# Effect of Online Learning on Psychological Wellbeing, Academic Resilience, and Self-efficacy of Students During COVID-19 Pandemic

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## Abstract

**Background:** COVID-19 pandemic shocked the world; it changes everybody's life, especially in education and online learning becomes a new culture. **Aim of the study:** To assess effect of online learning on psychological wellbeing, academic resilience, and self-efficacy among college students. **Subjects and Methods: Research design:** A descriptive design was employed. **Setting:** The study was conducted at faculty of nursing Benha University, Egypt. **Subjects:** A convenience sample of 400 students from the Faculty of Nursing at Benha University, Qalyubia Governorate. **Tool of data collection:** Tool (1) Personal data about the students. Tool (II) Psychological Well-being Scale. Tool (III) Academic Resilience Scale. Tool (IV). Online Learning Self-Efficacy Scale. **Results**: The findings revealed a negative impact of online learning on all three variables: Less than two-thirds of the students reported low levels of psychological well-being, suggesting potential detrimental effects on their mental and emotional health. Similar proportions of students exhibited low level of academic resilience and poor level of online learning self-efficacy, indicating decreased capacity to navigate academic difficulties with decrease student`s confidence in their ability to succeed in the online environment. **Conclusion:** Statistically significant strong correlations were observed on psychological wellbeing, academic resilience, and self-efficacy among college students. This suggests that lower academic resilience and online self-efficacy are associated with decreased psychological well-being. **Recommendations:** Develop and implement psycho-educational modules that enhance students' self-efficacy in online learning environments and Equip students with effective stress management skills and foster academic resilience to navigate challenges associated with online learning.

**Key words:** Online Learning, Psychological Well-being, Resilience, Self-efficacy, Students.

## Introduction:

The COVID-19 pandemic abruptly shifted to online platforms for numerous enterprises, including schools. Individuals faced new difficulties as a result of this change, which also significantly altered their attitudes, feelings, and perceptions. Despite the continued quarantine restrictions and the growing worries about the virus spreading, they largely struggled to manage their stress and stay motivated. University students' academic performance and views were also impacted by this constant stress, since they underwent significant changes to their daily routines and habits [(1).]

The COVID-19 pandemic, according to the WHO, can affect other sectors in addition to health. Education was among the organizations that suffered the most during the COVID-19 pandemic. In order to stop the spread of the virus, the government has urged students to study from home. Online learning is a type of remote learning that uses internet tools to communicate online [(2).]

The advantages of online learning encompass a wide array of possibilities, expanding access to education for the general public and business because flexible scheduling can lessen the impact of many time and place constraints, outsourcing some activities outside the location reduces institutional capacity

constraints resulting from the need for infrastructure buildings, and there is the potential to increase access to more flare-ups from diverse geographic, social, cultural, economic, and experiential backgrounds. On the other hand, distance learning has drawbacks as well, such as obstacles to efficient learning including domestic distractions and faulty technology, poor student-teacher contact, and the need for more experience. Students may feel stressed as a result of these issues [3].

For students, psychological well-being is crucial, especially during the epidemic COVID-19. Students who are in good psychological well-being will develop to their full potential. The ability to accept oneself as he is, the capacity to form relationships with others, the capacity for autonomy, and the clarity of one's life goals are all components of the psychology of well-being [4]. Psychological well-being divided into six dimensions: self-acceptance, positive relationships with others, autonomy mastery, purpose in life, and personal growth. Age, gender, and social support are variables that impact students' psychological wellbeing. The findings demonstrated that one's environmental mastery and autonomy will increase with age. Additionally, variations in gender have an impact on a person's psychological wellbeing, with women being more likely than males to experience it. This implies that female's student often possesses stronger interpersonal abilities than males [5].

One of the most important elements in gaining psychological well-being is resilience. The ability to persevere in the face of hardship or other situations that make a person feel unpleasant, traumatized, or depressed is known as resilience. Resilience is the ability to respond in a healthy and useful way to stressful situations. Resilience can be defined as a notion that represents a person's capacities for overcoming and adapting to challenging situations [6].

Resilience is an efficient coping technique for dealing with misfortune. It includes inner strength, competence, optimism, and flexibility. These traits can lessen the effects of stressful life experiences and strengthen the protective elements that increase one's capacity to handle challenges. Even in the presence of stressful situations that may otherwise result in subpar performance or even dropping out, academic resilience, a sort of resilience specialized to the field of education, encourages improved academic accomplishment, engagement and motivation [7].

