THE EFFECT OF KOREAN POP (K-POP) MUSIC ON REDUCING STRESS LEVELS AMONG FIRST-YEAR UNIVERSITY STUDENTS

Azra Janice Dwi Kiani[1], Suryanti[2*],
[1,2] *Poltekkes Kemenkes Surakarta, Indonesia*

**Corresponding author: suryantisolo1@gmail.com*

Abstract

New students must adapt to both academic demands and the higher education environment, a process that can trigger stress. Music serves as an accessible, non-pharmacological intervention for stress management; this includes Korean Pop (K-Pop) music, which is highly popular among students. This study aimed to determine the effect of K-Pop music on reducing stress levels among first-year nursing students at the Health Polytechnic of the Ministry of Health in Surakarta (Poltekkes Kemenkes Surakarta). A one-group pretest-posttest design was employed. The sample consisted of 42 first-year nursing students, selected from a total population of 255. Stress levels were measured using the Depression Anxiety Stress Scale-42 (DASS-42) before and after a six-day K-Pop music intervention. Changes in stress levels were analyzed using the Wilcoxon Signed-Rank Test. Prior to the intervention, the majority of respondents experienced mild stress (n=27; 64.3%), followed by moderate stress (n=10; 23.8%) and severe stress (n=5; 11.9%). Following the intervention, 30 respondents (71.4%) fell into the normal category, while 7 (16.7%) experienced mild stress, 3 (7.1%) moderate stress, and 2 (4.8%) severe stress. The Wilcoxon test yielded a Z-value of -4.311 ($p < 0.001$). Specifically, 31 respondents (73.8%) showed a decrease in stress scores, 4 (9.5%) showed an increase, and 7 (16.7%) showed no change. There is a significant difference in stress levels among first-year nursing students before and after exposure to K-Pop music. K-Pop music has the potential to be utilized as a non-pharmacological approach to assist students in managing stress..

Keywords: DASS-42, K-Pop, New Students, Nursing Students, Music, Stress.

1. INTRODUCTION

Transition period from teenager to mature early , especially moment enter level college high, is full period challenge psychosocial . Students new students (maba) often face various pressure that comes from from demands increased academics , changes method learning , demands independence , until need For adapt with environment new social (1,2). Pressure This often manifests become stress academic , which includes concern to value , load excessive workload, and strictness deadline time (deadlines) (1,3–5).

Stress experienced student new If No handled with the right strategy can lower welfare subjective well-being and triggers problem better mental health serious , like anxiety and depression (4,6). In effort manage stress said , listening music has long been identified as one of the mechanism the most effective and easiest coping accessible (7). Study during the COVID-19 pandemic shows existence improvement significant in behavior musical students , with 79% of participants report use music as method For overcome challenges and boredom during learning distance Far (4,8).

One of phenomenon culture evolving music fast and have influence big on style life generation young , including students in Indonesia, is Korean Pop or K-Pop (9,10), K-Pop is not only just a music genre , but rather A ecosystem that includes visual content , social media , and a close -knit fandom community . scientific , listener K-Pop content has proven own connection negative or significant

opposite with stress academic , which means habit listen K-Pop content *increases* , then level stress academic somebody will *decrease* (5). K-Pop music works as a coping strategy effective emotional through energetic melody , relevant lyrics with struggle live , and provision of " space" safe " for his fans For run self moment (1). However , the effectiveness music as coping can varies . There are difference motivation and effectiveness coping music between student domestic and international (1). In addition , excessive involvement without control good self risky trigger behavior consumerism and negligence to not quite enough answer academic (10,11). Therefore that , research that is specific test How K-Pop music plays a role in mitigate stress in the phase beginning lectures are very important For done as effort promoting adaptive mental health strategies for student new .

2. METHODOLOGY

Study This use approach quantitative with design **quasi-experimental one-group pretest-posttest** For know influence K-Pop music towards decline level stress in students new . Population study is **255 students new Poltekkes** , with sample as much as **42 students** were selected based on criteria study. Stress level respondents measured use **Depression Anxiety Stress Scale (DASS-42)** at the time before (*pretest*) and after (*posttest*) administration intervention K-Pop music . Intervention done with give chance to respondents For listen K-Pop music according to procedures that have been set during research . Data analyzed in a way univariate For describe characteristics respondents and levels stress before as well as after intervention . Analysis bivariate done use **Wilcoxon Signed-Rank test** because the data analyzed is paired data and/ or No fulfil assumptions normality . Statistical decisions set at the level meaning **α = 0.05** . Research implemented after get **ethical clearance (EC) from Dr. Moewardi Regional Hospital** with Number : 2.635/XI / HREC / 2024.

