Journal of Education and Practice
ISSN 2222-1735 (Paper) ISSN 2222-288X (Online)
Vol.14, No.4, 2023

Observing Preschool Physical Education Practices and Policies Under the COVID-19 Pandemic

Tamader Al-Thani
College of Education, Qatar University, PO box 2713, Doha, Qatar
E-mail: tamader.al-thani@qu.edu.qa

Abstract
The covid-19 epidemic changed people live style and routines, schools and children were effected by the covid-19 restrictions, this study was conducted during this pandemic.This study was conducted in the period of covid-19. In the months of April, and May 2022. At the beginning of the covid-19 pandemic, 2020 and 2021 there was no physical education classes they start to come back gradually on 2022.According to the new system, students must attend from one to three times a week to the school building, while maintaining an attendance rate of about 30% of the total number of students in the school per day, in order to attend some basic subject classes, conduct practical experiments in laboratories and take tests. (Gulf,2020).The participants where random schools in the state of Qatar 40 schools, 27 governmental schools and 13 international schools, 27 P.E teachers from government schools and 13 P.E teachers from independent schools.The questionnaire Go NAPP SAC (Ward. Et al, 2014) the questionnaire is built to assess children physical activity, from the University of North Carolina.The result was that the physical education was infected intensely in the period of the covid -19 pandemic, at the beginning of the pandemic period there were no physical education classes then slowly they started to come back the physical education classes.
Keywords: Covid-19 Pandemic, Physical Education, Pre-school, School Family Relationship
DOI: 10.7176/JEP/14-4-06
Publication date: February 28th 2023

1. Introductions

The physical education is an important sport for children in pre-schools 3-6 years old, emotionally physically cognitively and socially.

Emotional development is the child ability to recognize, express, and manage feelings at different situation in life and to have empathy for the feelings of others, physical education help the child to have control over his impulse. (Johnson, A .2022)

Physical activity provides, physical, psychological, and social benefits for children. It is important to have the abilities and a major motivation for lifelong participation in physical activities from early years on. (Leisterer, S. L., & Jekauc, D. 2019). Physical development is an important part of developing as children learn to master control of their body. For instance, physical development includes sitting, crawling, standing and walking. As children grow and develop, these changes are simply observed. A child's physical or motor development falls into two categories: Fine motor skills and Gross motor skills. (John academy, 2022). Schools are a good setting to promote the nationally recommended 60 minutes or more of moderate-to-vigorous physical activity daily. Regular physical activity in childhood is necessary for promoting lifelong health and well-being and avoiding numerous health conditions. (CDC Healthy Schools)

Cognitive development Piaget believes that children's capability to comprehend objects such as learning that a rattle makes a noise when shaken was a cognitive skill that develops slowly as a child matures and intermingles with the environment. Today, developmental psychologists think Piaget was incorrect; researchers have found that even very young children understand objects and how they work long before they have experience with those objects. (General Psychology)

Social development, According to Piaget, children engage in types of play that reflect their stages of cognitive development: functional play, constructive play, symbolic, fantasy play, and games with rules. (My teaching cup board) Vygotsky believes that play enhance self-regulation, when applied to young children, the term "self-regulation" is referred to a variety of abilities. Self-regulated behaviors thus include delaying indulgence, being able to change fast between different tasks, focusing attention and monitoring one's emotions. One or two for these aspects, leading to a self-regulation as discrete behaviors, separating cognitive self-regulation from social and emotional self-regulation. Researchers that study self-regulation as a social-emotional competency often regard it as a distinguishing characteristic that is determined by children's psycho-physiological characteristics such as temperament. For example, the child's ability to purposefully engage in or refrain from certain behaviors physical as well as social. (Bodrova, E. (2006)

