

Does Reggio Emilia Approach encourage physical activities on children during Covid-19 Pandemic?

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Abstract:

Learning in early childhood, which is identical to play, requires teachers to make adjustments to interesting learning activities. Since the COVID-19 pandemic hit the world and countries have implemented school closure policies, distance learning has begun to be implemented in early childhood education. Teachers as learning designers are required to be more creative so that they can facilitate children's development. The physical development of children during the distance learning period cannot be observed directly. It needs an appropriate learning design approach. The Reggio Emilia Approach (REA) is a constructivist early childhood education program that allows instructors to explore pleasurable learning even as learning evolves. The purpose of this paper was to investigate the Reggio Emilia approach that encourages children's physical activity when distance learning during the COVID-19 Pandemic. This research uses a qualitative approach with case study method. The study participants were 15 children aged 4-6 years and 5 parents. Observation, documentation (photos and videos) and interviews with parents were used as data collection. The findings of the study shown that the Reggio Emilia Approach (REA) can encourage children's physical activity even though they carry out distance learning. Children can still play in a limited environment at home with their parents and other family members and keep moving to carry out physical activities. The physical activities carried out by children while carrying out distance learning during the Covid-19 pandemic through the Reggio Emilia Approach through play activities. Further research can be continued to explore more varied activities design in Reggio Emilia Approach (REA) to increase children's physical activities independently.

Key Words: Reggio Emilia Approach, physical activities, learning activities, covid-19 pandemic, distance learning, early childhood education

Introduction

Since the COVID-19 pandemic, world conditions have experienced drastic changes in all sectors of life, including education. Government policies that impose school closings, forcing education actors to make changes to the learning system. Learning in early childhood, which is identical to play, requires teachers to make adjustments to interesting learning activities. Play activities designed by the teacher before the pandemic occurred were carried out directly face-to-face, but since the epidemic, playing activities as a natural activity of early childhood must be carried out through distance learning. This condition is not easy for the teacher. Teachers must practically and implement timely mobilize their competencies to provide learning services that attract children.

Early childhood will find it easier to learn by playing. Playing with peers in a conducive learning environment can optimize aspects of children's development. However, since learning was carried out from home, children only played with family members. This condition makes the space for children's play more limited and triggers boredom in children. To get around this, the role of teachers as providers of education services, especially in early childhood, is still needed to optimize the development of children with limited conditions. Since the COVID-19 pandemic, world conditions have experienced drastic changes in all sectors of life, including education. Government policies that impose school closings, forcing education actors to make changes to the learning system. Learning in early childhood, which is identical to play, requires teachers to make adjustments to interesting learning activities. Play activities designed by the teacher before the pandemic occurred were carried out directly face-to-face, but since the epidemic, playing activities as a natural activity of early childhood must be carried out through distance learning. This condition is not easy for the teacher. Teachers must practically and implement timely mobilize their competencies to provide learning services that attract children.

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limited and triggers boredom in children. To get around this, the role of teachers as providers of education services, especially in early childhood, is still needed to optimize the development of children with limited conditions. The Reggio Emilia Approach is one of the services provided to keep children playing and engaging in physical activities. Despite the fact that many research have been conducted on Reggio Emilia, it is still uncommon to find a correlation between REA and children's physical exercise, particularly in distance learning during the Covid-19 pandemic.

In preschool and kindergarten, the Reggio Emilia Approach (REA) is an implementation of a constructivist approach. (McNally, & Slutsky, 2016). The Reggio Emilia approach is firmly rooted in the progressive, learner-centered end of the continuum of beliefs that influence early childhood curricula. It is a community-supported, neighborhood-based, activity-based educational system that embodies progressive education (Soler & Miller, 2003). The following are the fundamental ideas that underpin the Vygotskian framework:

1. Children construct knowledge.
2. Development cannot be separated from its social context.
3. Learning can lead development.
4. Language plays a central role in mental development.

