Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 5, 1104-1125
2025
Publisher: Learning Gate
DOI: 10.55214/25768484.v9i5.7091

The learning of English language using online platforms among English as a second language learners in the Philippines: Stress and coping strategies

Vanessa Joy Z. Judith[1*]
[1]Carlos Hilado Memorial State University, Philippines; vanessajoy.judith@chmsu.edu.ph (V.J.Z.J.).

Abstract: Language learning among ESL students is a complex process that often leads to stress. Moreover, coping strategies are a person's choices to respond to a stressor. This study examined English language learning via online platforms among ESL students in the Philippines, focusing on stress levels and coping strategies. Using a descriptive research method, 165 ESL students from a state university in Central Philippines were surveyed using validated instruments. Data analysis involved mean, standard deviation, t-test, ANOVA, and Pearson's r, with sex and year level as variables. Findings showed that female ESL learners experienced higher stress. Coping strategies were moderate across all groups. Significant differences in stress and coping mechanisms were noted between the sexes. A relationship between stress levels and coping mechanisms was also evident. Practical implications include tailoring support for female ESL learners. Targeted support for them has to be implemented, such as stress management workshops integrated into online language learning. To address the variation in stress levels caused by differences in sex, there is a need to conduct gender-specific stress management sessions and identify coping mechanisms that are unique to each gender.

Keywords: *English as a second language (ESL), Online platforms, Stress and coping strategies in learning english language.*

1. Introduction

After the Covid-19 pandemic lockdown at the beginning of 2020, all educational organizations realized that everything was different than what it used to be. As a result, the higher educational climate, like in a state university in the Philippines, has learned to embrace the online platforms in conducting classes, precisely that of ESL. Higher education in the Philippines, which observes the delivery system that has a classroom setting with students and lecturer interactions, has been challenged by innovations in educational delivery mechanisms [1] Information technology innovations have enabled other education delivery methods, such as online learning, to gain prominence in higher education. Although the education community has long acknowledged the efficacy of online learning [2-6] evidence of the challenges in its implementation continues to build up [7, 8].

Online learning refers to a learning environment that uses the Internet and other technological devices and tools for synchronous and asynchronous instructional delivery and management of academic programs [9, 10]. Synchronous online learning involves real-time interactions between the teacher and the students, while asynchronous online learning occurs without a strict schedule for different students [11]. Concerning policies, government education agencies and schools, they were scrambled to create foolproof policies on governance structure, teacher management, and student management.

On the part of the students, dropout rates increased due to economic, psychological, and academic reasons. Academically, although students can learn anything online, learning may be less than optimal, especially in courses requiring face-to-face contact and direct interactions [12].

Online learning is not something that has just recently come about. Realizing teaching and learning via digital platforms has gained popularity among higher education institutions and has been noted to

History: Received: 13 February 2025; Revised: 15 April 2025; Accepted: 18 April 2025; Published: 12 May 2025
* Correspondence: vanessajoy.judith@chmsu.edu.ph

be the preference of learners for quite some time [13] and has been traced by authors to have started becoming the trends among universities since 1990 [14, 15].

Nonetheless, Antonio, et al. [16] claimed that the popularity of online learning and teaching and its extensive practice remains isolated in some countries, especially in developed ones; however, the case only holds in the Philippines. Supportive of this, online learning, as claimed by Aljaraideh and Al Bataineh [17] still needs to be extensively employed in developing countries. In general, the Philippine educational system greatly favors the traditional approach to education. It was only until recently that online learning has been made known or introduced to the common public when it was considered as means for the continuation of the learning of the young; hence, it could be said that online learning is at its infancy in the country.

In one of the state colleges, as part of strategies to expand access to tertiary education to meet the growing demands of professional education, online learning has been one of the best mode of teaching. However, students in this type of modality encounter numerous challenges. Some subjects were challenging to the students and the instructors because they needed classroom interaction to teach. One of these subjects was the English language [18].

Research evidence suggests that students experience some kind of stress in one way or the other. Therefore, stress is part of students' existence and can affect how students cope with the demands of university life [19]. Other studies have consequently attributed many emotional and physical symptoms among tertiary students, such as fatigue, headaches, and depression, to stress [1] Excessive stress among students results in poor academic performance, school dropout, addictions, and crime, among others. Hence, Aydın and Tekin [19] advocated positive psychology interventions to mitigate stress and enhance coping strategies in language learners by fostering a growth mindset and resilience. Lestari [20] suggested that meaningful learning strategies in distance education can alleviate stress by providing a sense of purpose and engagement. These are essential for effective coping.

In the Philippines, very little is known about learning English using online platforms among ESL learners, along with their stress and coping strategies in this new learning setup. Addressing these areas would shed light on learning the English language using online platforms among English (ESL) Learners in the Philippines. This information would also be critical in revisiting the typology of strategies in an online learning environment.

2. Research Objectives

This study aims to determine the English language learning using online platforms among English as a Second Language (ESL) learners in the Philippines and their stress and coping strategies.

Specifically, it seeks to answer the following:

1. What is the stress level in Learning the English Language using online platforms among English as a Second Language (ESL) Learners when taken as a whole and grouped according to year level and sex?
2. What is the extent of the coping strategy in Learning the English Language using online platforms among English as a Second Language (ESL) Learners when taken as a whole and grouped according to year level and sex?
3. Is there a significant difference in the stress level in Learning the English Language using online platforms among English as a Second Language (ESL) Learners when taken as a whole and grouped according to year level and sex?
4. Is there a significant difference in the extent of coping strategy in Learning the English Language using online platforms among English as a Second Language (ESL) Learners when taken as a whole and grouped according to year level and sex?
5. Is there a significant relationship between the level of stress and the extent of coping strategy in Learning the English Language using online platforms among English as a Second Language (ESL) Learners?

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 5: 1104-1125, 2025
DOI: 10.55214/25768484.v9i5.7091

3. Theoretical Framework

The study was anchored to these three theories: Behaviorism, the Transactional Model of Stress, and Coping Theory.

Behaviorism focuses on how people behave. It evolved from a positivist worldview related to cause and effect. In simple terms, action produces a reaction. In education, behaviorism examines how students behave while learning. More specifically, behaviorism focuses on observing how students respond to certain stimuli that, when repeated, can be evaluated, quantified, and eventually controlled for each individual. The emphasis in behaviorism is on that which is observable and not on the mind or cognitive processes. In sum, if you cannot observe it, it cannot be studied [21].

The Transactional Model of Stress and Coping Theories are the theoretical frameworks that emphasize appraisal to evaluate harm, threat, and challenges, which results in the process of coping with stressful events [22]. The level of stress experienced in the form of thoughts, feelings, emotions, and behaviors, as a result of external stressors, depends on appraisals of the situation, which involves a judgment about whether internal or external demands exceed resources and the ability to cope when demands exceed resources [22]. The coping mechanism plays a significant part in overcoming or reducing the stress experienced by individuals. Ganesan stated that appropriate and effective coping may buffer the effects of stressful circumstances on the physical and mental health of an individual. People use different types of coping to overcome their stress.

4. Materials and Methods

This study utilized the descriptive method, particularly the utilization of the quantitative method. This approach allowed the researchers to collect complex data about the stress and coping of the ESL learners in an online learning environment and to clearly understand the phenomena from their perspective.

5. The Respondents of the Study

This study involved ESL learners from a state university in the Philippines. They were selected through stratified random sampling. These ELS learners have been engaged in online learning during their English language lessons. These respondents were selected through a stratified random sampling technique. Informed consent was sought from the participants prior to their involvement.

Before students signed the informed consent form, they were oriented about the objectives of the study and the extent of their involvement. They were also brief about the confidentiality of information, their anonymity, and their right to refuse to participate in the investigation. Finally, the participants were informed that they would incur no additional cost from their participation.

Table 1 shows the distribution of respondents of the study.

Table 1.
Distribution of the Respondents.

Variable	f	%
A. As a Whole	165	100%
B. Year Level		
First Year	47	27%
Second Year	37	21%
Third Year	63	42%
Fourth Year	18	10%
C. Sex		
Male	59	36%
Female	105	64%

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 5: 1104-1125, 2025
DOI: 10.55214/25768484.v9i5.7091

6. Research Instrument

To gather the data on the learning of English language using on-line platforms among English as a Second Language (ESL) Learners in the Philippines with their stress and coping strategies, a validated and reliability tested research instrument was utilized. Part 1 is intended to gather information on the demographic profile, including the year level and sex. To gather the data on the stress level, a modified research instrument on the Perceived Stress Scale (PSS) was utilized. To gather data on the coping strategies, a Coping Orientation to Problems Experienced Inventory was utilized. The responses of the respondents were computed based on the following scale. There were five numerical choices for the respondents to choose for each of the line items, five being the highest and 1 being the lowest. A five-point Likert scale was made as the basis for interpretation. The following scale is shown with the descriptions and their numerical value:

For the level of stress of the ESL learners in learning English using the online platforms, the results were interpreted based on the scoring scale below:

Value	Range	Verbal Interpretation
5	4.50-5.00	Severely Stressed (SS)
4	3.50-4.49	Highly Stressed (HS)
3	2.50-3.49	Moderately Stressed (MS)
2	1.50-2.49	Sometimes Stressed (SomeS)
1	1.00-1.49	Never Stressed (NS)

For the extent of coping strategies of the ESL learners in learning English using the online platforms, the results were interpreted based on the scoring scale below:

Value	Range	Verbal Interpretation	
5	4.50-5.00	Very Great Extent	(VGE)
4	3.50-4.49	Great Extent	(GE)
3	2.50-3.49	Moderate Extent	(ME)
2	1.50-2.49	Less Extent	(LE)
1	1.00-1.49	Not at All	(NA)

The questionnaires were subjected to a content validation process to guarantee that the data obtained would address the study's objectives. Lawshe's Content Validity Ratio (CVR) was used to establish the instrument's content validity. Ten (10) members with proven expertise in the field shall compose the panel of validators. They rated the competency and the extent to which a measure represents all facets of a given construct. Each panel member was given a list of indicators or items independently. They judged the alignment of each item with the construct being measured as "essential," "useful but not essential," or "not essential." The mean content validity ratio (CVR) per area was calculated. Items obtaining the critical value for a content validity ratio of 1.00 were retained in the finalized instrument.

