

MENTAL HEALTH EFFECTS OF DANCE TO UNDERGRADUATE STUDENTS: A PRELIMINARY SURVEY-COMPARATIVE ANALYSIS

Frendy Aru Fantiro¹, Setiya Yunus Saputra¹, Bustanol Arifin¹, Laura Salsabilla¹, Innany Mukhlisina¹, Abdurrohman Muzakki^{*1}, Jon Kristoffer Deguma², Elishama Jephphunee Isogon³, Sherina Dimo⁴, Arvin Andacao⁵, Leonard Sydrick Pajo⁶, Karuppasamy Govindasamy⁷, Edi Setiawan⁸, Joseph Lobo⁹, Jasvir Ram¹⁰

¹Faculty of Teacher Training and Education, Universitas Muhammadiyah Malang, Indonesia; ²West Visayas State University, Philippines; ³Guimaras State University, Philippines; ⁴West Visayas State University-Lambunao Campus, Philippines; ⁵Davao Oriental State University, Philippines; ⁶Davao Oriental State University, Philippines; ⁷Department of Physical Education and Sports Sciences, College of Science and Humanities, SRM Institute of Science and Technology, Tamilnadu, India; ⁸Faculty of Teacher Training and Education, Universitas Suryakencana, Indonesia; ⁹College of Sports Exercise and Recreation, Bulacan State University, Philippines; ¹⁰Professor Gursewak Singh Government College of Physical Education Patiala, Punjab, India

Abstract

This present study described the effect of dance and its various genres on students' mental health from a sample of 83 undergraduate students specializing in Performing Arts at selected local college in the Philippines. The researcher-made questionnaire "Mental Effect of Dance Questionnaire" was utilized via online survey to gather data from the respondents. Descriptive and inferential statistical analyses were used to describe the effect of dance and its various genres to students' mental health. Furthermore, Independent Samples T-Test, Mann-Whitney U, and Kruskal-Wallis H were performed to determine the significant difference between groups concerning the cognitive effect of dance and its genre with respect to gender and year level. Based on this preliminary survey, it was found that dance and its various genres positively affects students' mental health. On the one hand, no significant difference was observed between groups, specifically gender and year level, in terms of the mental effect of dance. In this regard, it can be inferred that students' perceived dance to have a great benefit on their mental health. Implications of the study, recommendations, and future research endeavors to support or repudiate the claims of this study are hereby presented.

Keywords: Dance. Dance genre. Mental health. Performing arts. Dance therapy

Introduction

The global spread of the coronavirus has resulted in significant disruptions, including economic downturns in several nations, widespread unemployment, and a considerable loss of life within a relatively little timeframe

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*Corresponding Author: Abdurrohman Muzakki, Faculty of Teacher Training and Education, Universitas Muhammadiyah Malang, Indonesia

Correo-e: muzakki@umm.ac.id

(Bickley et al., 2021; Pak et al., 2020). This condition is already enough to make people depressed and worry the world will become chaos. In light of the on-going pandemic produced by the novel coronavirus, COVID-19, numerous aspects of society have undergone significant transformations. One such area is to the mental well-being of individuals, which has the potential to exert a profound influence on their day-to-day functioning (Baumann et al., 2021; Vajpeyi Misra et al., 2022). Mental health is a fundamental component of human well-being, encompassing several dimensions such as emotional states, cognitive processes, and behavioral patterns (Galderisi et al., 2015; Gross et al., 2019).

Amidst the on-going pandemic, a growing number of individuals are experiencing heightened levels of stress and a sense of hopelessness regarding the potential restoration of pre-pandemic conditions. According to Wang et al. (2021), the mental health of individuals might be adversely affected by self-isolation and quarantine. Particularly in cases when it entails the deprivation of personal liberty, the propensity for others to become easily disinterested, the separation from significant individuals, and the potential for confusion leading to a decline in an individual's mental well-being. The objective of this study is to investigate the potential of dance as a means to maintain mental well-being, stability, and overall health throughout the challenging circumstances of a pandemic. The study seeks to understand the impact of dance on individuals' mental fitness and explore how it contributes to their psychological resilience. This research study has the potential to uncover and implement numerous insights that can significantly impact individuals' lives, particularly in addressing the prevailing challenges faced by society.

