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EFFECTIVENESS OF PHYSICAL ACTIVITIES IN STUDENTS' MENTAL HEALTH AT ELEMENTARY LEVEL

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ABSTRACT

This study investigates the effectiveness of physical activities in improving the mental health of elementary students. Preliminary analysis reveals a significant positive correlation between participation in physical activities and various indicators of mental health, including self-esteem, emotional regulation, and social competence. Certain types of activities, such as team sports and outdoor play, appear particularly beneficial. The study underscores the importance of integrating physical activities into the school curriculum to support the overall well-being and academic success of elementary students. The research was exclusively of a quantitative type. The association between students' physical activity levels and their mental health at a particular moment in time was investigated using a correlation research methodology. The elementary school children enrolled in public schools in District Layyah made up the study's population. There were 37,820 kids in the target population overall, comprising students in Grades 6, 7, and 8. There were 37820 people in total, and 380 pupils were chosen at random to make up the sample. Indicators of mental health and levels of physical activity were measured using a survey questionnaire. Structured questionnaires were used to gather data from the chosen group of primary school pupils. Using the proper statistical techniques, such as inferential and descriptive statistics, the collected data was examined. The data were summarized using descriptive statistics including mean, standard deviation, and frequency distributions. Inferential statistics, such as correlation analysis, were used to investigate the connections between primary school kids' levels of physical exercise and their mental health outcomes. All statistical tests were conducted with a significance threshold of $p < 0.05$. To make it easier to grasp and analyze the results, the data analysis results were presented as tables and figures. Based on the findings, the research questions were answered and conclusions were made. This study is important because it offers guidance on how parents, legislators, and educators can help their children engage in physical activity. Evidence-based guidelines, treatments, and policies aimed at improving mental and physical well-being can be informed by the results.

Keywords: Effectiveness; Physical activities; Students' mental health; Elementary level.
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INTRODUCTION

In recent years, the importance of addressing mental health issues in students, especially at the elementary level, has gained significant attention. Mental health problems can have profound effects on a child's academic performance, social interactions, and overall well-being. Recognizing this, educators and researchers have explored various interventions to promote mental well-being among elementary students. One such intervention is the incorporation of physical activities into their daily routines. It is often acknowledged that engaging in physical exercise contributes significantly to overall health and well-being, which encompasses both mental and physical well-being. Numerous studies still demonstrate the positive effects of physical activity on different aspects of mental health (Mahindru et al., 2023). Early school years

are a crucial developmental stage that usually spans from 6 to 12 years old. It is a time of transition for the development of cognitive, social, and emotional maturity. Children must overcome stresses and challenges throughout this time to excel academically, flourish socially, and grow personally (White et al., 2017).

It is important to closely explore how physical exercise affects young people's development as they go through these crucial years. Childhood experiences lay the foundation for future well-being, and there is a lot of promise for how physical exercise at this time might affect mental health. Previous teenage research emphasizes the benefits of physical exercise. Frequent exercise helps improve psychological resilience to handle a variety of life circumstances and lessen psychological anguish brought on by various life-affecting events. There is a complicated relationship including physical, cognitive, and social processes between physical activity and psychological well-being. Increased physical exercise may provide physiological benefits such as the elimination of neurotransmitters and a reduction in stress hormone levels, as well as noticeable cognitive improvements in physical obstacles and enhanced self-efficacy (Biddle et al., 2019).

The actual educational setting has a significant impact on how pupils' mental health develops. The demanding academic standards and growing number of digital distractions in today's classroom underscore the need for focused treatments that foster emotional resilience and attention. Children who engage in physical exercise may find it easier to cope with the pressures of their school journey and an efficient means of relieving stress and emotional strain (Maugeri et al., 2020). Early childhood education offers a special time when physical activity may play a significant role in fostering better mental health. Engaging in these activities can have significant psychological advantages in addition to improving physical health. Together, educators, parents, and legislators can build a comprehensive approach to education that prioritizes the welfare of all students over merely academic performance by recognizing the ways that physical activity can improve the mental health of young students (Schuch & Vancampfort, 2021).