To establish the reliability of the research instrument, internal consistency was used through the Cronbach's Alpha and it was administered to 25 students who were not part of the actual respondents.

6.1. Data Gathering Procedure

A letter of address to conduct the study, addressed to the Dean of the state university, was sought prior to the distribution of the research instrument. On the day of the conduct of the study, directions were written to guide the respondents on how to accomplish the form, and they were asked to rate each item using the five-point Likert scale. The data gathered from the respondents' responses were tallied and tabulated using the appropriate statistical tools. The raw data was transformed into numerical code guided by a coding manual.

6.2. Data Analysis Procedure

The following statistical tools were used in presenting, analyzing, and interpreting the data to be gathered.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 5: 1104-1125, 2025
DOI: 10.55214/25768484.v9i5.7091

For Objective 1, which aimed to determine the level of stress of the students in online learning when taken as a whole and grouped according to year level and sex, mean and Standard Deviation were utilized.

For Objective 2, which aimed to determine the extent of coping strategies of the students in online learning when taken as a whole and grouped according to year level and sex mean and Standard Deviation were utilized.

For objective 3, which aimed to determine the significant difference in the level of stress of the students in online learning when grouped according to sex, a t-test was utilized and to determine the significant difference in the level of stress of the students in the online learning when grouped according to year level, ANOVA was used.

For objective four, which aimed to determine the significant difference in the coping strategy of the students in online learning when grouped according to sex and marital status, a t-test was utilized and to determine the significant difference in the coping strategy of the students in the online learning when grouped according to year level, ANOVA was utilized.

For objective 5, which aimed to determine the significant relationship between the level of stress and the coping strategy of the students in the online learning, Pearsons' r was utilized.

All the data gathered was processed using computer software with an alpha level set at 0.05.

6.3. Ethical Considerations

In the proper conduct of this study, ethical issues were observed. A letter requesting approval from the Dean was processed to ensure the highest professionalism level is maintained. Before administering the research instrument, the researcher informed the respondents to ask if they were willing to participate in the study, out of their own volition and desire, without being coerced or forced, to serve as survey respondents. In collecting the respondents' demographic profile, the individual names of the participants were not required. The gathered data were used solely to address the problem raised in the study. All data were kept confidential. The gathered data were confidentially kept by the researcher in an encrypted file. The hard copy of the survey result was turned over to the statistician for analysis. Safety protocols were observed throughout the conduct of the study.

7. Results and Discussions

The Level of Stress in Learning the English Language using Online Platforms among ESL Learners when taken as a whole and grouped according to year level. Results are presented in Table 2.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 5: 1104-1125, 2025
DOI: 10.55214/25768484.v9i5.7091

Table 2.
Level of Stress in Learning the English Language using Online Platforms among ESL Learners when taken as a whole and grouped according to year level.

Variables	1st Year		2nd Year		3rd Year		4th Year	
	M	SD	M	SD	M	SD	M	SD
Cognitive Domain	3.51	0.39	3.37	0.42	3.41	0.51	3.44	0.31
I struggle in understanding the instructions of my teachers.	3.72	0.9	3.78	0.75	3.76	0.9	3.78	0.73
I get easily unfocussed while studying.	3.96	0.93	3.81	0.78	3.56	0.99	4	1.03
I have troubled in remembering the things that I already learned in the past two months.	4.23	0.87	4.16	0.76	4.18	0.98	4.22	0.81
I have difficulty in retaining the lessons I have learned in the past two weeks.	3.34	0.92	3.11	0.84	3.15	0.87	3.28	0.89
I have difficulty in thinking before acting on something.	3.15	0.81	3	0.85	3.21	0.94	2.94	0.8
I have difficulty in making decisions	3.64	1.07	3.28	1.17	3.31	1.11	3.44	1.2
I have difficulty in having a goal in doing things	3.32	0.98	3.16	0.83	3.34	0.97	3.11	0.9
I have difficulty in realizing the importance of the things I do.	2.72	0.83	2.7	0.91	2.81	0.9	2.72	0.89
Behavioral Domain	3.64	0.52	3.63	0.34	3.68	0.46	3.67	0.4
I am losing appetite.	3.57	1.12	3.68	0.85	3.39	1	3.89	1.02
I have excessive cravings for food.	3.74	0.94	3.59	0.9	3.55	1	3.78	1.22
I do not accept school related responsibilities.	4.32	0.73	4.27	0.69	4.23	0.71	4.06	0.87
I have difficulty in submitting assignment and other task on time	3.06	1.03	3.3	0.94	3.23	1.05	3.17	0.86
I have difficulty in prioritizing assignments or school related task	3.55	1.19	3.16	1.17	3.52	1.04	3.17	1.04
I am hurting myself.	3.83	0.79	3.46	0.73	3.85	0.85	3.67	0.91
I have difficulty in organizing my stuff.	2.34	1.26	2.78	1.11	2.87	1.15	3.11	1.02
I have difficulty in making school related decisions.	4.68	0.75	4.81	0.52	4.81	0.57	4.56	1.04
Affective Domain	2.89	0.52	2.74	0.55	2.94	0.53	3.07	0.48
I struggle in understanding my oneself.	2.28	0.99	2.38	1.28	2.34	1.2	2.72	1.18
I have difficulty in pointing out the emotion of other people.	3.28	0.83	3.27	0.9	3.29	0.8	3.22	0.94
I have trouble in talking to family members.	3.3	1.33	2.49	1.22	3.23	1.32	3.28	1.36
I have difficulty in performing school related task.	1.26	0.77	1.14	0.54	1.16	0.58	1.89	1.18
I do not accept leadership roles.	3.57	1.21	3.46	0.96	3.66	0.94	3.39	1.04
I have difficulty in handling the task assigned to me in a given period of time.	3.37	1.27	2.86	1.21	3.44	1.24	3.39	0.92
I am losing my motivation in studying my lesson with enthusiasm.	3.22	1.14	3.57	1.07	3.46	0.95	3.59	1.24
Physiological Domain	3.71	0.54	3.59	0.51	3.75	0.54	3.68	0.46
I experience constipation.	3.83	0.99	3.73	1.04	3.89	1.04	4	0.84
I do not want to move my body a bit.	4.53	0.86	4.62	0.72	4.71	0.69	4.33	1.08
I experience diarrhea.	3.98	0.79	3.78	0.89	3.97	0.9	4.06	0.87
I have colds or flu.	3.19	1.24	3.24	1.16	3.13	1.14	3.11	1.41
I experience headaches.	3.7	1.12	3.62	1.14	3.84	1.06	3.61	1.04
I have difficulty in sleeping.	3.32	0.93	3.3	0.94	3.41	1.04	3.22	0.65
I have muscle aches and pains.	3.4	1.25	2.86	1.21	3.29	1.27	3.44	1.2
Overall	3.45	0.35	3.35	0.35	3.45	0.38	3.47	0.31

Note: 1.00 - 1.49 Never Stressed (NS); 1.50 - 2.49 Sometimes Stressed (SomeS); 2.50 - 3.49 Moderately Stressed (MS); 3.50 - 4.49 Highly Stressed (HS); and 4.50 - 5.00 Severely Stressed (SS).

The numbers in Table 2 show notable stress and challenges in multiple areas (Cognitive, Behavioral, Affective, and Physiological) among participants over four years. The information reveals that participants faced moderate to high stress, especially in the Cognitive and Behavioral areas. This analysis will explore these results using studies found in Scopus-indexed literature.

In the Cognitive area, stress levels were moderate to high, with averages from 3.37 to 3.51 over the four years. Participants had trouble understanding the teacher instructions, staying focused while studying, and recalling previously learned material. These results match the research by Schacter [23] on memory and attention problems, which are typical cognitive issues related to stress. The ongoing high scores imply that cognitive stress is a major worry for the participants.

The Behavioral area also showed high stress levels, with averages from 3.63 to 3.68. Participants struggled with accepting school responsibilities, turning in assignments on time, and making school-

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 5: 1104-1125, 2025
DOI: 10.55214/25768484.v9i5.7091

related decisions. These findings support the work of Gresham and Elliott [24] who stress the importance of behavioral control in educational settings. The steady high scores indicate that behavioral stress is an ongoing problem for the participants.

The Affective area scores ranged from 2.74 to 2.94, indicating moderate stress levels. Participants had difficulties understanding themselves, recognizing others' emotions, and communicating with family members. These results align with the research by Brackett, et al. [25] on emotional intelligence and its effects on mental health. The moderate scores suggest that affective stress is present but not as intense as cognitive or behavioral stress. Dewaele, et al. [26] would underscore how the foreign language anxiety would significantly impact the stress levels of ESL learners, while enjoyment and boredom play crucial roles in their emotional engagement and academic performance.

The Physiological area scores ranged from 3.59 to 3.75, indicating high stress levels. Participants reported issues like constipation, lack of physical activity, diarrhea, colds or flu, headaches, sleep difficulties, and muscle aches and pains. These findings match the research by Pascoe [27] on the physical effects of stress. The consistent high scores show that physiological stress is a significant concern for the participants.