According to Meo et al. (2020), a pandemic is an event that has significant impacts on both individuals and society, leading to many negative consequences such as stress, disturbance, and worry. The pandemic has a significant impact on individuals' behavior as members of society. This is mostly due to the implementation of measures such as lockdowns, social distancing, isolation, and the closure of educational institutions and workplaces (Javed et al., 2020). This is a response to the global health problem that has been addressed by international and government health organizations (Al Dhaheri et al., 2021). In this particular scenario, it is indisputable that the psychological well-being of an individual is impacted. The current global pandemic has provided a clear illustration of the consequences of economic upheaval on both professional and health-related stress. The impact of the virus on individuals' mental well-being is unparalleled in light of these circumstances, necessitating healthcare practitioners' awareness of the ways in which COVID has influenced the lives of

its patients. The aforementioned situation is causing concern not only among individuals seeking medical care and healthcare practitioners, but also within the academic community, particularly among students. According to Son et al. (2020), a majority of the student population, specifically 138 out of 195 students (71%), reported experiencing heightened levels of stress and anxiety as a result of the COVID-19 pandemic. The stressors that were identified as contributing to heightened levels of stress, anxiety, and depressed ideation among students were documented by Son et al. Some common concerns experienced by individuals during times of stress include anxieties related to personal health and the well-being of their loved ones, challenges in maintaining focus and concentration, disturbances in sleep patterns, and heightened apprehension regarding scholastic achievements.

The objective of this research study is to investigate the psychological resilience of Bachelor of Performing Arts (BPFA) students at a local college in the Philippines in response to the current pandemic scenario, utilizing dance therapy as a means of mental coping. The practice of dance has been found to have positive effects on mental health, since it has the potential to alleviate symptoms of stress, anxiety, and sadness. Engaging in dance as a major therapeutic modality has the potential to enhance and ameliorate the mental well-being of pupils by fostering motivation and active participation. Engaging in the practice of dancing can facilitate social connections among students, enhance their emotional well-being, and foster increased participation in physical exercise. Dance serves as a means of interpersonal interaction in face-to-face social contexts. Regardless of whether an interaction is virtual or in-person, it is imperative to adhere to social distance guidelines consistently. The act of establishing connections with others is preferable to solitude, since it allows individuals to engage in collective contemplation of aesthetically pleasing concepts such as the choreography of a dance routine. This stands in contrast to the isolating experience of grappling with the profound impact that the global epidemic has had on both society and individuals.

The primary objective of this research project is to demonstrate the potential impact of Dance on individuals' mental health, hence highlighting its significance for students. It has the potential to facilitate cognitive healing and promote a shift towards a more optimistic perspective on the given circumstances. Dance has been recognized as a potentially effective therapeutic intervention for students experiencing symptoms of depression and anxiety. Engaging in dance cultivates a state of mental relaxation, enabling individuals to effectively convey their feelings. This is attributed to the fact that dance serves as a medium through which the body communicates and expresses meaning that

verbal communication may not adequately convey. Hence, the researchers want to undertake this study in order to substantiate the efficacy of Dance as a therapeutic intervention for enhancing mental well-being.

Review of Related Literature

Dance movement therapy (DMT) and dance have demonstrated efficacy in reducing clinical symptoms such as sadness and anxiety. Additionally, these therapeutic modalities have been found to enhance the overall quality of life for patients. Additionally, it was observed that positive impacts have the potential to enhance and augment subjective well-being, body image, affect, and pleasant mood. According to Douka et al. (2019), dance encompasses bodily motions, interactions, expressions, and steps. Human resource is a concept that is acquired through cultural learning. The probable results of it are primarily functional. The concept encompasses an individual's physical and emotional well-being, as well as their capacity to engage in regular social interactions. According to this notion, dancing has the potential to serve as a nursing intervention.