3. RESULTS AND DISCUSSION

3.1 RESULTS

3.1.1 Stress Level Before and after Intervention

Students new before given therapy K-Pop music , all over respondents (100%) experienced stress with proportion most at the level stress light (64.3%) and stress moderate (23.8%). After undergo intervention for 6 days , some big respondents is in the category level normal stress (71.4%), and the number of student with stress critical decrease from 5 people (11.9%) to 2 people (4.8%). Distribution level stress respondents shown in Table 1.

Table 1. Distribution Stress Level Frequency Before and after Intervention K-Pop Music Therapy

Category Stres	Pre-Test		Post-Test	
	(n)	(%)	(n)	(%)
Normal	0	0	30	71.4
Light	27	64.3	7	16.7
Currently	10	23.8	3	7.1
Critical	5	11.9	2	4.8
Total	42	100	42	100

3.1.2 Influence K-Pop Music Therapy for Decline Stres

Test results Wilcoxon Table 2 shows mark $Z = -4{,}311$ with p-value $< 0{,}05$. A total of 31 respondents (73.8%) experienced a decrease in stress scores (negative ranks), 4 respondents experience increase (positive ranks), and 7 respondents No experience change level stress (ties). Because $p < 0{,}05$, then the null hypothesis (H_0) is rejected and the alternative hypothesis (H_a) is

accepted, which means that there is a significant influence of providing K-Pop music therapy on reducing stress levels in students. new Nursing.

Table 2. Results of *the Wilcoxon Signed-Rank Test for* Pre-Test and Post-Test Stress Levels

Changes in Stress Levels	n	Mean Rank	Sum of Ranks	Z	p-value
Negative Ranks (Decrease)	31	18.4	570.5	-4,311	0
Positive Ranks (Improvement)	4	14.88	59.5		
Ties (Fixed)	7	-	-		
Total	42				

3.2 Discussion

3.2.1 Stress Level Before And After Intervention

Student new is groups that can experience stress in facing the transition process going to education height , thing This due to face change environment learning , demands academic , pattern interaction social , as well as need For adapt self with environment new . Condition the can become source pressure psychological research (1) find that student year First show that listen music including assessed coping strategies effective For help student manage stress . Research it also shows that effectiveness listen music related with welfare student .

The height proportion stress light in study This show that part big respondents experience pressure psychological but Still is at a relative level low . Although Thus , the condition the still need get attention Because stress that is not managed can bother comfort psychology and adaptation processes students . Therefore Therefore , a management strategy is needed easy stress done and in accordance with characteristics student (4).

After giving intervention K-Pop music during six day , found change level enough stress significant . Amount respondents in the normal category increased to 30 students (71.4%), while stress light decrease to 7 students (16.7%), stress currently to 3 students (7.1%), and stress critical to 2 students (4.8%). Change the show that after follow intervention , partly big respondents experience decline level stress . This result in line with study (12) that student college high that finds that intervention music can lower score stress and anxiety after session intervention .

K-Pop music is one of the form music popular that has characteristics rhythm , melody , lyrics , and diverse arrangements . In study This , the use of K-Pop as a musical stimulus can give experience positive emotions for respondents , especially if type music the in accordance with preference listener . Effect music to stress No only determined by type music in a way general , but can also influenced by preferences individual , experience previously to music , context listening , and characteristics music used . Research (1) show that student use music as a coping strategy with characteristics different songs , so that response to music No always the same in every individual .

In a way physiological and psychological , music Work as stimulation auditory influences system nerve center . Exposure to pitch, harmony , and rhythm music stimulate activity hypothalamus For pressing expenditure Corticotropin-Releasing Factor (CRF). The obstacles in this CRF lower release Adrenocorticotropic Hormone (ACTH) by the glands pituitary gland , which in turn pressing production hormone stress like cortisol , adrenaline, and noradrenaline from adrenal glands . Decreased level cortisol and stimulation system nerve parasympathetic trigger response relaxation body , relieve tension muscles , as well as lower pressure blood and frequency pulse heart (4,12,13).

In a way psychological , listening music can be a helpful coping strategy individual divert attention from source stress , manage emotions , and provide a pleasant experience . In context study this , K-Pop can become form familiar and catchy music for student so that activity listen music potential more easy accepted as activity relaxation . Systematic review by Wong et al. (2021), which showed that intervention music potential lower stress psychological at a time several stress biomarkers . In a number of the research reviewed , decreased stress biomarkers like cortisol and α-amylase accompanied by with decline stress psychological . Although Thus , the author also emphasizes existence variation protocol intervention so that size effect music to stress No can equalized For all condition.

Change level stress in research This possibility No only related with characteristics of K-Pop as a music genre , but also with activity listen music That alone and possible suitability music with preference respondents , research Hernandez-Ruiz, (2022) about use music For lower anxiety in students also shows that music can used as one of the approach For help student face pressure psychological . Students is groups that face various pressure during the education period , so activity music can be one of the strategies that can implemented in a way practical.