Overall, the average stress scores ranged from 3.35 to 3.47, indicating moderate to high stress levels across all areas. This aligns with the findings of Creswell and Lindsay [28] who highlight the combined effects of stress on various aspects of functioning. The consistent moderate to high scores suggest that overall stress is a major issue among the participants and needs specific interventions.

Table 3.
The Level of Stress in Learning English Language using Online Platforms among ESL Learners when grouped according to sex.

Variables	Male		Female	
	M	SD	M	SD
Cognitive Domain	3.38	0.56	3.47	0.35
I struggle in understanding the instructions of my teachers.	3.71	0.91	3.78	0.81
I get easily unfocussed while studying.	3.76	0.99	3.79	0.92
I have troubled in remembering the things that I already learned in the past two months.	4.1	0.96	4.25	0.83
I have difficulty in retaining the lessons I have learned in the past two weeks.	3.12	0.87	3.26	0.88
I have difficulty in thinking before acting on something.	3.12	0.89	3.12	0.86
I have difficulty in making decisions	3.22	1.19	3.51	1.08
I have difficulty in having a goal in doing things	3.15	0.96	3.33	0.92
I have difficulty in realizing the importance of the things I do.	2.83	0.89	2.7	0.87
Behavioral Domain	3.68	0.48	3.64	0.42
I am losing appetite.	3.54	1.04	3.57	1
I have excessive cravings for food.	3.56	1.02	3.69	0.96
I do not accept school related responsibilities.	4.25	0.8	4.24	0.69
I have difficulty in submitting assignment and other task on time	3.19	0.96	3.19	1.02
I have difficulty in prioritizing assignments or school related task	3.56	1.02	3.32	1.16
I am hurting myself.	3.81	0.86	3.7	0.8
I have difficulty in organizing my stuff.	2.8	1.3	2.69	1.11
I have difficulty in making school related decisions.	4.76	0.7	4.73	0.67
Affective Domain	2.9	0.53	2.89	0.54
I struggle in understanding my oneself.	2.19	1.17	2.48	1.14
I have difficulty in pointing out the emotion of other people.	3.32	0.9	3.25	0.81
I have trouble in talking to family members.	3.14	1.34	3.06	1.34
I have difficulty in performing school related task.	1.24	0.65	1.28	0.79
I do not accept leadership roles.	3.44	1.12	3.63	0.99
I have difficulty in handling the task assigned to me in a given period of time.	3.58	1.12	3.12	1.24
I am losing my motivation in studying my lesson with enthusiasm.	3.4	1.11	3.44	1.04
Physiological Domain	3.77	0.63	3.65	0.45
I experience constipation.	3.95	1.04	3.79	0.98
I do not want to move my body a bit.	4.61	0.79	4.59	0.8

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 5: 1104-1125, 2025
DOI: 10.55214/25768484.v9i5.7091

I experience diarrhea.	3.97	0.95	3.92	0.82
I have colds or flu.	3.46	1.26	3.01	1.13
I experience headaches.	3.73	1.06	3.72	1.11
I have difficulty in sleeping.	3.24	0.99	3.39	0.92
I have muscle aches and pains.	3.47	1.28	3.11	1.22
Overall	3.44	0.45	3.42	0.29

Note: 1.00 - 1.49 Never Stressed (NS); 1.50 - 2.49 Sometimes Stressed (SomeS); 2.50 - 3.49 Moderately Stressed (MS); 3.50 - 4.49 Highly Stressed (HS); and 4.50 - 5.00 Severely Stressed (SS).

The overall mean scores indicate that both male (M = 3.38; SD = 0.56) and female (M = 3.47; SD = 0.35) learners experience moderate levels of cognitive stress. Female learners report slightly higher levels of cognitive stress compared to male learners. Female learners report higher levels of difficulty in understanding instructions, being easily unfocused, and struggling to remember past lessons. Both genders report similar levels in thinking before acting and realizing the importance of tasks, but females show slightly higher levels in making decisions and having goals. These findings align with the research by Schacter [23] who noted that females may experience more difficulties in certain cognitive processes.

Both male and female learners experience moderate levels of behavioral stress, with slightly higher scores for males. Both genders report similar levels in most behavioral stress items, with males showing slightly higher levels in not accepting responsibilities and making school decisions. These findings are consistent with the research by Gresham and Elliott [24] which highlights the importance of behavioral regulation in educational settings.

Both male and female learners experience moderate levels of affective stress, with very similar scores. Female learners report slightly higher levels in understanding oneself and accepting leadership roles, while males report higher levels in handling tasks. These findings are consistent with the research by Brackett, et al. [25] on emotional intelligence and its impact on mental health.

Both male and female learners experience moderate levels of physiological stress, with slightly higher scores for males. Male learners report higher levels in constipation, not moving the body, diarrhea, and headaches, while female learners report higher levels in colds/flu and muscle aches/pains. These findings align with the research by Pascoe [27] on the physiological impacts of stress.

The overall mean scores indicate that both male and female learners experience moderate levels of stress in online English learning, with very similar scores. The findings from Table 3 indicate that both male and female ESL learners experience moderate levels of stress in online English learning across all domains. Female learners report slightly higher levels of cognitive stress, particularly in understanding instructions and remembering past lessons. Male learners report higher levels of behavioral stress, especially in not accepting responsibilities and making school decisions, and physiological stress, such as not moving the body and experiencing headaches. These differences align with existing research on gender-specific stress patterns and coping mechanisms in educational settings.

The advent of technology has brought fundamental changes to English language teaching [29]. Various forms of technology-supported learning and teaching, like MOOCs, flipped classrooms, etc., have received increasing attention in the educational sphere in recent years, and traditional face-to-face teaching has given way to internet-based instruction. The shift to online education, however, also carries with it a range of problems and challenges. For example, students become anxious due to the feelings of isolation and disconnectedness in online learning environments, which exert a debilitative effect on their learning efficiency and mental health [26, 30-33].

In the study conducted by Unal, as cited by Ibrahim [18] it was found that they were not fully ready to adopt online learning. They would like to experience better implementation of online learning and would like to avail training programs that will help them understand online learning better, making its benefits clearer, offering better internet infrastructures with more computer and mobile technology facilities that can help them increase their readiness levels. Moreover, Ibrahim [18] mentioned that

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 5: 1104-1125, 2025
DOI: 10.55214/25768484.v9i5.7091

previous studies concluded that most students have positive attitudes towards learning that utilizes web applications.

Abdullah et al. as cited in Ganesan, et al. [22] found out that the academic related stress level among the final year students could be because of the demand of the higher level of university education.

Aysan, et. al as cited in Ganesan, et al. [22] and Creswell and Lindsay [28] in their study found that the juniors tend to have higher reaction to stress compared to the seniors and this is due to their adjustment to the new university life. Some causes of stress among the students including heavy workload, unclear assignments, having difficulty to understand the context, feeling of incompetence, poor motivation to learn, participation in class presentation, relationship with family and friends, time pressures, and sleeping habits may affect some students' mental health.

Regarding gender as a personal characteristic, Wu and Cheng as cited in Liu [34] examined who is better adapted to learning online within the personal learning environment. They found that males adopted more behavioral strategies than females to deal with their disorientation during online learning. Another study indicated that in Pakistan, females have better online communication self-efficacy than males during COVID-19 online learning [34].

Table 4.
Extent of Coping Strategy of Students in On-Line Learning when grouped according to Year Level.

Variables	First Year		Second Year		Third Year		Fourth Year	
	M	SD	M	SD	M	SD	M	SD
Acceptance	2.35	0.58	2.32	0.53	2.22	0.63	2.48	0.70
I reflect on the problem.	1.87	1.08	2.05	1.20	1.77	1.14	1.94	1.16
I accept the responsibility of supporting my own online learning.	3.85	0.88	3.62	0.76	3.55	1.02	3.50	0.62
I learn to live and adapt in learning English using online platforms.	1.34	0.92	1.27	0.87	1.32	0.95	2.00	1.24
Emotional Support	2.80	0.74	2.63	0.64	3.12	0.81	3.06	0.79
I am receiving emotional support from people to understand me.	1.91	1.00	2.03	0.87	2.50	1.21	2.78	0.65
I am looking for ways to receive emotional support from the teachers to adapt to the challenges of online learning.	3.32	1.14	3.30	1.24	3.53	1.07	3.28	1.41
I am obtaining understanding and emotional support from a family member to help me in learning using platforms.	3.17	1.27	2.57	1.04	3.32	1.30	3.11	1.18
Positive Reinterpretation	3.55	0.75	3.34	0.61	3.63	0.65	3.22	0.56
I examine the problem or difficulty in order to overcome the stressful situation.	3.47	1.14	3.57	1.30	3.50	1.11	3.17	0.99
During my support of my son's distance learning, I try to maintain a positive outlook in accordance with the teaching methodology proposed by the teacher, taking into account the context of COVID-19. In the face of the various implications of this distance learning.	3.81	0.99	3.32	0.75	3.79	0.89	3.22	0.94
I seek out positive aspects in order to deal with the stressful factor of assumed responsibilities.	3.38	0.95	3.14	0.59	3.60	0.78	3.28	0.83
Active Coping	2.48	0.63	2.30	0.50	2.59	0.69	2.71	0.78
I organize my actions to eliminate or reduce stress-inducing situations.	3.30	1.21	2.81	1.15	3.48	1.10	3.39	1.20
I plan for a daily schedule that incorporates	1.32	0.93	1.11	0.52	1.31	0.84	1.82	1.18

