

Research Article: Art

Dance and Its Effect on the Mental Health of Performing Arts Students

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Abstract: This study is aimed to describe dance's effect and its different forms on mental health. The respondents of this study are students taking Bachelor of Performing Arts at City College of Angeles. The Mental Effect of Dance Questionnaire was utilized to gather data through an online survey. The said questionnaire has undergone pilot testing $\alpha = .975$ and $.946$, which confirms that the instrument can be utilized. Descriptive analyses were used to describe the effects of dance and its different forms on mental health. Independent T-Test Analysis, Mann-Whitney U, and Kruskal-Wallis H analyses were utilized to determine the difference between groups in the cognitive effect of the dance and its genre regarding gender and year level. After data were obtained from 83 students, the results showed that dance positively affects their mental health. On the other hand, there was no significant difference between groups regarding gender and year level regarding the mental effect of the dance and its genres. Results found that most BPeA students answered that dance has a good impact and benefits them, especially in their mental health. From the results obtained, this study suggests providing different seminars and exposures for the students to gain knowledge about the benefits of dance based on various dance forms to students' mental health. These findings provide new information to students and professionals interested in researching dance and mental health. Further investigation is also recommended to support this research study.

Keywords: Dance, Genre, Mental Health, Performing Arts.



1. Introduction

The coronavirus has already spread globally; it has brought everything out of order wherein different countries went into economic collapse, many people became jobless and even killed millions of people in a short period. This situation is already enough to make people depressed and think the world will become chaotic. Amid the pandemic caused by this virus, COVID-19, many things have been changed, including the mental health of people that may affect their daily lives. Mental health is one of the critical aspects of humans; it involves emotions, thinking capability, and behavior.

During the pandemic, more people feel stressed and hopeless that the situation might not return to normal, mainly what it used to be. Self-isolation and quarantine can also negatively impact an individual's mental health [1]. Especially when it involves loss of freedom, other people getting easily bored, separation of essential people, and confusion that can cause deterioration in an individual's mental health status. This study aims to know how people can still be mentally good, stable, and healthy through dancing and how it affects and help them to be mentally fit even in the middle of a pandemic. This research study can discover and apply many things to people's lives, especially how to overcome this situation where everyone is struggling.

As mentioned by Meo et.al [2], a pandemic is a phenomenon; individuals and society are affected by it; it causes stress, disruption, and anxiety. The individual's behavior as a society member will also be affected by this pandemic because the transmission of COVID-19 causes lockdowns in every place, social distancing, isolation, and closure of educational institutes and workplaces [3] [4]. This is in response to this global health crisis implemented by international and government health organizations [5]. In this case, the mental health of an individual is undoubtedly affected. During this pandemic, we can see the impact of economic disruption on professional and health-related stress. The effects of the virus on mental health are unprecedented due to these kinds of situations, and healthcare professionals must be aware of how COVID has impacted the lives of their patients. This is alarming not only to patients and health professionals but also to those in the academe, especially students. Of the 195 students, 138 (71%) indicated increased stress and anxiety due to the COVID-19 outbreak [6]. Identified stressors that contributed to increased stress, anxiety, and depressive thoughts among students [6]. These include worrying about their health and loved ones, difficulty concentrating, sleeping pattern disruptions, and increased concern for academic performance [7].

This research study aims to determine how Bachelor of Performing Arts (BPeA) students in City College of Angeles can mentally overcome the present situation, which is the cause of this pandemic, through dance therapy. Dance benefits mental health; it can reduce stress, anxiety, and depression. It may help students to be motivated enough to perform and involve dancing as their primary therapy that can heal and improve their mental health. Dancing will help students connect to others, make them happier, and engage more in this physical activity. Dance can be used as a way of socializing with others in person. It doesn't matter if it is virtual, considering social distancing should still be practiced every time. Being connected to others is better than being alone; it gives them more time to think about beautiful things together, on what kind of Dance they will perform, rather than feeling alone about what this pandemic did to the world and people.

This research study's importance is to show the students that Dance can also make a change in a person's life, specifically to their mental health. It can heal people's thinking and make them think more about the positive side of the situation. Dance can also be the best medicine for students who suffer from anxiety and depression. It makes their mind more relaxed, and they can express their emotions because, in Dance, the body is the one that speaks and give meaning that the mouth cannot show. Therefore, the researchers would like to conduct this study to prove that Dance as therapy is veritably effective in healing one's mental health.

