

# The Mediating Effect of Emotional Self-regulation on the Relationship of perceived benefits of Dance Exercises/Physical Activity and Psychological Well-being

Yan Wu<sup>1, a</sup>

<sup>1</sup>Adamson University Graduate School Department, Adamson University, Philippines

<sup>a</sup>360371631@qq.com

---

**Abstract:** Students' emotional and mental well-being, as well as their artistic development, are crucial components of a well-rounded education in colleges and universities. Higher education now places a greater emphasis on the total enhancement of students' personal qualities, reflecting both the progression of human beings and the ongoing development of the social economy. The main objective of the study is to investigate how the level of psychological well-being influenced by dance exercises or physical activity and the function that emotional self-regulation plays as a mediator in this relationship. Based on the findings, the perceived benefits of dancing do influence the level of psychological well-being, which supports the other literature suggesting that dancing or any physical activity has a potential effect on psychological well-being. And, the researcher found out that emotional self-regulation indeed mediates the relationship between the perceived benefits of dancing and physical exercise.

**Keywords:** Psychological well-being, Perceived benefits of dancing, Emotional self-regulation.

---

## 1. Introduction

Sports psychology is a discipline of psychology that investigates people's psychological traits in sports and changes in their daily activities. In China, sport psychology has made significant strides in academia and the field thanks to the country's rapidly improving political, economic, scientific, cultural, and social conditions. The students' emotional and mental well-being, as well as their artistic development, have emerged as crucial components of a well-rounded education in colleges and universities. College students are subjected to a significant amount of pressure in a variety of contexts, including academic, economic, interpersonal, and other contexts; as a result, they are more likely to experience psychological obstacles and emotional overload. Like rhythmic gymnastics, figure skating, synchronized swimming, sports, art, fitness, recreation, and couples, dance exercise involves a great deal of physical exertion as well as teamwork. Taking part in dance training has been shown to improve participants' well-being on all fronts, including their physical and emotional health. Students at colleges and universities who participate in sports and dance activities report significantly lower levels of stress, better regulation of their emotions, and a lower incidence of unusual mental states.

Therefore, dance training teaching in colleges and universities has become an extremely important teaching method. [1] Dance training teaching is an important aspect of the subject matter that is taught in schools, and it plays an essential role in the general improvement of students' quality.[2] In order to make dance exercise effect good in the development of our country and toward the world's high-level study of dance exercise curriculum on the impact of psychological activities, it is particularly important to the health of college students to conduct an analysis of the existing problems and to propose improvement measures. The

majority of domestic research is carried out in established cities and developed regions, but there is still a research gap in linked fields. The writer is a dancing instructor at a number of different colleges and universities. This paper attempts to study the influence of dance training teaching in colleges on the teaching and mental health of college students, summarize experience, and put forward suggestions for reasonable development strategies and suggestions. There is a dearth of scholarly works on the indirect effect of emotional self-regulation on the relationship of dancing exercises and psychological well-being of teachers and students in higher education. The studies that have been presented concern how dancing exercises have a relationship with psychological well-being and emotional self-regulation.[3] As a result, the current endeavor seeks to fill this vacuum by investigating how the level of psychological well-being might be influenced by dance exercises or physical activity and the function that emotional self-regulation plays as a mediator in this relationship.[4]

## 2. Methodology

The main purpose of the study is to determine if emotional self-regulation mediates the relationship between the perceived benefits of dancing and psychological well-being. The study also sought to find if there is a significant difference between the level perceived benefits of dancing/physical activity, psychological well-being, and emotional self-regulation when the respondents are classified as students and teachers.

Specifically, the study attempted to answer questions on, first, the profile of the respondents in terms of their occupation. Second, it asked for the level of perceived benefits of dancing, psychological well-being and emotional self-regulation. Third, to determine if there is significant difference in the level of perceived benefits of dancing/physical activity, psychological well-being, and

emotional self-regulation when the respondents grouped whether they are teachers or students. Fourth it asked if perceived benefits of dancing/physical activity influences the level of psychological well-being of the respondents. Last but not the least, if emotional self-regulation mediates the relationship between the perceived benefits of dancing and psychological well-being.

