

Student Stress Reduction Through Implementation Of Mozart Music Therapy

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Abstract. Stress is symptom Good physique and thought to excessive pressure. Stress can caused by internal and external factors. Related with compilation task end or thesis, stress factors experienced by students are *self-imposed* and academic pressure. *Self-imposed* means burdening oneself, in this situation individuals are afraid of failing to complete the thesis assignment and are afraid of not being able to make their parents proud, while academic pressure means that individuals must complete the thesis in accordance with the regulations set by the academic party. Research this aiming, for comparison before and after given Mozart music therapy and see How influence significance from the actions given. This research use pre experimental with one group pretest-posttest design. Data collection using sheet observation, SOP for Mozart music therapy, and *Perceived Stress Scale* (PSS-10). The sampling technique used was purposive sampling with inclusion criteria: final year students facing their thesis, students experiencing stress. Exclusion criteria: students who do not like music, students who refuse to be respondents. The sample used in this research was 16 people. The statistical analysis used namely the Wilcoxon Signed Ranks Test. The results of the study shows p-value of 0.000 which means There is influence Mozart music therapy on reducing student stress in face thesis.

Key words: Students, Thesis, Stress, Therapy Mozart's Music

INTRODUCTION

Stress is the body's response to a situation or pressure that is perceived as a threat or challenge, either physical or psychological (Wind Dylanesia, 2023). Stress is caused by external or internal conditions that cause disturbances and require an adaptive response from the individual. (Farida Aryahi, 2016). Symptoms of students who feel stressed are feelings of anxiety, restlessness, neck or shoulder cramps, headaches, shortness of breath, constant thoughts, difficulty concentrating, and experiencing sleep disorders (Apipudin, A., Rahman, I. A., Suarningsih, n.d.).

Causes of stress can come from internal and external factors. Internal factors include frustration, conflict, *pressures*, and *self-imposed* while external factors include family, academic, and environment. Stress factors experienced by students in compiling a thesis are *self-imposed* and academic pressure. *Self-imposed* means burdening oneself, in this situation individuals are afraid of failing to complete the thesis assignment and are afraid of not being able to make their parents proud, while academic pressure means that individuals must complete the thesis in accordance with the regulations set by the academic (Farida Aryahi, 2016).

According to data from *the World Health Organization* (WHO) in 2020, the prevalence of stress is quite high, with almost more than 350 million people and is the 4th most common disease in the world. The prevalence of stress in final year students facing their thesis in the world in 2020 who experienced stress was 38% - 71%, the prevalence of stress experienced by final year students in Asia in 2020 was 39.6% - 61.3% while the prevalence of stress in final year students in Indonesia itself was 36.7-71.6% (World Health Organization., 2020). Research conducted by Hariaty in 2023 at the Faculty of Nursing, Riau, the prevalence of stress levels in final year students who were working on their thesis showed results of 79.4% of 34 students (Hariaty et al., 2023). Research conducted by Ambarwati in 2019 at the Muhammadiyah University of Magelang, students who experienced moderate stress were 57.4% and severe stress was 7.0% out of 65 students. (Ambarwati et al., 2019). Research according to Kawuran in 2015 in Kudus obtained results from six faculties experiencing mild stress levels of 32%, moderate stress was 37%, students experiencing severe stress were 27% of 120 students (Kawuryan, 2015).

The impact of stress felt by students in preparing their final assignments or theses is, increased anxiety, tension and anxiety, physical pain such as headaches, heartburn, itching, and diarrhea, fatigue, muscle tension, sleep disorders, or increased blood pressure and heart rate. Stress can also cause changes in individual behavior to become impatient, quicker to get angry, withdrawn, or display changes in eating patterns. Some individuals feel frustrated, helpless, become lethargic and have low self-esteem

and the most fatal impact is suicide (Farida Aryahi, 2016)

Stress can be handled with several appropriate methods or ways, including using pharmacological and non-pharmacological approaches (Nur, G., Putra, W., Ridayanti, 2022) . Pharmacological therapy , namely by consuming anti-anxiety drugs (*anxiolytics*) of the benzodiazepine group such as diazepam, lorazepam, alprazolam. (Elisabeth, R., Erda, R., Alba, AD, & Yunaspi, 2019) . Non-pharmacological therapy includes exercise, good nutrition and diet by getting enough rest, doing relaxation techniques, namely deep breathing relaxation, meditation, yoga, and classical music therapy. Non-pharmacological therapy is always the choice because the costs incurred are relatively cheap while pharmacological therapy is relatively more expensive and causes unwanted side effects for sufferers, namely it can worsen the condition of the disease and will cause side effects of drug dependence. The initial step in non-pharmacological stress treatment is to make a new change in the environment so that it can reduce stress, by doing relaxation therapy that can control individuals to create positive and relaxed feelings, such as doing classical Mozart music therapy to calm and reduce stress (Mutakamilah et al., 2021) .

