

Research Article

The Effectiveness of Butterfly Hug in Reducing Anxiety Long-Distance Relationship (LDR) with Parents in Nursing Students

Nastiti Dyah Safitri, Endang Caturini, Sugiyarto*

Department of Nursing Poltekkes Kemenkes Surakarta, Indonesia

Article history:

Submission May 2023

Revised June 2023

Accepted June 2023

*Corresponding author:

E-mail:

sugiy1077@gmail.com

ABSTRACT

Introduction: Anxiety related to a long-distance relationship with parents is an unpleasant emotional reaction when away from parents that can cognitively interfere with feelings and emotions caused by feelings of loneliness and longing for home. One of the ways to reduce anxiety is a butterfly hug.

Methods Using quasi-experimental with the control group and pre-posttest design. The sampling technique used purposive sampling. The sample consisted of 60 respondents divided into a control group of 30 respondents and an intervention group of 30 respondents. Using the Zung Self-Anxiety Rating Scale for the instrument. The intervention group received a butterfly hug for 6 days in 8 sessions every day, and the control group received music therapy for 6 days. Bivariate analysis used the parametric test paired sample t-test to see the difference between the prepost-test intervention group and to see the difference between the prepost-test control group on the anxiety level using the nonparametric Wilcoxon test. Analysis of bivariate test to see the difference between groups using the independent sample t-test.

Result: The results of the Wilcoxon test of the anxiety level control group $p=0,274$ ($p>0,05$), meanwhile the results of the intervention group of the paired sample t-test intervention group there was a significant effect ($p=0,000$). The results of the independent sample t-test between the control and intervention groups were $p=0,001$ ($p<0,05$).

Conclusions: Butterfly hug therapy is an effective therapy to reduce anxiety in LDR with parents in nursing students. This therapy is expected to be applied and used as an intervention to reduce anxiety.

Keywords: Anxiety level, Butterfly hug, LDR with parents

Introduction

University students are individuals aged 18-23 years who in the developmental stage of early adulthood are trying to form their own

structures of life [1]. Most university students are teenagers in the transition period from childhood to early adulthood. This is in accordance with the developmental tasks of early

How to cite:

Safitri, N. D., Caturini, E., & Sugiyarto (2023). The Effectiveness of Butterfly Hug in Reducing Anxiety Long-Distance Relationship (LDR) with Parents in Nursing Students. *Basic and Applied Nursing Research Journal*, 4(1), 9 – 19. doi: 10.11594/banrj.04.01.02

adulthood, namely getting a job at the age of university students starting to get higher education to get the best job. This causes university students to separate from their parents in the original area, known as wandering.

Circumstances forced students to carry out all activities independently. In contrast to the habits at home that are still assisted by their parents, this results in a feeling of always wanting to go home (homesick). Homesickness is a negative emotional feeling that arises in individuals when they are away from the home environment and leave old habits, and the emergence of strangers' feelings towards themselves in a new environment [2,3]. Students who are always required to be independent result in feelings of pressure and anxiety when they are unable to do everything on their own [4].

Anxiety is an unpleasant emotional reaction to real or imaginary danger accompanied by subjective experiences such as 'pressure', 'fear' and 'anxiety'. Anxiety has an impact on cognition, has an impact on mood, so it is difficult to sleep and is often alone, and has an impact on feeling uneasy and often feeling nervous [5]. Anxiety also affects perception, learning, and thinking, causing confusion and perceptual distortion, which can interfere with learning ability by reducing the ability to focus, reducing memory, and interfering with the ability to connect one thing to another [6]. Students who experience anxiety have a low ability to adapt to a higher education environment, poor academic performance, and even drop out of college [8]. Therefore, the anxiety experienced by students must be immediately overcome.

According to a survey conducted by the American College Health Association, 25.9% of students experienced anxiety and 31.9% of students experienced stress [9]. This is related to the results of the previous American College Health Association survey in 2019, which stated that up to 66% of students experienced anxiety during the 2019 spring semester [10]. The prevalence of anxiety disorders among Indonesian students is 33.3%, and 56.7% experience moderate anxiety [11,12] (Febriyanti and Mellu, 2020). The research by al. [13] stated that up to 58.5% of students in Indonesia who

live alone experience moderate anxiety and up to 41.5% experience mild anxiety. According to Riskesdas (2018), the prevalence of anxiety disorders among students in Central Java is 7.71%.

The Butterfly Hug is a method of direct bilateral simulation (such as eye movement or pressure) to reduce anxiety and self-soothe that was developed by Lucina Artigas and Ignacio Jarero while working with survivors of Hurricane Pauline [15]. This method is interpreted as a method of self-acceptance by giving suggestions to feel better so that individual trauma can be overcome without the help of others. This method is applied by hugging oneself and giving soothing words, accompanied by meditation that focusses on the breath and the words spoken [16].