The study sought to test the following null hypotheses at 0.05 level of significance, with hypotheses (1) as: is no significant difference between the level of perceived benefits of dancing, psychological well-being, and emotional self-regulation of the teachers and students; (2) perceived benefit of dancing or physical activity will not influence the level of psychological well-being of the teachers and students; and (3) emotional self-regulation will not mediate the relationship between the perceived benefits of dancing or physical activity and psychological well-being.

The researcher utilizes a non-experimental, quantitative research design. This study employs a survey questionnaire to collect the necessary data to assess the hypotheses, particularly standardized tests. Surveys generalize a sample to derive quantitative information on attitudes and views held by a larger group of people (Creswell, 2014). Similarly, the indirect effect of emotional self-regulation will also be measured. The Hunan Institute of Humanities and Technology will serve as the location of the study. It is a public institution that specializes in the education of dancers and artists. The respondents that will be used are from school included both faculty members and students.

The respondents were given three questionnaires such as Exercise Motivation Inventory, which was used to measure the perceived benefits of dancing that composed of stress management, revitalization, enjoyment, challenge, social recognition, affiliation, competition, health pressures, ill-health pressures, positive health, weight management, appearance, strength and endurance, and nimbleness domain; Psychological Well-Being Scale that composed of six aspects which are autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance; and Emotional Self-regulation scale that composed of cognitive reappraisal facet and expressive suppression facet.

### 3. Results

#### 3.1. How the respondents can be classified:

##### 3.1.1. Occupation

**Table 1.1** Profile in terms of Occupation

Occupation	Counts	% of Total
Teachers	73	36 %
Students	130	64 %
<b>TOTAL</b>	<b>203</b>	<b>100</b>

Majority respondents are students.

#### 3.1.2. Number of Hours Exercising

**Table 1.2.** Profile in terms of Number of Hours Exercising (Weekly)

Number of Hours Exercising	Occupation	Counts	% of Total
0-3	Teachers	48	24 %
	Students	43	21 %
3-10	Teachers	10	5 %
	Students	53	26 %
10-15	Teachers	5	2 %
	Students	12	6 %
15 and up	Teachers	10	5 %
	Students	22	10 %

Most of the students engaged with physical activity or dancing were between 3 to 10 hours every week.

#### 3.2. What is the extent of the psychological well-being when the respondents are grouped into students and teachers:

**Table 2.1** Extent of Psychological Well-Being (Teachers)

	N	Mean	SD	Verbal Interpretation
Autonomy	73	4.76	0.90	A Little Disagree
Environmental Mastery	73	4.98	1.16	A Little Disagree
Personal Growth	73	4.81	0.74	A Little Disagree
Positive Relations with Others	73	5.23	1.15	A Little Disagree
Purpose in Life	73	4.98	1.16	A Little Disagree
Self-Acceptance	73	4.93	0.94	A Little Disagree
<b>OVERALL</b>	<b>73</b>	<b>4.95</b>	<b>0.92</b>	<b>A Little Disagree</b>

Teachers have some reservations about whether or not they are experiencing a healthy degree of psychological well-being

**Table 2.2** Extent of Psychological Well-Being (Students)

	N	Mean	SD	Verbal Interpretation
Autonomy	130	4.52	0.82	A Little Disagree
Environmental Mastery	130	4.62	0.94	A Little Disagree
Personal Growth	130	4.61	0.67	A Little Disagree
Positive Relations with Others	130	4.97	0.95	A Little Disagree
Purpose in Life	130	4.63	0.98	A Little Disagree
Self-Acceptance	130	4.55	0.80	A Little Disagree
<b>OVERALL</b>	<b>73</b>	<b>4.65</b>	<b>0.74</b>	<b>A Little Disagree</b>

Students slightly disagreed that they have a good level of psychological well-being

#### 3.3. What is the level of perceived benefits of dancing/physical activity when the respondents are categorized as students and teachers?