1.1 The policy in dealing with covid-19 in Qatari schools

Qatar's schools return to normal as before Corona, Qatar will begin a gradual lifting of restrictions imposed due to the spread of the Corona virus in all public and private schools in the country. The Qatari Ministry of Education

announced in a statement that "in light of the health indicators of the Corona pandemic (Covid-19), and in the interest of the ministry for the interest of students and their academic future, it has been decided to return to normal school hours as of tomorrow, with the possibility of including the school schedule for recess and physical education class for the first time since the Corona pandemic, provided that it is in groups to ensure that one group is kept in entry and exit,". In a circular to school administrations, the ministry stressed the need to conduct self-examination of Corona during the weekend and on a weekly basis for unvaccinated and non-recovered students only, and to stop this procedure for vaccinated students. (Roya News,22)

The Qatari Ministry of Education and Higher Education announced the amendment of the previously circulated school return plan, and the implementation of the blended learning system during the first semester of the academic year 2020-2021, in all educational stages of public and private schools, kindergartens and higher education institutions. According to the new system, students must attend from one to three times a week to the school building, while maintaining an attendance rate of about 30% of the total number of students in the school per day, in order to attend some basic subject classes, conduct practical experiments in laboratories and take tests. The local newspaper Al-Sharq reported that e-learning (distance) will be integrated with classroom education in one framework. In order to achieve health requirements and social distancing, schools are obligated to divide the total number of students in one level into study sections that include a maximum of 15 students in one section, and student seating is organized in classrooms, taking into account the presence of a distance of 1.5 meters between each student and his classmate.

The "distance learning" system will be applied on days when students do not attend the school building according to the schedule planned by the ministry. PAs for kindergartens, the usual daily schedule is applied during the days of students' visit to the school, where the working hours are from 7 am to 12 pm, with the need to work on exploiting the open spaces in the school building and converting them into open classrooms to achieve the required social distancing. (Gulf,2020)

2. Methods

2.1 Participants

27 teachers from 27 government schools and 13 teachers from 13 international schools all the participants are physical education teachers. All the teachers have bachelor degree or master in physical Education. Qatari schools are divided between public (government) schools and private schools, expat usually study in the private schools that follows their embassies. Every Qatari citizen has the right to a public education that is compulsory and free. The number of public schools exceeded 207 plus 68 kindergartens in 2019/2020, serving more than 124,600 Qatari and non-Qatari students. Private schools are also welcome in Qatar, they should be licensed by the Ministry of Education and Higher Education also are an alternative to the K-12 public schools. In the 2019/20 academic year, there are more than 332 private schools serving approximately 211,000 students. Private schools have a varied range of curricula, philosophies, and activities that encounter the desires of individual students and their families.

Evaluation of Public and Private Preschools: This is a comprehensive, objective, documented and accurate process, which assesses the performance of all public and private preschools in Qatar. It aims to improve the proficiency of preschools, advance the educational process and ensure a high-quality education is presented to all children in this stage. Furthermore, it enables children to develop the required knowledge and skills to meet their many kindergarten needs. It also helps to detect distinguished programs and practices, as well as the strengths and areas for development and improvement. (Ministry of Education and Higher education)

2.2 Instruments

Go NAPSACC's best-practice standards for childcare programs can help children up to age 5 develop healthy habits for eating, physical activity, and oral health. For this self-assessment, physical activity is any movement of the body that increases heart rate and breathing. These questions relate to opportunities for both children with special needs and typically developing children.

Question one to three is about Time provided, question four to seven is about Indoor Play Environment, question eight to ten is about Teacher Practices, question eleven to sixteen is about Education & Professional Development and question seventeen is about Policy on physical education. (napsacc,2014)

2.3 Procedure

The questionnaire took the approval from the IRB then the Ministry of Education and Higher Education. The questionnaire was distributed to all the schools 27 government schools and 13 private or international schools, total 40 schools. The questionnaire was delivered to the SPSS to get the result how is the physical education classes were affected by the covid-19 pandemic.

For each of the 17 items, teachers were instructed to select (from 1-4) the physical education practice/area that is pertinent to their respective institutions, with 4 being the best practice.