Teachers are significant role players in the development and promotion of physical education programs in the classroom because of their impact on students' lives. Education professionals who get training on movement-based tactics can foster a culture in the classroom that prioritizes students' cognitive and emotional growth. The significance of teacher professional development programs emphasizing the integration of physical activity activities for overall student performance. Policymakers are placing a higher priority on students' mental health as an essential component of the educational system as the landscape of education changes. This comprehensive approach is congruent with the curriculum's use of physical exercise programs (Lubans et al., 2016).

Exercise appears to be one of the most comprehensive and promising ways to deal with mental issues. There is a vital association between mental health and physical activity. Frequent exercise has been demonstrated to have major favorable effects on emotional resilience and cognitive performance in addition to its physical advantages. Since elementary school children frequently face years of developmental obstacles, social connection can support their emotional wellbeing and make them more susceptible to demands from academic expectations. Students who exercise have a special way of expressing their feelings and letting go of pent-up energy, which lowers tension and anxiety. Exercise's physiological benefits, such as endorphins, are essential for uplifting and stimulating the mind (Ekkekakis, 2023).

LITERATURE REVIEW

Numerous studies have highlighted the positive effects of physical activity on mental health across different age groups. For example, a meta-analysis by Smith et al. (2019) found that engaging in regular physical activity was associated with reduced symptoms of depression and anxiety in children and adolescents. Similarly, a longitudinal study by Johnson et al. (2020) demonstrated that incorporating physical activities into the school day resulted in improvements in students' mood and attention span. Physical activity has been found to alleviate anxiety and depressive symptoms, elevate mood, increase self-esteem, and improve

cognitive performance. Students' mental health can be enhanced by physical activity in a variety of ways. One method is through the production of endorphins, which are chemicals that improve mood. Reducing stress is another way that physical activity enhances mental health. Students who engage in physical activity are less prone to ruminate on unfavorable feelings and ideas. Students who engage in physical activity can also sleep better, which is beneficial to their mental health. Students who participate in physical exercise can lower their chance of acquiring chronic illnesses, maintain a healthy weight, and strengthen their bones (Marconcin et al., 2022).

Physical exercise increases general well-being in primary school pupils, including better mental health (Mahindru et al., 2023). This has long been recognized. According to a study (Jacob et al., 2020) found a similar pattern of outcomes, regular physical exercise had a good influence on a variety of elements of mental health, including lowering anxiety and depressive symptoms, enhancing self-esteem, and improving cognitive performance. The connection between physical exercise and mental health in elementary school-aged children has been the subject of several researches.

Researchers have been interested in the role that physical exercise plays in supporting primary school students' mental health for a long time. Historically, it has been acknowledged that including physical activities in elementary education is essential to supporting kids' general growth (Chekroud et al., 2018). The practice of integrating physical exercise into the educational process has its origins in the late 1800s, when prominent individuals such as Johann Basedow pushed for the inclusion of physical exercise in schools as early as the 18th century, emphasizing its benefits for both mental and physical well-being (Fluetsch et al., 2019).

Theoretical Framework

Drawing upon theories of behavioral psychology and neuroscience, our research framework posits that physical activities stimulate the release of neurotransmitters such as dopamine and serotonin, which are known to regulate mood and stress levels. By engaging in regular physical activity, elementary students may experience improvements in their mental well-being, leading to enhanced academic performance and socio-emotional development. Research conducted by Loturco et al. (2022) provides insight into how students' mental health is affected by frequent physical exercise. Over the course of twelve weeks, the researchers created a physical education program that included team sports and a variety of cardiovascular activities. Significant gains in students' mental health were found, as shown by a decline in the incidence of anxiety and depression symptoms in the study population. These findings provide strong evidence that physical activity has a favorable impact on primary school pupils' mental health. In line with the conclusions of Alyami et al. (2017), a study was carried out to investigate the relationship between students' views of self-efficacy and self-esteem and their levels of physical activity. Expanding upon this isolated research, Mahindru et al., (2023) carried out an extensive analysis covering a wide variety of inquiries to evaluate the general efficacy of physical activities in enhancing students' mental well-being.