We can begin to notice how our surroundings can have a life of their own and contribute to children's learning by seeing the environment through the lens of an educator, as the Reggio Emilia approach does (Strong-Wilson & Ellis, 2007). Reggio Emilia Approach provide The ethical role is to 'create that cultural environment' with the children (Delrio, 2012). Fraser (2006) identifies that aesthetics, transparency, active learning, flexibility, collaboration, reciprocity, and bringing the outdoors in are eight Reggio Emilia principles that serve as the third teacher for the environment.

Young children enjoy discovering novel objects and witnessing interesting events. Children also value opportunity for social connection, creative or self-development in their favorite places. Reggio Emilia environments open-ended materials made from natural and recyclable materials (Bond, 2015), allowing children to explore, test, and discover the materials before being instructed on how to use them (Harris, 2019). According to Fyfe (2011) social support among children, teachers, family members and community, are making of their experiences and in order to know how to support their motivation and pursuit of learning. According to a review of research on schoolyard greening—a movement to replace barren grass, asphalt, or wood chips areas with naturalized areas for children's exploration and play—natural environments promote social interaction between children, are critical for children's independence and autonomy development, and act as a buffer against the impact of life on children (White, 2004). Physical activity is frequently linked to improved health and early childhood is a critical time period for the development of healthy physical activity behaviors (WHO, 2018), as physical activity continues into adulthood (CDC, 2018). According to studies, many children do not get enough physical activity (During the COVID-19 epidemic, this research explores the Reggio Emilia Approach to increase children's physical activity. (Frank, Flynn, Farnell, & Barkley, 2018). This study investigates the Reggio Emilia Approach to encourage children's physical activity during the COVID-19 pandemic.

Material and Methods

This research uses a qualitative approach because it allows me to understand complex problems and also allows me to explore this problem in depth. Researchers used a case study approach. The case study was chosen because it allows the researcher to explore in-depth from various complex perspectives (Swanborn, 2010; Yin, 2019). Specifically, this study aims to investigate whether the Reggio Emilia approach can encourage children's physical activity during distance learning during the COVID-19 pandemic era.

Instrument

This research chooses to use instruments in the form of observation sheets and semi-structured interviews. The observation sheet is used to observe distance learning activities. Meanwhile, structured interview instruments are used to extract in-depth data from research participants amidst the COVID-19 pandemic. During remote learning, the Reggio Emilia Approach was utilized in educational institutions for children to stimulate children's activities.

Participants

This study included five people: a kindergarten principal and four kindergarten teachers who used the Reggio Emilia Approach to encourage children to engage in physics activities. Participants were selected using purposive sampling, namely with a specific purpose, to obtain the data needed in this study. In this study, an early childhood education institution located in Cirebon, West Java, was selected, which practically implements REA in implementing distance learning during the COVID-19 pandemic.

Data collection and analysis / Statistical analysis

Collecting data in this study using observation and semi-structured interviews. Observations were made to observe the distance learning process carried out through the zoom meeting application. In addition, the observation sheet is used to observe photos and videos sent by participants about the physical activities that children do during distance learning using the Reggio Emilia Approach. Semi-structured interviews were conducted through the zoom meeting application and telephone. During the interview process, it was recorded using a recording with prior permission from the participants.

In the first stage of data collection, the researcher made direct observations or joined the class through a zoom meeting during the learning process to observe how the Reggio Emilia Approach was applied in encouraging children's activities during distance learning. Direct observation through zoom meetings is held for one theme or about a month, including observing photos and videos sent by parents to participants during learning outside the network with parents at home.

In the second stage, the researcher conducted semi-structured interviews. The semi-structured interview in this study began with the researcher contacting via WhatsApp message to ask the participant's willingness. After confirmation of the participants' availability, the researcher then made an appointment to conduct a telephone interview.