In a preliminary study conducted by the researchers, it was found that not all prospective respondents knew the butterfly hug method and how to do it properly. Some prospective respondents overcame their anxiety by crying and feeling anxious at all times. The researcher chose students from the Nursing Department of the Surakarta Health Polytechnic as the research target because it was seen that the students came from various regions, so many experienced long distance relationships with their parents.

Materials and Methods

This study used quasi-experimental methods with a control group and pre-test-post-test design. This research was carried out at the Surakarta University Health Polytechnic from 4 February to 18 February 2023. The sampling technique used purposive sampling and obtained 60 participants who experienced mild to moderate anxiety levels. The participants were divided into the control group of 30 respondents and the intervention group of 30 respondents. Odd respondents get a control group and even respondents get an intervention group.

Instrument

The research instrument used Zung Self Anxiety Rating Scale [17]. The Zung Self-Rating Anxiety Scale (SAS) was created by Dr. William Zung, a distinguished professor of psychiatry at

Duke University, in 1971. This instrument comprises 20 items and is self-administered. Its purpose is to assess people for anxiety symptoms, including both psychological and somatic manifestations.

The SAS categorises anxiety manifestations into four distinct groups, namely cognitive, autonomic, motor, and central nervous system symptoms [18]. The scale comprises psychological and somatic items that relate to both negative and positive experiences. The former includes unwarranted fear, while the latter pertains to the ability to breathe easily. As an illustration, certain items related to cognitive symptoms encompass statements such as "I experience unfounded fear." The individual expresses a sense of emotional distress through statements such as "I feel like I am falling apart and going to pieces" and "I experience heightened emotional reactions and feelings of panic." Expressions pertaining to symptoms of the motor and central nervous systems encompass phrases such as "I experience shaking and tremors in my limbs," "I am afflicted by discomfort in my neck, back, and head," and "I perceive a sense of debilitation and fatigue with minimal exertion."

The present scale serves as a screening tool for anxiety disorders and evaluates the need for counseling for people experiencing anxiety [18]. It is imperative to note that this tool cannot serve as a substitute for a formal diagnosis by a qualified healthcare professional. However, it can provide an indication of the severity of an individual's symptoms. Despite the scale's demonstrated high sensitivity and accurate severity ratings, the diagnoses assigned are based on self-reported items rather than clinician-directed interviews. Therefore, it is imperative to seek the guidance of a mental health professional for an authoritative diagnosis.

The survey comprises 20 items, each of which is rated on a four-point Likert scale that spans from 1 to 4 [19]. The scale used to measure the frequency of an occurrence ranges from "a little of the time" to "most of the time".

The calculation of an individual's score involves the summation of all the selected values. Elevated scores are indicative of elevated levels of anxiety. Zung's methodology involves the conversion of total raw scores into an anxiety

index number through the use of a conversion chart. The numerical values of the anxiety index are subject to interpretation in the following manner. Anxiety levels can be classified into four categories based on the scores obtained on the anxiety scale. The first category, which ranges from 0 to 45, is considered to be within the normal range. The second category, which ranges from 45 to 59, indicates mild to moderate anxiety levels. The third category, ranging from 60 to 74, is indicative of marked to severe anxiety levels. Finally, the fourth category, ranging from 75 to 80, is indicative of extreme anxiety levels.

The psychometric properties of this scale are deemed satisfactory, as evidenced by its strong internal consistency, concurrent validity, convergent validity, and discriminant validity in distinguishing between clinical and non-clinical samples [20].

Data Collection

Respondents described in detail the purpose, benefits, and research procedures that contended with the purpose and willingness of respondents in the study of butterfly hug to reduce anxiety for 6 days in 8 sessions every day, and the control group received music therapy for 6 days.

Researchers conducted the first session was history talking Beginning with exploring the respondent's background in general and specifically related to events or disturbing things including information about the respondent's clinical picture, emotional and physical sensations that are felt to be dist. Session 2 was preparation Building a therapeutic bond with respondents. Introduction to butterfly hug therapy method and its benefits. Provide a more detailed explanation of the theory and procedures to be undertaken. Session 3 was an assessment; respondents were asked to recall negative events/feelings, negative thoughts, and emotions that caused anxiety, as well as positive thoughts that they wanted to eliminate negative thoughts that often arise.

Session 4 was desensitisation, the core method of the butterfly hug was carried out for 24-30 seconds, then the respondent was asked to express their feelings in the form of good, bad, or neutral. This was repeated until the

respondent felt calm and positive changes were felt by the respondent. Session 5 was installation to strengthen the positive thoughts of respondents who have started to form by asking them to continue to focus on their positive thoughts. Then ask yourself what positive thoughts do you have. In this session, the respondents used the butterfly hug method. Session 6 was a body scan; after the respondent feels confident about the positive thoughts that have formed, the respondent is asked to pay attention to his whole body. Respondents were asked to report whether they felt uncomfortable. If there is an uncomfortable body sensation, the butterfly hug method is repeated.

