mathematical models. *Computers & Education*, 61, 133–145.

65. Bausch, S., Michel, A., & Sonntag, K. (2014). How gender influences the effect of age on self-efficacy and training success. *International Journal of Training and Development*, 18(3), 171-187.
66. Liu, E. Z. F., & Chang, Y. F. (2010). Gender differences in usage, satisfaction, self-efficacy, and performance of blogging. *British Journal of Educational Technology*, 41, 39–43.
67. Chang, C. S.-F., & Cheng, S. S. (2014). Effects of online college student's Internet self-efficacy on learning motivation and performance. *Innovations in Education and Teaching International*, 51(4), 366-377.
68. Alghamdi, A., Karpinski, A. C., Lepp, A., & Barkley, J. (2020). Online and face-to-face classroom multitasking and academic performance: Moderated mediation with self-efficacy for self-regulated learning and gender. *Computers in Human Behavior*, 102, 214–222.
69. Nistor, N. (2013). Stability of attitudes and participation in online university courses: Gender and location effects. *Computers & Education*, 68, 284–292
70. Harvey, H. L., Parahoo, S., & Santally, M. (2017). Should gender differences be considered when assessing student satisfaction in the online learning environment for millennials? *Higher Education Quarterly*, 71(2), 141–158.
71. Rivera-Heredia, M. E., Martínez-Fuentes, M., González-Betanzos, F., and SalazarGarcía, M. A. (2016). Self-Efficacy, Social Participation, and Perception Regarding University Services by Sex. *Rev. de Psicol.* 25, 1–16.
72. Borzone, M. A. (2017). Self-efficacy and academic experiences with university students. *Acta Colombiana de Psicología* 20, 266–274.
73. Abreu, J. L. (2020). Times of Coronavirus: Online education in response to the crisis. *Int. J. Good Consci*, 15, 1-15.



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