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Evaluating the Outdoor Play & Learning for Pre-schools Underneath the Covid -19 Restraints

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Abstract
This study is about out-door play under the covid-19 restrictions, using Go NAPSACC assessment for outdoor play. Self-Assessments help teachers in the preschools providers and compare their practices to best-practice standards based on the most current research. Go NAPSACC's best-practice standards for preschool programs can help children up to age 5 develop healthy habits for eating, physical activity, and oral health. The Go NAPSACC self-assessment is the beginning toward change. The researcher distribute the questioner for 40 schools, 27 governmental schools plus 27 teachers, and 13 international schools plus 13 teachers. The assessment is divided into four categories:
Outdoor Playtime
Outdoor Play Environment
Education & Professional Development
Policy
To assess the schools environment under the Covid-19 restrictions, when the covid-19 hit the word. Qatar was effected as part of this world, the ministry of education and higher education stated and required the closure of the physical education classes and the outdoor play from 2020 to 2021 then came back at 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 teachers of the education practiced and experienced difficulties in distance education allowed teachers to develop subject competencies and improve their capability to use ICT in the school environment.(Rasa et al;2022)
The research found that through the pandemic, the cognitive and motor development skills of children at age five suffered the most followed by their learning experiences. Stay-at-home measures also led to a harsh reduction in physical activity, which may explain the underdevelopment in motor skills. (SRCD,2022)
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". (Roya News,22)
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1. Introduction

The COVID-19 pandemic might establish an "obesogenic lifestyle" that results in worsening childhood obesity. (G et al., 2022).

The World Anti-Obesity Day, which falls on March 4 of each year, carried shocking figures on the reality of obesity in the State of Qatar, as the Primary Health Care Corporation revealed that the rates of overweight and obesity increased to approximately 54% of the total number of visitors to therapeutic and community nutrition clinics in all its health centers.

Childhood obesity ,one of the most important reasons for the high rates of obesity in the State of Qatar is due to the imitation of the American life system, including commuting only by car, eating fast food and not dispensing with air conditioners, which results in physical inactivity and lack of calorie burning. With scorching temperatures as high as 45°C, regular "natural" exercise such as walking is uncommon. The increasing embrace of Western fast food restaurants in recent years. Traditionally, people often share large community plates, making it difficult to keep track of portion size and quantity. (sharq news,2022)

As teachers or parents, children need to eat foods and beverages that are full with nutrients. Children should eat and drink just enough calories for their everyday living and activities. The Dietary Guidelines for Americans, 2020–2025 suggest balancing calories with physical activity and Improve eating habits to promote health live. It can reduce the risk of disease, overweight and obesity. Americans ages 2 years and older are encouraged to consume a variety of healthy foods and beverages such as fruits, vegetables, unsalted nuts and seeds (child isn't

allergic), and whole grains, fat-free or low-fat dairy products, a variety of protein foods, including seafood, lean meats and poultry, eggs, legumes. (NIH,2019)

Games and activities are good ways to teach children about food and healthy eating, play-based learning provide children's development through many areas such as physical, social, emotional and intellectual development. (Healthy Eating, 2013)

The benefits of physical activity on brain health happen right after a session of moderate-to-vigorous physical activity, includes improved thinking or cognition for children 6 to 13 years of age. (CDC, 2022)

2. Methods

2.1. Participants

The schools who participated in this research are 40 random schools in the state of Qatar; the schools are divided into two categories governmental and international schools. The governmental school are 27 schools; the international schools are 13 schools, 27 teachers from the governmental schools, and 13 teachers from the international schools. All the schools in Qatar are under the supervision of the ministry of education and higher studies, the governmental schools are under the ministry of education and higher study, they recruit the teachers and employee and approve the curriculum. The international schools are to serve the expat in the country so most of the international schools follow their countries curriculum and their teachers are from their original countries they follow their original country curriculum. The British school under the ITCC is permitted by Penta International which, are one of the leading independent helps training, consultancy and inspection services in the United Kingdom and overseas, and under the British Government.