Learners and educators should be acquainted to ICT and E-learning. Through it they can be updated with the latest in science. Educators can instruct greater numbers of learners. They can use interactive learning strategies with concern of difference in learning styles. Learners can deal with their instructors anytime. Regarding the assessment of student's needs and achievements they can get immediate feedback [8].

Learners possessing an unwavering spirit towards academics have the remarkable ability to transform a daunting environment into a wellspring of inspiration; all while nurturing their aspirations, aligning themselves with purposeful objectives, and exhibiting astute problem-solving prowess. Highly resilient students, are also more likely to set higher academic goals, enhance their skills and knowledge, and may therefore be more adaptive in educational settings. Furthermore, students who have the capacity to become resilient might also have high psychological well-being in facing online learning challenges [9].

A student's views and confidence in their academic abilities are referred to as their academic self-efficacy. It is also one of the "5-C" qualities, which

describe an innate human skill that may be developed as a defense against stress and adversity that significantly predicts academic resilience. Students who have high self-efficacy are able to control their thoughts and emotions when faced with difficulties, making them more likely to persevere in their goals and push past self-doubt. Simply put, people who lack confidence in their ability to succeed will be less motivated to persevere through challenges [10].

Academic self-efficacy was found to be able to predict academic resilience, with students with higher self-efficacy responding more favorably than those with lower self-efficacy to statements relating to high academic resilience. Academic self-efficacy is positively correlated with better performance, higher grades, and higher academic resilience [10]. The success of a student's online learning experience will also be heavily influenced by their level of self-efficacy [11].

## Significant of the study:

In COVID-19 pandemic, educational institutions are compelled to use technology to facilitate online learning. Some teachers and students find it difficult and uncomfortable to adjust to new technologies. Additionally, students may become mentally and physically exhausted when using video conferencing for online study [12].

There is a short age of study to assess effect of online learning on psychological wellbeing, academic resilience, and self-efficacy among college students in Egypt. According, it is important to notice these variables that influencing on the students as it can help to make a positive academic performance through improving psychological wellbeing, resilience and self-efficacy. So, this study aims to assess effect of online learning on psychological wellbeing, academic

resilience, and self-efficacy among college students.

## Aim of the Study:

The aim of this study was to assess effect of online learning on psychological wellbeing, academic resilience, and self-efficacy of students during Covid 19 pandemic.

## Research Questions:

To accomplish aim of this study, the following questions were asked:

- What are the levels of psychological well-being, academic resilience, and self-efficacy of students during Covid 19 pandemic?

- What is the effect of online learning on psychological wellbeing, academic resilience, and self-efficacy of students during Covid 19 pandemic?

## Subject and Methods

### Research design:

A descriptive design was used in this study. The goal of descriptive research is to describe the connection between variables rather than to infer cause and effect correlations. Correlation study is useful for explaining how one phenomenon is connected to another and indicating how one variable might predict another.

### Study setting:

This study was conducted at Faculty of Nursing, Benha University in Qalubia governorate. The faculty is containing of 4 academic years. Faculty consists of four flours, seven small classrooms, four large lectures halls, library and 11 labs. The faculty provided with all educational facilities.

### Study Subjects:

All available sample of (400) undergraduate students from fourth grade enrolled in the study and derived from total number of approached nursing students in academic year was

"n=495 student. The researchers selected 4th year students because they are the most mature and aware with all teaching staff and have the ability to train, access and use online learning than others students.

### Inclusion criteria

Participated students fulfilled the following criteria: enrolled in the 4th year, owned a smartphone, and consented to participate voluntarily and have the ability to access online leaning.

### Exclusion criteria:

Any student having psychiatric disorders, undergoing any pharmacological or psychotherapies, taking any substance use (amphet-amines,), and incomplete completion of the questionnaires. The "95 students" not involved on data analysis includes as follow: Not meeting the inclusion criteria "n= 30 students","26 students" refused to participate in the study, and "39 students" not completed the questionnaire.

### Tool for data collection:

Data was acquired using the following tools:

### Tool (I): Personal data:

It was developed by the investigator to elicit data about student's socio-demographic characteristics: such as age, sex, marital status, number of brothers and sisters, student order in the family, occupational status, family income and residence.

