

SCHOOL RELATED EMOTIONAL RESPONSES OF NURSING STUDENTS DURING COVID-19 PANDEMIC: A CONCEPT ANALYSIS

*Maria Teresa R. Fajardo

**Rosario Charisse R. Venzon

***Ma. Theresa Salinda

Paper Received: 28.05.2021 / **Paper Accepted:** 20.06.2021 / **Paper Published:** 28.06.2021

Corresponding Author: Maria Teresa R. Fajardo; Email: fajardo_tessa@yahoo.com; doi:10.46360/globus.met.320211004

Abstract

Background: The COVID-19 pandemic has affects the lives of so many people that result in great challenge in physical health, mental health, emotional health, and spiritual health. The pandemic brought crisis in different countries that result of closure of establishment and even school facilities.

Purpose: The aim of the study is to present concept analysis in the student perspective especially in the emotional state that related to school activities. To promote resiliency and empowerment to nursing student that will serve as an eye opener to the real struggles of student during this challenging time.

Methods: The method use is a concept analysis. The eight steps of this methods are: 1) Selecting a concept; 2) Determining the aims or purposes of analysis; 3) Identifying all uses of the concept; 4) Determining the defining attributes of the concept; 5) Constructing a model case; 6) Constructing borderline, contrary, invented, and illegitimate cases; 7) Identifying antecedents and consequences; and 8) Defining empirical references.

Results: The school activities can help us develop learning, to experiences new things that will promote innovation and creative output. Activities can enhance comprehension, logical reasoning, problem solving and decision making but somehow this activities may lead to emotional challenges of the students. Failure to determine those problems in the school activities will result in the in effective learning and preventing students form growth and learning.

Conclusion: The emotional responses of nursing students pertaining to school related activities will serve as initial steps in continuous finding key strategies on how emotional responses and students experiences with it comes to school activities. A clear definition of concepts promotes understanding and enables to promote competency and self-awareness in handling emotional status.

Keywords: Emotional Expression, Emotional Responses, Student Emotional Formation, Emotional Intelligence.

Background

The COVID- 19 pandemic affects the lives of so many people that result in physical health, mental health, emotional health, and spiritual health battle. The pandemic brought crisis in different countries that result of closure of establishment and even school facilities. The Commission on Higher Education (CHED) memorandum order No.4 Series of 2020 led to the sudden switch from face-to-face learning to flexible learning, which had cause conspicuous change to the emotional states of the students and has brought increasing concerns on their emotional health as well. Many students are experiencing an increased level of stress and anxiety due to the COVID-19 pandemic (Melnyk, 2020). In addition, students in tertiary education who experience academic-related stress can also be due to being pressured in attaining good grades, having decreased motivation and reduced academic achievement during this time of health crisis (Hetrick, S., et al., 2020).

Emotions are affect can be positive or negative experience that influence us the way we respond to certain situations. Human emotions are made from relationships with others formed from regular interactions at special places such as the home or schools (Won, 2019). School activities is quite challenging that result to the changes of emotions of the students. Some have difficulty to manage emotions, difficulty in handling situations that will lead to stress. Stress and anxiety have been part of a students' academic life since adolescents are the individuals who are highly associated with emotional disturbances, which can be aggravated by altering circumstances (Menon, K., et al., 2018). The emotional responses of student may vary differently, some students may adopt easily to changes brought by situations, and some have difficulty in handling it. Emotional state of the students is important as it is connected to their wellbeing in terms of the way they think, feel, and act towards their goals in life. Mental wellbeing is the foundation of emotion, thinking, conversation, learning, strength and self-esteem. It also plays a

*Faculty, College of Nursing, Phinma University of Pangasinan, Philippines.

**Faculty, College of Nursing, St. Paul University Philippines Graduate School.

***Graduate School, St. Paul University Philippines, Tuguegarao City, Philippines, Faculty, Institute of Nursing, Far Eastern University, Manila, Philippines.

vital role in relationships, personal and emotional well-being, which leads to better academic and health-related outcomes.