2.2 Instruments

Is a self-assessment program that serve seven categories; child nutrition's, Breastfeeding & Infant Feeding, Farm to (ECE) Education & Professional Development, Oral Health, Infant & Child Physical Activity, Outdoor Play & Learning, Screen Time. In this paper, the researcher is focusing on the Outdoor Play & Learning that helps best practices address:

Outdoor Playtime & Play Environment
Education & Professional Development
Policy (napsacc,2018)

Preschoolers needs about 3 hours of physical activities each day, the activities can be light, moderate, or vigorous in intensity. Preschool-age children (ages 3 to 5 years) should have the opportunity to be physically active throughout the day which will help them grow and develop. (NIH, 2019)

The regular exercise can help motivate children to make healthy food choices, playing with other children, throwing a football; cycling, skating, or swimming; family walks and hikes. Introduce different activities for children that they enjoy so they can choose one or two of the activity that they can enjoy practicing. (H.E, 2022)
Making sensible ranges about preschool children's health can help to good conducts and good activities throughout childhood. Teaching preschooler to make healthy food choices arrange the stage for a lifelong healthy diet. (Mayo, 2021)

2.3 Procedure

The researcher approved the Nap Sacc questioner from the IRB and the Ministry of Education and Higher Education, and then the researcher distributed the questioner to 40 schools 13 international schools and 27 Qatari public schools. The participants where 13 teachers from international schools and 27 teachers from public schools, all the teachers have bachelor degree in physical education and most of them experiences from 4 to 6 years.

The pedagogical knowledge of the curriculum, and practicum provided by the Teachers education and schools and, the support from teachers and administrators also helped in developing the trainee teacher. These supports had developed the confidence of the trainee teacher to deliver quality teaching. The inclusion of physical activities will develop the children's motor skills and cognitive development; will help characterize an important period of early childhood. (Siong et al; 2019)

3. Results

3.1 MANOVA

To assess whether there were significant differences between levels of School type in the linear School type of "outdoor playtime", "outdoor play environment", "policy", and "education and professional development", a multivariate analysis of variance (MANOVA) was conducted.

The main effect for School type was significant ($F(4, 32) = 15.75$, $p < .001$, $\eta^2p = 0.66$) suggesting the linear School type of outdoor playtime, outdoor play environment, policy, and education and professional development was significantly different between the levels of School type. The MANOVA results are presented in Table 1.

Table 1. *MANOVA Results for outdoor playtime, outdoor play environment, policy, and education and professional development by School type*

Variable	Pillai	*F*	*df*	Residual df	*p*	$\eta_p 2$
School type	0.66	15.75	4	32	< .001	0.66

To further examine the effects of School type on outdoor playtime, outdoor play environment, policy, and education and professional development, an analysis of variance (ANOVA) was conducted for each dependent variable.

ANOVA (Dependent: Outdoor playtime)

An analysis of variance (ANOVA) was conducted to determine whether there were significant differences in outdoor playtime by School type.

The ANOVA was examined based on an alpha value of .05. The results of the ANOVA were significant, $F(1, 35) = 54.78$, $p < .001$, indicating there were significant differences in outdoor playtime among the levels of School type (Table 2). The eta squared was 0.61, indicating School type explains approximately 61% of the variance in outdoor playtime. The means and standard deviations are presented in Table 3.

Table 2. *Analysis of Variance Table for outdoor playtime by School type*

Term	*SS*	*df*	*F*	*p*	$\eta_p 2$
School type	5.75	1	54.78	< .001	0.61
Residuals	3.67	35			

Table 3. *Mean, Standard Deviation, and Sample Size for outdoor playtime by School type*

School type	*M*	*SD*	*n*
International	2.90	0.32	10
Independent	2.01	0.33	27

3.2 ANOVA (Dependent: Outdoor play environment)

An analysis of variance (ANOVA) was conducted to determine whether there were significant differences in outdoor play environment by School type.

The ANOVA was examined based on an alpha value of .05. The results of the ANOVA were significant, $F(1, 35) = 32.04$, $p < .001$, indicating there were significant differences in outdoor play environment among the levels of School type (Table 4). The eta squared was 0.48, indicating School type explains approximately 48% of the variance in the outdoor play environment. The means and standard deviations are presented in Table 5.

Table 4. *Analysis of Variance Table for outdoor play environment by School type*

Term	*SS*	*df*	*F*	*p*	$\eta_p 2$
School type	10.23	1	32.04	< .001	0.48
Residuals	11.18	35			

Table 5. *Mean, Standard Deviation, and Sample Size for outdoor play environment by School type*

School type	*M*	*SD*	*n*
International	3.28	0.72	10
Independent	2.10	0.50	27

3.3 ANOVA (Dependent: Policy)

An analysis of variance (ANOVA) was conducted to determine whether there were significant differences in policy by School type.