### Tool (II): Psychological Well-Being Scale:

Ryff & Keyes (1995) [12] developed assessment scale to measures one's psychological well-being. The scale comprises 18 items consists of six dimensions. The autonomy subscale is Q15, Q17, and Q18. The environmental mastery subscale, Q4, Q8, and Q9. The personal growth subscale, from Q11, Q12, and Q14. The positive relations with others subscale Q6, Q13, and Q16. The purpose in life subscale Q3, Q7, and Q10. The self-acceptance subscale, from Q1, Q2, and Q5. The scale's scoring system is profound on 7-point Likert scale with 1 strongly agreeing, 2 somewhat agreeing, 3 a little agreeing, 4 neither agreeing nor disagreeing, 5 a little disagreeing, 6 somewhat disagreeing, and 7 strongly disagreeing. Q (1, 2, 3, 8, 9, 11, 12, 13, 17, and 18) should be scored in reverse. To compute subscale scores for each participant, add their responses to each subscale's items. Minimal score is 18 and maximum score is 126, which higher scores mean higher level of psychological well-being.

### Scoring system:
- 60%= Low level of psychological well-being.
- 60-80%= Moderate level of psychological well-being.
- ≥ 80%= High level of psychological well-being.

### Tool (III): Academic Resilience Scale (ARS-30):

Academic Resilience Scale developed by Cassidy (2016) [13] to measures academic resilience by examining individuals' particular adaptive cognitive-affective and behavioral responses to academic hardship. ARS-30 has 3 subscales: (1) perseverance (14 items), the items 1, 2, 3, 4, 5, 8, 9, 10, 11, 13, 15, 16, 17 and 30. (2) reflecting and adaptive help seeking (9 items) items 18, 20, 21, 22, 24, 25, 26, 27, and 29; and (3) negative affective and emotional response (7items), items 6, 7, 12, 14, 19, 23 and 28.

Responses are ranked on a 5-point Likert scale, from probable (1) to unlikely (5). Positive items are inverted, therefore based on content; items 1, 3, 6, 7, 12, 14, 15, 19, and 28 are negative, while the rest are positive. The overall score of the scale is calculated by adding the scores of

the individual elements, which range from 30 to 150, which higher scores imply higher academic resilience.

**Scoring system:**

- <60% = Low academic resilience.
- 60-80% = Moderate academic resilience.
- ≥ 80% = High academic resilience.

## TOOL IV: Online Learning Self-Efficacy Scale (OLSES):

Zimmerman & Kulikowich developed the OLSES scale in 2016 [14].The scale contains 21 components separated into three categories to assess students' confidence in their ability to succeed in online learning environments. These elements are called learning in the online environment (9 things), time management (5 items), and technology use (7 items). The scale items were assessed on a 5-point Likert scale, "strongly disagree (1), disagree (2), I am unsure (3), agree (4), and strongly agree (5)." Minimal score is 21and maximum score is 105, which higher score indicated good self-efficacy.

**Scoring system:**

- < 60% = Poor self-efficacy.
- 60-80% = Insufficient self-efficacy.
- ≥ 80% = Good self-efficacy.

## Methods:

Study was carried out following to the steps that followed:

### Preparation of tools:

The researchers conducted a thorough review of existing literature related to the issue. Various sources were consulted, including books, articles, periodicals, and magazines. This review aimed to gain a comprehensive understanding of the research problem and develop the necessary study tools.

To ensure the accuracy of the developed tools, the researchers followed a strict translation verification procedure. This involved: **a-** The researchers initially translated the English versions of the tools into Arabic. **b-** Expert Back-Translation: The Arabic versions were then presented to bilingual experts for review and verification. **c-** Double Back-Translation: To further identify any inconsistencies, the Arabic versions were translated back into English by independent bilingual experts. **d-** Content Discrepancy Resolution: Any minor discrepancies identified during the back-translation process were addressed, and necessary modifications were made to ensure consistency and accuracy.

## Content Validity and Reliability of the Tools:

To ensure the data collection tools were trustworthy, underwent rigorous content validity testing. Three experts in psychiatric mental health nursing evaluated whether the tool items comprehensively and clearly covered the intended content domain. Based on their expert feedback, necessary modifications were implemented, leading to the development of the final form of the tool.

The researcher employed reliability of tools as a means to gauge the internal coherence of the instrument. This was accomplished by administering the identical instruments to the same participants in comparable conditions on one or multiple occasions. Cronbach's alpha reliability coefficient of psychological well-being scale is 0.92; academic resilience scale is 0.90, while online learning self-efficacy scale is 0.843.

## Field work:

Data gathering took around three months from the beginning October to end of December 2022, during the first term semester in the academic year 2021–2022.

These steps were taken to begin and conclude the research:-

- Once official permissions were obtained from the authorized

persons, the researchers started the data collection phase.