Philosophical Underpinnings

The definitions of concepts presented how will the student response in the school related activities amidst of COVID-19 situation. An examination of philosophical conclusion to understand the nature of emotions which are numerous and complex. The question of the relationship between the mind and emotion has been central in philosophy across times, sub-disciplines and areas of interest. The emotional mind tackles one of the core problems underpinning philosophy across different time spans and schools, that of the division between rationality and emotion, or, more precisely and the attempt to understand emotion analytically. (Mills, 2020). In the ontological approach focus on the Responses of the students that pertains their emotion. The ontological evaluation is the activities given to the students like difficult task or requirements. The Types of ontology evaluation range from gauging adherence to some philosophical principles, purpose like the capability to capture people's self-reported emotional responses to a situation. The ontology aims to address diverse requirements arising from the full range of disciplines involved in research into affective phenomena. The emotion is complex process specially when having school related activities and the struggles that the student is facing right now due to pandemic like fear, anger and other physiological and mental process that form emotional process including subjective feelings and cognitive appraisal. The complex structure lead to identifying relevance of cognitive judgement, subjective feelings and emotions proper in relation to school related activities.

Objective

The aim of the study is to present concept analysis in the student perspective especially in the emotional state that related to school activities. To promote resiliency and empowerment to nursing student that will serve as an eye opener to the real struggles of student during this challenging time.

Methods

1. Research Design

The researchers use concept analysis to analyse the concepts. This concept analysis was conducted using the Walker and Avant's (2010) eight-step method. This method was used because it is one of the most easiest and understandable methods for concept analysis, particularly for beginners. The eight steps of this method are: 1) Selecting a concept; 2) Determining the aims or purposes of analysis; 3) Identifying all uses of the concept; 4)

Determining the defining attributes of the concept; 5) Constructing a model case; 6) Constructing borderline, contrary, invented, and illegitimate cases; 7) Identifying antecedents and consequences; and 8) Defining empirical references (Walker and Avant, 2010).

2. Participants/ Key Informants

A Non-Probability Sampling Technique is defined as a sampling technique in which the researcher selects samples based on the subjective judgment of the researcher rather than random selection this sampling method depends heavily on the expertise of the researchers. It is carried out by observation. This is used to select informant for the discussion of major themes and informant were selected for cognitive view of the concepts, critical thinking and their experiences is necessary for concept analysis. In addition, they are ten nursing student with consented to the discussions on their emotional responses to school related activities amidst of COVID- 19 pandemic.

3. Instrumentation

The researcher conducted interview guide questionnaire. This contain open ended question to facilitate informants to answer the question in their chosen way. The audio recorder will be use during the interview with their permission. Second we will be using The Student Stressors and Emotional Distress scale (SSEDS) is made up of 16 items. Two-factor Student Stressors and Emotional Distress Scale (SSEDS) which identified (a) sources of student stress and, (b) outcomes of student stress in the form of emotional disturbances. (Chow, 2016). The researcher will also use literature from data base to analyses different concepts which serve as main tool in the study.

4. Data Collection Procedure

The main data collection is collection of articles and guiding questions to explore critical thinking of nursing students in relation to school activities. For retrieving related articles, a review of literature was performed with combining, using the "AND" Boolean word, keywords such as "nursing student", "emotional response" and "school activities" in title or abstract, all full text articles published like data base like EBSCOhost, Jstor, CINAHL, and ERIC were extracted from 2016 to 2021. However selective and theoretical data collection is applied using informant as data sources. The interview schedule with open-ended questions addressed five major areas from the literature analysis, namely: Antecedents of critical thinking, Attributes of critical thinking, Object of intention/directedness in critical thinking Outcomes of critical thinking.

5. Data Analysis

Concept analysis should adhere to the logical principle, which requires that concepts be systematically and coherently related to other concepts. Constant comparative data analysis was used in this study. Constant comparative data analysis refers to simultaneous data collection and analysis where each unit of data is compared with every of data for the purpose of generating categories (Lincoln & Guba 1981:332). Initial coding of data was done to develop substantive codes. Theoretical sensitivity was very important during this process. Open coding, whereby data were broken down line by line and paragraph by paragraph to enhance conceptualisation, was also used. Analytical thinking became important during constant comparisons. This helped identify processes in data and ascribing codes (Chenitz & Swanson 1986:96; Walker & Avant 1995:100).