Session 7 was closure. Respondents were asked to make daily notes if there were negative thoughts that they still wanted to process and then discuss them in the next session. And the of the session was re-evaluation This session aims to determine the progress that has been experienced by respondents and to make further treatment plans. This session begins with the respondents being asked to focus on the goals that have been undertaken; then, the researcher reviews the responses of the respondents to see the success of the respondents in maintaining positive results. Researchers asked how respondents felt about previous targets and observed distractions that occurred between sessions.

Data Analysis

In the study, the univariate analysis consists of age, sex, long wondering time and frequency of meetings with parents, anxiety level, and anxiety before and after intervention. The normality test used Kolmogorov-Smirnov test and the result was not normally distributed in the control group and it was normally distributed in the intervention group. Bivariate analysis used the parametric test paired sample t-test to see the difference between the prepost-test intervention group and to see the difference between the prepost-test control group on the anxiety level used the non-parametric Wilcoxon test. Analysis of the bivariate test to see the difference between groups using the independent sample t-test.

Ethical Consideration

The research was started after obtaining authorisation through an institutional protocol. The participant was provided with the option to refuse or discontinue participation at any stage during the data collection process. Before beginning the assessment, the participant was presented with the instructions. Moreover, there exists an extensive discussion regarding the protection of individual's personal information.

Result and Discussion

The description of the respondents is shown in Table 1. Table 1 shows that the age in the control group most of the time was 20 years (36,7%) and most of the intervention group was 22 years (26,7%). The control group and the intervention group were mostly women (96,7%). Long wandering in the control group majority of 2 years (43,3%) and in the intervention group majority of 4 years (56,7%). Frequency of meetings with parents in the control group and in the intervention group mainly in trimester I 70% and 56,7%.

Table 2 illustrates the anxiety scores before and after the intervention in both groups. The anxiety score in the control group before the music therapy gave respondents experienced moderate anxiety, 6 respondents, and mild anxiety (24 respondents), while after music therapy, 3 respondents experienced moderate anxiety, 11 experienced mild anxiety, and 16 had normal. In the intervention group before giving the butterfly hug the respondents experienced moderate anxiety 8 respondents and mild anxiety 22 respondents, while after giving the butterfly hug the respondent experienced mild anxiety 4 respondents and normal 26 respondents.

Table 3 illustrates that the results of the control group difference prepost-test mean anxiety score were 8,93. The difference between the intervention groups in prepost-test mean anxiety score before and after the test was 16,70.

Table 1 Distribution of respondents based on characteristics

No	Characteristics	Control Group		Intervention Group	
		Amount	Presentage (%)	Amount	Presentage (%)
Age					
1.	17 years	1	3,3	-	-
2.	18 years	1	3,3	1	3,3
3.	19 years	9	30	3	10
4.	20 years	11	36,7	5	16,7
5.	21 years	5	16,7	12	40
6.	22 years	2	6,7	8	26,7
7.	23 years	1	3,3	1	3,3
Gender					
1.	Female	29	96,7	29	96,7
2.	Male	1	3,3	1	3,3
Long-time wandering					
1.	1 year	8	26,7	4	13,3
2.	2 years	13	43,3	4	13,3
3.	3 Years	7	23,3	5	16,7
4.	4 years	2	6,7	17	56,7
Frequency of meeting with parents					
1.	Trimester I	21	70	17	56,7
2.	Trimester II	4	13,3	8	26,7
3.	Trimester III	2	6,7	-	-
4.	Trimester IV	3	10	4	13,3
5.	Trimester V	-	-	1	3,3

Table 2 anxiety score before and after the intervention

No	Category	Amount Control Group		Amount Intervention Group	
		Pre-test	Post-test	Pre-test	Post-test
1.	Normal	-	16	-	26
2.	Mild	24	11	22	4
3.	Moderate	6	3	8	-
4.	Heavy	-	-	-	-
Amount		30	30	30	30

Table 3 Mean anxiety score before and after the resulting intervention

Category	Control Group (Difference Pre Post)	Intervention Group (Difference Pre Post)	p-value
Mean	8,93	16,70	0,001
Median	9,50	17	

Characteristic of Respondents Based on Age

According to the research conducted by al. [21], up to 60.19% of 18-year-old adolescents experienced anxiety. al. [22] stated that up to 37% of students aged 23 years experienced moderate anxiety. Ilahi et al. [23] stated that

most students aged 20 to 23 years experience moderate anxiety (48 %). This is because in late adolescence, the individual has a maladaptive coping mechanism caused by their maturity level in the thought process, which is still low

in dealing with unexpected things that cause anxiety [24].

Putri [1] explained that students aged 18-23 years are in the transition period from adolescence to adulthood, which is the mental stage is immature and lacks experience in anxiety management.