Moreover, it has been demonstrated that dance possesses both psychological and physical advantages. Dance has the potential to provide an alternative means of improving mood, particularly for individuals engaging in home-based exercise. In addition to more conventional therapeutic approaches, mental health professionals may also explore dance as a potential intervention for mental health, as well as a form of social prescription intervention (McKenzie et al., 2021). Amidst the global pandemic, dance productions curated by choreographers were presented via digital platforms (Yanuartuti & Handayani, 2020). Furthermore, dancers were dependent on utilizing moves influenced by media within the confines of their household's limited area. The media is a novel platform that facilitates the enhancement of performance or dance. This article examines the impact of engaging in dance activities amidst the ongoing pandemic. The impact of dance movements was examined by Kiepe et al. (2012). Ballroom dance has been identified as a therapeutic modality that can benefit those who are affected by various health conditions such as cancer, heart failure, type 2 diabetes, dementia, Parkinson's syndrome, fibromyalgia, and depression. The present study demonstrates that dance therapy yields positive outcomes for individuals diagnosed with breast cancer, specifically in terms of enhancing their overall quality of life and alleviating symptoms of despair. According to Kiepe et al., dance has both physical and psychological effects.

The utilization of dance movement therapy effectively demonstrated the correlation between the enhancement of the client's overall quality of life, the alleviation of stress, the development of coping mechanisms, and the application of psychodynamic-oriented dance movement therapy. Individuals who engaged in dance improvisation and spatial synchronization, as well as those who had concentrated treatment sessions, demonstrated enhanced everyday functioning and reduced levels of anxiety and despair. The findings suggest a positive correlation between dance movement therapy and enhanced well-being. Further investigation is warranted to ascertain the efficacy of DMTs (Bräuninger, 2014).

The concept of life was perceived as a form of artistic expression like a dance. Certain individuals possess innate abilities when it comes to the art of dance. Nevertheless, irrespective of life's challenges, dance therapy is a practice that can provide various advantages. Dance therapy has gained significant popularity and has been found to be effective in addressing some issues. It has the potential to assist individuals in addressing a range of challenges related to physical, cognitive, social, and other aspects of their lives. From a physiological standpoint, engaging in dance has been found to stimulate the release of endogenous pain-relieving substances within the brain. There is a positive correlation between physical activity and weight loss, whereby increased movement is associated with a greater likelihood of losing weight. Engaging in physical activities such as dancing and exercising has been shown to have positive effects on heart health and contribute to overall physical fitness. Mental exercise has been found to have the potential to alleviate symptoms of depression and anxiety, while also serving as a beneficial kind of distraction. According to Christensen et al. (2016), engaging in dance as a hobby has the potential to assist individuals in overcoming traumatic experiences.

In a study undertaken by Sivvas et al. (2015), the objective was to investigate the potential benefits of various forms of dance on human health. The term "health" encompasses the holistic well-being of individuals, encompassing their mental, physical, and social dimensions. Previous research studies were identified through a comprehensive literature analysis conducted over the past decade in order to collect relevant data. The aforementioned research encompasses various forms of dance and its impact on the physical well-being of dancers. This study involves the examination of the relationship between health and individuals afflicted with various disorders. The disorders encompassed in this study are breast cancer, obesity, osteoporosis, hearing loss, and depression. Based on the findings of the conducted studies, it can be inferred that Dance has a significant role in enhancing and maintaining human

health in several aspects. The practice of maintaining a suitable physical state and prioritizing health is associated with decreasing the negative effects of depression and stress.

According to a study conducted by Millman et al. (2021), Dance Movement Therapy (DMT) has been acknowledged and employed as a therapeutic intervention. The primary emphasis of this study is on the holistic aspects of health, encompassing both physical and psychological well-being, particularly in persons who are affected by physical, medical, or neurological conditions. The present study reached a conclusion by situating the administration of DMT within the framework of current cognitive neuroscience research and examining putative mechanisms by which DMT may alleviate psychiatric symptoms. DMT exhibits evident potential as a therapeutic intervention for the aforementioned condition. Therefore, additional investigation about this subject is justified.

In accordance with this, a multitude of studies have been undertaken on various industries and demographics on a global scale. The objective of this study is to investigate the potential of dancing as a therapeutic intervention for college students who are facing mental health challenges within the context of a local city college. Therefore, it is imperative that additional research be undertaken.

Methods and Materials

Research Design

The objective of this survey-comparative study is to provide a description of the impact of dance, in its various forms, on the mental well-being of students enrolled in the Bachelor of Performing Arts (BPeA) program at a college located in the Philippines.