6. Preliminary Biases

Literature are paramount for the effective translation, the researcher encounter some preliminary biases like in choosing articles. The articles came from data base like EBSCOhost, ERIC, CINAHL. The literature that use is from 2016-2021 with the inclusion of English language and excluded articles even if it from 2016-2021 but not English language. The comparison also of each articles with published in larger scales and their efficacy on the topic of emotional responses of nursing students in relation to school related activities.

Results

1. Uses of concept

School activities help us to develop learning and experience that promotes innovation and creative output. The activities enhance comprehension, logical reasoning, problem solving and decision making but somehow this activities may lead to emotional challenges of the students. Some activities are burdens to some students especially in the field of nursing which requires high competency with it comes to knowledge, skills, attitude. Failure to determine those problems in the school activities will result in the in effective learning and preventing students form growth and learning. The effect that stress has on the health and performance of nursing students can be mediated by other life stressors, as well as personal, behavioral, social, and environmental factors that are experienced during school or earlier in life.(Alvarez, 2019).

1.1 Emotions

Emotion is an all-pervasive, primal, and powerful motivator of a range of behaviors, cognitions, and motivations. Emotions are emergent properties that

are heavily influenced by levels of self-awareness and the conceptual content of one's self-understanding. (Hofmann & Doan, 2018).

Our emotions influence us in our decision making. Sometimes it is difficult to handle situation that challenge our emotional states. It keeps on changing that hard to understand. This are the challenges of most of the students that need to address especially in the times of pandemic the emotions of some students are too high. Understanding the concepts of emotions will help the student to cope up on the challenges on how to handle those emotional state.

1.2 The brain and emotion

Drawing on Darwin's claim that facial expression of emotions is part of humanity's biological inheritance (Darwin, 1872), this model maintained that the expressive mimic reactions corresponding to a small number of basic emotions (namely, happiness and sadness, fear and anger, surprise and disgust) are universal and innate.

Three brain structures appear most closely linked with emotions: the amygdala, the insula or insular cortex, and a structure in the midbrain called the periaqueductal gray. The amygdala integrates emotions, emotional behavior, and motivation. It interprets fear, helps distinguish friends from foes, and identifies social rewards and how to attain them. Neuroscientists think the insula receives a status report about the body's physiological state and generates subjective feelings about it thus linking internal states, feelings, and conscious actions. The periaqueductal gray is also involved in defensive and reproductive behaviors, maternal attachment, and anxiety.

While emotions are intangible and hard to describe this will still serve important purposes, helping us learn, initiate actions, and survive. (Halber, 2018)

1.3 School related activities

Nursing education has consistently been associated with anxiety as it is highly prevalent among college students considering that concerns on academic performance, pressure to succeed, and post-graduation plans are mostly experienced by the students (Beiteretal, 2015). The reasons for this high prevalence included heavy course loads, stringent examinations, continued pressure to attain a high grade point average, complex interpersonal relationships, challenges of remote learning and uncertainties about the future during the continuing COVID-19 pandemic, which resulted in greater anxiety among nursing students (Savitsky, B., et al. 2020).

Considering that college students are individuals who are extremely vulnerable to emotional concerns, the transitions with this pandemic has affected their well-being in terms of academic-related outcomes. Levels of stress on class workloads and academic pressure heighten. (Son, et al., 2020).

1.4 Emotional responses

Emotions can play vital role in how students think and behave. In order for us to understand the emotions we need to include the main components of an emotion. There are three parts to an emotion: (1) subjective component (how you experience the emotion) (2) physiological component (how your bodies react to the emotion) (3) An expressive component (how you behave in response to the emotion). These different elements can play a role in the function and purpose of your emotional responses. (Cherry, 2020).

When we face challenging situation like exams that sometimes students are feel anxious about it. Whether you perform well or not and how the result will impact to grade of the students. Because of these emotional responses, you might be more likely to study. That emotions that the students experience will lead to motivation to particular actions to do something in order to have good grades and is through studying and understanding the lesson. This are ways in order to experience positive emotions and minimize the probability of feeling negative emotions.