- The researchers came to faculty of Nursing in early morning before beginning of studying day and rest time between lectures.
- The researcher followed the specific precautions such as (wearing facemask and using alcohol spray) due to corona virus circumstances.
- The researchers started data collection by introducing himself to each student, provide a brief description and explanation of the aim and objective of the study to them.
- After explanation an oral permission taken from students who want to share and the researchers give every student copy from tool.
- The researchers started data collection from 8 am to 3 pm with interviewing students during their presence in the faculty before and after practical lectures in suitable place.
- The researchers lasted from 20-30 minutes to complete the questionnaire which interview a group of students at one time to collect data two days per week, about one group/day "17-15 student/day", 30-34 student/week.

## Pilot Study:

The intention behind conducting the pilot study was to ascertain the clarity, applicability, significance, and soundness of the tools employed, to assess the duration required to complete the sheet, and to undertake the requisite modifications. 10% of the entire student sample served as the testing ground for this study. Participants in the pilot study were subsequently included from the main study sample.

## Administrative and ethical consideration:

- Data gathering was executed in the following manner: The acquisition of

written official authorization and endorsements for the execution of this investigation has been successfully attained from the Dean of the Faculty of Nursing at Benha University. Enclosed within this correspondence is the authorization to conduct the study, accompanied by a detailed explanation of the study's objectives and the data that is to be collected.

- Students were notified that engagement in the investigation is of their own voluntary, no name was included in the questionnaire sheet and anonymity and confidentiality of each student was protected. Students were informed that the tool's content would only be utilized for research purpose.

## Statistical Analysis:

SPSS version 25, a statistical tool designed for the exploration of social science, was employed to analyze of data. To illustrate personal information and level of study variables, a descriptive statistics were summoned, including percentages, frequencies, means, weighted means, relative weights, and standard deviations. Pearson's correlation coefficients reveal the essence of the relationship among the study variables. The significance level was considered at $p \leq 0.05$ and highly significant at $P < 0.01$.

## Results:

**Table (1):** Shows that, the mean age of studied students were (20.50±1.119) years old, more than half (58.57%) were female, more than three quarters of them (78.0%) were single,. The study findings illustrates more than one third of them (38.0%) had two brothers or sisters. Also, more than one third of the studied student (34.0%) was the first one and the second in the family, respectively. Also, more than half (52.0%) of them had not enough income and less than

three quarters (70.0%) reside in rural area.

**Table (2):** Illustrates that, the Mean score and SD of psychological well-being subscales among the studied students. Result reveals that the highest Mean and SD for personal growth and purpose in life was 12.63 ±5.65 & 12.85±5.71, respectively, while the lowest Mean and SD for positive relations and autonomy with Mean and SD (11.56 ± 5.92 & 11.91± 5.86) respectively.

**Figure (1)**: Shows that, less than two thirds of the studied students (61.3 %) had low level of psychological well-being, while less than one quarter of them (24.3 %) of them had high level of psychological well-being.

**Table (3):** Reveals that, Mean score and SD of academic resilience subscales among studied students, it can be noticed that ranking of perseverance subscale was ranked as first with Mean and SD (43.40± 15.07), followed by reflecting and adaptive help seeking subscale with Mean and SD (27.65±11.15), and lastly negative affective and emotional response subscale with Mean and SD (18.33 ± 8.41).

**Figure (2):** Illustrates that, less than two thirds of the studied students (60.5%) had low level of academic resilience, while less than one quarter of them (22.3%) of them had high level of academic resilience.

**Table (4):** Shows that that Mean score and SD of online learning self-efficacy subscales of the studied students, the highest mean score regarding learning in the online environment (28.66±8.59); followed by technology use with Mean and SD (20.78± 7.52), while, the lowest mean score for time management with Mean and SD (15.37 ±6.87).

**Figure (3):** Illustrates that, less than two thirds of the studied students (62.2 %) had poor level of online learning self-efficacy, while more than one quarter of them (22.8 %) of them had good level of online learning self-efficacy.

**Table (5):** Demonstrates that, there were statistically significant strong correlation between total self-efficacy and academic resilience r=0.264, P- value 0.000**. Also there were statistically significant strong correlation between total self-efficacy and psychological wellbeing r=0.462, P- value 0.000**. Furthermore, there were statistically significant strong correlation between total academic resilience and psychological wellbeing r=0.273, P- value 0.000**.

## Discussion:

The inception of virtual education sprouted as a groundbreaking concept, crafted to provide aid and assistance to educators, scholars, and learners alike. However, amidst the throes of the pandemic, students have voiced their grievances, recounting the burdens, challenges, and unease that accompany the realm of online learning.