MATERIAL AND METHODS

This section outlines the study approach used to look at how well physical activity can improve the mental health of primary school pupils. The research design, population, sample, data collecting methods, data collection process, data analysis, scoring system, pilot study, ethical issues, and an overview of the methodology used in this study are all covered in this part of the study.

Research Design

For this study, a quantitative research strategy was chosen. Utilizing a correlation research design, the study's objectives may be addressed in an organized and impartial manner by allowing for the systematic collection and analysis of numerical data. To guarantee an impartial and methodical examination of the connection between physical activities and students' mental health, a quantitative study methodology was

selected. Co-relational research design was used to examine the relationship between physical activities and mental health outcomes among elementary-level students at a specific point in time.

Population of the Study

The students in elementary school who attended public schools in District Layyah made up the study's population. 37,820 pupils in all, including those in grades 6, 7, and 8, were part of the target population.

Table 1. Total number of elementary schools in district Layyah.

Tehsil	Public Elementary Schools		
	Male	Female	Total
Layyah	50	61	111
Karor Lal Eason	36	64	100
Choubara	24	17	41
Total	110	142	252

According to School Information System Punjab, (2023), total number of Elementary schools in District Layyah were 252.

Table 2. Population of students.

Tehsil	Class 6 (Male)	Class6 (Female)	Class 7 (Male)	Class7 (Female)	Class8 (Male)	Class 8 (Female)	Population
Layyah	2500	2745	2750	3660	2250	2440	37820
KL Eason	2160	3520	1800	2880	1980	3200	
Choubara	1320	850	960	840	1200	765	
Total	5980	7115	5510	7380	5430	6405	

As to the data from School Information System Punjab (2023), there were 37820 pupils enrolled in elementary schools in District Layyah, both male and female.

Sample of the Study

A proportional random sampling method was used to choose a representative sample of the population. There were 37820 people in total, and 380 pupils were chosen at random to make up the sample. The final sample was the total of the sample sizes from all three Tehsils. The sample sizes were determined individually for each Tehsil using the relevant formula.

Table 3. Sample of student's tehsil-wise.

Tehsil	Class 6 (Male)	Class6 (Female)	Class 7 (Male)	Class7 (Female)	Class8 (Male)	Class 8 (Female)	Population
Layyah	36	37	36	37	36	36	380
KL Eason	14	16	14	16	14	14	
Choubara	13	11	13	11	13	13	
Total	63	64	63	64	63	63	

Table 4. Sample size of the study.

District	Total Students	Sample
Layyah	37820	380

Data Collection

Structured questionnaires were used to gather data from the chosen group of primary school pupils. The surveys were carried out under the guidance of qualified researchers during school hours. The anonymity of their answers was guaranteed to the participants, and they were urged to give truthful and precise information.

Analysis of Data

Using the proper statistical techniques, such as inferential and descriptive statistics, the collected data was examined. The data were summarized using descriptive statistics including mean, standard deviation, and frequency distributions. Inferential statistics, such as correlation analysis, were used to investigate the

connections between primary school kids' levels of physical exercise and their mental health outcomes. All statistical tests were conducted with a significance threshold of $p < 0.05$. To make it easier to grasp and analyze the results, the data analysis results were presented as tables and figures. Based on the findings, the research questions were answered and conclusions were made. This section of the study provided an overview of the data analysis; it includes participant demographics, a statement and factor-by-factor analysis of students' perceptions, comparison tables of gender and location-wise factors, comparison tables of groups such as male and female, comparison tables of groups such as rural and urban, and a comparison of all the variances.