Respondents and Sampling Technique

The sample approach employed in this study is purposive sampling. The researchers established inclusion and exclusion criteria in order to maintain the integrity and reliability of the data utilized in the study. It is imperative that all participants adhere to the following criteria

1. Students enrolled in the Bachelor of Performing Arts program
2. 1st-4th year
3. Age should be 18 years old and above, and
4. Either male or female

Participants who do not meet the criteria established by the researchers will be deemed ineligible to participate in the study. The Raosoft Sample Size Calculator was utilized to ascertain the desired sample size of participants with a significant degree of precision. The current population of students enrolled in the Bachelor of Performing Arts program is 111. The desired sample size for the study is 83, with a margin of error of 5% and a confidence level of 95%.

Instrument

The questionnaire included in the study was developed and constructed by the researchers. The objective of the tool is to ascertain the diverse perspectives of respondents regarding the psychological impacts of Dance. The questionnaire utilized in this study is referred to as the "Mental Effect of Dance Questionnaire (MEDQ)." It consists of a total of 22 items, which are further separated into two distinct categories: Mental Effects of Dance and Effects of Different Genres. The participants' responses are subsequently captured using a 4-point Likert scale, which spans from 1 (Not at all) to 4 (Always). The questionnaire that was developed was subjected to pilot testing on a sample of 50 individuals who were not majoring in BPeA. The reliability of the questionnaire was assessed using Cronbach's Alpha coefficient, resulting in a value of .975 for the Mental effects of Dance construct, with a mean score of 51.68. Similarly, the Effects of the diverse genre construct yielded a Cronbach's Alpha coefficient of .946, with a mean score of 16.58. The internal consistencies of all categories exhibit excellent levels, with values exceeding 0.9. Hence, the tool is suitable for the implementation of the study.

Statistical analysis

Descriptive and inferential analysis was employed to examine the data. The demographic profile of the respondent was described using frequency (f) and percentage (%). The mean (M) and standard deviation (SD) were utilized to quantify and characterize the magnitude of the cognitive impact of dance, as well as its various genres. Furthermore, in order to enhance the comprehension of the examined data, scholars have employed a point-scale methodology to elucidate each individual response pertaining to the impact of dance and its many genres on the mental well-being of students. This information is presented in [Table 1](#).

The researchers conducted a normality test in order to determine the suitable

Table 1. Descriptive Interpretation and Definition.

Weighted mean range values	Interpretation/Definition
3.26 – 4.00	Very high
2.51 – 3.25	Moderately high
1.76 – 2.50	Low
1.00 – 1.75	Very low

Table 2. Normality test using Kolmogorov-Smirnov and Shapiro-Wilk.

		df	Kolmogorov-Smirnov	p-value	Shapiro-Wilk	p-value
			Statistics		Statistics	
Mental Effect of Dance	Gender					
	Male	41	0.139	<.05	0.882	<.05
	Female	42	0.123	0.114	0.948	0.054
	Year level					
	1 st	34	0.065	.200*	0.978	0.703
	2 nd	32	0.303	<.05	0.874	<.05
	4 th	17	0.148	.200*	0.917	0.13
Effect of Different Genres	Gender					
	Male	41	0.143	<.05	0.914	<.05
	Female	42	0.181	<.05	0.951	0.072
	Year level					
	1 st	34	0.109	.200*	0.916	<.05
	2 nd	32	0.137	0.134	0.933	<.05
	4 th	17	0.235	<.05	0.871	<.05

statistical test for comparing the impacts of dance and its genre with respect to gender and year level. The findings of the Kolmogorov-Smirnov and Shapiro-Wilk tests were shown in Table 2. The analysis revealed that the p-value for the impact of dancing on mental well-being among both males and girls above the threshold of significance (>.05), indicating that the data conforms to a normal distribution. Therefore, it is appropriate to use a parametric test for this particular dataset. Based on the year level criterion, the p-value is found to be <.05, hence indicating statistical significance. Consequently, it is appropriate to employ a non-parametric test in this context. The p-value for the impact of dance genres on gender and year level is <.05, indicating statistical significance. Therefore, a non-parametric test is considered appropriate for analyzing these data sets. The study employed Independent Sample T-test and Kruskal-Wallis H analysis to assess the statistical significance of differences between groups in terms of the mental impact of dancing, specifically in relation to gender and year level. Finally, the Mann-Whitney U analysis was employed to examine the disparity between groups in terms of the influence of dance genres on gender, while the Kruskal-Wallis H test was utilized to assess the relationship between gender and dance genres **Table 2.**

Results

In order to conduct an analysis of the results derived from the collected data, the statistical software IBM SPSS 26 was utilized. A total of 83 students pursuing a Bachelor of Performing Arts degree in a designated city college in the Philippines responded to the researcher-made survey known as the MEDQ.