The sudden and unforeseen transition in the realm of education, compelled by the "new normal," has provoked a sense of discomfort and disarray. Failing to grasp the necessary know-how to adapt to this unforeseen conversion may potentially engender a decline in the level of learning and affect the student`s psychological wellbeing. Many students are declared to have depression, anxiety, and stress because it is harder to overcome internet challenges. Additionally, their academic resilience is weak [15].

Academic resilience is a critical attribute that students must possess to maintain a connection with the learning processes and techniques required to

achieve study success. Individuals pursuing higher education who exhibit determination and perseverance in overcoming obstacles encountered during online studies are regarded as having commendable academic resilience. Additionally, student self-efficacy assumes a particularly significant role in challenging learning environments, such as online education, wherein individuals have limited opportunities for social interaction; potentially leading to social isolation [16].There is a significant positive link between academic self-efficacy and academic resilience.

Students with higher self-efficacy responded more positively to statements corresponding to high academic resilience than those with low self-efficacy. Understanding psychological wellbeing, self-efficacy, and academic resilience in online learning is critical for student to improving online education, which can be a key component of academic success in distance education [17].

The sample in the present study is representative of undergraduate nursing students. It showed that the respondents mean age were (20.5±1.119) years old, more than three quarters of them were single, half of them were at first year & the anther half were at fourth years and more than one third of them had two brothers or sisters. Also, more than one third of the studied mothers were the first one in the family and more than half of them had not enough income.

Concerning the mean and standard deviation of psychological well-being subscales among the studied students. The result illustrates that the highest Mean ± SD for personal growth and purpose in life was (12.63 ±5.65 & 12.85±5.71) respectively, while the lowest Mean ±SD for positive relations and autonomy with Mean and SD (11.56 ±

5.92 & 11.91± 5.86) respectively. Meanwhile, personal growth, and a sense of purpose in life with others were the top two factors influenced by online learning.

This result consistent with **Aryani et al.** [5] who revealed that the dimensions of positive relationships with other people and autonomy have the highest percentage in the low category among the students. In the other side, this result inconsistent with **Navarez** [4] who revealed that, the highest dimensions of psychological well-being are environmental mastery and autonomy then the lowest dimensions among the studied students was for purpose in life and personal growth.

Regarding to distribution of the studied students according to their total psychological well-being. The finding of the present study shows that less than two thirds of the studied students had low level of psychological well-being. This might be because the abrupt transition to online learning has profoundly altered students' daily life, potentially impacting their psychological well-being. Throughout online learning, students are frequently unable to gain appropriate support from classmates and teachers, and are often not offered adequate aid to handle the issues and technological troubles throughout their online education, so the over-all psychological wellbeing has interpreted as low.

This outcome is in line with the findings of **Fitriawan et al.** [18] which indicate that a majority of nursing students experience psychological distress, with most respondents reporting mild distress. Moreover, this outcome aligns with the findings of **Holzer et al.** [19] who undertook a research endeavor in Indonesia and ascertained that the majority of nursing students experienced substantial psychological stress. Psychological

well-being of students has the potential to impact their academic achievements in both conventional and virtual educational settings. Similarly, **Aristovnik et al.** [20] conducted an investigation focused on the mental health of Spanish students amidst online learning, where they discovered a heightened likelihood for these students to exhibit symptoms ranging from mild sadness to severe anxiety in comparison to the general population.

Previous studies showed also that, many individuals, particularly students, have endured psychological repercussions. The realm of university can be a breeding ground for stress, worry, and despair, regardless of the presence of an epidemic, due to the unrelenting demands of academic pursuits [21, 22]. Furthermore, Bolatov et al [23] have demonstrated that students frequently encounter various manifestations of mental well-being struggles, encompassing exhaustion, despondency, unease, and physical symptoms.

These results are disagreeing with research conducted by **Aziz et al.** [24] that assess the mental condition of students during online learning. The study reported the studied students have good mental health conditions. Furthermore, this result disagrees with Navarez [4] the findings revealed that the participants have a moderate level of psychological well-being. **Rahim et al.** [25] and **Ropret et al** [26] also, reveals that, the mean of the findings in this investigation demonstrate that students possess a good and acceptable degree of comprehension regarding the psychological well-being experienced on university campus.

Concerning to mean and stander deviation of academic resilience subscales among the studied students. It noticed by **Casttelino et al.** [27] that ranking of perseverance subscale was ranked as first with Mean and SD (43.40± 15.07), followed by reflecting

and adaptive help seeking subscale with Mean and SD (27.65±11.15), and lastly negative affective and emotional response subscale with Mean and SD (18.33 ± 8.41).

