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Types of Nursing Care Delivery to Improve Student's Resilience in Online Learning: A Systematic Scoping Review

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Abstract.

The Covid-19 pandemic has led to a shift from traditional classroom instruction to online learning. Students who learn online, experience mental health issues because of these developments. To solve this issue, people must be resilient enough to modify their learning styles. The study aims to identify the nursing care delivery modalities that can improve students' resilience during the online learning phase. Scoping review was employed in this study with the help of articles from the databases of CINAHL, PubMed, and ProQuest. The words "resilience" and "student OR undergraduate student" and "pandemic covid-19 OR covid-19" were used in the English language. Full text, randomized control trial or quasi-experiment research designs, the use of the English language, student populations and samples, and publication dates within the last 10 years were the requirements for inclusion in this study (2013-2022). We found 10 articles discussing about nursing interventions to increase resilience in students who learning online. There are training interventions mindfulness interventions, and internet-based interventions. The three interventions can increase student resilience in online learning so that student achievement increases and can adapt to changes in learning methods. There are three types of nursing interventions to increase resilience during the Covid-19 pandemic for students, namely training, mindfulness, and Internet-based intervention.

Keywords: online learning, resilience, students

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1. Introduction

The most contagious disease in the world as of 2019 is coronavirus disease (COVID-19). The number of COVID-19 cases worldwide and in Indonesia generally continues to rise daily. According to World Health Organization (WHO) data, there were 446,511,318

confirmed COVID-19 cases worldwide as of March 9, 2022, and 6,004,421 people died as a result of the disease in 228 afflicted nations [1].

Impacts with Covid-19 might be both psychological and physical. As a result of the COVID-19 infection, many people experience respiratory issues as well as other symptoms like fever, coughing, and shortness of breath. Pneumonia, acute respiratory syndrome, kidney failure, and possibly death are among the chronic illnesses problems that COVID-19 can cause in severe circumstances [2]. The psychological impact of COVID-19 is causing stress for every individual. The previous research shows that 24.9% of Chinese students have experienced anxiety since the onset of Covid-19 [3]. This anxiety arises because of changes in the economy, academic delays, and difficulties in activities. In addition, 53.8% of the community felt psychological impacts such as depression, anxiety, and stress due to Covid-19 [4].

The COVID-19 pandemic's effects have generated community changes in a number of areas, including the economic, social, health, education, and other areas. This occurred as a result of the lockdown and social restrictions put in place to stop the COVID-19 virus's spread [1]. Therefore, changes must be made in the community's varied activities. Educational institutions must create learning strategies in the education sector so that they may continue to function interactively and meet learning goals even when learning techniques shift from offline to online.

Students who learn online often experience discomfort, trouble adjusting, worry while dealing with the material, and boredom from spending too much time at home studying. Due to their poor internet literacy and involvement, students find it uncomfortable [5]. Based on previous research, it was found that 28.5% of 571 Chinese students experienced psychological distress due to online learning [6]. Another study carried out in New York, United States, found that up to 40% of students had anxiety disorders, PTSD, and major depressive disorder [7]. One of the things that can help adapt online learning and reduce mental health disorders in students is resilience [8]. Flexible online learning can build resilience while still paying attention to the importance of face-to-face interactions between staff, lecturers, and students [9].

The individual's ability to deal with and reduce the effects of stress or pressure properly is called resilience. Resilience is the individual's response to fight with stress, the stressor such as conflict, confusion, and other conditions which make us feeling uncomfortable [10]. High resilience can make a healthy lifestyle and improve physical performance [11]–[13], optimistic attitude and good psychological well-being [14], [15], and

improve mental health [16]. High resilience in students will give better performance in the learning process cause they know how to deal with current situation [17]. Meanwhile, low resilience causes individuals to blame themselves and feeling depression or anxiety [17–19]

Resilience is very important for individuals during the COVID-19 pandemic to be able to survive and get through these conditions. In addition, resilience can also help individuals' mental health to be better and ready to adapt to changing situations and conditions. A protective factor in dealing with stress is resilience so that individuals can adapt and face the challenges that occur. Several studies have shown that resilience can improve the health system [21], improve sleep quality, positive emotions, and quality of life [22], and increase subjective happiness and life expectancy.