Characteristic of Respondents Based on Gender

Rengieur and Hendra [25] stated that girls have gentle feelings and tend to be closer to their parents, so they tend to experience greater anxiety when they have long-distance relationships with their parents. Boys seem more indifferent to their parents, so they do not mind having long-distance relationships with their parents.

According to Sugiharno, et al. [27] that found female students are more prone to experiencing greater anxiety than men because women are more sensitive and think about their inability to do something, while men think more logically and focusses on the causes of the problems encountered.

Characteristic of Respondents Based on Long-Time Wandering

The results of this study are in line with the research of Mohamad, et al.[28], which showed that first and second year students have a 3.06 times higher risk of anxiety than third and fourth year students. Hewstone, et al. [29] argued that the longer a person is away from home, the less homesickness that is one of the causes of anxiety.

The new students in this case were those who had just migrated or separated from their parents for one year. According to the DSM-IV book (2012) in Carin, et al.[30] provided criteria for excessive anxiety, namely repeated sadness when separated from home, persistent feelings of fear of loss or about the possibility of danger that befalls when away from parents, fear of feeling alone without a parental figure, persistent reluctance and refusal to live without parents, recurring nightmares about separation, and complaints of physical symptoms (headache, stomachache, nausea, or vomiting).

Another reason is that students often feel sad and miss their families, are afraid because it is the first time they live abroad, and feel lonely, uncomfortable, and unprepared to live independently. The absence of direct communication, warmth, and help causes students to feel alone and have difficulty concentrating on work or study. These causes result in psychological pressure that triggers anxiety [30].

Characteristic of Respondents Based on Frequency of Meeting with Parents

The results of this study are in line with Aulia [31], who divided foreign students into three categories. The first type is overseas students, who often go home (every week) because their homes are close, so they do not have to think too much about transportation costs. The second type comprises migrant students who come home once every one or two months. Their homes are quite far away, but they still have many options for using public transportation and do not need to pay extra money for other transportation. The third type consists of students who come home only once a semester or once a year.

Because the house is quite far away and the transportation used is relatively more than one public vehicle, it is necessary to consider additional transportation costs and the time spent during the trip. Those who have homes outside Java and have to cross the island need to incur additional costs, but if you want to use an aeroplane, it also requires a lot of money. They must also consider the estimated travel time in relation to any given vacation. This results in students who have a frequency of meeting with parents once every four trimesters (10-12 months) experiencing greater anxiety Aulia [31].

Anxiety reduction after music therapy in the control group

The results of this study showed a decrease in anxiety, with a decrease in anxiety levels from moderate to mild anxiety (43.3%) and from mild anxiety to normal anxiety (53.3%), but there were still respondents with moderate anxiety levels (10%). The results of this study prove that there was no significant effect on the

control group after music therapy treatment ($p = 0.274, p > 0.05$).

There are factors that may hinder, including noisy environmental conditions due to the crowded environment inside and outside the boarding house, unstable body condition and rush due to boredom, and limited therapy time when carrying out music therapy which causes not all students to feel calm after listening to Mozart's music.

The results of this study are in line with those of Heryyanoor, et al.[32], who stated that music therapy could reduce anxiety levels by 57% but did not provide effectiveness or a significant effect on anxiety. Agni, et al.[33] explained that music therapy can gradually reduce anxiety levels gradually, but does not have a significant effect on anxiety.

Anxiety Reduction After Butterfly Hug in the Intervention Group

The results of this study showed a decrease in anxiety (mean 16.77), with a decrease in anxiety levels from moderate to mild anxiety (13.3%) and from mild anxiety to normal anxiety (86.7%). The results of this study prove that there is a significant effect on the intervention group after receiving butterfly hug therapy treatment.

According to the research conducted by Wahyu et al. [15], there is a significant influence on mood changes, namely, the change from negative thoughts to positive thoughts. Lazzaroni, et al. [34] stated that early administration of butterfly hugs as the main treatment for anxiety significantly reduces anxiety levels and stress symptoms. Supported by research conducted by Nugraha, et al.[35], butterfly hug therapy affects the amygdala, which contains catecholamines with two chemical reactions, adrenaline and noradrenaline, to reduce anxiety. Anxiety responses are captured directly by the body's senses as incoming sensations entering the thalamus as interpreters or interpreters of information and then sent simultaneously to the hippocampus and amygdala.

Brier and Jayanti [36] further explained that the amygdala transmits information to the hippocampus, thalamus, and other parts of the brain, including the hypothalamus. The

amygdala instructs the hypothalamus to communicate with the autonomic nerves. The amygdala is responsible for responses that need to be activated, behaviours that survive, and protecting the individual so that reflex movements occur in response. The amygdala also stores responses to certain memories, so that individuals automatically switch to the same stimuli. During times of anxiety, the hippocampus cannot function properly, so when information processing to the amygdala fails, the amygdala activates adrenaline to deal with it.