3. Results

Descriptive Statistics

Frequencies and percentages were calculated for school type, job title, qualification, years of experience in Education, and years of experience in Physical Education. Frequencies and percentages are presented in Table 1.

Table 1. Frequency Table for Nominal Variables

Variable	*n*	*%*
School Type		
Government	27	67.50
International	13	32.50
Job Title		
PE Teacher	24	60.00
PE Coordinator	8	20.00
Other	8	20.00
Qualification		
Bachelor	33	82.50
Master	7	17.50
Years of Experience in Education		
0-5 years	4	10.00
6-9 years	4	10.00
10-15 years	10	25.00
16-20 years	6	15.00
21 years and more	16	40.00
Years of Experience in Physical Education		
0-5 years	10	25.00
6-9 years	7	17.50
10-15 years	7	17.50
16-20 years	5	12.50
21 years and more	11	27.50

Fisher's Exact Test

A Fisher's exact test was conducted to examine whether "School Type" and "Availability of PE Assistant" were Government. There were two levels in School Type: Government and International, and two levels in "Availability of PE Assistant": No and Yes.

The results of the Fisher exact test were not significant based on an alpha value of .05, OR = 1.93, p = .484, suggesting that "School Type" and "Availability of PE Assistant" could be independent of one another. This implies that the observed frequencies were not significantly different than the expected frequencies. Table 2 presents the results of the Fisher's exact test.

Table 2. Observed and Expected Frequencies

	School Type			
Availability of PE Assistant	Government	International	OR	*p*
No	10[8.78]	3[4.22]	1.93	.484
Yes	17[18.23]	10[8.78]		

Note. Values formatted as Observed [Expected].

MANOVA

A multivariate analysis of variance (MANOVA) was conducted to assess if there were significant differences in the linear combination of time provided, Education and professional development, teacher practices, indoor play environment, and policies between the levels of School Type.

The main effect for School Type was significant, $F(5, 34) = 3.36$, p = .014, $\eta^2p = 0.33$, suggesting the linear combination of time provided, Education and professional development, teacher practices, indoor play environment, and policies were significantly different between the levels of School Type. The MANOVA results are presented in Table 3.

Table 3. MANOVA Results for time provided, Education and professional development, teacher practices, indoor play environment, and policies by School Type

Variable	Pillai	*F*	*df*	Residual df	*P*	$\eta_p 2$
School Type	0.33	3.36	5	34	.014	0.33

To further examine the effects of School Type on time provided, education and professional development, teacher practices, indoor play environment, and policies an analysis of variance (ANOVA) was conducted for each dependent variable.

ANOVA (Dependent: Time provided)

An analysis of variance (ANOVA) was conducted to determine whether there were significant differences in Time provided by School Type. The ANOVA was examined based on an alpha value of .05. The results of the ANOVA were not significant, indicating the differences in Time provided among the levels of School Type were all similar (Table 4). The means and standard deviations are presented in Table 5.

Table 4. Analysis of Variance Table for Time provided by School Type

Term	*SS*	*df*	*F*	*p*	$\eta_p 2$
School Type	0.77	1	1.85	.182	0.05
Residuals	15.77	38			

Table 5. Mean, Standard Deviation, and Sample Size for Time provided by School Type

School Type	*M*	*SD*	*n*
Government	2.01	0.69	27
International	2.31	0.54	13

ANOVA (Dependent: Education and professional development)

The ANOVA was examined based on an alpha value of .05. The results of the ANOVA were significant, $F(1, 38) = 7.99$, $p = .007$, indicating there were significant differences in Education and professional development among the levels of School Type (Table 6). The eta squared was 0.17, indicating School Type explains approximately 17% of the variance in Education and professional development. The means and standard deviations are presented in Table 7.