The school still manages student issues on its own; nurses and other health professionals have not been actively involved. Additionally, nurses are unaware of the various interventions that can be used to help students become more resilient while engaging in online learning. So, in order to promote student resilience during online learning, we need the kinds of interventions that nurses may do as an example. Therefore, measures to boost resilience during the COVID-19 pandemic are a topic that experts are keen to delve deeper into. In order for it to serve as a solid example for assisting students in the COVID-19 program in their transition to online learning.

2. Methods and Equipment

2.1. Study Design

The scoping review approach was used in the design of this study. Scoping review is a methodology for investigating novel subjects that are currently evolving quickly [23]. This study paradigm has a wide conceptual scope, making it possible to explain many pertinent publications [24]. The structure that was employed consisted of 5 main stages: identifying research questions, identifying pertinent study findings, selecting studies, data mapping, compiling, summarizing, and reporting results [25]. This evaluation of the literature identifies numerous issues that address interventions to boost adolescent resilience during the COVID-19 pandemic using the PRISMA Extension for Systematic Reviews (PRISMA-ScR). Which nursing care intervention and approach should be used

to support students' resilience in online learning? was the first query that was asked to start the search process.

2.2. Search Strategy

For publication searches, three databases were used: PubMed, CINAHL, and Proquest. The keywords and Boolean operators used are: "resilience" AND "student OR undergraduate student" AND "pandemic covid-19 OR covid-19"

2.3. Eligibility Criteria

The PICO criteria framework was utilized to determine eligibility for this study. For the patient, there are: students, Resilience-building interventions Comparison: none; outcome: nurse care and nursing intervention.

In addition to the previously mentioned eligibility requirements. We evaluate the authors' criteria for describing spiritual interventions using the primary research findings from the Randomized Control Trial and Quasy Experiment. The articles used are English articles over the past ten years with full texts (2013-2022).

2.4. Data collection and analysis

Using the PRISMA flowchart, all authors carried out the following steps in the process of choosing publications for review: (1) detecting duplicate studies; (2) screening titles and abstracts based on study objectives; and (3) examining the readily available fulltext. In the tabulation approach, the author, country, study design, objectives, interventions, and outcomes are searched for manually (Figure 1).

2.5. Data extraction

Authors using a table that included the author, outcome, year, nation, study methodology, sample, scale, and research findings, articles were manually retrieved.

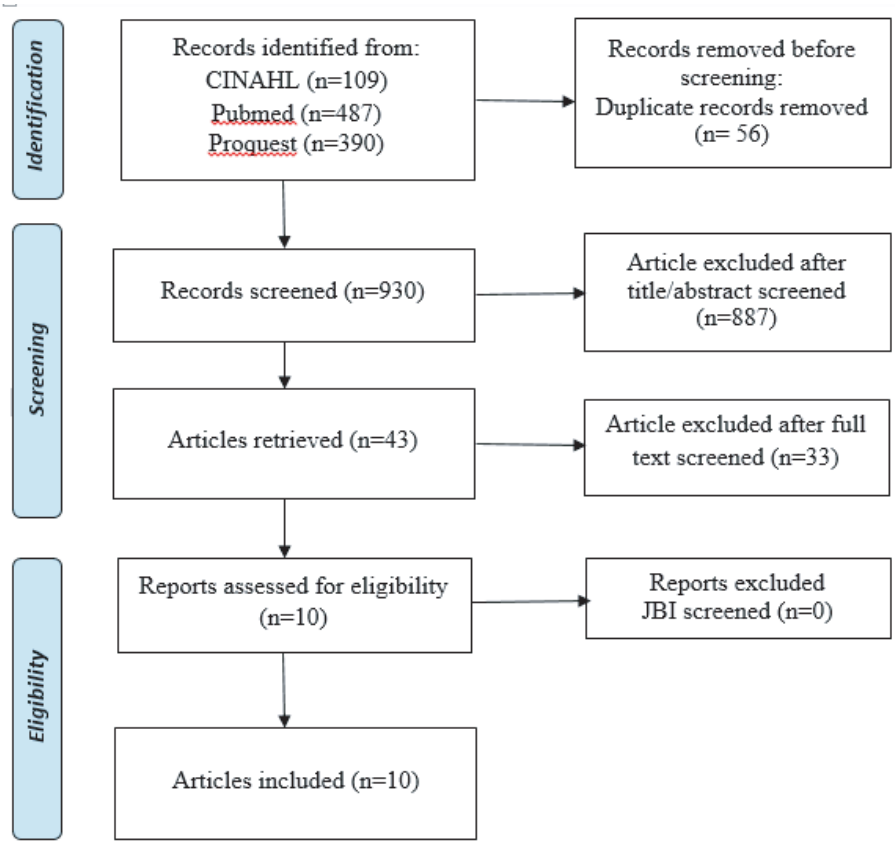

Figure 1: PRISMA Flow Diagram.