Music therapy is a treatment method that uses music to improve physical, mental and emotional health (Wind Dylanesia, 2023) . Mozart music therapy is a therapy that uses classical musical instruments of the Mozart type originating from the 18th century with musical presentations that have a musical style from the past (Rahayu Sumaningsih, 2023) .

Mozart's music has an effect that other music does not have. The rhythm, melody and frequency of Mozart's music can heal, restore, relax and stimulate the creative part of the brain. Mozart's music with a speed of 60 to 80 beats per minute can shift brain waves from beta to alpha and relax (Azizah et al., 2023) . Listening to Mozart's classical music stimulates hypothalamic activity and suppresses the release of the hormone *corticotropin-Releasing Factor* (CRF), which then inhibits the release of adrenocorticotrophic hormone (ACTH) from the pituitary gland. The release of cortisol, adrenaline, and norepinephrine hormones by adrenal hormones. The thyroxine hormone produced by the thyroid gland in the body is also suppressed. High thyroxine levels cause sufferers to get tired easily, worry easily, be anxious, and have difficulty sleeping. Therefore, the situation of listening to music filled with calm and peaceful emotions has a calmer, more relaxed and reduced stress impact (Kinasih, A., Saudah, N., & Prasastia, nd) .

Research conducted by Sarwono in Purwokerto in 2018 with the title " The Effectiveness of Mozart Classical Music Therapy and Ar-Rahman Surah Murotal Therapy on Reducing Academic Stress Levels in Adolescents". The study was conducted routinely for 15 minutes twice a week, with a sample size of 70 students. Based on the results of the effectiveness test of Mozart music therapy and Ar-Rahman letter therapy, the mean rank of Mozart music therapy was (44.93%) while Ar-Rahman letter therapy was (26.07%), this shows that Mozart classical music therapy is more effective in reducing academic stress levels in adolescents (Sarwono, 2018) .

Research conducted by Paramita Ratna Gayatri, Wahyu Nur Pratiwi, Yanuar Eka Pujiastutik in 2022 entitled "The Effect of Mozart Music Therapy on Reducing Student Stress in Facing Thesis at the Bhakti Wiyata Kediri Health Sciences Institute". The results of the Wilcoxon test in this study showed a *p value* = 0.008 where *pa* (0.05) which means that the provision of Mozart music therapy has an effect on reducing stress levels in students in facing their theses at the Bhakti Wiyata Kediri Health Sciences Institute (Gayatri, P., Pratiwi, WN, Pujiastutik, 2022) .

This study aims to determine the effect or significance of Mozart music therapy on reducing student stress in facing thesis. The benefits of this study are to provide education to the public or respondents regarding the use of Mozart music therapy in reducing stress.

METHODS

Types of research used was pre-experimental with one group pretest-posttest design. This research used one group the treatment that will be measured mark before and after treatment. The purpose of research This that is to know comparison before and after action Mozart music therapy and see How influence significance from given Mozart music therapy is given for 7 days in 1 week with duration 10 minutes done at night day before sleep. This research conducted at ITEKES Cendekia Utama Kudus in April 2025. Data collection using sheet observation, SOP for Mozart music therapy, and *Perceived Stress Scale* (PSS-10) to measure stress levels before and after the action. The sampling technique used was purposive sampling with inclusion criteria: final year students facing their thesis, students who are

experiencing stress. Exclusion criteria: students who do not like music, students who refuse to be respondents. The sample used in this research was 16 people. Statistical analysis used namely the Wilcoxon Signed Ranks Test.

RESULTS AND DISCUSSION

This study was conducted on April 14 - April 20, 2025 at the Cendekia Utama Kudus Health Technology Institute. The instruments used in this study were *the Perceived Stress Scale* (PSS-10) to measure stress levels and standard operating procedure guidelines for Mozart's music therapy type Sonata for Two Pianos in D major, K. 448 using *mobile phones* and *earphones*. In this study, the number of samples was 16 people, this study was conducted at night before the respondents' bedtime for 10 minutes for 7 consecutive days.