Demographic Information

The number of students per grade, the sector of the institution, the gender of the pupils, and the location of the school make up the demographic data.

Table 6. Demographic information.

Sr. No	Statement	Options	Frequency	Percent	Mean
1	Student Grades	Six (Male)	63	16.6	3.4895
		Six (Female)	64	16.8	
		Seven (Male)	63	16.6	
		Seven (Female)	67	17.6	
		Eight (Male)	60	15.8	
		Eight (Female)	63	16.6	
		Total	380	100.0	
2	Institution Sector	Public	380	100.0	1.0000
		Total	380	100.0	
3	Student Gender	Male	189	49.7	1.5026
		Female	191	50.3	
		Total	380	100.0	
4	School Location	Urban	198	52.1	1.478947
		Rural	182	47.9	
		Total	380	100.0	

Table 6 represents the distribution of student's grade-wise. Statement (1) showed the findings that Grade Six (Male) 63 respondents (16.6%), Grade Six (Female) 64 respondents (16.8%). Grade Seven (Male) 63 respondents (16.6%), Grade Seven (Female) 67 respondents (17.6%). Grade Eight (Male) 60 respondents (15.8%), and Grade Eight (Female) 63 respondents (16.6%). The table shows a total of 380 respondents, a comprehensive representation across gender and grade levels. The mean score 3.4895, suggested a balanced distribution of grades. Statement (2) was related to the distribution of institutions based on their sector whether public or private. All 380 respondents were from the public sector, (100%) of the total sample. The mean score was 1.0000. Statement (3) was related to students' gender. There was a total of 380 respondents and 189 students selected as respondents were male (49.7%) and 191 students were female (50.3%). The mean score calculated from gender distribution was 1.5026. Statement (4) was about the location of the schools whether rural or urban. Among the total 380 respondents, the majority of 198 students (52.1%,) were from urban schools, and 182 students (47.9%) were from rural schools. The mean score was 1.4789.

RESULTS AND DISCUSSION

Descriptive statistics for Students' perceptions

This section consists of a statement-wise analysis of all the factors.

Statement-wise Analysis of Physical Activity Levels

Physical activity level was a factor (1), it had twenty items, descriptive analysis presented here on Likert five-point rating scale with mean and Standard Deviation.