2.6. Data analysis

The retrieved articles were then thoroughly read and then assessed by the author. After analysis, we categorize nursing treatments to boost student resilience in online learning. The sorts of nursing interventions are also defined in relation to each nursing intervention.

3. Results

986 articles were found in total thanks to the search. 930 articles were obtained after the gathered articles were duplicated. The remaining 30 articles were also eliminated using the inclusion criteria. Ten papers were then found after reviewing the title and abstract. The JBI Critical Appraisal Tool assessment method was used to study the articles, with good article standards exceeding 75% based on criteria and topic relevancy (Table 1).

The interventions that can be used to boost resilience are discussed in ten articles. Resilience is only one of several things that can enhance quality of life, mental health,

Table 1: JBI Critical Appraisal Tool.

Author, published Year	JBI Critical Appraisal Tool	Study Design
[26]	84,6% (11/13)	RCT
[27]	84,6% (11/13)	RCT
[28]	84,6% (11/13)	RCT
[29]	76,9% (10/13)	Pilot RCT
[30]	88,8% (8/9)	Quasi experimental
[31]	84,6% (11/13)	RCT
[32]	84,6% (11/13)	RCT
[33]	76,9% (10/13)	RCT
[34]	100% (13/13)	RCT
[35]	76,9% (10/13)	RCT

and self-esteem while lowering stress and depressive symptoms. Students in elementary school and college served as samples for the research topics of the publications that were examined. Three different nursing intervention types—training, mindfulness, and internet-based interventions—are present among the ten articles that were analyzed. By describing the instructions given to the research volunteers, the researcher was able to identify the five treatments. The findings of the article analysis are shown in the following table (Table 2):

The COVID-19 pandemic is a new situation that must be faced by individuals who are carrying out education. The change in online learning from offline to online causes students or students to have resilience in dealing with these situations. Interventions to improve resilience are important things to do in order to optimize the learning process. Based on the results of the literature review, the following is an explanation of the interventions carried out to improve student resilience abilities during the COVID-19 pandemic:

3.1. Training

Training is carried out to improve the ability of participants to increase knowledge and deal with the problems being faced [35]. Training is carried out in a span of 4-10 weeks with 4-12 sessions. There are several types of training that can be done, namely physical activity exercises, exercises to write daily journals about activities to increase resilience, and exercises on psychosocial health. Training is carried out to increase student productivity so that it distracts stressors that cause students to stress. The results of the study show that training can increase student resilience by increasing

Table 2: Extraction Data.

No	Author and Year	Location	Method	Sample	Intervention	Result
1.	[26]	Australia	RCT	67 students	High-Intensity Interval Training and Moderate-Intensity Training	The results showed that the HIIT and MIT interventions could reduce stress, anxiety, depression, and significantly increased resilience. .
2.	[27]	UK	RCT	616 students	mindfulness-based intervention	mindfulness-based intervention is effective in increasing resistance to the stress experienced by students at university
3.	[28]	US	RCT	585 students	Internet-Based Self Help	The results showed that there was a significant effect in reducing long-term stress and short-term depressive symptoms, as well as increasing resilience in students
4.	[29]	Ireland	Pilot RCT	54 students	Web-BasedIntervention	The results of the study showed that there was a significant increase in student resilience
5.	[30]	Spain	Quasi experimer	93 students	CRAFT program	The results showed that after being given the CRAFT program, there was an increase in student welfare and resilience
6.	[31]	Iran	RCT	77 students	Resilience training	The study's findings demonstrate that resilience training can boost one's ability to overcome obstacles during the COVID-19 pandemic.
7.	[32]	USA	RCT	679 students	Online Isha Upa Yoga	After being given the intervention showed there were significant changes in reducing stress, increasing well-being and resilience.
8.	[33]	India	RCT	1440 students	REACH intervention	After being given the intervention, the results obtained are a decrease in symptoms of depression, an increase in mental health and resilience in students
9.	[34]	German	RCT	100 students	Resilience Journal	Resilience Journal can increase resilience in students and has the potential to be applied to students
10.	[35]	Hongkong	RCT	228 students	Adventure□based training	The results showed that there was an increase in resilience and a decrease in depression after the intervention for 6 months, and increased self-esteem after intervention for 3 months

productivity, understanding mental health, and focusing on things that can be done to reduce stressors.