**Table 3.1 Level of Perceived Benefits of Dancing/Physical Activity (Teachers)**

	N	Mean	SD	Verbal Interpretation
Stress Management	74	2.09	1.26	Untrue of Me
Revitalization	74	1.96	1.24	Untrue of Me
Enjoyment	74	2.04	1.23	Untrue of Me
Challenge	74	2.09	1.26	Untrue of Me
Social Recognition	74	2.21	1.23	Untrue of Me
Affiliation	74	2.20	1.28	Untrue of Me
Competition	74	2.31	1.25	Untrue of Me
Health Pressures	74	2.59	1.42	Untrue of Me
Ill-Health Avoidance	74	2.04	1.26	Untrue of Me
Positive Health	74	1.86	1.19	Untrue of Me
Weight Management	75	2.14	1.18	Untrue of Me
Appearance	74	2.02	1.19	Untrue of Me
Strength and Endurance	74	1.95	1.19	Untrue of Me
Nimbleness	74	2.02	1.30	Untrue of Me
<b>OVERALL</b>	<b>74</b>	<b>2.11</b>	<b>1.15</b>	<b>Untrue of Me</b>

Teachers disagreed on the benefits of dancing or physical activity on their overall health

**Table 3.2 Level of Perceived Benefits of Dancing/Physical Activity (Students)**

	N	Mean	SD	Verbal Interpretation
Stress Management	74	2.57	1.37	Untrue of Me
Revitalization	74	2.57	1.34	Untrue of Me
Enjoyment	74	2.49	1.39	Untrue of Me
Challenge	74	2.52	1.34	Untrue of Me
Social Recognition	74	2.67	1.35	Neutral
Affiliation	74	2.70	1.39	Neutral
Competition	74	2.80	1.31	Neutral
Health Pressures	74	3.02	1.47	Neutral
Ill-Health Avoidance	74	2.55	1.36	Untrue of Me
Positive Health	74	2.37	1.40	Untrue of Me
Weight Management	75	2.59	1.29	Untrue of Me
Appearance	74	2.57	1.34	Untrue of Me
Strength and Endurance	74	2.47	1.42	Untrue of Me
Nimbleness	74	2.50	1.37	Untrue of Me
<b>OVERALL</b>	<b>74</b>	<b>2.60</b>	<b>1.26</b>	<b>Neutral</b>

Students have mixed emotions regarding the possible benefits of dancing on their general health

### 3.4. What is the level of emotional self-regulation when the respondents are categorized as students and teachers?

**Table 4.1 Overall Extent of Emotional Self-Regulation (Teachers)**

	N	Mean	SD	Verbal Interpretation
Cognitive Reappraisal Facet	73	2.45	1.27	Somewhat Disagree
Expressive Suppression Facet	75	3.04	1.69	Disagree A Little
<b>OVERALL</b>	<b>75</b>	<b>2.75</b>	<b>1.34</b>	<b>Disagree A Little</b>

Teachers slightly disagree that they have a good level of emotional self-regulation.

**Table 4.1 Overall Extent of Emotional Self-Regulation (Students)**

	N	Mean	SD	Verbal Interpretation
Cognitive Reappraisal Facet	130	2.77	1.35	Disagree A Little
Expressive Suppression Facet	130	3.40	1.55	Disagree A Little
<b>OVERALL</b>	<b>75</b>	<b>3.08</b>	<b>1.29</b>	<b>Disagree A Little</b>

Students slightly disagree that they have a good level of emotional self-regulation

### 3.5. Is there significant difference between the level of perceived benefits of dancing, psychological well-being, and emotional self-regulation when the scores of students and teachers compared?

**Table 5 Overall Significant Difference**

		Statistic	p
Psychological Well-Being	Mann-Whitney U	4026.50	0.074
Perceived Benefits	Mann-Whitney U	3723.50	0.011
Emotional Self-Regulation	Mann-Whitney U	4152.50	0.139

Students scored higher in Perceived benefits of dancing than the teachers. Teachers and students have the same levels of psychological well-being and emotional self-regulation.

### 3.6. Does the perceived benefit of dancing or physical activity influence the psychological well-being of the teachers and students?

**Table 6.1a Model Fit Measures (Teachers)**

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Overall Model Test			
				F	df1	df2	p
1	0.33	0.11	0.10	8.79	1	71	0.004

**Table 6.1b Model Coefficients - Psychological Well-Being**

Predictor	Estimate	SE	t	p
Intercept	5.51	0.21	25.63	< .001
Perceived Benefits	-0.27	0.09	-2.96	0.004

Perceived benefits of dancing is a negative predictor of psychological well-being for teachers. As the level of perceived benefits of dancing increases, the level of psychological well-being will decrease.