Wahyu, et al. [15] added that a butterfly hug, which can be performed anywhere and anytime, is a bilateral stimulation method that involves the use of external visual stimuli. Auditory and tactile stimuli help people process traumatic memories into positive thoughts, create feelings of spaciousness, and balance the right and left brains so that the emotions or feelings of anxiety that they experience can be reduced or overcome. Individuals become more comfortable and optimistic, do not think that bad events will happen in the future, and are able to make peace with the factors that cause anxiety.

The effectiveness of the butterfly hug method for reducing anxiety

The results of this study showed the effectiveness of the butterfly hug method in the reduction of anxiety (mean 7.77) with a p-value of 0.001 (<0.05) in the control and intervention groups. Giving music therapy to the control group, according to a book written by Wulandari and Hapsari (2013), stated that music therapy will affect the hypothalamus. The hypothalamus sends nerve impulses to the nucleus of the brainstem, namely the pituitary gland, to secrete corticotropin-releasing hormone (CRH). CRH releases adrenocorticotropin hormone (ACTH), which stimulates the adrenal glands. This gland releases the hormones cortisol, adrenaline, and noradrenaline to help reduce the emotions that cause anxiety and help the body relax more. Classical music can affect the limbic system and autonomic nervous system, creating a relaxed, safe, and enjoyable atmosphere and stimulating gamma amino butyric acid (GABA). Enfekali and

endorphins eliminate anxiety neurotransmitters, resulting in calm and improved moods (Merdekawati, 2016) [38]. However, music therapy only affects the environment around the limbic system and the feeling of calm that everyone feels is different from the influence of music therapy, which often only affects when listening to music, so that music therapy only provides a temporary decrease in anxiety levels.

Butterfly hug therapy was administered to the intervention group in eight sessions, which were carried out for six days from sessions 1-8. The core movement of the butterfly hug occurs in sessions 4, 5, and 6, where the respondent is asked to cross his arms and place them on his chest so that each finger is located just below the opposite collarbone, and the thumb points to the chin (Filipiak, 2022) [39]. Butterfly hug movement is a self-healing therapy by giving a touch to yourself so that a person is in a mild meditative condition and has been shown to reduce anxiety in the body (Naspufah, et al., 2022) [40]. This is caused by a touch between the hands and chest, resulting in an increase in the production of the hormone serotonin (Redho, et al., 2019). Serotonin is a neurotransmitter receptor found in the prefrontal cortex, amygdala, and hippocampus, which has a direct effect on reducing physiological and emotional dysregulation so that it can provide a calm and relaxing effect (Atmaja and Rafelia, 2022) [42]. The movement of the arms crossing the chest has been shown to provide comfort and calm to respondents (Wahyu, et al., 2021) [15].

According to a book by Brier and Jayanti[36], giving a butterfly hug directly affects the amygdala, which is an efficient communicator that assigns emotions such as fear or anger to environmental stimuli and triggers a response to fight or run. The amygdala transmits information to the hippocampus, thalamus, and other parts of the brain, including the hypothalamus. The amygdala instructs the hypothalamus to communicate with autonomic nerves related to physiological changes, namely fear, panic, and anxiety, and then performs the process of releasing the hormones cortisol, adrenaline, and noradrenaline.

Butterfly hug therapy is one of the CBT therapies that affects the cognitive abilities and behaviour of the respondents so that the effect is permanent. Beck [43] stated that CBT is a treatment based on cognitive formulations, individual beliefs, and behavioural strategies that can explain the formation of disorders. The basic assumption of cognitive behaviour therapy is that there is a reciprocal relationship between cognitive processes, namely, what they think, how they feel (affect), physiology, and individual behaviour. Rahmadiani [43] stated that administering CBT therapy for one week with a follow-up of one week after therapy was able to reduce social anxiety in adolescents. The process of this intervention was to perform cognitive restructuring, relaxation exercises, and gradual exposure (in this study, butterfly hug). Rahmadiani [43] explained that during the cognitive therapy process, the subject was able to develop more positive thoughts by helping the subject identify his negative thoughts and form more positive and rational thoughts. At the behavioural therapy stage, there is a change in anxiety levels. It was found that in each butterfly hug session, the subject showed a decrease in the perceived level of anxiety based on the evaluation questions given.

German [44] states that CBT has advantages compared to other psychotherapies in the treatment of anxiety, including the following: CBT tends to be directive (the therapist acts and plays an active role during the therapy process and gives specific suggestions), and CBT solves problems very specific. One of the therapy techniques used is to help individuals develop insight (for example understand or understand) down to the root of the problem, by using a simple way, CBT focusses on current beliefs and behaviours, in the CBT process, the therapist and client are friends/colleagues who work the same during the therapy period, in CBT the client determines therapy goals with little input from the therapist, in CBT an assessment is carried out to evaluate several therapeutic techniques (if necessary) can be changed for the effectiveness of therapy, CBT also changes a person's beliefs and behaviour so that he is able to manage his anxiety

effectively better and can control situations that can trigger the emergence of anxiety.