Table 6. Analysis of Variance Table for Education and professional development by School Type

Term	*SS*	*df*	*F*	*p*	$\eta_p 2$
School Type	2.48	1	7.99	.007	0.17
Residuals	11.80	38			

Table 7. Mean, Standard Deviation, and Sample Size for Education and professional development by School Type

School Type	*M*	*SD*	*n*
Government	3.02	0.62	27
International	3.55	0.40	13

ANOVA (Dependent: Teacher practices)

The ANOVA was examined based on an alpha value of .05. The results of the ANOVA were not significant, $F(1, 38) = 2.74$, $p = .106$, indicating the differences in Teacher practices among the levels of School Type were all similar (Table8). The means and standard deviations are presented in Table 9.

Table 8. Analysis of Variance Table for Teacher practices by School Type

Term	*SS*	*df*	*F*	*p*	$\eta_p 2$
School Type	0.43	1	2.74	.106	0.07
Residuals	6.00	38			

Table 9. Mean, Standard Deviation, and Sample Size for Teacher practices by School Type

School Type	*M*	*SD*	*n*
Government	2.89	0.37	27
International	2.67	0.45	13

ANOVA (Dependent: Indoor play environment)

The ANOVA was examined based on an alpha value of .05. The results of the ANOVA were significant, $F(1, 38) = 10.37$, $p = .003$, indicating there were significant differences in Indoor play environment among the levels of School Type (Table 10). The eta squared was 0.21 indicating School Type explains approximately 21% of the variance in Indoor play environment. The means and standard deviations are presented in Table 11.

Table 10. Analysis of Variance Table for Indoor play environment by School Type

Term	*SS*	*df*	*F*	*p*	$\eta_p 2$
School Type	4.24	1	10.37	.003	0.21
Residuals	15.53	38			

Table 11. Mean, Standard Deviation, and Sample Size for Indoor play environment by School Type

School Type	*M*	*SD*	*n*
Government	2.82	0.67	27
International	3.52	0.57	13

ANOVA (Dependent: Policies)

The ANOVA was examined based on an alpha value of .05. The results of the ANOVA were not significant, $F(1, 38) = 0.86$, $p = .361$, indicating the differences in Policies among the levels of School Type were all similar (Table 12). The means and standard deviations are presented in Table 13.

Table 12. Analysis of Variance Table for Policies by School Type

Term	*SS*	*df*	*F*	*p*	$\eta_p 2$
School Type	0.89	1	0.86	.361	0.02
Residuals	39.71	38			

Table 13. Mean, Standard Deviation, and Sample Size for Policies by School Type

School Type	*M*	*SD*	*n*
Government	2.80	1.05	27
International	3.12	0.96	13

References

1. Ward D, Morris E, McWilliams C, Vaughn A, Erinosho T, Mazzucca S, Hanson P, Ammerman A, Neelon S, Sommers J, Ball S. (2014). Go NAP SACC: Nutrition and Physical Activity Self-Assessment for Child Care, 2nd Edition. Center for Health Promotion and Disease Prevention and Department of Nutrition, University of North Carolina at Chapel Hill. Available at: www.gonapsacc.org.
2. Johnson ,A (2022) scienceoxygen.com
3. Leisterer, S. L., & Jekauc, D. (2019). Students' Emotional Experience in Physical Education—A Qualitative Study for New Theoretical Insights. Sports. https/doi.org/10.3390/sports7010010
4. Academy, J. (2022). Physical Development in Early Childhood: From Birth to Age 6.
5. CHILDHOOD: PHYSICAL AND COGNITIVE DEVELOPMENT. General Psychology by OpenStax and Lumen Learning is Licensed.
6. Developmental Stages of Play - Piaget. My Teaching cup Board.
7. Bodrova, E. (2006). Developing self-regulation: The Vygotskian view. Academic Exchange Quarterly. 1096-1453
8. Physical Education and Physical Activity. Centers of Diseases Control and Prevention. https://www.cdc.gov/healthyschools/index.htm
9. (2022, February 12). Qatar's schools return to normal as before Corona. Gulf on Line. http://khaleej.online/YV7YZ3
10. (2020, August 20). Qatar announces school return plan as Corona outbreak continues. Roya News. https://royanews.tv/news/270444
11. State of qatar (n.d.). Ministry of Education and Higher Education. Https://www.edu.gov.qa/en/Pages/Evaluationdefault.Aspx?ItemID=63.
12. Ward D, Morris E, McWilliams C, Vaughn A, Erinosho T, Mazzucca S, Hanson P, Ammerman A, Neelon S, Sommers J, Ball S. (n.d.). Go NAPSACC Self-Assessment Instrument. Www.Gonapsacc.org.
13. Swim England (n.d.). Swimming and Water Safety in Schools. Https://www.Swimming.org/Schools/.
14. Li, G., Yang, L., Xu, X., Chen, M., Cai, Y., Wen, Y., Xie, X., Lu, X., Luo, S., Lin, S., Li, H., & Wu, S. (2022).