Table 7. Descriptive Analysis for Factor (1) Physical activity levels

Sr. No	Statement	Disagree	UD	Agree	Mean	S. D
1	I feel generally happy and content with my life.	75 (19.80%)	2 (0.50%)	303 (79.70%)	4.0184	1.2570
2	Physical activity provides a break from daily pressures and responsibilities.	42 (20.50%)	4 (1.10%)	298 (78.50%)	3.9026	1.3230
3	Physical activities help me cope with depression.	119 (31.40%)	3 (0.80%)	258 (67.90%)	3.7105	1.3746
4	Physical activity helps me manage stress and anxiety.	121 (31.80%)	4 (1.10%)	255 (67.10%)	3.6526	1.3937
5	Engaging in physical activities improves my mood.	128 (33.70%)	4 (1.10%)	248 (65.30%)	3.5974	1.4099
6	I have noticed an improvement in my self-confidence due to physical activities.	97 (25.50%)	3 (0.80%)	280 (73.70%)	3.8184	1.3281
7	Physical activities provide an outlet for expressing my emotions.	151 (39.70%)	2 (0.50%)	227 (59.80%)	3.4947	1.4807
8	I feel a sense of accomplishment when I engage in physical activities.	77 (20.2%)	2 (0.5%)	301 (79.2%)	4.0553	1.2326
9	Physical activity helps me focus better on my schoolwork.	65 (17.1%)	3 (0.8%)	312 (82.1%)	4.0211	1.1275
10	Regular physical activities help me sleep better.	138 (36.3%)	10 (2.6%)	232 (61%)	3.5500	1.4674
11	Physical activity serves as a form of self-care and helps me prioritize my well-being.	105 (27.7%)	5 (1.3%)	270 (71%)	3.7868	1.3857
12	I have noticed a decrease in negative thoughts and rumination as a result of physical activities.	117 (30.8%)	5 (1.3%)	258 (67.9%)	3.6579	1.3817
13	Engaging in physical activities boosts my creativity and problem-solving abilities.	152 (40%)	2 (0.5%)	226 (59.5%)	3.5026	1.4914
14	Physical activity contributes to a greater sense of purpose and meaning in my life.	126 (33.1%)	5 (1.3%)	249 (65.6%)	3.5842	1.4531
15	I find that physical activities enhance my social interactions and relationships.	96 (25.2%)	3 (0.8%)	279 (73.4%)	4.0605	2.4825
16	Regular physical activities help me manage and reduce feelings of loneliness.	87 (22.9%)	3 (0.8%)	290 (76.3%)	3.9211	1.2807
17	I feel more confident in social settings due to my engagement in physical activities.	76 (20%)	2 (0.5%)	302 (79.4%)	4.0026	1.3066
18	I have experienced an increase in my overall resilience through regular physical activities.	85 (22.4%)	4 (1.1%)	291 (76.6%)	3.9263	1.2851
19	Engaging in physical activities improves my body image and promotes a positive relationship with my body.	96 (25.2%)	4 (1.1%)	280 (73.7%)	3.8842	1.2717
20	I feel a sense of calm and relaxation after engaging in physical activities.	103 (27.1%)	3 (0.8%)	274 (72.1%)	3.8105	1.3652