2. Critical attributes

The critical attributes are the core of concept analysis is to determine the defining attributes of the concept, i.e. a group of attributes which have the strongest relationship with the concept and allows analyser to obtain a deep insight. These attributes differentiate the intended concept from similar or related concepts (Walker and Avant, 2010).

Having an emotional awareness to the situation will helps us to respond in certain situation. Understanding ones emotion and responding to it is essential in overcoming stress. Learning to be independent emotionally will allow to accept and aware on the decision and actions that you will be made.

2.1 Emotional expression

Our bodies feel different emotions that affect us. It our choice if how can we express it. Sometimes due to school related activities is somehow we feel sad if we did not do our best in particular output on the other hand we feel happy if our output get high score. Feeling sadness, anger or joy are natural

responses to all the events our brains process every day. Emotional expression is simply on how we acknowledge it. Sometimes we are exhausted due to bulk of work in the schools that need to pass on time. When we get frustrated then we cannot think clearly. We feel very sad that we cannot understand some my express through eating, sleeping or dancing that help to release those stress and calm their emotion.

If we get affect with our emotions then that will serve as a hindrance in our life, frustration, sadness, guilt and another negative aspects will make burden to our life. On the other hand if we know how to express it in positive way then no matter how difficult it is we still manage to overcome it.

2.2 Student emotional formation

Stress is an emotional, physical, or mental reaction that can cause tension, which can result from social, environmental, or psychological situations (Mheidly, N., et al., 2020). School activities is quite challenging for the students especially in the field of nursing. Nursing students considering that they tend to undergo higher levels of academic stress in comparison with other disciplines, which could relatively lead to psychological distress that can affect an individual's well-being negatively. Stressors such as excessive anxiety and depression from emotional and academic demands, including abrupt changes in life, increase the chance of acquiring stress and even psychological illnesses (Chow, et al. 2018). Difficulty in relaxing, being easily upset or agitated, irritable, over-reactive, impatient and nervous arousal are assessed on individuals who are experiencing stress (Lovibond, S.H. & Lovibond P.F., 1995).

Giving significance and attention to their psychological stress and emotional states, and carrying out appropriate psychological counselling can reduce mental pressure on the nursing students. In this way, it will enable them to focus on their studies and their professional identity can be enhanced even during the COVID-19 Pandemic.

2.3 Emotional intelligence

The emotional intelligence is vital tool in order for us to improve our critical work relationship, achieving our goals and creating healthy and productive environment. Our emotions sometimes affects our decision making. The way respond in front of other people. When we feel sad or frustrated that affect us physiology and even mentally. Sometimes we are too sensitive in some situations that affect us and our actions might be inappropriate like the way we talk or communicate to other people, the way we have relationship with other people this are somehow challenges.

Being that emotional intelligence will help us to respond on this kind of situations. Learning to control our emotion is not that easy it requires effort, patience and understanding. If know to understand situation then this is very helpful in responding any emotional disturbances whether in school related activities or any other factors.

3. Model case

We tend to take certain actions in order to experience positive emotions and minimize the probability of feeling negative emotions. A model case is a “real life” example of the use of the concept that includes all the critical attributes (Walker and Avant, 1995). The following case reflects a model case on the emotional responses. “Mr. Jin is second year nursing students, he is intelligent but when pandemic occurs there is sudden drop of his grade, he stated that he loss motivation to study besides of others problems that their family is experiencing he feel anger, despair and envy to others because he feels that he is only experiencing those situation. Two weeks later he start praying and telling his parents how he feels. Despite challenges right now he still manage to be cheerful and positive to every situation. He stated now he doesn’t dwell in the scores but on the knowledge that he acquires and to try to strive hard to aim good grades. He stated that he just go with the flow and enjoy it. He stated that prayers, supports from his family, friends and relatives will serve as key to able to cope up with those stress. He tends to be happy and accept the challenges that brought by sudden shifting of all activities in the class.