This result inconsistent with **Shirmohammadi et al.** [28] results reveals that, the facet of academic resilience with the highest average score was reflecting and adaptive help-seeking, followed by academic persevere resilience. Then, in terms of emotional reaction, we received an average score, which is consistent with the results of our study.

**Cassidy** [13] identifies three components of academic resilience: persistence, reflecting and adaptive help-seeking, and negative affect and emotional responses. Perseverance is represented by student behaviors, characteristics, and emotions such as hard work and effort, failure to conform, adherence to plans and objectives, acceptance and use of feedback, inventive problem solution, and viewing adversity as an opportunity. Reflective and adaptive assistance seeking shows a collection of student features, personalities, and reactions that highlight strengths and shortcomings, such as adjusting study techniques, seeking help, support and encouragement, monitoring efforts and successes, and emphasizing rewarding and punishing. Anxiety, catastrophe, and avoiding bad reactions are examples of negative affect and emotional response components.

Regarding to distribution of the studied students according to their total academic resilience. Result illustrates that less than two thirds of the studied students had low level of academic resilience. This result may be due to the students being unable to cope with such situations so as to stay linked to the learning processes and apply ways to achieve study success,

resulting in a low degree of academic resilience.

This result inconsistent with **Kayun et al.** [29] **and Tarigan and Fauzi** [30] who revealed that a considerable majority of students had strong academic resilience, which allows them to cope under pressure and solve academic challenges that arise who showed that students have high academic resilience during online learning.

In the same side, **Liem et al.** [31] the findings revealed that, despite encountering numerous challenges and hardships, the students excelled in showcasing their academic fortitude. Students possess the ability to navigate through trying circumstances, confront them head-on, and discover a solution. Academic fortitude empowers students to thrive academically and attain favorable academic outcomes even in the face of diverse obstacles. Academic fortitude plays a vital role in helping student triumph over any difficulties and subsequently excel in their academic endeavors.

Regarding mean and stander deviation of online learning self-efficacy subscales among the examined students. The result illustrates that the highest mean score of the studied students regarding learning in the online environment (28.66±8.59); followed by technology use with Mean and SD (20.78±7.52), while the lowest mean score for time management with Mean and SD (15.37 ±6.87). This mean the most domain is affected is online environment by online learning.

This result consistent with **Tiwari and Srivastava** [32] who showed that the highest mean scores on online environment. Moreover, the majority of participants had inadequate learning, technical skills. However, this finding contradicts **Baab** [33]**,** who discovered that the highest subscale score for

OLSES was related to the use of technology.

Concerning distribution of the studied students according to their total online learning self-efficacy level. Less than two thirds of the studied students had poor level of online learning self-efficacy. This may be because students are accustomed to running social media sites; nevertheless, they still do not have adequate capacity and skills in using technological tools or software for educational purposes. Furthermore, students may be susceptible to external influence, reducing their learning efficiency, confidence, and academic self-efficacy.

This conclusion is similar to that of Al-Qahtani et al [34] who found that the majority of Najran University students had poor levels of self-efficacy. Found another study by **Chen et al.** [35]**; Pantu** [36] **and Yuri and Yendi** [37] found that the higher the semester, the lower the students' academic self-efficacy. At this point, students' regular learning and clinical practice are disrupted, and online learning lacks an appropriate monitoring mechanism, affecting students' learning consciousness and academic self-efficacy. On the other hand, this finding contradicts **Zhu et al.** [38] discovered that academic self-efficacy among nursing undergraduates was high.

Concerning the correlation between students studying regarding their total self-efficacy, academic resilience, and psychological well-being. Result demonstrates that, there were statistically significant positive correlation between total self-efficacy and academic resilience r=0.264, P-value 0.000**. Thus, students who exhibit less resilient behavior are likely to encounter greater difficulty in dealing with challenges, thus leading them to perceive their studies as more arduous.

These findings align with previous research conducted among nursing students by **Warshawski** [39] and **Ojeleye and Umar** [40] demonstrating a strong positive correlation between overall self-efficacy and academic resilience. A recent review exploring resilience and its promotion practices in nursing students highlighted the importance of self-efficacy as a key trait associated with resilient behavior [41]. Moreover, research suggests that higher levels of resilience can contribute to increased self-efficacy. Therefore, fostering and strengthening student resilience may lead to positive improvements in their perceived academic self-efficacy [42].