2. Literature Review

Dance movement therapy (DMT) and Dance are effective, especially for decreasing clinical symptoms like depression and anxiety; on the other hand, DMT and Dance are good and effective for increasing the life quality of patients. Positive impacts were also found to improve and increase subjective well-being, body image, affect, and positive mood. A dance implies body movements, interactions, expressions, and steps [8]. It is a human resource learned from the culture. The outcomes of it are most likely functional. It includes the person's physical and emotional health, well-being, and capability to cooperate with others daily. Based on this concept, dance can also be a nursing intervention.

Dance has been shown to have psychological and physical benefits. Dance may offer a different way to enhance mood, specifically those exercising at home. Mental health experts can also consider the Dance as a mental health intervention in addition to more traditional therapeutic approaches and as a social prescription intervention [9]. During the pandemic, dance works that choreographers produced were performed through digital media [10]. Also, dancers relied on media movements with limited space around the house. Media is a new medium to support performance or Dance. This paper discusses the effect of creating Dance during the pandemic tested the impact of dance movements [11]. Ballroom dance is a therapeutic medium for people with cancer, heart failure, type 2 diabetes, dementia, Parkinson's syndrome, fibromyalgia, and depression. This study showed that dance therapy has a good effect on patients with breast cancer, improving quality of life and relieving depression. Kiepe et al. add that Dance has a physical and psychological impact.

Dance movement therapy illustrated the relationship between the client's improvement of life's quality, reduction of stress, coping, and psychodynamic-oriented DMT. A person that performed dance improvisation and spatial synchrony and those who received focused treatment sessions exhibited improved daily life and decreased anxiety and depression. It only shows that the results indicate that dance movement therapy is associated with improving well-being. Other DMTs should be investigated further to demonstrate its effectiveness [12].

Life itself was considered a dance. Some people are talented in terms of dancing. However, regardless of dealing with life, dance therapy is one thing that can have some benefits. Dance therapy is viral, and it can cure some problems. It can help people with physical, cognitive, social, and other issues in life. Physically, dancing can help by releasing natural painkillers in one's brain. The more the person moves, the higher the possibility of losing weight. It can improve heart health, and dancing and exercising can make a person physically fit. Mentally, exercise can help reduce depression and anxiety; it also provides distraction in a good way. Dance, a hobby, can help people overcome their trauma [13]. A study to check whether any form of Dance can be an asset for improving human health. "Health" describes each individual's mental, physical, and social well-being [14]. Studies were already found with the help of a literature review for the last decade used to gather data. These studies deal with all kinds of Dance and their effects on a dancer's health. In this research, health and people who suffer various diseases are involved. These diseases included breast cancer, obesity, osteoporosis, hearing loss, and depression. From the results of the studies, it was concluded that Dance helps in many ways to improve and preserve human health. It maintains the physical state at a reasonable level and concerns health by minimizing depression and stress.

A study stated that Dance movement therapy (DMT) had been recognized and used as a treatment. It focuses on physical and psychological well-being in individuals with physical, medical, or neurological illnesses [15]. It was concluded by placing DMT within the context of contemporary cognitive neuroscience research and discussing potential mechanisms by which DMT can reduce psychiatric symptoms. DMT has clear potential as a treatment for that symptom. Thus, further research on this topic is warranted. In line with this, numerous studies have been conducted internationally on different sectors and populations. Additionally, the researchers would like to determine if dance can serve as a therapy for students experiencing mental health issues in a local city college setting. Thus, further investigation should be conducted.

3. Methodology

3.1. Research Design

This quantitative-descriptive study aims to describe the mental effect of the dance and its different forms on the mental health of students taking Bachelor of Performing Arts (BPeA) at City College of Angeles.