At the beginning of the interview, the researcher thanked him for being a participant in this study and explained the general purpose. The interviews were conducted in a semi-structured manner by one researcher to find out the depth of meaning of the exposure delivered by the participants. Interviews were conducted for each participant to explore children's physical activities during distant learning using the Reggio Emilia approach. Interviews were conducted using the Indonesian language. Before conducting the interview, the researcher conducted casual conversations that were not directly on the research topic to build good communication and relationships with participants. At the end of the interview session, the researcher asked the participant to send the documents needed in this study. Each participant was interviewed for between 40-60 minutes. The purpose of the interview is to foster relationships and trust between the researcher and the participants and obtain the depth of data and identify consistency in participants' answers during the interview. Data collection through interviews was chosen to determine the reflection of experience and find out the participant's response in more detail. The data from the interview were then made a transcript of each sentence delivered by the participants. Furthermore, the interview transcripts were compiled based on coding to facilitate data analysis. Data in the form of coding that has been made are then analyzed based on themes to facilitate research.

Data analysis

Researchers conducted data analysis by providing meaning based on data obtained through interviews and analysis of documents that had been previously collected. Interview data analysis was carried out after carrying out a transcript of the recorded interviews. The researcher also noted changes in the participants' intonation, which depicted emotions and emphasized the answers given. A thematic analysis was carried out to determine the meaning embedded in the participants' perceptions, feelings, and experiences based on transcriptions and field notes. In analyzing the data, the transcripts were read repeatedly to complete the answers to the research questions. Participants' answers, which describe a meaningful pattern, are identified and then given a code to determine the category. The codes were then grouped according to the same concept, then the researcher gave the group code names and entered them into several categories. The next process is data abstraction in the form of grouping categories into themes. In this way, a theme that describes children's physical activity is set using the Reggio Emilia Approach to distance learning during the COVID-19 pandemic.

Results

The teacher prepares synchronous or asynchronous blended learning for distance learning. The teacher adapts the Reggio Emilia approach to prepare the learning environment. Even though learning is done remotely, the Reggio Emilia Approach is being adapted to fulfill learning objectives. The components of the Reggio Emilia Approach are still taken into account in the adaptations that are made (REA). In preparing lessons that use the Reggio Emilia Approach, it begins with selecting a theme that allows children to work together with their parents at home in the form of daily activities such as projects "Clean Up Our Home Sweet Home," "Helping Our Parents."

In synchronous learning, implemented through the Zoom meeting application there are three things that the teacher does, namely: first, the teacher delivers the core material according to the theme; second, the teacher explains the steps of REA activities with parents at home; The three teachers invite them to give examples and invite the children to do physical activities together, see figure 1.



Figure 1. Teacher doing physical activities together using Zoom Meeting

After learning through a zoom meeting, the teacher reiterates the child's project, accompanied by a parent, as a task of learning with the Reggio Emilia Approach. The project, which was carried out during distance learning during the COVID-19 Pandemic, is a project that is close to children, and every day, children see it. Even though the project tends to be a "daily home task," but with clear steps through the learning settings conveyed by the teacher to parents, it can bridge children to gain knowledge and facilitate their activities while learning from home. from Reggio Emilia's approach that children do not passively reproduce what is offered to them; instead, they develop their understandings (Bodrova, 2008; Bodrova & Leong, 2007). Children can build their understanding and knowledge through the REA project on distance learning during the COVID-19 Pandemic.



Figure 2. "Clean Up Our Home Sweet Home"



Figure 3. "Helping Parents Project"

Dicussion

Since Covid-19 outbreak when lockdown in social community have inevitably disrupted the routine physical activities (PA) of millions of people worldwide (Kraemer, M., Yang, C. H., Gutierrez, B., Wu, C. H., Klein, B., Pigott, D. M. et al., 2020), include for children that must stay at home resulting in their physical activity being limited. Physical activity in early childhood identifies active play as a game that combines moderate to vigorous intensity movement (for example, brisk walking and running) (Becker et al., 2014). In early childhood, physical activity is linked to improved executive function and academic performance (Khan, N. A., Raine, L. B., Donovan, S. M., & Hillman, 2014). Children's physical activity during their early developmental years can also be referred to as locomotory play or active play (Robinson, L., Stodden, D., Barnett, L., Lopes, V., Logan & Rodrigues, L., & D'Hondt, 2015). From toddler to preschool, active play becomes more prevalent and then declines throughout the elementary school years, reaching a peak around the age of 4 to 5 years. According to observational studies conducted in child care settings, active play accounts for approximately 10% of all day care behavior (Brown, Pfeiffer, McIver, Dowda, Addy, & Pate, 2009). Physical activity contributes to the development of a sedentary behavior during Covid-19 when stay at home (De Sousa et al., 2021).