Concerning to correlation between total academic resilience and psychological well-being among the studied students. There was statistically significant strong correlation between total academic resilience and psychological wellbeing r=0.273, P- value 0.000**. This result may be due to negative learning experience in ability of the students to adapt well over time to life-changing or stressful situations" online learning" increase level of stress and lower the psychological well-being. This result is consistent with a study by **Deo and Dash** [43] they are found that resilience is a component that influences students' well-being and mental health. **Yıldırım and Solmaz** [44] stated that even in these difficult times, resilience may mitigate the negative impacts of stress and promote healthy mental health.

Concerning the link between total self-efficacy and psychological wellbeing among the studied students. Results illustrated that there was a statistically significant positive link between overall self-efficacy and psychological health (r=0.462, P-value 0.000**). This might be because nursing undergraduates and medical students have similar psychological well-being due to protracted learning cycles, substantial learning requirements, and frequent examinations. These psychological issues have a negative effect on nursing students' academic self-efficacy.

This result consistent with **Deo and Dash** [43] revealed that there exists a positive correlation between psychological wellbeing and self-efficacy. So, as the level of psychological wellbeing increases the level of self-efficacy also increases among undergraduate students. If self-efficacy is low psychological wellbeing also low. Findings have consistently found a correlation between self-efficacy and psychological well-being, which is characterized with good mental health or a lower risk of depression, anxiety, and stress [44].

In the same side, result agrees with **Bolatov et al.** [23] who stated that student has high self-efficacy; the student will also have good mental health. High self-efficacy will help students avoid the negative effects anxiety, and somatic symptoms from online learning. Furthermore, Alkhatib [45] showed that there was a positive relationship between psychological well-being and self-efficacy. Other studies supported result of the present study as; self-efficacy affects the mental health of medical students in online learning [46]. Self-efficacy is a strong variable in predicting mental health among people in Turkey [47].

**Conclusion:**
Based on the results of the study, it was concluded that there is a negative impact of online learning on psychological well-being, academic resilience, and self-efficacy of students. The findings of the present study show that less than two thirds of the studied students had low level of psychological well-being, academic resilience and poor level of self-efficacy in online learning. Also, there were statistically significant positive

correlations between total psychological well-being, academic resilience and self-efficacy. The implication is, if the academic resilience and self-efficacy decreases, the level of psychological well-being will also decrease. And vice versa, the more academic resilience and self-efficacy held by students, the psychological well-being will also increase.

**Recommendations:**

1-Implement a psycho-educational program focusing on academic self-efficacy and stress management techniques. This program can equip students with the tools they need to navigate challenges and build confidence in their abilities.

2-Foster a supportive learning environment that prioritizes open communication, collaboration, and feedback. Building a strong sense of community among students and faculty can enhance resilience and well-being.

3-Integrate resilience-building strategies directly into the nursing curriculum. This can include activities that develop problem-solving skills, positive coping mechanisms, and resourcefulness.

4-Provide targeted training modules specifically designed to help students master online learning tools and strategies. This can increase confidence and self-efficacy in digital learning environments.

5-Conduct future research exploring evidence-based interventions and coping strategies that effectively support younger nursing students in managing stress and building resilience during their education.

6-Investigate the barriers and determinants impacting online learning self-efficacy and resilience among nursing students. This research can inform the development of comprehensive and targeted interventions to address these challenges.

**Table (1): Frequency distribution of personal data of the studied students (n=400).**

| Personal data | N | % |
|---|---|---|
| **Age(years)** | | |
| - **19-20** | 200 | 50.0 |
| - **21-22 years** | 200 | 50.0 |
| **Mean ±SD** | 20.50±1.119 | |
| **Sex** | | |
| - **Male** | 165 | 21.25 |
| - **female** | 235 | 58.57 |
| **Marital status** | | |
| - **Married** | 88 | 22.0 |
| - **Single** | 321 | 78.0 |
| **Student grade** | | |
| - **Forth year** | 400 | 100.0 |
| **Number of brothers and sisters** | | |
| - **One** | 16 | 4.0 |
| - **Two** | 152 | 38.0 |
| - **Three** | 136 | 34.0 |
| - **More than three** | 96 | 24.0 |
| **Student order in the family** | | |
| - **First** | 136 | 34.0 |
| - **Second** | 136 | 34.0 |
| - **Third** | 88 | 22.0 |
| - **Last** | 40 | 10.0 |
| **Occupational status** | | |
| - **Work** | 40 | 10.0 |
| - **Not work** | 360 | 90.0 |
| **Family income** | | |
| - **Enough** | 192 | 48.0 |
| - **Not enough** | 208 | 52.0 |
| **Residence** | | |
| - **Rural** | 280 | 70.0 |
| - **Urban** | 120 | 30.0 |