3.2. Respondents

The sampling technique used for this study is purposive sampling. It is a non-probability procedure where participants are being chosen for the study because of their qualities highly fitted for the study [16]. Selection criteria were set to ensure the validity of the data used in the study. All participants should be:

1. Students who are taking Bachelor of Performing Arts course
2. 1st-4th year level
3. Shall be within the age range of 18-50 years old
4. Either male or female

Participants who have not satisfied the criteria set by the researchers will automatically be ineligible to partake in the study. Raosoft Sample Size Calculator was used to determine the target sample size of respondents with a high level of accuracy. The total population of students taking Bachelor of Performing Arts is 111, and the target sample size is 83, with a 5% margin of error and 95% confidence level.

3.3. Research Instrument

The researchers formulated and created the questionnaire that was used in the study. The instrument aims to know respondents' different views on Dance's mental effects. It was named "Mental Effect of Dance Questionnaire (MEDQ)," which is a 22-item questionnaire subdivided into two (2) categories: Mental Effects of Dance and Effects of Different Genres. Responses are then recorded by a 4-point Likert scale ranging from 1 (Not at all) to 4 (Always). The formulated questionnaire underwent Pilot testing on non-BPeA students (N=50), where Cronbach's Alpha for Mental effects of Dance is (.975) with a mean of (51.68) and Effects of the different genre is (.946) with a mean of (16.58). Internal consistencies of all categories are both Excellent (>0.9) and (>0.9). Therefore, the tool is applicable for the conduct of the study.

3.4. Statistical Analysis

In order to analyze the data, descriptive and inferential analyses were utilized. Frequency (f) and percentage (%) were used to describe the demographic profile of the respondent. Mean (M) and standard deviation (SD) were applied to describe the level of the mental effect of dance, and its genres. Moreover, to facilitate the interpretation of the analyzed data, researchers have used a point-scale interpretation to describe item per response on the effects of dance and its genre to the mental health of the students which is shown in Table 1.

Table 1. Descriptive Interpretation

Range of weighted mean values	Interpretation
3.26 – 4.00	Very high
2.51 – 3.25	Moderately high
1.76 – 2.50	Low
1.00 – 1.75	Very low

A normality test was performed to recognize the appropriate statistical test to compare the effects of dance and its genre concerning gender and year level [16]. Table 2 revealed the results of the Kolmogorov-Smirnov and Shapiro-Wilk tests. It was shown that the p-value of dance's mental effects for males and females is higher than .05 (>.05); as a result, the data are typically distributed. Hence, a parametric test is appropriate for this set of data.

Table 2. Kolmogorov-Smirnov and Shapiro-Wilk Test of Normality

	Gender	df	Kolmogorov-Smirnov		Shapiro-Wilk test	
			Statistics	p-value	Statistics	p-value
Mental Effects of Dance	Male	41	.139	.045	.882	.001
	Female	42	.123	.114	.948	.054
	Year Level					
	1 ST Year	34	.065	.200*	.978	.703
	2 ND Year	32	.303	.000	.874	.001
	4 TH Year	17	.148	.200*	.917	.130
Effects of Different Genres	Gender					
	Male	41	.143	.035	.914	.004
	Female	42	.181	.001	.951	.072
	Year Level					
	1 ST Year	34	.109	.200*	.916	.012
	2 ND Year	32	.137	.134	.933	.049
	4 TH Year	17	.235	.013	.871	.023

*. This is a lower bound of the true significance.

In terms of year level, the p-value is lower than .05 (<.05), and a non-parametric test is suitable. For the effect of dance genres in gender and year level, the p-value is lower than .05 (<.05), and a non-parametric test is deemed fit for these data sets.

Independent Sample T-test and Kruskal-Wallis H analyses was utilized to determine the significant differences between groups regarding the mental effect of dance concerning gender and year level. Lastly, Mann-Whitney U analysis was used to observe the difference between groups regarding the impact of dance genres concerning gender and Kruskal-Wallis H regarding gender.

4. Finding and Discussion

To analyze the results from the obtained data, IBM SPSS 26 has been used. Eighty Three (83) Bachelor of Performing Arts students answered the MEDQ who are currently enrolled at City College of Angeles, Pampanga, Philippines.