Research result This in line with study previous which shows existence benefit intervention music to stress in students , among others Finnerty et al., (2023) find decline stress and anxiety in students after follow session therapy music .(1) show that listen music is one of the many coping strategies used student year First For manage stress . Results of systematic review and meta-analysisDe Witte et al., (2022) report effect currently until big from therapy music to external related stress , whereas (13,16), find that intervention music potential give change good at stress psychological as well as stress biomarkers .

Research result show that giving K-Pop music during six day followed by a decline level stress in some big respondents , which is proven with Wilcoxon test results P<0.05. K-Pop music can considered as a simple and easy non - pharmacological strategy implemented For help student in manage stress . However , research furthermore with group control , amount more samples large , duration more interventions long , and measurement based on types and preferences music required For strengthen proof about the effectiveness of K-Pop in management stress student .

3.2.2 Influence K-Pop Music Therapy For Decline Stres

Analysis results bivariate prove that therapy K-Pop music in general significant capable lower level stress student new ($p < 0{,}05$). Before intervention , no There is respondents who are at the level normal stress . However after intervention 6 days of K-Pop music respectively , as many as 71.4% of respondents succeed reach level normal stress . The results of the Wilcoxon Signed-Rank Test show Z value = -4.311 with p = 0.000 (p < 0.05). Of the 42 respondents, 31 respondents (73.8 %) experienced decline score stress , 4 respondents (9.5%) experienced improvement score stress , and 7 respondents (16.7%) did not experience changes . The results show there is significant difference between score stress before and after intervention K-Pop music . Research results This consistent with proof scientific about use music as intervention For reduce stress . Meta- analysis de Witte et al., (2022) show that intervention based music have effect currently until big to various external related stress . Analysis the includes 47 studies with 2,747 participants and found effect overall of d = 0.723 against external stress -related

In a way physiological and psychological , music Work as stimulation auditory influences system nerve center . Exposure to pitch, harmony , and rhythm music stimulate activity hypothalamus For pressing expenditure Corticotropin-Releasing Factor (CRF). The obstacles in this CRF lower release Adrenocorticotropic Hormone (ACTH) by the glands pituitary gland , which in turn pressing production hormone stress like cortisol , adrenaline, and noradrenaline from adrenal glands . Decreased level cortisol and stimulation system nerve parasympathetic trigger response relaxation body , relieve tension muscles , as well as lower pressure blood and frequency pulse heart.

Besides the mechanism neurobiological general therapy music , characteristics typical from K-Pop music provides mark plus psychological . K-Pop music in general has an energetic tempo (up-beat), cheerful melody , and combination element catchy modern pop music . The elements This stimulate release neurotransmitters dopamine and endorphins in the brain are responsible answer create feeling happy , excited , and excited.

Findings This in line with study Satriaanti Mulya et al., (2024), who found that therapy effective K-Pop music lower level stress student with mark $p = 0{,}000$. The results of this study also support studies Fajariyah & Utami, (2024), who reported The effectiveness of K-Pop music in reducing anxiety levels. Effects damper stress from this K-Pop music equivalent with effectiveness modality other music that has been Lots researched, such as therapy music classics Mozart (3,17,19).

4. CONCLUSION

K-Pop music therapy has an effect on reducing stress levels. This is evidenced by the results of the Wilcoxon Signed-rank test, with a p-value of 0.000 (< 0.05), indicating a significant decrease in stress levels between the pre-test and post-test score

REFERENCES

[1] Vidas D, Larwood JL, Nelson NL, Dingle GA. Music Listening as a Strategy for Managing COVID-19 Stress in First-Year University Students. Front Psychol. 2021 Apr 1;12. doi:10.3389/fpsyg.2021.647065

[2] Psimawa J, Djuwita L, Rosandi FH. Dinamika Psikologis Pada Remaja Perempuan Penggemar K-Pop [Internet]. Vol. 6. 2023;6(1):25–30. Available from: http://jurnal.uts.ac.id/index.php/PSIMAWA

[3] Adetya Winarno S, Sapto Pramono J, Palin Y, Terapan S, Kesehatan P, Kemenkes P, et al. Pengaruh Mendengarkan Musik Pop Terhadap Variasi Tingkat Stres Pada Mahasiswa D-Iii Tingkat Akhir. JURNAL KESEHATAN TAMBUSAI. 2024 Dec;5(4):11854–63.