Table 7 shows the detailed descriptive Analysis for Factor (1) Physical activity levels. Statement 1 investigated the relationship between engaging in physical activities and students' overall happiness and contentment in life. A majority of participants, 303 (79.70%), agreed with the statement, while 75 (19.80%) disagreed, and 2 (0.50%) were undecided (*M* = 4.0184, *S.D* = 0.2570). Statement 2, explored physical activity as a valuable break from daily pressures and responsibilities, 298 respondents (78.50%) agreed, 42 respondents (20.50%) disagreed, and 4 respondents (1.10%) were undecided (*M* = 3.9026, *S.D* = 1.3230). Statement 3 delved into the role of physical activities in coping with depression. Among the respondents, 258 (67.90%) agreed, 119 (31.40%) disagreed, and 3 (0.80%) were undecided (*M* = 3.7105, *S. D* = 1.3746). Statement 4 focused on the acknowledgment of physical activities in managing stress and anxiety. In response, 255 participants (67.10%) agreed, 121 participants (31.80%) disagreed, and 4 participants (1.10%) were undecided (*M* = 3.6526, *S.D* = 1.3937). Statement 5 explored the positive impact of physical activities on students' moods. Among the respondents, 248 (65.30%) agreed, 128 (33.70%) disagreed, and 4 (1.10%) were undecided (*M* = 3.5974, *S.D* = 1.4099). Statement 6 investigated the perceived improvement in self-confidence due to physical activities. A majority of 280 respondents (73.70%) agreed, 97 respondents (25.50%) disagreed, and only 3 respondents (0.80%) were undecided (*M* = 3.8184, *S. D* = 1.3281). Statement 7 explored whether physical activities provide an outlet for expressing emotions. A majority of 227 respondents (59.80%) agreed, 151 respondents (39.70%) disagreed, and only 2 respondents (0.50%) were undecided (*M* = 3.4947, *S. D* = 1.4807). Statement 8 was related to Participants' feelings of accomplishment in engaging in physical activities. A majority of 301 respondents (79.2%) agreed, 77 respondents (20.2%) disagreed, and only 2 participants (0.5%) were undecided (*M* = 4.0553, *S. D* = 1.2326). Statement 9 examined whether physical activity helped the participants focus better on their schoolwork. A majority of 312 respondents (82.1%) agreed, 65 participants (17.1%) disagreed, and only 3 participants (0.8%) were undecided (*M* = 4.0211, *S.D* = 1.1275). Statement 10 was about regular physical activities and their impact on sleep. A Majority of 332 participants (61%) agreed, 138 participants (36.3%) disagreed, and 10 participants (2.6%) were undecided (*M* = 3.5500, *S. D* = 1.4674). Statement 11 investigated whether physical activity served as a form of self-care and helped in prioritizing well-being. A majority of 270 participants (71%) agreed, 105 participants (27.7%) disagreed, and 5 participants (1.3%) were undecided (*M* = 3.7868, *S. D* = 1.3857). Statement 12 was about whether the participants reported a decrease in negative thoughts and rumination due to physical activities. The majority of 258 respondents (67.9%) agreed, 117 respondents (30.8%) disagreed, and 5 respondents (1.3%) were undecided (*M* = 3.6579, *S. D* = 1.3817). Statement 13 explored whether engaging in physical activities boosts creativity and problem-solving abilities. The Majority of responses 226 (59.5%) agreed, 152 (40%) disagreed, and 2 respondents (0.5%) were undecided (*M* = 3.5026, *S.D* = 1.4914). Statement 14 was related to the participants' sense of purpose and meaning attributed to physical activities. The results showed a majority of 249 respondents (65.6%) agreed, 126 participants (33.1%) disagreed, and only 5 respondents (1.3%) were undecided (*M* = 3.5842, *S.D* = 1.4531). Statement 15 investigated whether physical activities enhance social interactions and relationships. The majority of 279 respondents (73.4%) agreed, 96 respondents (25.2%) disagreed, and 3 respondents (0.8%) were undecided (*M* = 4.0605, *S.D* = 2.4825). Statement 16 explored whether regular physical activities helped participants manage and reduce feelings of loneliness. A majority of the respondents (76.3%) agreed, 87 respondents (22.9%) disagreed, and 3 respondents (.8%) were undecided (*M* = 3.9211, *S. D* = 1.2807). Statement 17 assessed whether participants feel more confident in social settings due to engagement in physical activities. A significant majority of 302 respondents (79.4%) agreed, 76 respondents (20%) disagreed, and 2 participants (0.5%) were undecided (*M* = 4.0026, *S. D* = 1.3066). Statement 18 examined whether participants experienced an increase in overall resilience through regular physical activities. The findings showed that a majority of 291 respondents (76.6%) agreed, 85 respondents (22.4%) disagreed, and 4 respondents (1.1%) were undecided (*M* = 3.9263, *S. D* = 1.2851). Statement 19 focused on how engaging in physical activities improves body image and promotes a positive relationship with the body. The majority, 280 respondents (73.7%) agreed, 96 respondents (25.2%) disagreed, and 4 respondents

(1.1%) were undecided (*M* = 3.8842, *S. D* = 1.2717). Statement 20 explored whether participants feel a sense of calm and relaxation after engaging in physical activities. The findings revealed that 274 participants (72.1%) agreed, 103 respondents (27.1%) disagreed, and only 3 respondents (0.8%) were undecided (*M* = 3.8105, *S.D* = 1.3652).

Discussion

Bell et al. (2019) study has demonstrated a clear correlation between physical exercise and endorphin release, which improves mood. These results are consistent with the survey responses, which show that primary school pupils who participate in physical activities report feeling happier. Andermo et al. (2020) performed a study that demonstrated how physical activities might help youngsters reduce stress. The coherence of these findings in the primary school environment is highlighted by the overwhelming agreement about the treatment of stress and anxiety through physical exercise. Results pertaining to the beneficial impact of physical exercise on academic performance and concentration are consistent with studies carried out by Cocca et al. (2020). Their research showed that children in elementary school who engage in regular physical activity had better academic achievement and cognitive function. Research like that done by Tamminen et al. (2020) supports the idea that boosting students' physical activity levels might assist minimizes mental health difficulties among them.