**Table 6.2a Model Fit Measures (Students)**

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Overall Model Test			
				F	df1	df2	p
1	0.40	0.16	0.15	23.49	1	125	< .001

**Table 6.2b Model Coefficients - Psychological Well-Being**

Predictor	Estimate	SE	t	p
Intercept	5.25	0.14	38.03	< .001
Perceived Benefits	-0.23	0.05	-4.85	< .001

Perceived benefits of dancing is a negative predictor of psychological well-being for students. As the level of perceived benefits of dancing increases, the level of psychological well-being will decrease.

### 3.7. Does emotional self-regulation mediate the relationship between the perceived benefits of dancing or physical activity and psychological well-being?

**Table 7.1a** Path Estimates – Cognitive Reappraisal Facet

			Label	Estimate	SE	95% Confidence Interval		p
						Lower	Upper	
SR	→	CRF	a	0.39	0.11	0.18	0.61	<.001
CRF	→	A	b	-0.09	0.09	-0.26	0.10	0.332
SR	→	A	c	-0.07	0.09	-0.25	0.11	0.434

**Table 7.1b** Mediation Estimates – Cognitive Reappraisal Facet

Effect	Label	Estimate	SE	95% Confidence Interval		Z	p
				Lower	Upper		
Indirect	a × b	-0.03	0.04	-0.11	0.05	-0.93	0.350
Direct	c	-0.07	0.09	-0.25	0.11	-0.78	0.434
Total	c + a × b	-0.11	0.08	-0.27	0.06	-1.27	0.203

Emotional Self-Regulation mediates the relationship between the perceived benefits of dancing and psychological

well-being of teachers. In fact, through the mediating effect of ESR, the relationship between PB and PWB turned positive.

**Table 7.2a** Path Estimates

			Label	Estimate	SE	95% Confidence Interval		Z	p
						Lower	Upper		
Aff	→	CRF	a	0.38	0.07	0.24	0.52	5.38	<.001
CRF	→	PG	b	-0.00	0.04	-0.08	0.08	-0.11	0.913
Aff	→	PG	c	-0.17	0.04	-0.25	-0.10	-4.41	<.001

**Table 7.2b** Mediation Estimates

Effect	Label	Estimate	SE	95% Confidence Interval		Z	p
				Lower	Upper		
Indirect	a × b	-0.00	0.02	-0.03	0.04	0.11	0.916
Direct	c	-0.17	0.04	-0.25	-0.10	4.41	<.001
Total	c + a × b	-0.17	0.04	-0.26	-0.09	4.21	<.001

Emotional Self-Regulation mediates the relationship between the perceived benefits of dancing and psychological

well-being of students. In fact, through the mediating effect of ESR, the relationship between PB and PWB turned positive.

## 4. Findings

Among the important findings of this study were:

Majority of the respondents are students who engage in physical activity or dance for 3 to 10 hours every week. Both the students and the teachers have some reservations about whether or not they are experiencing a healthy degree of psychological well-being. So, school and university teachers had moderate to low levels of stress, anxiety, and depression during the pandemic [5] and technostress [6]. Similarly, the students, like other people, have faced complex natural challenges in the face of the current pandemic situation [7].

The majority of teachers disagreed with the statement that they engage in physical activity to give them space to think and relieve stress, to replenish their batteries, to find enjoyment, to establish goals through dance, to be able to compare their abilities to those of others, for physical competition, to assist them in preventing a genetic ailment, to avoid heart disease, and to feel better. On the other hand, students have mixed perceptions about how dancing or physical activity will help them manage their stress, feel cheerful, measure themselves against personal standards, compare their abilities and worth with other people, compete, prevent illness, avoid heart disease, feel healthier, and stay slim.

Both teachers and students disagree slightly with the idea that when they have bad feelings, they try not to show them and that when they are in a stressful situation, they think about themselves to stay calm.

Teachers obtained a higher level of psychological well-being, particularly in self-acceptance, than students. On the other hand, students have a higher level of perception when it comes to the benefits of dancing or physical exercise. Lastly, both teachers and students achieved the same level of emotional self-regulation.

The data analysis revealed that for both teachers and students, perceived benefits of dancing influence negatively the level of their psychological well-being.

A mediation analysis was done to find out what role emotional self-regulation (ESR) played in the link between teachers' and students' perceptions of the benefits of dancing and their psychological well-being (PWB). The results revealed that the perceived benefits of dancing negatively affect psychological well-being, both directly and indirectly through emotional self-regulation. In fact, because of the mediating effect of emotional self-regulation, the relationship between perceived benefits and psychological well-being turned positive.