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 5: 1104-1125, 2025
DOI: 10.55214/25768484.v9i5.7091

specific activities designed to alleviate stress.								
I focus my efforts on planning and organizing my time to support my online learning.	2.83	1.17	2.97	1.26	2.98	1.05	2.83	1.10
Social/ Instructional Support	3.49	0.48	3.30	0.63	3.55	0.57	3.33	0.49
I seek assistance and acquire advice and information from people who have the capability to help me.	2.04	0.81	2.22	0.92	2.27	1.06	2.44	0.86
I organize and plan my time while seeking support and assistance from family members to provide support in my online learning.	4.26	0.74	3.86	0.89	4.25	0.98	3.83	1.04
I seek professional help to guide me in online learning.	4.17	0.84	3.81	0.84	4.13	0.82	3.72	0.89
Planning	3.09	0.57	3.13	0.60	3.17	0.65	3.28	0.37
I think about ways to cope with stressful conditions or situations.	2.26	1.03	2.32	0.97	2.52	1.10	2.83	0.71
I make a plan for strategies of action, the process or steps to follow, and where these efforts in learning English using online platforms are directed.	3.43	1.02	3.49	1.02	3.56	0.97	3.50	0.86
I look for creative alternatives such as drawing, painting, music, sports, among others to distract me from the routine activities proposed by the online learning.	3.57	0.83	3.57	0.87	3.44	0.86	3.50	0.62
Behavioural Disconnection	3.60	0.68	3.29	0.91	3.71	0.73	3.46	0.68
I am giving up my effort in learning English using online platforms to achieve the goals for which the stressor interferes.	3.57	1.19	3.30	1.35	3.65	1.24	3.33	1.24
I stopped using online platforms because I feel that I don't have the necessary skills to learn though it.	3.98	1.07	3.78	0.98	4.11	0.89	3.50	1.04
I give up trying to use of technological resources such as computer, cellphone, tablet, among others used during online learning.	3.23	1.27	2.78	1.27	3.37	1.16	3.56	1.10
Denial	3.46	0.81	3.20	0.62	3.67	0.72	3.35	0.62
I ignore the stress I encountered from learning using online platforms.	3.23	1.03	3.54	1.04	3.65	0.98	3.33	0.97
I refuse to access the learning materials in the online platforms.	3.40	0.88	3.03	0.69	3.68	1.02	3.39	0.70
I refuse to learn English using online platforms.	3.74	1.09	3.03	1.14	3.69	1.18	3.33	1.28
Distraction/ Self Distraction	2.92	0.62	2.96	0.74	3.07	0.78	2.89	0.51
I only focus on other things to distract myself from stressful situations.	3.30	1.08	3.30	1.00	3.56	1.03	3.28	0.57
I turn to free and creative experiences such as going to the countryside, playing games with family, outdoor sports, among others, to set aside the stressful situations during learning using online platforms.	2.77	1.22	2.89	1.24	2.85	1.21	2.72	1.13
I include recreational activities of an artistic and cultural nature such as arts and crafts to set aside the stressful situations during learning using online platforms.	2.70	0.93	2.70	0.97	2.79	0.99	2.67	0.77
Substance Use	2.83	0.62	2.51	0.56	2.82	0.66	2.96	0.70
I use substances to feel good in order to cope with the stressors in learning using online platforms.	3.47	1.30	2.78	1.25	3.32	1.34	3.56	1.34
I consume alcoholic beverages to feel better about the stressful situations caused about by the learning using online platforms.	1.32	0.89	1.11	0.52	1.32	0.88	1.83	1.20
I use illegal drugs to cope with the difficulties	3.70	1.06	3.65	0.92	3.82	1.05	3.50	1.04

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 5: 1104-1125, 2025
DOI: 10.55214/25768484.v9i5.7091

encountered in learning using online platforms.								
Venting	3.05	0.62	3.12	0.66	3.31	0.65	3.35	0.53
I increase my awareness of my one own emotional discomfort to express or discharge feelings.	3.06	0.76	3.14	0.86	3.35	0.87	3.44	0.92
I express my anger to manage my emotional burden in the context of learning using online platforms.	3.70	0.93	3.54	0.77	3.69	1.00	3.61	0.85
I express my negative feelings to the teacher through any means of communication about my experience in learning using online platforms.	2.38	1.07	2.68	1.11	2.87	1.06	3.00	0.69
Humor	4.22	0.71	4.21	0.58	4.32	0.64	3.89	0.97
I make jokes about the stress that I experience in learning using online platforms.	3.91	0.90	3.89	1.07	4.08	0.92	3.72	0.96
Often, I try to ignore my emotional burden by making jokes and rejecting the responsibilities of supporting and accompanying my son in this distance learning, handing over this function to someone else.	4.55	0.75	4.62	0.59	4.45	0.82	4.11	0.90
I frequently share my emotional burden through jokes or ridiculing the work and behavior of the teacher to get attention.	4.19	1.08	4.11	1.07	4.40	0.90	3.83	1.34
Religion	3.18	0.58	3.19	0.60	3.30	0.57	3.26	0.54
Involves returning to the religious environment in moments of stress and increasing participation in religious activities.	3.06	0.76	3.14	0.86	3.35	0.87	3.44	0.92
When facing difficulties with this new distance learning modality for my child, I try to find comfort in my religion or spiritual beliefs. Due to the challenges involved in distance learning,	3.70	0.93	3.54	0.77	3.69	1.00	3.61	0.85
I have added prayer to my daily routine as a means of meditation to gain more clarity in taking on the responsibility of supporting and accompanying my child	2.77	1.22	2.89	1.24	2.85	1.21	2.72	1.13
Overall	3.16	0.36	3.04	0.39	3.27	0.38	3.17	0.34

Note: 1.00 - 1.49 Not At All (NA); 1.50 - 2.49 Less Extent (LE); 2.50 - 3.49 Moderately Extent (ME); 3.50 - 4.49 Great Extent (GE); and 4.50 - 5.00 Very Great Extent (VGE).

As shown in Table 4, regardless of year level, the respondents have "moderately extent" of coping strategy.

In the study conducted by Freire [35] variable like gender and university year, it was found out that given the extensive and varied range of demands faced by students in their daily lives (both academic and non-academic), it would seem that men report higher levels of coping strategies than women, with this difference emerging at the end of adolescence. It may also be the case that students in their first year of university, because of their inexperience, may have lower levels of coping strategies than students with more academic experience. Guo, et al. [30] highlighted the need to incorporate scaffolding techniques in learning environments that can boost learners' self-efficacy and willingness to communicate to reduce stress and enhance coping mechanisms.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 5: 1104-1125, 2025
DOI: 10.55214/25768484.v9i5.7091

Table 5.
Extent of Coping Strategy of Students in On-Line Learning when grouped according to Sex.

Variables	Male		Female	
	M	SD	M	SD
Acceptance	2.38	0.63	2.26	0.58
I reflect on the problem.	1.90	1.05	1.88	1.18
I accept the responsibility of supporting my own online learning.	3.59	1.02	3.68	0.81
I learn to live and adapt in learning English using online platforms.	1.66	1.24	1.24	0.75
Emotional Support	3.03	0.78	2.84	0.77
I am receiving emotional support from people to understand me.	2.22	1.08	2.28	1.06
I am looking for ways to receive emotional support from the teachers to adapt to the challenges of online learning.	3.53	1.13	3.31	1.18
I am obtaining understanding and emotional support from a family member to help me in learning using platforms.	3.36	1.31	2.93	1.20
Positive Reinterpretation	3.63	0.66	3.42	0.67
I examine the problem or difficulty in order to overcome the stressful situation.	3.53	1.15	3.44	1.15
During my support of my son's distance learning, I try to maintain a positive outlook in accordance with the teaching methodology proposed by the teacher, taking into account the context of COVID-19. In the face of the various implications of this distance learning.	3.81	0.88	3.52	0.93
I seek out positive aspects in order to deal with the stressful factor of assumed responsibilities.	3.56	0.79	3.30	0.81
Active Coping	2.64	0.62	2.43	0.66
I organize my actions to eliminate or reduce stress-inducing situations.	3.39	1.08	3.20	1.22
I plan for a daily schedule that incorporates specific activities designed to alleviate stress.	1.46	0.97	1.24	0.79
I focus my efforts on planning and organizing my time to support my online learning.	3.08	1.15	2.83	1.11
Social/ Instructional Support	3.53	0.62	3.41	0.51
I seek assistance and acquire advice and information from people who have the capability to help me.	2.36	0.96	2.13	0.92
I organize and plan my time while seeking support and assistance from family members to provide support in my online learning.	4.20	0.89	4.07	0.92
I seek professional help to guide me in online learning.	4.03	0.91	4.02	0.82
Planning	3.18	0.67	3.13	0.54
I think about ways to cope with stressful conditions or situations.	2.53	1.04	2.38	1.01
I make a plan for strategies of action, the process or steps to follow, and where these efforts in learning English using online platforms are directed.	3.53	1.12	3.49	0.89
I look for creative alternatives such as drawing, painting, music, sports, among others to distract me from the routine activities proposed by the online learning.	3.47	0.84	3.53	0.82
Behavioral Disconnection	3.59	0.80	3.54	0.75
I am giving up my effort in learning English using online platforms to achieve the goals for which the stressor interferes.	3.56	1.19	3.49	1.29
I stopped using online platforms because I feel that I don't have the necessary skills to learn though it.	3.86	0.99	3.97	0.99
I give up trying to use of technological resources such as computer, cellphone, tablet, among others used during online learning.	3.34	1.18	3.15	1.25
Denial	3.41	0.88	3.50	0.64
I ignore the stress I encountered from learning using online platforms.	3.37	1.07	3.52	0.98
I refuse to access the learning materials in the online platforms.	3.44	0.99	3.41	0.86
I refuse to learn English using online platforms.	3.42	1.37	3.57	1.07
Distraction/ Self Distraction	3.10	0.72	2.92	0.68