[4] Kurniawan R, Fajriani Barokah R, Supriadi B., Nurmiaty, Sumiaty, Khotimah SK, et al. Pengaruh musik Korea pop terhadap tingkat stress pada mahasiswa tingkat akhir. JURNAL KEPERAWATAN TROPIS PAPUA. 2025 Dec 27;8(2):113–7. doi:10.47539/jktp.v8i2.463

[5] Clarista O, Jesslyn F, Sary P N, Irvan Dwi Putra A. Hubungan Antara Konsumsi Konten K-Pop dengan Tingkat Stres Akademik pada Mahasiswa Fakultas Psikologi. Kaganga:Jurnal Pendidikan Sejarah dan Riset Sosial Humaniora. 2025 Jun 30;8(3):378–92. doi:10.31539/kaganga.v8i3.15924

[6] Rizky Novanda S, Pratikto H, Aristawati AR. Subjective well-being pada penggemar k-pop dewasa awal : Bagaimana kecenderungan coping stress berperan? Sukma : Jurnal Penelitian Psikologi. 2024 Dec;5(02):302–9. doi:DOI:10.30996/sukma.v2i5.10395.

[7] Thompson SH. The Sounds Of Coping: Listening To Music As A Coping Mechanism For College Students [Thesis]. [Pennsylvania, Amerika]: THE PENNSYLVANIA STATE UNIVERSITY; 2010.

[8] R. LS. K-Pop as a Stress-Relief Mechanism Exploring Its Emotional Impact on Filipino Youth. Journal of Research in Social Science and Humanities. 2024 Dec;3(12):1–10. doi:10.56397/jrssh.2024.12.01

[9] Dewi TN, Nurudin. Perilaku Komunikasi Komunitas Kpopers Palangka Raya dalam Loyalitas pada Idola. Jurnal Komunikasi Nusantara. 2022 Jun 15;4(1):78–88. doi:10.33366/jkn.v4i1.97

[10] Sri Yenti N, Mairiza N, Anggraini N, Febriani E, Fadilla P. Dampak Budaya Korea Pop (K-Pop) Terhadap Tingkat Motivasi Belajar Mahasiswa Universitas Negeri Padang. Enggang: Jurnal Pendidikan, Bahasa, Sastra, Seni, dan Budaya. 2022 Jun;2(2):2746–7708.

[11] Citra, Ratna Yunita Setiyani Subardjo. Kontrol Diri Perempuan Dewasa Awal Penggemar K-Pop Terhadap Perilaku Celebrity Worship. Da'watuna: Journal of Communication and Islamic Broadcasting. 2024 Dec 1;4(6):1992–2000. doi:10.47467/dawatuna.v4i6.4745

[12] Finnerty R, McWeeny S, Trainor L. Online group music therapy: proactive management of undergraduate students' stress and anxiety. Front Psychiatry. 2023;14. doi:10.3389/fpsyt.2023.1183311

[13] Wong MM, Tahir T, Wong MM, Baron A, Finnerty R. Biomarkers of Stress in Music Interventions: A Systematic Review. Journal of Music Therapy. American Music Therapy Association; 2021. p. 241–77. doi:10.1093/jmt/thab003 PubMed PMID: 33822108.

[14] Hernandez-Ruiz E. Music to decrease anxiety in college students during the COVID-19 pandemic. Arts in Psychotherapy. 2022 Sep 1;80. doi:10.1016/j.aip.2022.101953

[15] de Witte M, Pinho A da S, Stams GJ, Moonen X, Bos AER, van Hooren S. Music therapy for stress reduction: a systematic review and meta-analysis. Health Psychol Rev. 2022;16(1):134–59. doi:10.1080/17437199.2020.1846580 PubMed PMID: 33176590.

[16] Cheng WLS, Wong LLK. Effects of a group-based music imagery program on promoting coping resources among undergraduate students: a pilot randomized controlled trial. Front Psychol. 2023;14. doi:10.3389/fpsyg.2023.1257863

[17] Satriaanti Mulya T, Rahayu C, Kesehatan Gigi Poltekkes Kemenkes Tasikmalaya J. Pengaruh Musik Indonesia Pop Dan Korea Pop Terhadap Tingkat Kecemasan Remaja Pada Pemeriksaan Gigi Di Smp Negeri 9 Kota Tasikmalaya. Jurnal Ilmiah Keperawatan Gigi (JIKG) [Internet]. 2024;5. Available from: https://ejurnal2.poltekkestasikmalaya.ac.id/index.php/jikg/index

[18] Fajariyah N, Utami LT. Efektivitas Terapi Musik K-Pop Terhadap Penurunan Tingkat Kecemasan Sebelum Pertunjukan Pada Dancer Remaja di Yapemri Depok. Malahayati Nursing Journal. 2024 Mar 1;6(3):1051–64. doi:10.33024/mnj.v6i3.11129

[19] Maharani MA, Palin Y, TonapaEmelia. Pengaruh Media Musik Klasik terhadap Tingkat Stres pada Mahasiswa Tingkat Akhir Jurusan Promkes Poltekkes Kaltim. SehatRakyat(jurnal kesehatan masyarakat. 2025 Nov 15;4(4):1065–74. doi:DOI:10.54259/sehatrakyat.v4i4.5743