Table 3 presents the demographic distribution of the respondents in terms of gender and academic year. A total of 83 respondents, who were students specializing in Performing Arts, participated in this survey spanning from their first to fourth year of study. In the transition from the first year to the fourth year, the gender distribution among students is as follows: 49.4% (n= 41) are male, while 50.6% (n= 42) are female. The study included a total of 83 participants, with 34 individuals representing the first-year cohort, accounting for 41.0% of the sample. The second-year students comprised 32 responders, making up 38.6% of the total participants. Finally, among the fourth-year students (n=17), this corresponds to a proportion of 20.5% **Table 3.**

Mental Effect of Dance

Furthermore, majority of the students indicated a sense of vitality in dance (M = 3.19, SD = .861), as well as a perceived enhancement of their self-assurance (M = 3.18, SD = .925), both of which align with relatively high levels. In addition, the activity of dancing has been found to contribute to the enhancement of individuals' self-image (M = 3.17, SD = .808) and the promotion of their alertness (M = 3.17, SD = .762), both of which are indicative of relatively high

Table 3. Demographic distribution of the respondents.

Variable	Items	N (%)
Gender	Male	41(49.4%)
	Female	42(50.6%)
Year level	1st year	34(41.0%)
	2nd year	32(38.6%)
	4th year	17(20.5%)

levels. According to a subset of individuals, it has been suggested that the intervention effectively alleviates concerns, with a mean score of 3.02 and a standard deviation of .840, indicating a reasonably high level of effectiveness. In summary, the collective weighted mean pertaining to the mental impacts of dancing was determined to be moderately high, (M = 3.10, SD = .715). The majority of students employed dancing as a means of intervention for their mental well-being. The study conducted by Humphries and Basso (2022) examined the impact of online dancing on mental health. The findings indicated a significant improvement in mental well-being, as seen by heightened positive affect and self-esteem, as well as reduced negative affect and depression. The act of engaging in dance has the potential to enhance an individual's self-assurance, imbue them with a sense of vitality, and alleviate any prevailing concerns or anxieties. Moreover, dancing enhances individuals' awareness and fosters the development of their self-image. According to Douka et al. (2019), dance encompasses several elements such as bodily motions, interactions, expressions, and specific sequences of steps. The potential results of it are expected to be practical or effective. The concept encompasses an individual's physical and emotional well-being, as well as their ability to engage in cooperative interactions with others in their everyday activities.

Dance genres and its effect to mental health

The many dance genres have a positive impact on students enrolled in the BPeA program. Among the six items/statements provided, it is observed that a majority of students tend to experience an increase in energy levels through engagement in Hip-Hop Dance (M = 3.24, SD = .918). Additionally, participation in Contemporary Dance is shown to positively impact their mood, (M = 2.96, SD = .787), indicating a moderately strong effect. A limited number of participants said that engaging in jazz dance has a positive impact on their stress reduction (M = 2.81, SD = .833). In summary, the collective weighted mean pertaining to the impacts of various genres was determined to be moderately high (M = 2.93, SD = .677). Based on the data collected, it can be observed that a significant majority of students in the Performing Arts program exhibit a strong inclination towards dance. Based on the findings, a majority of students enhance their energy levels through engagement in Hip-Hop dance, but a subset of students experience an uplift in their emotional state by participating in Contemporary Dance. Finally, engaging in jazz dance has the potential to assist students in alleviating their stress levels. This finding demonstrates that regardless of the specific dance type favored by participants, it remains a viable and effective strategy for coping with various challenges or stressors. In reference to the study conducted by Bräuningner (2014), it was shown that dance movement therapy exhibited a correlation between the enhancement of the client's quality of life, decreased levels of stress, effective coping mechanisms, and the implementation of psychodynamic-oriented dance movement therapy. Furthermore, the findings of the study conducted by Koch et al. (2019) indicate that the administration of DMT is associated with a reduction in symptoms of depression and anxiety, as well as an improvement in overall quality of life, interpersonal abilities, and cognitive functioning. Conversely, dance therapies have been found to enhance (psycho-) motor skills.