The case represent on students struggles in the schools especially for those students who are scholars to maintain good grades. The pandemic affects so many lives of people, losing their jobs and financial instability. This situations like family problems will add to the burden right now that the student is facing, they feel fear, sadness and others that challenges their emotions. Coping up strategies may vary to each students but understanding the concept of emotions and on how they will respond to it is very essential in managing their emotions when problems arise.

4. Borderline case

Borderline cases contains some of critical attributes of the concept being examined but not all of them (Walker and Avant, 1995). The following is an example of boarder line case for emotional intelligence. “ Ms. Tina is 3rd year nursing students, she was currently the class mayor of their class. Being class mayor is not easy because she feel that responsibilities to help classmates to cater possible concern on designated topic that needs further elaboration. She frequently feels the burden that the

class may comply. She sometimes feel exhausted that result into sadness that difficult to explain those stress May somehow affects the way he feels. Upon reflecting on it he decided to be strong because she do believes that her classmates who experience same difficulty as her. She decided to “take a break” and set aside her “feelings” and help the students to explore their emotions to promote self- awareness and emphasize the importance of emotional management amidst pandemic. She continue to encourage her fellow student to be strong and strengthen communication skills and cooperation in the class.

The case represent on how emotional intelligence apply can change something when there is emotional challenges. The students who are facing difficult situation right now needs empathy and find solution to understand and promote communication. The self-management, commitment, empathy, social skills, and relationship building is strategies to be able to cope up. Appropriate assertive abilities, will help them attain their needs to be met. Creating an atmosphere where empathy is celebrated will help students to be motivated and become preserve to achieve their goals.

5. Antecedent

Antecedents are events which happen before the intended concept (Walker and Avant, 2010). They refer to the characteristics of events that are most likely to evoke the emotion, such as loss of scholarship for sadness, anticipated threat for fear or transgression for anger. For anxiety and shame, inability to answer students' questions was the key antecedent, while shame was additionally triggered by responsibility for student failure, and anxiety was additionally triggered by class observation by supervisors, and lack of preparation. For anger, disciplinary issues, lack of student commitment to tasks and homework, and having to explain a topic to students several times when they do not understand were identified as the key antecedents. (Khajavy, et.al., 2018).

5.1 Emotional situations

Each students somehow have different emotions in responding on school related activities. It sometimes depends on how our mind answer those different questions. There are some instances that people don’t notice any thoughts that related to those emotions and really hard to understand. Our situations is somehow quite challenging especially in this pandemic. The emotions of the people doubled because of too many factors. This situations might challenge us with it comes to decision making, problem solving and addressing difficult situation. Everyone feels sad from time to time. This emotion might relate to a specific event,

such as a loss or rejection. But in other cases, you might have no idea why you feel sad. On the other hand when some situations may lead to happiness just having high scores, excellent output and acquisition of knowledge and skills competency. People generally like to feel happy, calm, and good. You might express these feelings by smiling, laughing, or indulging yourself.

5.2 Environmental factor

The environment is somehow affects students emotions, especially the way they learn. Adaptation brought by environment is quite challenging like shifting of face to face to online class. Students must know how to use certain technologies in order to participate in class or to be able to submit their output. Sudden shifting of school learning activities may somehow contribute to the emotional status of each students. This anxiety tends to have a negative impact on a student's quality of life, education and clinical practice as well.

5.3 Emotional experiences

Expectation of disempowerment during pandemic is one of the key issues in terms of feeling anxious and having poor confidence among students. The students, specifically with school performance, results in their diminished ability to fully perform as anxiety becomes a severe issue for them. Students in this dilemma may be overwhelmed by the tasks they must face as well as worry about their capability to accomplish them or they experience difficulties in completing tasks effectively. As anxiety greatly affects the academic performance of students, it was recommended that both professors and parents work together in order to help students learn to handle anxiety (Ajmal, M. & Ahmad, S., 2019). In addition lack of knowledge and understanding of modules, and exams schedule contributed to the high levels of anxiety among the students.

5.4 Student emotional interactions

The student's feels burdens sometimes they feel frustration, issues that need to face like lack of communication to their professor and even lack of interaction with their classmates. Lack of interaction somehow lead to emotional burdens especially on how they reach their professors when there is questions that need to be address.