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 5: 1104-1125, 2025
DOI: 10.55214/25768484.v9i5.7091

I only focus on other things to distract myself from stressful situations.	3.44	1.07	3.37	0.96
I turn to free and creative experiences such as going to the countryside, playing games with family, outdoor sports, among others, to set aside the stressful situations during learning using online platforms.	3.12	1.16	2.66	1.20
I include recreational activities of an artistic and cultural nature such as arts and crafts to set aside the stressful situations during learning using online platforms.	2.73	0.91	2.73	0.96
Substance Use	2.84	0.62	2.73	0.65
I use substances to feel good in order to cope with the stressors in learning using online platforms.	3.37	1.29	3.21	1.35
I consume alcoholic beverages to feel better about the stressful situations caused about by the learning using online platforms.	1.47	1.04	1.25	0.76
I use illegal drugs to cope with the difficulties encountered in learning using online platforms.	3.68	1.07	3.73	0.99
Venting	3.12	0.73	3.23	0.58
I increase my awareness of my one own emotional discomfort to express or discharge feelings.	3.31	0.88	3.19	0.83
I express my anger to manage my emotional burden in the context of learning using online platforms.	3.51	1.01	3.73	0.85
I express my negative feelings to the teacher through any means of communication about my experience in learning using online platforms.	2.56	1.10	2.78	1.03
Humor	4.19	0.75	4.23	0.67
I make jokes about the stress that I experience in learning using online platforms.	3.92	1.02	3.97	0.92
Often, I try to ignore my emotional burden by making jokes and rejecting the responsibilities of supporting and accompanying my son in this distance learning, handing over this function to someone else.	4.42	0.89	4.51	0.69
I frequently share my emotional burden through jokes or ridiculing the work and behavior of the teacher to get attention.	4.24	1.07	4.20	1.04
Religion	3.31	0.55	3.19	0.59
Involves returning to the religious environment in moments of stress and increasing participation in religious activities.	3.31	0.88	3.19	0.83
When facing difficulties with this new distance learning modality for my child, I try to find comfort in my religion or spiritual beliefs. Due to the challenges involved in distance learning,	3.51	1.01	3.73	0.85
I have added prayer to my daily routine as a means of meditation to gain more clarity in taking on the responsibility of supporting and accompanying my child	3.12	1.16	2.66	1.20
Overall	3.23	0.42	3.14	0.35

Independent samples t-test was used to determine the significant difference in the level of stress and extent of coping strategy of students in on-line learning when grouped according to sex and analysis of variance when grouped according to year level. There was no significant difference in the level of stress [t(162)=0.314, p=0.754], and extent of coping strategy [t(162)=1.408, p=0.161] of students in on-line learning when grouped according to sex.

Table 6.
Difference in the Level of Stress and Extent of Coping of Students in On-line Learning according to Sex

Variable	t	df	p
Stress	0.314	162	0.754
Coping	1.408	162	0.161

Note: the difference is significant when p≤0.05.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 5: 1104-1125, 2025
DOI: 10.55214/25768484.v9i5.7091

There was no significant difference in the areas of stress [F(3, 160)=0.797, p=0.497] when grouped according to year level. There was a significant difference in the areas of coping [F(3, 160)=2.958, p=0.034] when grouped according to year level. Post hoc test revealed that 2nd year students have a significantly lower extent of coping than 3rd year students.

Table 7.
Difference in the Level of Stress and Extent of Coping of Students in Online Learning according to Year Level.

Variable	F	df	p
Stress	0.797	3, 160	0.497
Coping	2.958*	3, 160	0.034

Note: the difference is significant when p≤0.05.

Pearson correlation was used to determine the significant relationship between level of stress and extent of coping of students in on-line learning. There was significant relationship between level of stress and extent of coping [r(162)=0.702, p=0.000] of students in on-line learning.

Table 8.
Relationship between Level of Stress and Extent of Coping of Students in On-line Learning.

Variable	r	df	p
Stress x Coping	0.702*	162	0.000

Note: *correlation is significant when p≤ 0.05.

Test of Difference in the Level of Stress of Students in Online Learning when grouped according to Sex and Year Level.

The third objective of the study is to determine the differences in the level of stress of students in online learning when grouped according to sex and year level. Results are presented in Tables 9 and 10.

Table 9.
t-test Results Showing Difference in Level of stress of students in online learning when grouped according to sex.

Categories		M	t-ratio	Df	p
Stress	Male	3.41	-1.182	162	0.29*
	Female	3.50			

Table 9 presents the presence of significant difference in the level of stress of students in on-line learning when grouped according to sex. The over-all p- value was 0.29, lower than the alpha value of 0.05. Given the result, the null hypothesis stating the no significant difference in the level of stress of students in on-line learning when grouped according to sex is rejected. The result shows that sex cause variation in the level of stress of students in on-line learning when grouped according sex.

College students are challenged with having to keep up with the high demands required to thrive in the university environment. To meet these demands, students must be able to work and function under pressure. Generally, stressors are derived from academia load, classroom environment, faculty interaction, illness, and emotional concerns outside of the classroom [36].

In the online learning environment, students studying EFL online generally experience significant levels of perceived language anxiety. Drawing on an extensive range of sources, Russell [37] article reviewed foreign language anxiety in online learning contexts and found that the use of online learning technologies and communicating in a foreign language were two stressors. Furthermore, Dewaele, et al. [26] conducted a mixed-methods study among 168 Arab and Kurdish EFL learners in in-person and emergency remote teaching classes to assess the levels of foreign language enjoyment (FLE), foreign language classroom anxiety (FLCA), and foreign language boredom (FLB). The researchers found that learners experienced significantly more FLE, more FLCA, and less FLB in in-person classes than that in emergency remote teaching classes. Nevertheless, the findings diverge from those of Aydın and Tekin [19] who conducted a review on the effect of learning technology-supported courses on FLCA and found that the use of technology could reduce learners' FLCA.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 5: 1104-1125, 2025
DOI: 10.55214/25768484.v9i5.7091

In the study conducted by Kumar & Bhukar as cited in Ganesan, et al. [22] it was found out that females are more stressed and scored higher in stress inventory than male. However, it contradicted to the study conducted by Pariat et al. as cited in Ganesan, et al. [22] that showed that males were more stressful due to poor coping strategies.

Lemay, et al. [38] noted that the transition to online learning posed not only technological and instructional challenges but also social and affective issues due to isolation and social distancing. A similar picture was captured by Maqableh and Alia [39] who studied the responses from 1336 undergraduate students in their two surveys. More than two-thirds of them reported that they had to struggle with technological and mental health problems, time management, and balance between life and education. A focus group discussion following the survey revealed further that the respondents were concerned about distraction, reduced focus, psychological problems, and management issues. An investigation of 1131 students by Livana, et al. [40] revealed that learning assignments, boredom, tedious online processes, an inability to meet loved ones or to do hobbies, poor internet connection, and an inability to conduct laboratory courses were the factors behind the respondents' stress.

Liu [34] found that their respondents noted that online learning was limited regarding student-teacher interactions, group work, peer engagement, class involvement, and the ease of asking questions about technical issues. Kapasia, et al. [41] indicated that students using their smartphones to participate in online learning experienced anxiety, slow internet connectivity, and an unfavorable study environment. Tang [42] also studied the difference between students who interacted face-to-face with classmates and those who used computer-mediated communication. They found that the former had better grammatical accuracy in some patterns.

Li, et al. [43] found out that students felt unmotivated when studying alone online and unwilling to communicate with other learners in the home environment. They complained about the lack of communication with others and the sense of isolation in the virtual world.

Table 10.
ANOVA Results show Differences in the level of stress of students in online learning when grouped according to year level

Categories		Sum of squares	Df	Mean square	f-ratio	p
Coping Strategy	Between Groups	0.473	3	0.158	0.732	0.534
	Within Group	34.446	160	0.215		
	TOTAL	34.919	163			

As reflected in Table 10, one-way ANOVA was performed to find out the significant difference in the level of stress of students in online learning when grouped according to year level. The study revealed no significant difference in the level of stress of students in online learning ($F(3, 160)=(.732)$, $p=0.534$ when grouped according to year level. It indicates that the year level was not a variable to manifest the level of stress of students in online learning.

A detailed examination in a study conducted by Kwaah and Essılfie [1] on "perceived causes of stress among students" revealed some significant differences in stressors using some background characteristics of the students. There were statistical differences in stressors among male and female students, first-year and final-year students.

Because of technical challenges and the lack of proper skills to address these problems, students might remain emotionally disengaged in online classroom activities [32]. This calls for more support to help students adapt to online learning, equipping them with basic technical skills to fix internet and computer problems that may arise during the learning process.

Powerfully, online platforms promote independent and inquiry-based learning since they enable student-teacher interaction even when they are not in the exact location [44, 45] explain that the provision of online material can be interactive, allowing learners to interact as a learning medium via technologies. Online learning might increase students' tension and anxiety during the learning process [46]. This could be seen in the failure of many universities to adopt an online learning system [47].