Based on the presentation of the results and the discussion above, it can be concluded that cognitive hug therapy can reduce anxiety in long-distance relationships with parents. Butterfly hug therapy jointly helps the respondent to face the reality test of his thoughts and automatic beliefs so that when anxiety returns, the respondent is able to overcome it by carrying out this therapy.

Conclusion

Butterfly hug therapy was an effective therapy to reduce anxiety in LDR with parents in nursing students from the Surakarta Health Polytechnic. This therapy is expected to be applied and used as an intervention to reduce anxiety. Most of the respondents in this study were level IV (final) students who had migrated for four years (long-distance relationships with their parents). Meanwhile, in this study, students who experienced moderate anxiety migrated for one year. Therefore, research is needed on new students (Level I) and parents of children who migrate.

Acknowledgements

Thank you to the Director Polytechnic Health Surakarta Sudiro, S.Kp, M.Pd., Addi Mardi Harnanto, MN, as Chairman Major Nursing, Siti Lestari, MN, as Chairman Programme Studies Bachelor Applied Nursing, Endang Caturini S, S.Kep., Ns, M.Kep., as Lecturer Mentor I, Sugiyarto, SST., Ns, M.Kes., as supervisor II, and all respondents who are willing to be involved in this research

References

- Putri, A. F. (2018). Pentingnya Orang Dewasa Awal Menyelesaikan Tugas Perkembangannya. *SCHOULID: Indonesian Journal of School Counseling*, 3(2), 35. <https://doi.org/10.23916/08430011>
- Fatimatuzzahro, A. (2022). *Fenomena Homesick pada Mahasiswa Rantau dalam Sudut Pandang Psikologi*.
- Juanamasta, I. G., Aunguroch, Y., Gunawan, J., & Fisher, M. L. (2022). Postgraduate and undergraduate student nurses' well-being: A scoping review. *Journal of Professional Nursing*, 40, 57–65. <https://doi.org/10.1016/j.prof-nurs.2022.03.001>
- Pratiwi, D., Dahlan, T. H., & Damaianti, L. F. (2019). Pengaruh Self-Compassion Terhadap Kesepian Pada Mahasiswa Rantau. *Jurnal Psikologi Insight*, 3(2), 88–97. <https://doi.org/10.17509/insight.v3i2.22349>
- Retnoningtyas, D. W., Atmaja, A. A. G. A. A., Pratiwi, A. A. I., & Rahayu, K. D. A. (2017). Pengaruh expressive writing terhadap penurunan tingkat kecemasan mahasiswa tahun pertama. *Jurnal Psikologi "Mandala,"* 1(1), 14–25.
- Lukitasari, P., & Hidayati, E. (2013). Perbedaan Pengetahuan Keluarga Tentang Cara Merawat Pasien Sebelum dan Sesudah Kegiatan Family Gathering Pada Halusinasi Dengan Klien Skizofrenia di Ruang Rawat Inap Rumah Sakit Jiwa Daerah Dr. Amino Gondohutomo Semarang. *Jurnal Keperawatan Jiwa*, 1(1).
- Hidayati, C. A. R. I. (2015). *Tingkat Kecemasan Mahasiswa Semester V dan VII Fakultas Kesehatan Masyarakat UNAIR Surabaya Tahun 2015*. 4–9.
- Ika. (2019). *Mahasiswa Rentan Alami Kecemasan Sosial*. Universitas Gadjah Mada.
- Walean, C. J. S., Pali, C., & Sinolungan, J. S. V. (2021). Gambaran Tingkat Kecemasan pada Mahasiswa di Masa Pandemi COVID-19. *Jurnal Biomedik (Jbm)*, 13(2), 132. <https://doi.org/10.35790/jbm.13.2.2021.31765>
- Naceanceno, K. D., Capps, S. K., Whittenburg, R., Ortiz, A., & Capps, S. K. (2021). A Comparison of Anxiety Levels Among College Students A Comparison of Anxiety Levels Among College Students. *Journal of Graduate Education Research*, 2(8), 25–31.
- Febriyanti, E. dan, & Mellu, A. (2020). Tingkat Kecemasan Mahasiswa Keperawatan Dalam Menghadapi Pandemi Covid-19 Di Kota Kupang. *NURSING UPDATE: Jurnal Ilmiah Ilmu Keperawatan P-ISSN : 2085-5931 e-ISSN : 2623-2871*, 11(3), 1–6.
- Wati, N. M. N., Juanamasta, I. G., Linasari, P. L., & Darmika, P. (2020). Anxiety Level Responses Of Nursing Students Who Will Take Competency Tests In Wira Medika Institute Of Health Sciences. *Jurnal Keperawatan Respati Yogyakarta*, 7(1), 11–15.