Table 3. Demographic Profile of Students

Profile	f	%
<i>Gender</i>		
Male	41	49.4
Female	42	50.6
<i>Year Level</i>		
1 ST Year	34	41.0
2 ND Year	32	38.6
4 TH Year	17	20.5

Table 3 shows the respondents' demographic distribution regarding gender and year. Eighty-three (83) Performing Arts Students (respondents) were involved in this study from 1st to 4th year. From 1st year to 4th year, there are 49.4% are male (n= 41) and 50.6% female (n= 42). There are 1st year respondents (n= 34) which is equivalent to 41.0% followed by the 2nd year (n= 32) students which is equivalent to 38.6%. Lastly, for the 4th year students (n= 17), which is equivalent to 20.5%.

Table 4. Mental Effect of Dance

Statements	Mean ± SD	Interpretation
<i>I feel calm.</i>	3.07 ± .823	MH
<i>I feel peaceful.</i>	3.06 ± .801	MH
<i>I become energetic.</i>	3.12 ± .802	MH
<i>I become an optimistic person.</i>	2.93 ± .808	MH
<i>I feel alive.</i>	3.19 ± .861	MH
<i>I feel enthusiastic.</i>	3.00 ± .811	MH
<i>I feel more focused.</i>	3.06 ± .801	MH
<i>Dancing can help me to be mentally stable.</i>	3.08 ± .899	MH
<i>Dancing helps me find meaning on the connection between movement and emotions. (Spirit, Body and Soul)</i>	3.18 ± .857	MH
<i>Dancing eliminates my worries.</i>	3.02 ± .840	MH
<i>Dance boosts my confidence.</i>	3.18 ± .925	MH
<i>I feel satisfied.</i>	3.11 ± .855	MH
<i>It enhances my memory.</i>	3.14 ± .857	MH
<i>It boosts my self-esteem.</i>	3.16 ± .848	MH
<i>It helps develop my self-image.</i>	3.17 ± .808	MH
<i>It improves my alertness.</i>	3.17 ± .762	MH
Total	3.10 ± .715	MH

Values are expressed as means ± standard deviations.

VH = very high, MH = moderately high, L = low, and VL = very low.

Table 4 illustrates that most of the students responded that they feel alive in dance ($3.19 \pm .861$), and it can boost their confidence ($3.18 \pm .925$) which both correspond to moderately high. Furthermore, dancing develops their self-image ($3.17 \pm .808$) and improves their alertness ($3.17 \pm .762$) which both corresponds to moderately high. Few of them say it eliminates Worries ($3.02 \pm .840$) which corresponds to moderately high. Overall, the general weighted mean on the mental effects of dance was found to be moderately high ($3.10 \pm .715$).

Almost all students were using dance as an intervention for their mental state. In the study of [17] regarding the effect of online dancing, the results revealed that it acutely improves mental health as measured by increased positive affect and self-esteem and decreased negative affect and depression. Dance can boost their confidence, become lively, and eliminate worries. Furthermore, because of dancing improves their alertness and develops their self-image. A dance implies body movements, interactions, expressions, and steps. The outcomes of it are most likely functional [8]. It includes the person's physical and emotional health, well-being, and capability to cooperate with others in daily life.

Table 5. Dance Genres and Its Effect to Mental Health

Statements	Mean \pm SD	Interpretation
<i>Dancing Jazz helps me eliminate stress.</i>	2.81 \pm .833	MH
<i>Dancing Hip-hop boosts my energy.</i>	3.24 \pm .918	MH
<i>Contemporary Dance can be a great stress buster.</i>	2.94 \pm .786	MH
<i>Contemporary Dance improves my mood.</i>	2.96 \pm .787	MH
<i>Performing Folk Dances makes mind at ease.</i>	2.84 \pm .803	MH
<i>Ballroom dancing can help enhance concentration</i>	2.81 \pm .833	MH
Total	2.93 \pm .677	MH

*Values are expressed as means \pm standard deviations.
 VH = very high, MH = moderately high, L = low, and VL = very low.*

Table 5 shows that the different dance genre positively affects the BPeA students. In these six (6) items/statements, most of the students can boost their energy on Hip-Hop Dance ($3.24 \pm .918$), and can improve their mood in Contemporary Dance ($2.96 \pm .787$), which corresponds to moderately high. Few respondents say that dancing Jazz helps them eliminate their Stress ($2.81 \pm .833$). Overall, the general weighted mean on effects of the different genres was found to be moderately high ($2.93 \pm .677$).