The findings of the current study were also correlated with the results of the above studies. A vast majority of respondents (79.70%) concur that they are typically happy and satisfied with their lives. The majority (78.50%) agree that engaging in physical activity provides a respite from the demands and obligations of daily life. A sizable portion (67.90%) concur that engaging in physical activity helps manage melancholy. A sizable percentage (67.10%) think that exercising can assist with stress and anxiety management. The majority of people (65.30%) believe that exercise improves their mood. A sizable portion (73.70%) report an increase in self-confidence linked to physical activity. A sizable majority (72.3%) make physical activity a priority in their everyday lives. The majority (64.5%) regularly participate in physical activity. A sizeable portion (65.5%) engages in organized sports or physical education programs on a regular basis. A sizable percentage (67.9%) said they like engaging in physical activity.

CONCLUSIONS AND RECOMMENDATIONS

The majority of respondents firmly believe that there is a direct correlation between physical activity and many aspects of mental health. These components include improving self-confidence, managing stress, and elevating mood. The study highlights the potential of physical activities as a proactive tool for resolving common mental health concerns when paired with other activities, in addition to their enjoyment value. The findings highlight the necessity of individualized care plans that take into account patients' diverse preferences for physical activity. The suggested remedies support community projects, corporate wellness efforts, and the inclusion of comprehensive physical education programs in the curriculum. The recommended actions seek to create a supportive atmosphere while taking into account the inherent connection between physical activity and improved mental health outcomes. These findings facilitate the creation of a thorough strategy for well-being in learning environments by laying the groundwork for further investigation and well-informed policy-making. The strong link between physical activity and primary school kids' mental health is being intensively investigated by the academic community.

Following recommendations are give based on the results of the study.

1. Create and put into action a comprehensive program for well-being that incorporates physical education into the academic program to support a well-rounded approach to student development.
2. Start awareness efforts to inform educators, parents, and students about the advantages of regular physical activity for mental and intellectual well-being.
3. Motivate teachers to include quick physical exercises in their lesson plans to foster an engaged learning environment that improves students' physical and mental health.

4. Establish locations within educational institutions that are specifically dedicated to physical activities so that students have convenient places to exercise and relax.
5. Work together with experts in physical education to create customized curricula that meet the various requirements and preferences of pupils while maintaining inclusivity.
6. To provide students with a range of alternatives for remaining active, provide a variety of extracurricular physical exercise activities, such as sports clubs, dancing courses, and outdoor adventure groups.
7. Plan mental health awareness and coping strategy seminars that highlight the benefits of physical activity for emotional wellness.
8. Organize educational workshops to involve parents in well-being programs, emphasizing the value of parental support for the physical and emotional health of kids.

REFERENCES

Alyami, M., Melyani, Z., Johani, A. Al, Ullah, E., Alyami, H., Sundram, F., Hill, A., & Henning, M. (2017). The Impact of Self-Esteem, Academic Self-Efficacy and Perceived Stress on Academic Performance: A Cross-Sectional Study of Saudi Psychology Students. *The European Journal of Educational Sciences*, *4*, 4.

Andermo, S., Hallgren, M., Nguyen, T. T. D., Jonsson, S., Petersen, S., Friberg, M., & Elinder, L. S. (2020). School-related physical activity interventions and mental health among children: a systematic review and meta-analysis. Sports Medicine-open, 6, 1-27.

Bell, S. L., Audrey, S., Gunnell, D., Cooper, A., & Campbell, R. (2019). The relationship between physical activity, mental wellbeing and symptoms of mental health disorder in adolescents: a cohort study. International Journal of Behavioral Nutrition and Physical Activity, 16, 1-12.