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 5: 1104-1125, 2025
DOI: 10.55214/25768484.v9i5.7091

In another study, Tang, et al. [48] examined the efficacy of different online teaching modes among engineering students. Using a questionnaire, the results revealed that students were generally dissatisfied with online learning, particularly in communication and question-and-answer modes. The combined online teaching model with flipped classrooms improved students' attention, academic performance, and course evaluation. A parallel study was undertaken by Hew, et al. [49] who transformed conventional flipped classrooms into fully online flipped classes through a cloud-based video conferencing app. Their findings suggested that these two types of learning environments were equally effective. They also offered ways to adopt videoconferencing-assisted online flipped classrooms effectively. Unlike the two studies, Suryaman, et al. [50] looked into how learning occurred at home during the pandemic. Their findings showed that students faced many obstacles in a home learning environment, such as lack of mastery of technology, high Internet cost, and limited interaction/ socialization between and among students. In a related study, Kapasia, et al. [41] investigated how lockdown impacts students' learning performance. Their findings revealed that the lockdown significantly disrupted students' learning experience. The students also reported some challenges that they faced during their online classes. These include anxiety, depression, poor Internet service, and an unfavorable home learning environment, which are aggravated when students are marginalized and from remote areas. Contrary to Kapasia, et al. [41] findings, García, et al. [51] found that the confinement of students during the pandemic had significant positive effects on their performance. They attributed these results to students' continuous use of learning strategies, which, in turn, improved their learning efficiency.

Khalil, et al. [52] qualitatively explored the efficacy of synchronized online learning in a medical school in Saudi Arabia. The results indicated that students generally perceive synchronous online learning positively, particularly in terms of time management and efficiency. However, they also reported technical (internet connectivity and poor utility of tools), methodological (content delivery), and behavioral (individual personality) challenges. Their findings also highlighted the failure of the online learning environment to address the needs of courses that require hands-on practice despite efforts to adopt virtual laboratories.

Test of Difference in the Extent of Coping Strategy of Students in Online Learning when grouped according to Sex and Year Level.

The fourth objective of the study is to determine the differences in the extent of the coping strategy of students in online learning when grouped according to sex and year level. Results are presented in Tables 11 and 12.

Table 11.
t-test Results Showing Difference in the extent of Coping strategy of students in online learning when grouped according to sex.

Categories		M	t-ratio	Df	p
Stress	Male	3.41	-1.182	162	0.29*
	Female	3.50			

The t-test results in Table 11 indicate that there is no significant difference in the extent of coping strategies used by male and female students in online learning. The t-ratio of -1.182 with 162 degrees of freedom yields a p-value of 0.29, which is above the alpha threshold of 0.05. Therefore, we fail to reject the null hypothesis, indicating that sex does not cause a significant variation in the extent of coping strategies used by students in online learning. This finding aligns with previous research that often reports no significant gender differences in coping strategies in educational settings.

García, et al. [51] found that male and female students use similar coping mechanisms in online learning environments. Their study supports the idea that there are no significant gender differences in coping strategies. Johnson, et al. [53] also reported no significant gender differences in the use of coping strategies among college students using online learning platforms.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 5: 1104-1125, 2025
DOI: 10.55214/25768484.v9i5.7091

Schacter [23] highlighted the role of cognitive processes in stress management. Their research suggests that cognitive factors may play a more significant role in coping mechanisms than gender. Compas, et al. [54] noted that while gender can influence coping strategies, other factors such as personality traits and environmental factors may also play crucial roles in how students manage stress.

Wubbels, et al. [55] emphasized the importance of emotional support and social factors in student well-being. Their findings suggest that environmental and social factors may contribute more to coping mechanisms than gender. Tugade and Fredrickson [56] highlighted the role of positive emotions in coping with stress. Their research indicates that both males and females can use positive emotions to manage stress effectively.

According to Ganesan, et al. [22] university life is one of young adulthood's most fun and exciting phases. It is a place where students gain educational and intellectual growth opportunities. Unfortunately, young adults have difficulty handling life. Students encounter a lot of challenges in their daily lives; hence, the idea of a vibrant university life is disclosed by these challenges, which contribute to stress. Many of them face hardship and difficulties in their studies and working life. For some university students, stress has become a way of living. Students are often challenged with many different personal and interpersonal challenges and the disability of these students to embrace the challenges and demands in university has turned into one of the most common reasons for students to withdraw from their tertiary education. Abdullah et. Al, as cited in Ganesan, et al. [22] study, found that juniors tend to have a higher reaction to stress compared to seniors, due to their adjustment to the new university life. Some causes of stress among the students, including heavy workload, unclear assignments, difficulty understanding the text, feeling of incompetence, poor motivation to learn, participation in class presentation, relationship with family and friends, time pressures, and sleeping habits may affect some students' mental health.

Table 12.
ANOVA Results show Differences in the extent of coping strategy of students in online learning when grouped according to year level.

Categories		Sum of squares	Df	Mean square	f-ratio	p
Coping Strategy	Between Groups	0.962	3	.321	2.479	0.63
	Within Group	20.692	160	.129		
	TOTAL	21.653	163			

As reflected in Table 7, one-way ANOVA was performed to determine the significant difference in the level of stress of students in online learning when grouped according to year level. The study revealed no significant difference in the extent of coping strategy of students in online learning ($F(3, 160)=(2.479)$, $p=0.63$ when grouped according to year level. It indicates that year level was not a variable to manifested the level of stress of students in online learning.

In a study conducted by Rahmat, et al. [57] in total, 8 out of 14 coping strategies were significantly correlated (modest correlation) with students' attitudes towards online learning. The study showed that students with positive attitudes or acceptance towards online learning were likely to use positive coping strategies, i.e., active coping, positive reframing, planning, and acceptance. The results also revealed that those students with negative attitudes or acceptance towards online learning seemed to use negative coping strategies, i.e., denial, substance use, behavioral disengagement, and self-blame. The study also indicates that students who stay longer at the university have better control over themselves when choosing the best coping strategies while participating in online learning.

Similarly, a four-dimensional anxiety-reducing strategy was also employed by Fujii [58] in one hundred fourteen (144) undergraduate participants at a national university in Sapporo, Japan. His research investigation has introduced two (2) student-oriented strategies: (1) cooperation with others and (2) building confidence; and another two (2) teacher-oriented strategies, respectively: (1) assistance from the teacher and (2) less stressful teaching methods. His study disclosed that students felt less anxious when engaging in small group activities or cooperating with others. Students felt that their

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 5: 1104-1125, 2025
DOI: 10.55214/25768484.v9i5.7091

anxiety decreased once they worked with their peers or classmates. They also experienced less anxiety when they had prepared thoroughly for any English task. This tendency builds students' confidence in a second language.

The 'cooperative learning strategies' were also effective coping mechanisms to reduce English language speaking anxiety [59]. These involve learning situations like small-group, real-life, or task-based activities, which make the learning climate interactive and communicative. Cooperative learning strategies shift classroom situations from threatening and unrelaxed into a learning-friendly, supportive, and open learning atmosphere. Chances like students sharing what they have in mind, their points of view, and their feelings and thoughts can create an avenue to rehearse and practice English in the interaction. Nagahashi further claimed that this mechanism enabled the students to become accustomed and oriented to the language structure and vocabulary in English. Hence, these fundamentals build confidence in interacting in a second language.

According to Thorndike [60] only when the students are ready to learn can learning happen, or his Law of Readiness. It resonates with the notion that to be pressured to learn while not ready results in an unpleasant circumstance in learning [61]. Thus, Thorndike's view sparks motivation as a crucial component in the learning process. As a result, the coping strategies outlined above value creating a language learning atmosphere that is welcoming, comfortable, and non-threatening to L2 students. It is displayed by providing adequate time for students to prepare, reflect, and speak, demonstrating a positive attitude from the teacher, such as teacher support or scaffolding, and fostering positive thinking through collaborative activities or assignments.

Thorndike's Law of Exercise also provides another perspective on classroom learning through appropriate coping strategies. He emphasized that it weakens and fades from memory. Yet, when knowledge is utilized and applied, authentic and long-term learning predominates. In this case, the cooperative learning strategies [59] and the student-oriented strategies of Fujii [58] where students have to work in teams, brainstorm, and share peculiar ideas, can foster opportunities to share the burden in learning and therefore make the classroom less anxious.

In the study conducted by Barrot, et al. [62] it was found that students employed a variety of strategies to overcome the challenges they faced during online learning. For instance, to address the home learning environment problems, students talked to their family, transferred to a quieter place, studied late at night where all family members sleep, and consulted with their classmates and teachers. To overcome the challenges in learning resources, students used the Internet, joined Facebook groups that shared free resources, asked for help from family members, used resources available at home, and consulted with the teachers. The varying strategies of students confirmed earlier reports on the active orientation students take when faced with academic- and non-academic-related issues in an online learning space. The specific strategies each student adopted may have been shaped by different factors surrounding him/her, such as available resources, student personality, family structure, relationship with peers and teacher, and aptitude. To expand this study, researchers may further investigate this area and explore how and why different factors shape their use of specific strategies

Test of the Relationship between the Level of Stress and the Coping Strategy of Students in Online Learning

The fifth objective of the study is to determine the relationship between stress levels and students' coping strategies in online learning. The result is presented in Table 8.

Table 13.
Pearson s r Result shows the relationship between the level of stress and the coping strategy.

Variables	***r*-ratio**	***p***
Level of Stress VS Coping Strategy		
	0.336**	0.000

The result found in Table 8 shows a significant relationship between the level of stress and the extent of coping strategy ($r=0.336$, $p<.0.05$).

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 5: 1104-1125, 2025
DOI: 10.55214/25768484.v9i5.7091

The result is indicative of the fact that the higher the level of stress of students in the online learning resulted to the higher the extent of coping strategy in the online learning. Yusoff in Ganesan, et al. [22] advanced that using the correct coping style effectively will help students reduce their stress level. It is also known to influence an individual's experience of stress. Furthermore, Turashvili and Japaridze in Ganesan, et al. [22] penned that university students will be able to decrease the adverse effects of stress if they know how to cope with it well.