Based on the collected data, most of the Performing Arts students are really into dance. Based on the results, most students boost their energy by dancing to Hip-Hop, while some improve their mood by dancing to Contemporary Dance. Lastly, dancing Jazz can help students to eliminate their stress. It only shows that whatever dance genre is preferred by respondents, it is still effective as a coping mechanism. Concerning [12] study, dance movement therapy demonstrated the relationship between the client's improvement in quality of life, reduction of stress, coping, and psychodynamic-oriented dance movement therapy. Also, in the study of [18], results suggest that DMT decreases depression and anxiety and increases the quality of life and interpersonal and cognitive skills, whereas dance interventions increase (psycho-)motor skills.

- *Difference on Mental effect of dance in terms of gender and year Level*
 After the Independent T-Test analysis, no significant difference between groups was observed ($t(83) = 1.237, p = .220$). In the Kruskal-Wallis H analysis, no significant difference was observed between groups ($H(2) = .872, p = .647$) in terms of year level. No previously conducted studies were found in connection with the results of this research. The result of this study is not yet conclusive, and operating a similar analysis will help to support or refute these findings.
- *Difference on the effect of dance genres in terms of gender and year level*
 After the Mann-Whitney U analysis, no significant difference between groups was observed ($U = 715,000, p = .182$) regarding gender. The Kruskal-Wallis H analysis results yielded no significant differences between groups ($H(2) = 2.113, p = .348$) regarding year level. On the other hand, no previous studies were found in connection to the variables used for this research. This study highly suggests conducting a similar study covering the same variables to support or repudiate the findings of this research.

5. Conclusion

The researchers concluded that dance is effective as one of the coping mechanisms for Performing Arts students in terms of mental health problems (some became energetic, feel alive, more focused, and satisfied in dancing). Furthermore, dancing can better impact the student's mental aspect that helps them overcome their problems.

It was also found that different dance genres affect BPeA students differently. Some of the dances can help students eliminate stress, others improve their mood, they can also enhance their concentration, and other students can boost their energy in dancing. It only means that dance can have a significant role in the lives of Performing Arts Students.

Also, this study concluded that no significant difference was observed between gender and year level regarding the mental effect of the dance and its genre. In this, it can be interpreted that groups positively agree on the positive impact of the dance and its genre on their mental health. Moreover, this also suggests conducting a similar study of the same variables to determine if the results will support or reject the findings of this current study.

The study's implication shows that dance benefits the mental health of Performing Arts students. Dance positively impacts their lives (eliminates worries, boosts confidence and satisfaction, develops self-image, and is a stress reliever). It only shows that dance can help students experience it in terms of the mental aspect. The researchers also concluded that dance not only focuses on physical development but also has a good effect on the mental health of BPeA students.

This research study revealed the effectiveness of Dance in the Mental Health of Bachelor of Performing Arts Students (BPeA). Therefore, the following recommendations are a result of this presented: (1) Since the effectiveness of dance was proven, teachers who are experts in the dance discipline should train their students and give them more exposure to help them develop themselves and have more understanding of dancing and how it may affect their future careers, especially as future performers, (2) Professionals and choreographers must explain more about the different dance genres so that students will gain more knowledge about them. Professionals can impart their learning by providing events or programs like seminars, webinars, and performances to explain how it affects the students physically and mentally, and lastly (3) a similar study may be conducted in the whole school or on a larger group of people to describe and discover if the findings were the same in other settings, especially in other schools that offer Bachelor of Performing Arts programs. Further investigation is highly recommended.