Physical Changes of Preschool Children during COVID-19 School Closures in Fujian, China. International journal of environmental research and public health, 19(20), 13699. https://doi.org/10.3390/ijerph192013699
15. Styx, L. (2020, December 9). How COVID-19 Is Affecting Preschoolers' Development and Mental Health. https://www.Verywellfamily.com/How-Covid-19-Is-Affecting-Preschoolers-Development-And-Mental-Health-5090416.
16. Dunton, G.F., Do, B. & Wang, S.D. Early effects of the COVID-19 pandemic on physical activity and sedentary behavior in children living in the U.S.. BMC Public Health 20, 1351 (2020). https://doi.org/10.1186/s12889-020-09429-3
17. McGall SE, McGuigan MR, Nottle C. Contribution of free play towards physical activity guidelines for New Zealand primary school children aged 7–9 years. Br J Sports Med. (2011).
18. Dowda, M., Brown, W. H., McIver, K. L., Pfeiffer, K. A., O'Neill, J. R., Addy, C. L., & Pate, R. R. (2009). Policies and characteristics of the preschool environment and physical activity of young children. Pediatrics, 123(2), e261–e266. https://doi.org/10.1542/peds.2008-2498
19. Barnett, W. S. (2008). Preschool Education and Its Lasting Effects: Research and Policy Implications. Research Gate. https://www.researchgate.net/publication/253354378_Preschool_Education_and_Its_Lasting_Effects_Research_and_Policy_Implications
20. UNESCO (n.d.). When schools shut: Gendered impacts of COVID-19 school closures. Https://www.Unesco.org/en/Covid-19/Education-Response. Retrieved November 4, 2022, from
21. Dunton, G.F., Do, B. & Wang, S.D. Early effects of the COVID-19 pandemic on physical activity and sedentary behavior in children living in the U.S.. BMC Public Health 20, 1351 (2020). https://doi.org/10.1186/s12889-020-09429-3
22. Polero, P., Rebollo-Seco, C., Adsuar, J. C., Pérez-Gómez, J., Rojo-Ramos, J., Manzano-Redondo, F., Garcia-Gordillo, M. Á., & Carlos-Vivas, J. (2020). Physical Activity Recommendations during COVID-19: Narrative Review. International journal of environmental research and public health, 18(1), 65. https://doi.org/10.3390/ijerph18010065
23. Bentlage, E., Ammar, A., How, D., Ahmed, M., Trabelsi, K., Chtourou, H., & Brach, M. (2020). Practical Recommendations for Maintaining Active Lifestyle during the COVID-19 Pandemic: A Systematic Literature Review. International journal of environmental research and public health, 17(17), 6265. https://doi.org/10.3390/ijerph17176265
24. Schwendinger, F., & Pocecco, E. (2020). Counteracting Physical Inactivity during the COVID-19 Pandemic: Evidence-Based Recommendations for Home-Based Exercise. International journal of environmental research and public health, 17(11), 3909. https://doi.org/10.3390/ijerph17113909
25. Al-Thani, T., & Semmar, Y. (2016). Physical Education Policies and Practices in Qatari Preschools: A Cross-Cultural Study. Journal of Education and Practice, Vol.7, No.28, 2016.