6. Consequences

Consequences of a concept are events that happen due to its presence (Walker and Avant, 2010). Consequences are those events or incidents that can occur as a result of the occurrence of a concept and that can often stimulate new ideas or avenues for research pertaining to certain concepts (Walker & Avant, 2005). Possible consequences of

overcoming include an individual's return to a more stable and better quality of life, finding hope and meaning in life, and moving beyond a difficult situation or circumstance toward a healthier and more satisfactory future. This is generally a positive process yielding positive outcomes.

6.1 Emotional base coping

Emotion-focused coping processes are associated with dysfunctional outcomes. Environmental context, stressful experience, and individual are important moderators of the relations of emotional-approach coping and health-related outcomes. Potential mediators and moderators of coping through emotional approach (Austenfeld, 2004). Coping skills help you tolerate, minimize, and deal with stressful situations in life. Managing your stress well can help you feel better physically and psychologically and it can impact your ability to perform your best.

This helpful when you need to take care of your feelings when you either don't want to change your situation or when circumstances are out of your control. For example, if you are failed on the exams, it'd be important to take care of your feelings in a healthy way since you can't change the circumstance.

6.2 Problem-based coping

Is helpful when you need to change your situation, perhaps by removing a stressful thing from your life. For example, if you're in an unhealthy relationship, your anxiety and sadness might be best resolved by ending the relationship (as opposed to soothing your emotions). Removing stress that brought by activities in school and being positive always to any situations.

7. Empirical referent

The last step to concept analysis is to determine empirical references for the main attributes of the concept. Empirical references can further clarify the concept and facilitate its measurement (Walker and Avant, 2010). Empirical referents enable us to identify and measure a Clinically related phenomenon in study and in practice. In the nursing discipline some empirical data and theoretical reasons inconsistent with this position pertains on emotional responses of students in school related activities. A more skeptical attitude toward the general construct of emotional lateralization was assumed when functional neuroimaging became the most common method of investigation of emotional functions. With regard to the intervention for the students it necessary to increase awareness, promote communications and provide ways and strategies in handling emotional management.

7.1 Implications for nursing practice

The concept of emotional responses of nursing students to school related activities is that promote strategic ways of coping mechanism with appropriate response pertains to emotions. Analysis of the concept of parental emotional responses will serve as guide in developing and creating successful strategies and practical approaches to make systematic ways to lessen the burden of nursing students. This will also addressed accordingly, yield to more academic success among the students in the society and entails to provide a holistic approach towards the essential care and health management primarily on the aspect of emotional status of an individual.

Conclusion

This concept analysis of emotional responses of nursing students pertaining to school related activities will serve as initial steps in continuous finding key strategies on how emotional responses and students experiences with it comes to school activities. A clear definition of concepts promotes understanding and enables to promote competency and self-awareness in handling emotional status. This will also provide encouragement to the nursing students who are experiencing difficulties. This concept analysis has identified antecedents, defining attributes and consequences by utilising Walker and Avant's framework. This concept is the process of emotional responses, how ones emotions pertains to the students that will continue to explored and understood. Finally, this analysis should promote future study and provide a foundation upon which practice guidelines are established to support effective emotional responses pertains to school related activities.

Conflict of Interest

The authors declares there are no significant competing financial, professional, or personal interests that might have influenced the performance or presentation of the work described in this manuscript.

Acknowledgement

The authors would like to extend their sincere gratitude and deepest appreciation to their affiliations and to the participants that led to the possible accomplishment of this research work.

References

1. Abisado, M.B., (2020). A flexible learning framework implementing asynchronous course delivery for Philippine local colleges and universities. *International Journal of Advanced Trends in Computer Science and Engineering*, 9(1.3), 413-421, <https://doi.org/10.30534/ijatcse/2020/6591.32020>.