References

- [1] Y. Wang *et al.*, "The impact of quarantine on mental health status among general population in China during the COVID-19 pandemic," *Mol. Psychiatry*, vol. 26, no. 9, pp. 4813–4822, Sept. 2021.
- [2] S. A. Meo, D. A. A. Abukhalaf, A. A. Alomar, K. Sattar, and D. C. Klonoff, "COVID-19 Pandemic: Impact of Quarantine on Medical Students' Mental Wellbeing and Learning Behaviors," *Pakistan J. Med. Sci.*, vol. 36, no. COVID19-S4, pp. 873–874, May 2020.
- [3] B. Javed, A. Sarwer, E. B. Soto, and Z. Mashwani, "The coronavirus (COVID-19) pandemic's impact on mental health," *Int. J. Health Plann. Manage.*, vol. 35, no. 5, pp. 993–996, Sept. 2020.
- [4] J. Lobo, "A sudden shift: Students' perception of distance and online education in physical education amidst COVID-19 Pandemic," *Edu Sport. Indones. J. Phys. Educ.*, vol. 3, no. 3, pp. 200–216, 2022.
- [5] A. S. Al-Dhaheri, "Impact of COVID-19 on mental health and quality of life: Is there any effect? A cross-sectional study of the MENA region," *PLoS One*, vol. 16, no. 3, p. e0249107, Mar. 2021.
- [6] C. Son, S. Hegde, A. Smith, X. Wang, and F. Sasangohar, "Effects of COVID-19 on College Students' Mental Health in the United States: Interview Survey Study," *J. Med. Internet Res.*, vol. 22, no. 9, p. e21279, Sep. 2020.
- [7] R. A. Nucup and J. Lobo, "Anxiety Level of City College of Angeles Students and Music as Their Coping Mechanism," *Am. J. Interdiscip. Res. Innov.*, vol. 1, no. 1, pp. 1–7, May 2022.
- [8] S. Douka, V. I. Zilidou, O. Lilou, and V. Manou, "Traditional dance improves the physical fitness and well-being of the elderly," *Front. Aging Neurosci.*, vol. 1, no. 11, PP. 1-9, 2019.

- [9] K. McKenzie, R. Bowes, and K. Murray, "Effects of dance on mood and potential of dance as a mental health intervention," *Ment. Heal. Pract.*, vol. 24, no. 3, pp. 12–17, May 2021.
- [10] S. Yanuartuti and W. Handayani, "Dancing as an Expressive Media in the Middle of Pandemic," in *Proceedings of the International Joint Conference on Arts and Humanities (IJCAH 2020)*, pp. 770–778, Dec. 2020.
- [11] M. S. Kiepe, B. Stöckigt, and T. Keil, "Effects of dance therapy and ballroom dances on physical and mental illnesses: A systematic review," *Arts Psychother.*, vol. 39, no. 5, pp. 404–411, Nov. 2012.
- [12] I. Bräuninger, "Dance movement therapy with the elderly: An international Internet-based survey undertaken with practitioners," *Body, Mov. Danc. Psychother.*, vol. 9, no. 3, pp. 138–153, July 2014.
- [13] J. F. Christensen, F. E. Pollick, A. Lambrechts, and A. Gomila, "Affective responses to dance," *Acta Psychol. (Amst.)*, vol. 168, pp. 91–105, Jul. 2016.
- [14] G. Sivvas, S. Batsiou, Z. Vasoglou, and D. A. Filippou, "Dance contribution in health promotion," *J. Phys. Educ. Sport*, vol. 15, no. 3, pp. 484–489, 2015, [Online] Available: doi: 10.7752/jpes.2015.03073. [Accessed: March. 8, 2022].
- [15] L. S. M. Millman, D. B. Terhune, E. C. M. Hunter, and G. Orgs, "Towards a neurocognitive approach to dance movement therapy for mental health: A systematic review," *Clin. Psychol. Psychother.*, vol. 28, no. 1, pp. 24–38, Jan. 2021.
- [16] J. Lobo, G. Dimalanta, C. Bautista, E. Buan, and D. Al De Dios, "TikTok Consumption and Level of Class Engagement of Performing Arts Students in the New Normal: Destructive or Beneficial?," *Am. J. Educ. Technol.*, vol. 1, no. 1, pp. 1–9, Jun. 2022.
- [17] A. Humphries and J. C. Basso, "Enhancing Mental Health and Social Connection Through an Acute Online Dance Intervention," *Preprint*, vol. 1, no. 16, 2022.
- [18] S. C. Koch, R. F. F. Riege, K. Tisborn, J. Biondo, L. Martin, and A. Beelmann, "Effects of Dance Movement Therapy and Dance on Health-Related Psychological Outcomes. A Meta-Analysis Update," *Front. Psychol.*, vol. 10, Aug. 2019.