13. Utami, A. B., Jumaini, & Nauli, F. A. (2019). Perbedaan Tingkat Kecemasan Dan Depresi Mahasiswa Yang Akan Tinggal Bersama Orang Tua Dan Tinggal Sendiri. *JOM FKp*, 6(1), 334–341.
14. Riskesdas. (2018). Laporan Riskesdas 2018 Nasional.pdf. In *Lembaga Penerbit Balitbangkes* (p. 226). Badan Penelitian Dan Pengembangan Kesehatan.
15. Wahyu, P., Giriarto, R., Widayati, D., & Agusti, S. S. (2021). Butterfly Hug to Reduce Anxiety on Elderly. *Jurnal Ners Dan Kebidanan*, 295–300. <https://doi.org/10.26699/jnk.v8i3.ART.p295>
16. Arviani, H., Subardja, N. C., & Perdana, J. C. (2021). Mental Healing in Korean Drama “It’s Okay to Not Be Okay” Heidy. *JOSAR*, 7(1).
17. Zung, W. W. K. (1971). A Rating Instrument For Anxiety Disorders. *Psychosomatics*, 12(6), 371–379. [https://doi.org/10.1016/S0033-3182\(71\)71479-0](https://doi.org/10.1016/S0033-3182(71)71479-0)
18. Dunstan, D. A., Scott, N., & Todd, A. K. (2017). Screening for anxiety and depression: reassessing the utility of the Zung scales. *BMC Psychiatry*, 17(1), 329. <https://doi.org/10.1186/s12888-017-1489-6>
19. Zung, W. W. K. (1996). Zung Anxiety Self-Assessment Scale. *Consult Pharmacol*, 11(4), 4–7.
20. Dunstan, D. A., & Scott, N. (2020). Norms for Zung’s Self-rating Anxiety Scale. *BMC Psychiatry*, 20(1), 90. <https://doi.org/10.1186/s12888-019-2427-6>
21. Cholifatin, N., Murdiana, S., & Zainuddin, K. (2021). Hubungan Antara Egosentrisme Dengan Kecemasan Sosial Pada Mahasiswa Baru. *Pinisi Journal of Art, Humanity, Social Studies*, 1(6), 55–62.
22. Ahyani, N. E., Suprihartini, & Novitasari, A. (2022). Gambaran Tingkat Kecemasan Mahasiswa S1 Fakultas Kedokteran Universitas Muhammadiyah Semarang dalam Pengerjaan Skripsi Overview of Anxiety Levels of Undergraduate Students of the Faculty of Medicine, University of Muhammadiyah Semarang in Working on Thes. *Medica Arteriana*, 4(2), 1–7.
23. Ilahi, A. D. W., Rachma, V., Janastri, W., & Karyani, U. (2021). The level of anxiety of students during the Covid-19 pandemic. *Proceeding of Inter-Islamic University Conference on Psychology*, 1(1), 1–6.
24. Fortuna, A. D., Saputri, M. E., & Wowor, T. J. F. (2022). Faktor – Faktor Yang Berhubungan Dengan Tingkat Kecemasan Warga Pada Masa Pandemi Covid-19 Tahun 2021 Di Kecamatan Sukmajaya Kota Depok. *Jurnal Keperawatan*, 10(1), 34. <https://doi.org/10.35790/jkp.v10i1.38850>
25. Rengiur, J., & Hendra. (2015). yang diperlukan untuk memajukan masyarakat tersebut . Dalam hal ini , perguruan tinggi adalah institusi yang mempunyai kedudukan menghadapinya maka perlu sumber daya manusia yang memiliki keunggulan dan Institut Agama Islam Negeri (IAIN) pengembangan pe. *Fikratuna*, 7(2).
26. Sugiharno, R. T., Ari Susanto, W. H., & Wospakrik, F. (2022). Faktor-Faktor yang Mempengaruhi Kecemasan Mahasiswa dalam Menghadapi Tugas Akhir. *Jurnal Keperawatan Silampari*, 5(2), 1189–1197. <https://doi.org/10.31539/jks.v5i2.3760>
27. Sugihantono, A., Burhan, E., Susanto, A. D., Damayanti, T., Wiyono, W. H., Prasenohadi, Samuedro, E., Isbaniah, F., Aryati, Rinawati, W., Susilo, A., Ginanjar, E., Nasution, S. A., Hidayat, R., Tarigan, T. J. E., Wahyudi, E. R., Afiatin, Wahyudi, E. R., Pitoyo, C. W., ... Santoso, S. P. (2020). *Pedoman Pencegahan dan Pengendalian Coronavirus Disease (COVID-19) Revisi Kelima* (L. Aziza (ed.); 5th ed.). Kementrian Kesehatan RI.
28. Mohamad, N. E., Sidik, S. M., Akhtari-Zavare, M., & Gani, N. A. (2021). The prevalence risk of anxiety and its associated factors among university students in Malaysia: a national cross-sectional study. *BMC Public Health*, 21(1), 1–12. <https://doi.org/10.1186/s12889-021-10440-5>
29. Mariska, A. (2018). Pengaruh Penyesuaian Diri dan Kematangan Emosi Terhadap Homesickness. *Psikoborneo: Jurnal Ilmiah Psikologi*, 6(3), 310–316. <https://doi.org/10.30872/psikoborneo.v6i3.4642>
30. Carin, A. A., Sund, R., & Lahkar, B. K. (2018). Perbedaan Kedenderungan Kecemasan Sosial Mahasiswa Baru Yang Tinggal Di Kos dan Tinggal Dengan Orang Tua. In *Journal of Controlled Release* (Vol. 11, Issue 2).
31. Aulia, H. (2018). *Mahasiswa Rantau, Antara Mandiri dan Dipaksa Keadaan*.
32. Heryyanoor, H., Muhsinin, M., Rahmawati, R., Patarru’, F., Handini, F. S., & Weu, B. Y. (2020). Music Therapy and Bibliotherapy to Reduce Child Anxiety When Given Intravenous Therapy.