2. Ajmal, M. & Ahmad, S., (2019). Exploration of anxiety factors among students of distance learning: A case study of Allama Iqbal Open University. *Bulletin of Education and Research*, 41(2), 67-78.
3. Aneshensel, C.S., and Avison, W.R., (2015). *The Stress Process*. *Society and Mental Health*, 5(2), 67-85, doi:10.1177/2156869315585388.
4. Aslan, H., & Pekince, H., (2020). Nursing students' views on the COVID-19 pandemic and their perceived stress levels. *Perspectives in Psychiatric Care*, 1-6. <https://doi.org/10.1111/ppc.12597>
5. Baloran, E.T., (2020). Knowledge, attitudes, anxiety, and coping strategies of students during COVID-19 pandemic. *Journal of Loss and Trauma*, 25(8), 635-642, <https://doi.org/10.1080/15325024.2020.1769300>.
6. Baticulon, R., Alberto, N., Baron, M., et.al., (2020). Barriers to online learning in the time of COVID-19: A national survey of medical students in the Philippines, <https://doi.org/10.1101/2020.07.16.20155747>.
7. Cherry, K., (2020). *The Purpose of Our Emotions How Our Feelings Help Us Survive and Thrive*.
8. Diab, G. & Elgahsh, N., (2020) E-learning during COVID-19 pandemic: Obstacles faced nursing students and its effect on their attitudes while applying it. *American Journal of Nursing Science*, 9, pp. 300-314, doi: 10.11648/j.ajns.20200904.33.
9. Grubic, N., Badovinac, S., & Johri, A.M., (2020b). Student mental health in the midst of the COVID-19 pandemic: A call for further research and immediate solutions. *International Journal of Social Psychiatry*, 66(5), 517-518, <https://doi.org/10.1177/0020764020925108>.
10. Hector , A. and Alvarez, O, et al., (2019). Stress and Health in Nursing Students The Nurse Engagement and Wellness Study, Volume 68, Issue 6, pp. 453-463, doi: 10.1097/NNR.0000000000000383.
11. Hofmann, S. and Doan, S., (2018). "Defining Emotions." *The Social Foundations of Emotion: Developmental, Cultural, and Clinical Dimensions*. American Psychological Association, Washington, DC, JSTOR, pp. 11-22.
12. Ivbijaro, G; Brooks, C.; Kolkiewicz, L. et.al., (2020). Psychological impact and psychosocial consequences of the COVID 19 pandemic Resilience, mental well-being, and the coronavirus pandemic. *Indian Journal of Psychiatry*, 9p.
13. Kecojevic, A., Basch, C.H., Sullivan, M., & Davi, N.K., (2020). The impact of the COVID-19 epidemic on mental health of undergraduate students in New Jersey, Cross-sectional Study.

- PLOS ONE, 15(9), 11-12, <https://doi.org/10.1371/journal.pone.0239696>.
14. Lovibond, S.H. & Lovibond, P.F., (1995). *Manual for the Depression Anxiety Stress Scales*. Sydney Psychology Foundation Australia.
 15. Melnyk, B., (2020). Six tips for students coping with the COVID-19 pandemic.
 16. Meng, L., Zhang, X. and Lei, M. et.al., (2019). Relationship between self-directed learning readiness, learning attitude, and self-efficacy of nursing undergraduates. *Frontiers of Nursing*, 6(4), 342-346, <https://doi.org/10.2478/fon-2019-0043>.
 17. Mills, D., (2021). The Emotional Mind: A Control Theory of Affective States. *The Philosophical Quarterly*, Pages 215-217.
 18. Palsola, M., Renko, E., and Kostamo, K., et.al., (2020). Thematic analysis of acceptability and fidelity of engagement for behaviour change interventions: The Let's Move It intervention interview study. *British Journal of Health Psychology*, 25(3): 772-789.
 19. Pascoe, M.C., Hetrick, S.E., & Parker, A.G., (2019). The impact of stress on students in secondary school and higher education. *International Journal of Adolescence and Youth*, 25(1), 104-112. <https://doi.org/10.1080/02673843.2019.1596823>
 20. Ramos-Morcillo, A.J., Leal-Costa, C., Moral-García, J.E., & Ruzafa-Martínez, M., (2020). Experiences of nursing students during the abrupt change from face-to-face to e-learning education during the first month of confinement due to COVID-19 in Spain. *International Journal of Environmental Research and Public Health*, 17(15), 5519. <https://doi.org/10.3390/ijerph17155519>.