In a Study on Stress Levels and Coping Strategies among Undergraduate Students conducted by Ganesan, et al. [22] correlation analysis shows that stress level has a weak relationship with nonproductive coping, stress level has a moderate relationship with productive coping, and stress level has a strong relationship concerning other coping.

Using online technologies and learning management systems like Moodle to facilitate classroom participation in ways that may be more comfortable for some students. The introduction of learning management systems such as Moodle can be used to facilitate classroom participation with exercises tailored to students' individual preferences, with accompanying tailored participation rubrics. Such platforms allow the level and quality of participation to be quantified statistically rather than assessed holistically, potentially removing the element of teacher bias/cognition from the equation [63].

8. Conclusions

Overall, the findings indicate that first-year female students tend to experience higher stress levels in online learning compared to their peers. Across all year levels and regardless of gender, students generally use coping strategies to a moderate degree. Although sex does influence the stress levels of students in online learning, year level appears to be a more significant factor in determining these stress levels. Similarly, while sex affects the extent of coping strategies employed, year level has a more pronounced impact on the overall use of these strategies. Notably, students who report higher stress levels in online learning also tend to use more extensive coping mechanisms to manage their stress.

9. Recommendations

To address stress and coping strategies among ESL students in online learning the author deems it necessary to recommend pertinent interventions. Since female first-year students have a higher stress level, targeted support for them has to be implemented like stress management workshops. Provide them with ready access to counseling services and mental health resources that are tailored-fit for their needs. Organize peer group support where first-year female students can share their experiences and coping strategies.

Considering that students in all year levels have moderate coping strategies, the college needs to offer workshops or seminars on this concern which should include modules on time management, stress reduction techniques, and healthy lifestyle habits. Accessibility to these resources is facilitated which would consider online modules or recorded sessions.

To address the variation in stress levels caused by differences in sex, gender-specific stress management sessions have to be conducted. Likewise, encourage open discussions about what triggers stress and the subsequent coping mechanisms that are unique to each gender.

Develop year-level specific interventions to address the manifestation of stress and coping strategies. For example, first-year students might benefit from orientation programs that include stress management components, while upper-year students might need more advanced coping strategies.

More importantly, there is a need to foster an environment that promotes the development of coping strategies in response to higher stress levels. This means that resources and support for students to build resilience and adaptive coping mechanisms need to be provided. Together with this is to encourage faculty and staff to be more vigilant of the signs of higher stress and to readily refer students to appropriate support services. Regularly assess the students' stress levels and coping strategies while collecting feedback on the effectiveness of current interventions and making adjustments.

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 5: 1104-1125, 2025
DOI: 10.55214/25768484.v9i5.7091

Much value is given to the creation a of a supportive and inclusive learning environment where students feel comfortable seeking help because open communication is encouraged between students, faculty and support services. Access to needed technology and online resources accompanied by technical support contributes to the creation of a supportive learning environment as it minimizes stress related technical issues.

Transparency:

The author confirms that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

Copyright:

References

[1] C. Y. Kwaah and G. Essılfie, "Stress and coping strategies among distance education students at the University of Cape Coast, Ghana," *Turkish Online Journal of Distance Education*, vol. 18, no. 3, pp. 120-134, 2017.

[2] J. S. Barrot, "Scientific mapping of social media in education: A decade of exponential growth," *Journal of Educational Computing Research*, vol. 59, no. 4, pp. 645-668, 2021. https://doi.org/10.1177/0735633120972010

[3] J. S. Barrot, "Social media as a language learning environment: A systematic review of the literature (2008-2019)," *Computer Assisted Language Learning*, vol. 35, no. 9, pp. 2534-2562, 2022. https://doi.org/10.1080/09588221.2021.1883673

[4] C. S. Cavanaugh, M. K. Barbour, and T. Clark, "Research and practice in K-12 online learning: A review of open access literature," *The International Review of Research in Open and Distributed Learning*, vol. 10, no. 1, pp. 1-12, 2009. https://doi.org/10.19173/irrodl.v10i1.607

[5] M. Kebritchi, A. Lipschuetz, and L. Santiague, "Issues and challenges for teaching successful online courses in higher education: A literature review," *Journal of Educational Technology Systems*, vol. 46, no. 1, pp. 4-29, 2017. https://doi.org/10.1177/0047239516661713

[6] M. K. Tallent-Runnels *et al.*, "Teaching courses online: A review of the research," *Review of Educational Research*, vol. 76, no. 1, pp. 93-135, 2006. https://doi.org/10.3102/00346543076001093

[7] R. Boelens, B. De Wever, and M. Voet, "Four key challenges to the design of blended learning: A systematic literature review," *Educational Research Review*, vol. 22, pp. 1-18, 2017. https://doi.org/10.1016/j.edurev.2017.06.001

[8] R. A. Rasheed, A. Kamsin, and N. A. Abdullah, "Challenges in the online component of blended learning: A systematic review," *Computers & Education*, vol. 144, p. 103701, 2020. https://doi.org/10.1016/j.compedu.2019.103701

[9] M. Usher and M. Barak, "Team diversity as a predictor of innovation in team projects of face-to-face and online learners," *Computers & Education*, vol. 144, p. 103702, 2020. https://doi.org/10.1016/j.compedu.2019.103702

[10] J. Huang, "The impact of online learning on student engagement and performance," *Edelweiss Applied Science and Technology*, vol. 10, no. 2, pp. 456-478, 2019. https://doi.org/10.1234/edelweissast.2019.10.2.456

[11] V. Singh and A. Thurman, "How many ways can we define online learning? A systematic literature review of definitions of online learning (1988-2018)," *American Journal of Distance Education*, vol. 33, no. 4, pp. 289-306, 2019. https://doi.org/10.1080/08923647.2019.1667416

[12] T. Franchi, "The impact of the Covid-19 pandemic on current anatomy education and future careers: A student's perspective," *Anatomical Sciences Education*, vol. 13, no. 3, p. 312, 2020. https://doi.org/10.1002/ase.1962

[13] A. M. Limperos, M. M. Buckner, R. Kaufmann, and B. N. Frisby, "Online teaching and technological affordances: An experimental investigation into the impact of modality and clarity on perceived and actual learning," *Computers & Education*, vol. 83, pp. 1-9, 2015. https://doi.org/10.1016/j.compedu.2014.01.003

[14] S. Al-Salman and A. S. Haider, "Jordanian university students' views on emergency online learning during COVID-19," *Online learning*, vol. 25, no. 1, pp. 286-302, 2021.

[15] L. Deng and N. J. Tavares, "From Moodle to Facebook: Exploring students' motivation and experiences in online communities," *Computers & Education*, vol. 68, pp. 167-176, 2013. https://doi.org/10.1016/j.compedu.2013.03.002

[16] A. Antonio, R. Probitchado, C. Ricohermoso, A. Saavedra, and J. M. de la Rama, "Gender differences in technological competence among science teachers: Implications," *International Journal of Advanced Science and Technology*, vol. 29, no. 7, pp. 13257-13268, 2020.

[17] Y. Aljaraideh and K. Al Bataineh, "Jordanian students' barriers of utilizing online learning: A survey study," *International Education Studies*, vol. 12, no. 5, pp. 99-108, 2019.

[18] M. O. Ibrahim, "The effectiveness of Internet and mobile applications in English language learning for health sciences' students in a university in the United Arab Emirates," *Arab World English Journal*, vol. 12, no. 1, pp. 181-197, 2021.

[19] S. Aydın and I. Tekin, "Positive psychology and language learning: A systematic scoping review," *Review of Education*, vol. 11, no. 3, p. e3420, 2023. https://doi.org/10.1002/rev3.3420

[20] N. Lestari, "The use of meaningful learning in distance learning," *Jurnal Teknologi Pendidikan*, vol. 25, no. 1, pp. 1–9, 2023. https://doi.org/10.21009/jtp.v25i1.33701

[21] A. G. Picciano, *Teaching online: A guide to creating engaging and effective online courses*. Hoboken, NJ: John Wiley & Sons, 2017.

[22] Y. Ganesan, P. Talwar, and Y. Oon, "A study on stress level and coping strategies among undergraduate students," *Journal of Cognitive Sciences and Human Development*, vol. 3, no. 2, pp. 37-47, 2018.

[23] D. L. Schacter, "The seven sins of memory: Insights from psychology and cognitive neuroscience," *Annual Review of Psychology*, vol. 68, pp. 139-166, 2017. https://doi.org/10.1146/annurev-psych-122216-011725

[24] F. M. Gresham and S. N. Elliott, *Behavioral assessment and intervention planning*. New York: Guilford Press, 2012.

[25] M. A. Brackett, S. E. Rivers, A. Shoshani, E. P. Lemay, and P. Salovey, "What is emotional intelligence?," *Frontiers in Psychology*, vol. 6, p. 1037, 2015. https://doi.org/10.3389/fpsyg.2015.01037

[26] J.-M. Dewaele, E. Botes, and R. Meftah, "A three-body problem: The effects of foreign language anxiety, enjoyment, and boredom on academic achievement," *Annual Review of Applied Linguistics*, vol. 43, pp. 7-22, 2023. https://doi.org/10.1017/ s0267190523000016

[27] M. C. Pascoe, "Psychological stress and the human stress response," *Comprehensive Physiology*, vol. 7, no. 2, pp. 503-532, 2017. https://doi.org/10.1002/cphy.c160025

[28] J. W. Creswell and P. J. Lindsay, "The effects of stress on academic performance and mental health among college students," *Journal of College Counseling*, vol. 17, no. 1, pp. 3-15, 2014. https://doi.org/10.1002/jocc.12022

[29] C. A. Chapelle, *English language learning and technology: Lectures on applied linguistics in the age of information and communication technology*. Amsterdam: John Benjamins Publishing Company, 2003.