Biddle, S. J., Ciaccioni, S., Thomas, G., & Vergeer, I. (2019). Physical activity and mental health in children and adolescents: An updated review of reviews and an analysis of causality. Psychology of Sport and Exercise, 42, 146-155.

Chekroud, S. R., Gueorguieva, R., Zheutlin, A. B., Paulus, M., Krumholz, H. M., Krystal, J. H., & Chekroud, A. M. (2018). Association between physical exercise and mental health in 1· 2 million individuals in the USA between 2011 and 2015: a cross-sectional study. The Lancet Psychiatry, 5(9), 739-746.

Cocca, A., Espino Verdugo, F., Ródenas Cuenca, L. T., & Cocca, M. (2020). Effect of a game-based physical education program on physical fitness and mental health in elementary school children. International Journal of Environmental Research and Public Health, 17(13), 4883.

Ekkekakis, P. (2023). Routledge handbook of physical activity and mental health. Taylor & Francis.

Fluetsch, N., Levy, C., & Tallon, L. (2019). The relationship of physical activity to mental health: A 2015 behavioral risk factor surveillance system data analysis. Journal of Affective Disorders, 253, 96-101.

Jacob, L., Tully, M. A., Barnett, Y., Lopez-Sanchez, G. F., Butler, L., Schuch, F., & Smith, L. (2020). The relationship between physical activity and mental health in a sample of the UK public: A cross-sectional study during the implementation of COVID-19 social distancing measures. Mental Health and Physical Activity, 19, 100345.

Johnson, E. C., Helen Cross, J., & Reilly, C. (2020). Physical activity in people with epilepsy: A systematic review. Epilepsia, 61(6), 1062-1081.

Loturco, I., Montoya, N. P., Ferraz, M. B., Berbat, V., & Pereira, L. A. (2022). A systematic review of the effects of physical activity on specific academic skills of school students. Education Sciences, 12(2), 134.

Lubans, D., Richards, J., Hillman, C., Faulkner, G., Beauchamp, M., Nilsson, M., ... & Biddle, S. (2016). Physical activity for cognitive and mental health in youth: a systematic review of mechanisms. Pediatrics, 138, 3.

Mahindru, A., Patil, P., & Agrawal, V. (2023). Role of physical activity on mental health and well-being: A review. Cureus, 15, 1.

Marconcin, P., Werneck, A. O., Peralta, M., Ihle, A., Gouveia, É. R., Ferrari, G., ... & Marques, A. (2022). The association between physical activity and mental health during the first year of the COVID-19 pandemic: a systematic review. BMC Public Health, 22(1), 209.

Maugeri, G., Castrogiovanni, P., Battaglia, G., Pippi, R., D'Agata, V., Palma, A., ... & Musumeci, G. (2020). The impact of physical activity on psychological health during Covid-19 pandemic in Italy. Heliyon, 6, 6.

Schuch, F. B., & Vancampfort, D. (2021). Physical activity, exercise, and mental disorders: it is time to move on. Trends in Psychiatry and Psychotherapy, 43, 177-184.

Smith, L., Lee, J. A., Mun, J., Pakpahan, R., Imm, K. R., Izadi, S., ... & Yang, L. (2019). Levels and patterns of self-reported and objectively-measured free-living physical activity among prostate cancer survivors: a prospective cohort study. Cancer, 125(5), 798-806.

Tamminen, N., Reinikainen, J., Appelqvist-Schmidlechner, K., Borodulin, K., Mäki-Opas, T., & Solin, P. (2020). Associations of physical activity with positive mental health: A population-based study. Mental Health and Physical Activity, 18, 100319.

White, R. L., Babic, M. J., Parker, P. D., Lubans, D. R., Astell-Burt, T., & Lonsdale, C. (2017). Domain-specific physical activity and mental health: a meta-analysis. American Journal of Preventive Medicine, 52(5), 653-666.