Table 1. Frequency Distribution of Respondent Characteristics Based on Age

	n	Minimum	Maximum	Mean	Mode	Median
Age	16	21	23	22.19	22	22.00

Based on table 1, it can be seen that the characteristics of the respondents' age are an average (mean) of 22.19 years, a minimum age of 21 years and a maximum of 23 years. The age range of 21-23 years is referred to as the early adult category, at this age a person is required to take responsibility for career decisions or complete education at the chosen college so as to get a better future life (Aulia, S., & Panjaitan, 2019).

Entering the early adulthood stage, individuals are expected to be able to take on new roles in their social lives and are expected to make decisions that will arise at the *quarter life crisis stage*, most individuals who experience this stage will experience feelings of fear, doubt, and helplessness, so that individuals will experience excessive stress (Nugsria, A., Pratitis, N. T., Arifiana, 2023). This is also supported by research conducted by Ambarwati in 2017 entitled "Description of Student Stress Levels" the characteristics of respondents in this study said that early adulthood tends to be more prone to stress. The results of the age characteristic study showed that the age of 22 years was more dominant in experiencing stress with a total of 48 students (47.5%) (Ambarwati et al., 2019).

Table 2. Frequency Distribution of Respondent Characteristics Based on Gender

Gender	Number (n)	Percentage (%)
Woman	10	62.5%
Man	6	37.5%
Total	16	100%

Based on table 2, it can be seen that the characteristics of the respondents' gender are mostly female, namely 67.5% and male gender as much as 37.5%. The level of mental stress related to gender has various causes, one of which comes from a cultural and social perspective. The causes of stress do not only come from academic aspects, but gender is also an important factor. Gender refers to the differences in roles between men and women that have existed socially for a long time. Differences in the levels of stress felt by students are also influenced by the social system in Indonesia, namely the patriarchal system, where men have a more dominant position than women in society (Karolina, V., Buwono, S., & Wiyono, 2024).

This is supported by a research journal conducted by Yoga in the year showing results that 90 male respondents, 22.9% experienced mild stress while 12.1% experienced excessive stress. Of the 167 female students, 35.0% experienced excessive stress while 30.0% experienced mild stress. (Yoga P. D. Kountul, 2018)

Table 3. Student stress levels in facing the thesis at the Cendekia Utama Kudus Health Technology Institute before being given Mozart music therapy (n=16)

	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
Pretest	16	17	12	29	18.81	4.875	23,763

Based on table 3 above, it can be seen that the average stress stick of respondents before being given Mozart music therapy was 18.81 on the PSS scale with a moderate stress category. Based on the results of the interview, most respondents answered that they experienced stress because they were dizzy thinking about their thesis assignments that had not been completed even though they felt they had tried to complete them, from the results of this interview it showed that respondents experienced stress due to one of the internal factors, namely frustration because respondents had felt they had struggled hard but still failed to meet respondents' expectations, stress factors can occur, namely due to internal factors (frustration, conflict, pressure, *self-imposed*) and external factors (family, academic, environment) (Farida Aryahi, 2016).

In filling out the PSS-10 questionnaire, respondents on average filled in the most points in number 3 with the question "In the last month, how often have you felt nervous or stressed?" Most respondents answered this question with point 3, which shows that it is quite often experienced by respondents. Question number 3 is included in the impact of student stress in writing a thesis, namely feeling restless or nervous, tense, and anxious (Farida Aryahi, 2016). This is also supported by a study conducted by Gayatri in 2022 entitled "The Effect of Mozart Music Therapy on Reducing Student Stress in Facing Thesis at the Bhakti Wiyata Kediri Health Sciences Institute" in this study, respondents before being given Mozart music treatment showed results from 60 respondents experiencing stress with a moderate stress category. This study states that the level of academic stress in students is classified as moderate stress and severe stress, the psychological effects that arise when individuals experience stress, including disturbed mental health, unstable emotions, irritability and can even cause depression (Gayatri, P., Pratiwi, W. N., Pujiastutik, 2022).