**Table (2): Mean and stander deviation of psychological well-being subscales among the studied students (n=400).**

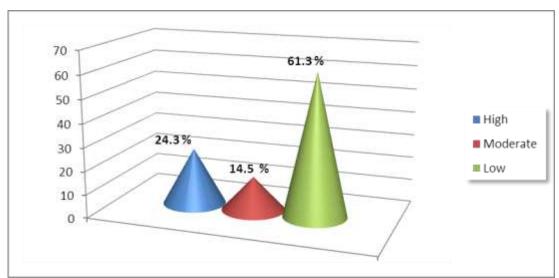| Psychological well-being dimensions | Items | Min | Max | Mean± SD | Mean % | Ranking |
|---|---|---|---|---|---|---|
| Autonomy | 3 | 3.0 | 21.0 | 11.91± 5.86 | 56.71 | 5 |
| Environmental Mastery | 3 | 3.0 | 21.0 | 11.92  ±5.85 | 56.76 | 4 |
| Personal Growth | 3 | 3.0 | 21.0 | 12.63 ± 5.65 | 60.14 | 2 |
| Positive Relations | 3 | 3.0 | 21.0 | 11.56 ± 5.92 | 55.05 | 6 |
| Purpose in Life | 3 | 3.0 | 21.0 | 12.85± 5.71 | 61.19 | 1 |
| Self-Acceptance | 3 | 3.0 | 21.0 | 12.50 ± 5.86 | 59.52 | 3 |
| **Total  psychological well-being** | 18 | 18 | 126 | 73.46±33.76 | 58.30 | |



**Figure (1): Percentage distribution of the studied students according to their total psychological well-being (n=400).**

**Table (3): Mean and stander deviation of academic resilience subscales among the studied students (n=400).**

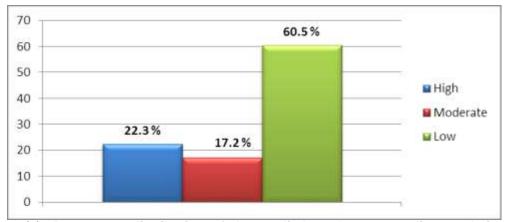| Academic resilience dimensions | Items | Min | Max | Mean± SD | Mean % | Ranking |
|---|---|---|---|---|---|---|
| Perseverance | 14 | 14.0 | 70.0 | 43.40± 15.07 | 62.0 | 1 |
| Reflecting and adaptive help seeking | 9 | 9.0 | 45.0 | 27.65 ±  11.15 | 61.44 | 2 |
| Negative affective and emotional response | 7 | 7.0 | 35.0 | ±  8.41 18.33 | 52.37 | 3 |
| **Total  academic resilience** | 30 | 30 | 150 | 89.38±31.61 | 59.59 | |

**Figure (2): Percentage distribution of the studied students according to their total academic resilience (n=400).**

**Table (4): Mean and stander deviation of online learning self-efficacy subscales among the studied students (n=400).**

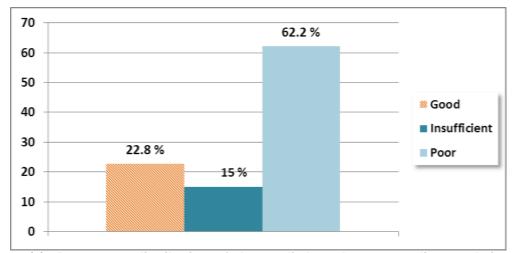| Online self-efficacy dimensions | Items | Min | Max | Mean± SD | Mean % | Ranking |
|---|---|---|---|---|---|---|
| Learning in the online environment | 9 | 13.0 | 44.0 | 28.66± 8.59 | 63.69 | 1 |
| Time management | 5 | 6.0 | 25.0 | 37±6.87.15 | 61.48 | 2 |
| Technology use | 7 | 9.0 | 35.0 | 20.78± 7.52 | 59.37 | 3 |
| **Total online learning self-efficacy** | 21 | 30 | 101 | 64.80±18.79 | 61.71 | |



**Figure (3): Percentage distribution of the studied students according to their total online learning self-efficacy level (n=400).**

**Table (5): Correlation between the studied students regarding their total of self-efficacy, academic resilience and psychological well-being (n=400).**

| Scales | Total self-efficacy | | Total academic resilience | |
|---|---|---|---|---|
| | r | p- value | r | p- value |
| **Total academic resilience** | 0.264 | 0.000** | - | - |
| **Total psychological well being** | 0.462 | 0.000** | 0.273 | 0.0001** |

A highly statistical significance differences (p=≤0.001**  r- Pearson Correlation Coefficient

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