Physical inactivity in children has been identified as a controllable risk factor for diseases caused by a sedentary lifestyle (Andersen, Riddoch, Kriemler, & Hills, 2011; Hussey, Bell, Bennett, O'Dwyer, & Gormley, 2007). Additionally, it has been suggested that inactivity during adolescence is associated with a number of health risks in adulthood (Yang, Telama, Viikari, & Raitakari, 2006). Furthermore also adequate engagement in

regular physical activity during childhood has been proposed may be critical for adult disease prevention (WHO, 2018).

For a healthy lifestyle, preschool children should get at least 120 minutes of physical activity per day, according to current health-related physical activity standards (60 minutes of structured and 60 minutes of unstructured physical activity) (NASPE, 2009). An expert panel recently reviewed the evidence on physical activity in school-aged children and concluded that children should engage in at least 60 minutes of moderate-to-vigorous physical activity every day (Strong, Malina, Blimkie, Daniels, Dishman, & Gutin, 2005).

Although there is some evidence of a link between physical exercise and early infancy health indicators, more research is needed (Saakslanti, Numminen, Varstala, Helenius, Tammi, & Viikari, 2004). Little is known regarding preschool children's compliance with physical activity requirements, and there isn't much information out there, to our knowledge. This is critical because future strategies for early childhood that the encouragement of physical exercise should be based on a bigger body of evidence from the preschool population.

Boys are more active than girls have been shown in previous studies (Cooper, Goodman, Page, Sherar & Esliger, van Sluijs, ... Ekelund, 2015; Seabra, Mendonça, Maia, Welk, Brustad & Fonseca, & Seabra, 2013). According to Lampinen et al., (2017), 486 children (238 girls and 248 boys) aged 6–8 years spent an average of 1.7 hours per day engaging in physical activity, while boys spent 2.0 hours per day ($p = 0.002$). 66 percent of females and 54 percent of males had less than 2 hours of total physical activity per day ($p = 0.012$). Girls engaged in less unsupervised physical activity (45 vs. 54 minutes per day, $p = 0.001$), supervised physical activity (1.5 vs. 1.9 hours per week, $p = 0.009$), and physical activity during school recess (1.8 vs. 1.9 hours per week, $p = 0.032$) than boys. Team sports and sprinting activities have been recognized as the most popular PAs among boys, while girls' most common PA have been reported dancing is a good example of a less strenuous or more rhythmic activity (Seabra, Mendonça, , Maia, Welk, Brustad & Fonseca, & Seabra, 2013). However, other research reveals that girls had a greater level of gross motor abilities than boys, which was mostly impacted by locomotor skills findings (Saczuk & Wasiluk, 2021). The results of this study shown that the physical activities carried out by children while carrying out distance learning during the Covid-19 pandemic through the Reggio Emilia Approach were carried out through play activities during the project, physical activity and sedentary behavior during free play have been documented in previous studies (Tsuda et al., 2019). Physical activity in children does not need to be high-intensity, because among diverse intensities, high-intensity physical activity did not contribute significantly to an increase in physical activity levels (Reyes-Amigo et al., 2021). The Reggio Emilia Approach (REA) encourages children to engage in physical activity in a joyful and non-burdening way. Pleasure, mental renewal, and maintaining health, according to a previous study, are the most important motivators for engaging in physical activity (Grajek et al., 2021).

Conclusions

The findings of this research show that the Reggio Emilia Approach, which is carried out during distance learning, can encourage children's activities. Children can still play in a limited environment at home with their parents and other family members and keep moving to carry out physical activities. Remote learning is not an obstacle for children to still be able to carry out physical activities. Physical activity in children can be encouraged through appropriate learning settings. Future research can be continued to explore, more specifically, children's physical activities that can be improved distance learning using the Reggio Emilia Approach.

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