Table 4. The level of stress of students in facing their thesis at the Cendekia Utama Kudus Health Technology Institute after being given Mozart music therapy (n=16)

	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
Posttest	16	13	9	22	13.81	3,692	13,629

Based on table 4 above, it can be seen that the average respondent after being given Mozart music therapy was 13.81 on the PSS scale with a mild stress category. This can be interpreted that there was a decrease in the level of student stress from an average of moderate stress to an average of low stress. In this study, all respondents experienced a decrease in stress levels, the average difference before and after the action was 5 points. This study shows that there was a decrease in stress after being given Mozart music therapy.

Music therapy is an alternative therapy using music so that it can overcome emotional and psychological problems (Wind Dylanesia, 2023). Mozart's music is effective in reducing stress because the rhythm, melody, and frequency of Mozart's music can have the effect of reducing stress and stimulating the creative brain area. Mozart's music can change brain waves from beta to alpha so that it can make the brain calm.(Azizah et al., 2023).

This is supported by a study conducted by Eko 2023 entitled "Classical Music Therapy Reduces Stress in Final Year Nursing Students" in this study stated that classical music therapy has a significant effect on reducing stress levels in final year students, this is evidenced by the results that respondents with severe stress and became mild stress after treatment were 5 respondents (16.1%), while students with severe stress and became moderate stress after treatment were 18 respondents (58.1%), while students with moderate stress and changed to mild stress after treatment were 3 students (9.7%). Meanwhile, students who continued to experience severe stress even though they had been given treatment were 2 students (6.4%) (Eko Riyadi, M., Laily, S., Viantika Kusumasari, 2023).

Table 5. The Effect of Mozart Music Therapy in Reducing Student Stress in Facing Thesis

Z (pretest – posttest)	-3.524 ^b
P-value	.000

Wilcoxon Signed Ranks Test

Table 4.5 shows that the p-value is 0.000, which means that there is an effect of Mozart music therapy in reducing student stress in facing their thesis before and after the action.

The use of music therapy as an effective alternative treatment to reduce stress and anxiety. Music therapy can create a calmer mood and reduce individual tension. Listening to Mozart's classical music in a slow rhythm reduces the release of catecholamines in the blood vessels. Catecholamines are hormones whose levels in blood plasma can have an impact on the activation of the sympathoadrenergic system and trigger the release of stress hormones, decreasing catecholamine levels in blood plasma can make the body feel more relaxed (Eko Riyadi, M., Laily, S., Viantika Kusumasari, 2023). Music can also affect breathing, heart rate, pulse, blood pressure, and muscle tone, increase body movement and regulation, strengthen memory, increase body temperature, and regulate stress-related hormones . Mozart's music provides many benefits for the body, because Mozart's music effectively changes the brain's threshold, which is emphasized to be more relaxed. In addition, music is easily accepted by the hearing organs and can be easily recorded by the brain. Classical music that increases mental activity and affects the body, mind and emotions to be calm and relaxed (Citra Febrianti, A., Maretianada, V., Febryan Ruswandi, F., & Hartati, 2023).

Research according to Sarwono in 2018 entitled "Effectiveness of Mozart Classical Music Therapy and Ar-Rahman Surah Murotal Therapy on Reducing Academic Stress Levels in Adolescents" said that Mozart music therapy is more effective in reducing stress as evidenced by the results of the study, the mean rank results showed that the results of Mozart classical music therapy (44.93) were greater than the results of Ar-Rahman surah murotal therapy (26.07), so Mozart classical music therapy is more effective in reducing stress levels, because listening to Mozart classical music will cause stimulation of hypothalamic activity so that it will inhibit the release of the hormone Corticotropin-Releasing-Factor (CRF), which causes the pituitary gland to inhibit the release of Adrenocorticotropin Hormone (ACTH) so that it inhibits the adrenal hormone from releasing the hormones cortisol, adrenaline, and noradrenaline. So that the thyroxine hormone produced by the thyroid in the body is also inhibited. High levels of Thyroxine hormone will cause individuals to tire easily, become anxious easily, become tense easily, and have difficulty sleeping, so that listening to music that is full of calm and peaceful feelings will have a calmer psychological impact (Sarwono, 2018)

CONCLUSION

Based on the results of research conducted at the Cendekia Utama Kudus Health Technology Institute for 7 consecutive days showed the results that *the p-value* was 0.00. This shows that there is an effect of Mozart music therapy in reducing student stress before and after the action.

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