3.2. Mindfulness

Mindfulness is the attention given by the individual by fully accepting the experience felt [36]. Mindfulness is a therapy that aims to increase relaxation in the face of stress. Mindfulness therapy can be done in a span of 4-6 weeks for 4-5 sessions. This therapy is usually done with physical activity and meditation that can be done at home. The results of the study show that there is an increase in students' resilience to face online learning.

3.3. Internet-based interventions

Internet-based intervention is an internet-based intervention by nurses that is carried out online. This intervention can be carried out for 4-8 weeks. The intervention program is in the form of providing prior education regarding resilience and also the urgency of mental health, yoga training is carried out online, and the provision of modules in the form of books or videos that serve as guides for students in doing therapy. Internet-based intervention requires monitoring from facilitators, parents, and students themselves. Cause the success of the intervention is seen from compliance in carrying out the intervention routinely. The results of this intervention indicate a significant increase in resilience in students who are taking online learning.

4. Discussion

Nursing intervention is one of the interventions that can be done to increase resilience in students during online learning. Nursing care carried out consists of assessment, planning, and implementation of nursing. Nurses have an important role as educators, counselors, and providers of nursing care to adolescents [37]. Previous research has shown that nursing interventions can be done to increase resilience [38]. Nurses also have a role in improving students' mental health [39].

The change in learning from offline to online caused mental health problems for students during the COVID-19 pandemic. The mental health problems that commonly arise are stress, anxiety, and depression. The high resilience of students will help improve mental health so that they are able to adapt to online learning. Resilience is an

individual's response to affective, cognitive, and behavioral in the face of difficulties or problems it faces [40].

Based on several studies have shown the effectiveness of resilience as an effort to deal with mental health problems when learning online. Research shows that resilience is a major factor in improving student adaptation in dealing with online learning. The results showed that 185 students in Spain found that resilience was positively related to student satisfaction in their learning [41]. The same thing was also found in Korean students, where the level of student academic satisfaction was correlated with resilience [38], [42], [43]. In line with the two previous studies, the results show that students with high resilience will have self-confidence and can reduce stress from academic pressure during online learning.

Based on the results of the study, there are three types of interventions, namely Training, Mindfulness, and Internet-based Intervention that can be done as an effort to increase resilience in students during online learning. Training is a training program given to students to improve their resilience [44]. Mindfulness is a meditation effort so that students can reduce the problems they face so can focus on solving the problem [30], [45]. Meanwhile, internet-based intervention is an online education and training module [46].

The three interventions are effective in increasing resilience in students. Students with high resilience will show a positive response to affective, cognitive, and behavior so that they are adaptive in responding to changes and academic problems that occur [40]. This indicates that students with high resilience can face the academic problems they face. In the context of online learning, students can adapt to the pressures that occur during online learning with high resilience [42].

Students with high resilience can be calm in facing difficulties and obstacles during online learning during the covid-19 pandemic. Resilience can be increased by doing positive activities such as doing entertainment activities at home, chatting with family members, eating together, or exchanging ideas [47], [48]. Resilience can increase if it is influenced by environmental conditions and individual characteristics [49]–[51]. This indicates that the environment is influential in shaping student resilience.

This study has limitations in analyzing the resilience conditions of students during online learning during the covid-19 pandemic. The limited number of studies causes discussions about interventions to increase resilience in students when online learning is less comprehensive. Several articles also discuss resilience in general so that it is not

only caused by the pressure of online learning, but also caused by student activities at home.

5. Conclusions

Based on the findings of a scoping review, three types of interventions—Training, Mindfulness, and Internet-based Intervention—were found to boost resilience in people who are learning during the COVID-19 pandemic. For the intervention to have the best chance of boosting resilience, the patient's evaluation results must be taken into account. In addition to boosting resilience, the therapies offered can also enhance self-esteem, mental health, and quality of life while lowering stress and depressive symptoms.

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7. Conflict of Interest

The authors have no conflict of interest to declare.

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