- Jurnal Ners*, 14(3), 340–353.
<https://doi.org/10.20473/jn.v14i3.17182>
33. Agni, J. A. R. S., Sarwono, B., & Suyanta, S. (2020). The Effectiveness of Classical Music Therapy and Progressive Muscle Relaxation Therapy on Anxiety Levels. *Midwifery and Nursing Research*, 2(1), 9–14.
<https://doi.org/10.31983/manr.v2i1.5673>
34. Lazzaroni, E., Invernizzi, R., Fogliato, E., Pagani, M., & Maslovaric, G. (2021). Coronavirus Disease 2019 Emergency and Remote Eye Movement Desensitization and Reprocessing Group Therapy With Adolescents and Young Adults: Overcoming Lockdown With the Butterfly Hug. *Frontiers in Psychology*, 12(August), 1–9.
<https://doi.org/10.3389/fpsyg.2021.701381>
35. Nugraha, O. N. R. A. C., Fadiya, A., Pratiwi, D. M., Muliyani, S. M., & Syah, M. E. (2022). Eye Movement Desensitization And Reprocessing (EMDR) Sebuah Teknik Terapi Guna Menangani Posttraumatic Stress Disorder (PTSD) Di Tengah Melonjaknya Kasus Pemerkosaan. *Sumbangsih*, 3(2), 51–57.
36. Brier, J., & lia dwi jayanti. (2020). *Neuroanatomi* (Vol. 21, Issue 1).
37. Wulandari, E., & Hapsari, A. (2013). Hormon Reproduksi. *Peran Hormon Sebagai Regulator Fungsi Organ*, 124.
38. Merdekawati, D. (2016). Pengaruh Terapi Musik Klasik Terhadap Penurunan Tingkat Skala Nyeri Pasien Post Operasi. *Jurnal Iptek Terapan*, 10(3).
<https://doi.org/10.22216/jit.2016.v10i3.526>
39. Filipiak, M. (2022). *Counseling Connections*.
40. Naspufah, M., Saprudin, A., & Heriana, Y. (2022). TERAPI BUTTERFLY HUG TERHADAP TINGKAT KECEMASAN DALAM PENYUSUNAN SKRIPSI PADA MAHASISWA KEPERAWATAN DI SEKOLAH TINGGI ILMU KESEHATAN KUNINGAN TAHUN 2022.
41. Redho, A., Sofiani, Y., & Warongan, A. W. (2019). Pengaruh Self Healing terhadap Penurunan Skala Nyeri Pasien Post Op. *Journal of Telenursing (JOTING)*, 1(1), 205–214.
<https://doi.org/10.31539/joting.v1i1.491>
42. Atmaja, B., & Rafelia, V. (2022). Hubungan antara Psikobiotik dengan Gangguan Kecemasan. *Journal Of The Indonesian Medical Association*, 71(6), 286–295.
<https://doi.org/10.47830/jinma-vol.71.6-2021-238>
43. Rahmadiani, N. D. (2020). Cognitive Behavior Therapy dalam menangani kecemasan sosial pada remaja. *Procedia : Studi Kasus Dan Intervensi Psikologi*, 4(1), 10–18.
<https://doi.org/10.22219/procedia.v4i1.11961>
44. Ardianto, O., & Aghadiati, F. (2022). Efektifitas cognitive behavior therapy (CBT) dalam mengatasi anxiety pada lansia dalam menghadapi varian baru Covid-19 di wilayah kerja Puskesmas Kenali Besar Kota Jambi. *Journal of Healthcare Technology and Medicine*, 8(2), 1263–1272.