The ANOVA was examined based on an alpha value of .05. The results of the ANOVA were not significant, $F(1, 35) = 0.32$, $p = .574$, indicating the differences in policy among the levels of School type were all similar (Table 6). The means and standard deviations are presented in Table 7.

Table 6. *Analysis of Variance Table for policy by School type*

Term	*SS*	*df*	*F*	*p*	$\eta_p 2$
School type	0.52	1	0.32	.574	0.01
Residuals	56.40	35			

Table 7. *Mean, Standard Deviation, and Sample Size for policy by School type*

School type	*M*	*SD*	*n*
International	2.60	1.43	10
Independent	2.33	1.21	27

3.4 ANOVA (Dependent: Education and professional development)

An analysis of variance (ANOVA) was conducted to determine whether there were significant differences in education and professional development by School type.

The ANOVA was examined based on an alpha value of .05. The results of the ANOVA were not significant, $F(1, 35) = 4.06$, $p = .052$, indicating the differences in education and professional development among the levels of School type were all similar (Table 8). The means and standard deviations are presented in Table 9.

Table 8. *Analysis of Variance Table for education and professional development by School type*

Term	*SS*	*df*	*F*	*p*	$\eta_p 2$
School type	3.54	1	4.06	.052	0.10
Residuals	30.53	35			

Table 9. *Mean, Standard Deviation, and Sample Size for education and professional development by School type*

School type	*M*	*SD*	*n*
International	2.90	0.65	10
Independent	2.20	1.01	27

4. Discussion

The study was during the epidemic of covid -19 which physical education was affected in negative way, at the beginning of the epidemic the physical education classes were cancelled, and then they started to come regularly. The study addressed the physical education during the Coivd -19 epidemic when the classes returned.

It is important during the pandemic the significant role of the teachers to ensure that learning continues. As schools reopen, the stress on teachers to ensure that children will be able to continue their education in a safe and healthy environment; and make up for knowledge and skills that may have been declined. (UNICEF,2021)

A study in the US last year of 35,000 children aged six to seventeen reinforced the study, students who did no exercise on a weekly basis were twice as likely to have mental health problems, particularly related to anxiety and depression, as those who met the guidelines of 60 minutes of moderate to vigorous physical activity on a daily basis. (Gulland & Rigby, 2020)

The first category, the result of the MANOVA Results for outdoor playtime, outdoor play environment, policy, and education and professional development by School type comparison between the government and international school, there were significant between the two type of schools.

The second category Analysis of Variance Table for outdoor playtime by School type, the result in favor of the international school.

The Third category Mean, Standard Deviation, and Sample Size for outdoor playtime by School type the result in favor of the international school.

The fourth category Analysis of Variance Table for outdoor play environment by School type the result in favor of the international school.

The fifth category Mean, Standard Deviation, and Sample Size for outdoor play environment by School type the result in favor of the international school.

The six category Analysis of Variance Table for policy by School type there were no significant between the two types of schools.

The seven category Mean, Standard Deviation, and Sample Size for policy by School type there were no significant between the two types of schools.

The eight category Analysis of Variance Table for education and professional development by School type there were no significant between the two types of schools.

The ninth category Mean, Standard Deviation, and Sample Size for education and professional development by School type there is significant in in favor of the international school.

4.1 Limitation and future directions

Encourage the outdoor environment for play, education and heath.

The outdoor environment is important, Mrs. Parsons said: “It is widely recognized that access to the outdoors has

a positive impact on mental health and wellbeing, and during COVID-19 we are being actively encouraged by the government to go outdoors to meet these needs and be physically active one a day.'' (Parson,2020)
Parents play a big role in encouraging their children to play outdoor.
Parents stated a significant increase in the time their children spent outside from an average of 10.47 hours per week before COVID-19 to 14.52 hours throughout quarantine. (DiYanni,2021)
The research stated that time spend outside has significant positive effects on physical health. This can lead to healthier mental health results in children and adults. (Akilah et Garone, 2022)
Play help enhance physical, mental, social and psychological heath.
Play is the first ever-international partnership in occupational science and occupational therapy that is targeting to take a scientific perspective on play for the sake of play. To understand play 'as it is', as a right for all children,. (Kantartzis, 2021)

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