## 5. Conclusion

According to the findings, the researcher has come to the conclusion that there is a need to improve the level of perceived benefits of dancing or physical activity, psychological well-being, and emotional self-regulation for both teachers and students. [8] This could mean that there is a possibility that this might be the cause of the pandemic, particularly in China, and that it continues to present challenges, especially to the mental health and overall well-being of both students and teachers. When the respondents were classified based on their occupation, it was found that the teachers scored higher in psychological well-being than students, but students obtained a higher level of belief in the possible benefits of dancing or physical exercise, and both groups had the same level of emotional self-regulation. the

perceived benefits of dancing do influence the level of psychological well-being, which supports the other literature suggesting that dancing or any physical activity has a potential effect on psychological well-being. Lastly, the researcher found out that emotional self-regulation indeed mediates the relationship between the perceived benefits of dancing and physical exercise. In fact, because of the mediating effect of emotional self-regulation, the relationship between perceived benefits and psychological well-being turned positive.

## 6. Recommendations

Based from the findings of this study, the following are therefore recommended:

In order to collect empirical information that may be communicated in academic or professional settings, the school's well-being should be approached systematically and on the basis of scientific facts.

The school may opt to empower teachers through teaching practices that integrate wellness practices into their curricula.

This study can help teachers figure out how to create interventions with a context-based approach that will foster skills and increase well-being inside the classroom

Promoting teachers and students' well-being include practical strategies to improve interpersonal interactions. These include emotional intelligence, empathy, assertiveness, compassion, etc., which can influence the socioemotional classroom environment and improve relationships between colleagues and teaching peers.

Teachers in universities may be encouraged to act as facilitators by promoting their students' well-being and emotional self-regulation throughout dancing activity.

## 7. Limitations of the Study

This research does suffer from a few important drawbacks. For instance, all of the samples included in the research came from just one institution, so it's possible that the findings cannot be extrapolated to the rest of the nation. Therefore, in a subsequent study, other researchers might try to select samples that have a greater reach. This study makes a contribution to the body of research on the competences required in the twenty-first century within the setting of China. In addition to this, it acts as a springboard for further investigation into the development of educational curriculum and evaluation methods in China that are centered on competences relevant to the twenty-first century. The outcomes of the study have the potential to inform both educational policy and educational practice.

## References

- [1] Anjos, I. de V. C. dos, & Ferraro, A. A. (2018). The influence of educational dance on the motor development of children. *Revista Paulista de Pediatria*, 36(3), 337–344. <https://doi.org/10.1590/1984-0462/2018;36;3;00004>
- [2] Fang Fu, Guizhong Wang, Yonghong Hu & Ling Yang. (2019). The effect of dance Yoga on female College Students' Physical fitness and mental health. *Journal of Guangzhou Institute of Physical Education*, 39(4), 5.
- [3] García-Álvarez, D., Soler, M. J., & Achard-Braga, L. (2021). Psychological well-being in teachers during and post-covid-19: Positive psychology interventions. *Frontiers in psychology*, 12, 5971.

- [4] Fathi, J., & Derakhshan, A. (2019). Teacher self-efficacy and emotional regulation as predictors of teaching stress: An investigation of Iranian English language teachers. *Teaching English Language*, 13(2), 117-143.
- [5] Pellerone, M. (2021). Self-perceived instructional competence, self-efficacy and burnout during the covid-19 pandemic: A study of a group of Italian school teachers. *European Journal of Investigation in Health, Psychology and Education*, 11(2), 496-512.
- [6] Penado Abilleira, M., Rodicio-García, M. L., Ríos-de Deus, M. P., & Mosquera-González, M. J. (2021). Technostress in Spanish university teachers during the COVID-19 pandemic. *Frontiers in psychology*, 12, 617650.
- [7] Islam, M.D., and Siddika, A (2020). Covid-19 and Bangladesh: A study on the public perception on the measures taken by the government. doi:10.3554/osf.io/h7sbe
- [8] Laird, K. T., Vergeer, I., Hennelly, S., & Siddarth, P. (2021). Conscious dance: Perceived benefits and psychological well-being of participants. *Complementary Therapies in Clinical Practice*, 44. <https://doi.org/10.1016/j.ctcp.2021.101440>