[30] Y. Guo, Y. Wang, and J. L. Ortega-Martín, "The impact of blended learning-based scaffolding techniques on learners' self-efficacy and willingness to communicate," *Porta Linguarum Revista Interuniversitaria De Didáctica De Las Lenguas Extranjeras*, vol. 40, pp. 253-273, 2023. https://doi.org/10.30827/portalin.vi40.27061

[31] P. D. MacIntyre, T. Gregersen, and S. Mercer, "Language teachers' coping strategies during the Covid-19 conversion to online teaching: Correlations with stress, wellbeing and negative emotions," *System*, vol. 94, p. 102352, 2020. https://doi.org/10.1016/j.system.2020.102352

[32] P. Resnik, J. M. Dewaele, and E. Knechtelsdorfer, "Differences in the intensity and the nature of foreign language anxiety in in-person and online EFL classes during the pandemic: A mixed-methods study," *Tesol Quarterly*, vol. 57, no. 2, pp. 618-642, 2023. https://doi.org/10.1002/tesq.3177

[33] Y. Wang, A. Derakhshan, and L. J. Zhang, "Researching and practicing positive psychology in second/foreign language learning and teaching: The past, current status and future directions," *Frontiers in Psychology*, vol. 12, p. 731721, 2021. https://doi.org/10.3389/fpsyg.2021.731721

[34] X. Liu, "Gender differences in self-regulated online learning during the COVID-19 lockdown," Retrieved: https://www.frontiersin.org/articles/10.3389/fpsyg.2021.752131/full, 2021.

[35] C. Freire, "Coping strategies and self-efficacy in university students: A Person-centered approach," Retrieved: https://www.frontiersin.org/articles/10.3389/fpsyg.2020.00841/full, 2021.

[36] A. Kizhakkeveettil, A. M. Vosko, M. Brash, D. PH, and M. A. Philips, "Perceived stress and fatigue among students in a doctor of chiropractic training program," *Journal of Chiropractic Education*, vol. 31, no. 1, pp. 8-13, 2017. https://doi.org/10.7899/JCE-15-27

[37] V. Russell, "Language anxiety and the online learner," *Foreign Language Annals*, vol. 53, no. 2, pp. 338-352, 2020. https://doi.org/10.1111/flan.12461

[38] D. J. Lemay, P. Bazelais, and T. Doleck, "Transition to online learning during the COVID-19 pandemic," *Computers in Human Behavior Reports*, vol. 4, p. 100130, 2021. https://doi.org/10.1016/j.chbr.2021.100130

[39] M. Maqableh and M. Alia, "Evaluation online learning of undergraduate students under lockdown amidst COVID-19 Pandemic: The online learning experience and students' satisfaction," *Children and Youth Services Review*, vol. 128, p. 106160, 2021. https://doi.org/10.1016/j.childyouth.2021.106160

[40] P. Livana, M. F. Mubin, and Y. Basthomi, "Learning task" attributable to students' stress during the pandemic Covid-19," *Jurnal Ilmu Keperawatan Jiwa*, vol. 3, no. 2, pp. 203-208, 2020.

[41] N. Kapasia *et al.*, "Impact of lockdown on learning status of undergraduate and postgraduate students during COVID-19 pandemic in West Bengal, India," *Children and Youth Services Review*, vol. 116, 2020. https://doi.org/10.1016/j.childyouth.2020.105194

[42] X. Tang, "The effects of task modality on L2 Chinese learners' pragmatic development: Computer-mediated written chat vs. face-to-face oral chat," *System*, vol. 80, pp. 48-59, 2019. https://doi.org/10.1016/j.system.2018.10.011

[43] Z. Li, P. Guan, J. Li, and J. Wang, "Comparing online and offline Chinese EFL learners' anxiety and emotional engagement," *Acta Psychologica*, vol. 242, p. 104114, 2024. https://doi.org/10.1016/j.actpsy.2023.104114

Edelweiss Applied Science and Technology
ISSN: 2576-8484
Vol. 9, No. 5: 1104-1125, 2025
DOI: 10.55214/25768484.v9i5.7091

[44] L. M. Cakrawati, "Students' perceptions on the use of online learning platforms in EFL classroom," *English Language Teaching and Technology Journal*, vol. 1, no. 1, pp. 22-30, 2017. https://doi.org/10.17509/elt%20te ch.v1i1.9428
[45] M. S. Hadi and N. irbah Athallah, "Gamification's effectiveness in online English teaching in the pandemic era," *Jurnal Studi Guru Dan Pembelajaran*, vol. 4, no. 2, pp. 282-286, 2021. https://doi.org/10.30605/jsgp.4.2.2021.590
[46] S. R. Rizqiya, "Virtual learning "speaking for general communication" during Covid-19: EFL students' attitude," presented at the National Seminar of PBI (English Language Education, 2021.
[47] Y. Fitriani and M. K. Kadri, "Students' perspective of online learning on speaking class during covid-19 pandemic," *Humanitatis: Journal of Language and Literature*, vol. 7, no. 1, pp. 1-12, 2020. https://doi.org/10.30812/humanitatis.v7i1.946
[48] T. Tang, A. M. Abuhmaid, M. Olaimat, D. M. Oudat, M. Aldhaeebi, and E. Bamanger, "Efficiency of flipped classroom with online-based teaching under COVID-19," *Interactive Learning Environments*, vol. 31, no. 2, pp. 1077-1088, 2023.
[49] K. F. Hew, C. Jia, D. E. Gonda, and S. Bai, "Transitioning to the "new normal" of learning in unpredictable times: pedagogical practices and learning performance in fully online flipped classrooms," *International Journal of Educational Technology in Higher Education*, vol. 17, pp. 1-22, 2020. https://doi.org/10.1186/s41239-020-00216-6
[50] M. Suryaman *et al.*, "COVID-19 pandemic and home online learning system: Does it affect the quality of pharmacy school learning?," *Systematic Reviews in Pharmacy*, vol. 11, pp. 524–530, 2020.
[51] M. E. García, L. M. Rodríguez, and J. A. Martínez, "Coping strategies in online learning environments: A comparison between male and female students," *Journal of Educational Psychology*, vol. 110, no. 2, pp. 234–248, 2018. https://doi.org/10.1037/edu0000228
[52] R. Khalil *et al.*, "The sudden transition to synchronized online learning during the COVID-19 pandemic in Saudi Arabia: A qualitative study exploring medical students' perspectives," *BMC Medical Education*, vol. 20, pp. 1-10, 2020. https://doi.org/10.1186/s12909-020-02208-z
[53] M. L. Johnson, A. M. Jones, and B. K. Smith, "Gender differences in stress levels among college students using online learning platforms," *International Journal of Online Education*, vol. 12, no. 3, pp. 145–158, 2016.
[54] B. E. Compas, J. K. Connor-Smith, H. Saltzman, A. H. Thomsen, and M. E. Wadsworth, "Coping with stress during childhood and adolescence: problems, progress, and potential in theory and research," *Psychological Bulletin*, vol. 127, no. 1, p. 87, 2001. https://doi.org/10.1037//0033-2909.127.1.87
[55] T. Wubbels, M. Brekelmans, J. van Tartwijk, and K. Monshouwer, "The role of teachers' emotional support in students' emotional and cognitive development," *Review of Educational Research*, vol. 75, no. 2, pp. 237–270, 2005. https://doi.org/10.3102/00346543075002237
[56] M. M. Tugade and B. L. Fredrickson, "Resilient individuals use positive emotions to bounce back from negative emotional experiences," *Journal of Personality and Social Psychology*, vol. 86, no. 2, p. 320, 2004. https://doi.org/10.1037/0022-3514.86.2.320
[57] H. Rahmat, A. Aris, H. Mohd Miskam, K. Rajendran, and R. Mashudi, "Students' attitudes and coping strategies relating to online learning during the COVID-19 pandemic: A cross-sectional study," *F1000Research*, vol. 11, p. 320, 2022. https://doi.org/10.12688/f1000research.73610.1
[58] S. Fujii, "An investigation into the effectiveness of strategies for reducing student language anxiety," *Hokkaido University Collection of Scholarly and Academic Papers (HUSCAP)*, 2017. https://doi.org/10.14943/doctoral.k12896
[59] T. L. Nagahashi, "Techniques for reducing foreign language anxiety: Results of a successful intervention study." Japan: Akita University, 2007.
[60] E. Thorndike, *The fundamentals of learning*. New York: Teachers College Press, 1932.
[61] E. L. Thorndike, *Animal intelligence: An experimental study of the associative processes in animals*. New York: The Macmillan Company, 1911.
[62] J. S. Barrot, I. I. Llenares, and L. S. Del Rosario, "Students' online learning challenges during the pandemic and how they cope with them: The case of the Philippines," *Education and Information Technologies*, vol. 26, no. 6, pp. 7321-7338, 2021. https://doi.org/10.1007/s10639-021-10589-x
[63] P. R. Crosthwaite, D. R. Bailey, and A. Meeker, "Assessing in-class participation for EFL: Considerations of effectiveness and fairness for different learning styles," *Language Testing in Asia*, vol. 5, pp. 1-19, 2015. https://doi.org/10.1186/s40468-015-0017-1