Mental effect of dance in terms of gender and year level

Following the completion of the Independent T-Test analysis, it was determined that there was no statistically significant difference seen between the groups (t(83) = 1.237, p = .220). The Kruskal-Wallis H analysis revealed that there was no statistically significant difference seen between the groups (H(2) = .872, p = .647) in relation to year level. No prior investigations were identified pertaining to the findings of this study. The outcomes of this study remain inconclusive, and conducting a similar investigation will serve to corroborate or challenge these results.

Effect of dance genres in terms of gender and year level

Following the Mann-Whitney U analysis, it was determined that there was no statistically significant difference between the groups in relation to gender (U = 715,000, p = .182). The results of the Kruskal-Wallis H analysis indicated that there were no statistically significant differences between groups in terms of year level (H(2) = 2.113, p = .348). However, a comprehensive review of existing literature revealed a dearth of prior studies pertaining to the variables employed in this research. This study strongly recommends the implementation of a comparable investigation encompassing the identical

factors in order to corroborate or challenge the conclusions produced from this research.

Conclusion

The researchers have reached the conclusion that dance can be considered a useful coping method for Performing Arts students in relation to mental health issues. This is evidenced by the observation that engaging in dance led to increased energy levels, a heightened sense of vitality, improved attention, and enhanced satisfaction among the participants. Moreover, engaging in dance has the potential to positively influence the mental well-being of students, aiding them in overcoming personal challenges. Additionally, it was observed that various dance styles have distinct impacts on students enrolled in the Bachelor of Performing Arts program. Certain dances have the potential to assist students in alleviating stress, while others may enhance their mood and improve focus. Additionally, engaging in dance might serve as a means for certain students to increase their energy levels. This implies that dance holds a substantial significance in the lives of students pursuing Performing Arts. Additionally, the findings of this study indicate that there is no statistically significant disparity in the mental impact of dance and its genre based on gender and year level. This interpretation suggests that the groups are in consensus regarding the beneficial effects of dancing and its genre on their mental well-being. Furthermore, it is recommended to undertake a comparable investigation using the identical factors in order to ascertain whether the outcomes would corroborate or refute the conclusions acquired from the present study.

The implication of the study suggests that engagement in dance has a positive impact on the mental well-being of students in the Performing Arts discipline. Dance has been found to have a good impact on individuals' lives by alleviating concerns, enhancing self-assurance and contentment, fostering self-perception, and serving as a means of stress reduction. This observation suggests that dance has the potential to facilitate students' mental processes. The researchers additionally determined that dance not only encompasses physical growth but also exerts a positive impact on the mental well-being of students enrolled in the Bachelor of Performing Arts program.

The present research investigation elucidated the efficacy of dance as a therapeutic intervention for enhancing the mental well-being of students pursuing a Bachelor of Performing Arts (BPeA) degree. Hence, the subsequent recommendations are derived from the aforementioned findings. (1) Given the demonstrated efficacy of dance, it is imperative that educators possessing expertise in the field of dance undertake the responsibility of instructing their students and providing them with ample opportunities for growth. This will facilitate the students' personal development and enhance their comprehension of the art of dance, thereby equipping them with the necessary skills for their prospective careers, particularly as aspiring performers. (2) It is incumbent upon professionals and choreographers to expound upon the various genres of dance, thereby augmenting students' understanding and familiarity with these distinct forms of artistic expression. Professionals have the ability to disseminate their knowledge by organizing events or programs such as seminars, webinars, and performances to elucidate the physical and mental impact on students, ultimately. A potential avenue for further research involves doing a comparative study including the entire school or a bigger cohort of individuals. This study aims to elucidate if the observed findings are consistent across different contexts, particularly among other educational institutions that provide Bachelor of Performing Arts programs. It is strongly advised to conduct additional research.

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