

Inclusion of Children with A Background of Migration into Greek Kindergartens Via Physical Education: Development of Emotional Skills

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Abstract

Cultural diversity in schools enriches the learning environment by exposing students to different perspectives, traditions, and worldviews. However, ensuring inclusion can be challenging as educators must navigate language barriers, cultural differences, and potential biases. Effective inclusion requires a commitment to equity, tailored teaching strategies, and fostering a sense of belonging for all students, regardless of their background. Enhancing emotional skills through a physical education program is a powerful way to promote inclusion among students. Emotional skills such as empathy, self-awareness, emotional regulation, and social interaction can be effectively integrated into physical education, fostering a more inclusive environment where all students feel supported and valued. In the present paper research is conducted in Greek kindergartens regarding inclusion. A PE (Physical Education) program was implemented to promote inclusion. The impact of outdoor activities on emotional skills and concomitantly on inclusion was significant.

Keywords: inclusion, physical education, children with a background of migration, emotional skills

Introduction

Inclusion refers to creating an environment where everyone, regardless of their background, abilities, or characteristics, feels valued, respected, and able to fully participate. It goes beyond simply allowing people to be present; it ensures that diverse perspectives are acknowledged, barriers to participation are removed, and all voices are heard (Booth & Ainscow, 2006). Especially for children with an immigrational status creating an inclusive school environment can be crucial. Emotional skills involve recognizing, understanding, managing, and using emotions effectively. These skills are crucial for building positive relationships, resolving conflicts, and fostering an inclusive environment (Urquart, 2008; Blewitt et al, 2021). In the present paper a PE educational program for kindergarten takes place to examine how enhancing emotional skills can be achieved through PE and especially outdoor activities.

How Inclusion and Emotional Skills Work Together

Empathy allows individuals to understand different perspectives and experiences, promoting inclusive behavior. In inclusive environments, people must manage their emotions, especially when facing conflicts or biases. Self-regulation helps individuals stay open-minded and patient, contributing to better decision-making and collaboration. Furthermore, effective communication, active listening, and collaboration skills enable people from diverse backgrounds to work together harmoniously, fostering an inclusive atmosphere. Promoting emotional skills is fundamental to advancing inclusion because it helps individuals and teams be more adaptable, respectful, and sensitive to the needs of others. This ultimately leads to stronger, more cohesive communities. Inclusion and emotional skills are deeply intertwined, especially in educational settings. Inclusive environments support the development of social-emotional skills by fostering interactions among children with diverse abilities. Research emphasizes that early and effective support in social-emotional learning (SEL) is critical to the success of inclusion (McCabe & Altamura, 2011).

PE and inclusion

According to Tripp et al. (2007) Physical Education is one of the subjects which children are taught from pre-school age, and it includes the teaching of procedures that promote children's mobility skills while, at the same time, aims at their cognitive, emotional and social development. Physical education provides fertile ground for the development of the principles of intercultural education and inclusion since it does not focus on the acquisition of knowledge but, it rather concentrates on the physical and emotional involvement of students. The focal point of physical education being physical activities, athletics and games, render it a powerful and valuable tool in promoting the inclusion of students with migratory backgrounds in mainstream schools (Walseth, 2008).

In fact, in physical education, it is necessary for students to show respect to the group and to each other. Students' respect becomes practically obvious in their cooperation during activities. As mentioned by Ramirez et al. (2003) the values of respect, cooperation and equality are contained in inclusion. In essence, with the aid of team games and a fun atmosphere, which are prevalent during the lesson of physical education, it becomes possible to acquire the values and skills that compose the core of inclusion.

The present study

For the present study a PE educational program was applied in kindergarten. The program was applied to children of pre-school age, attending kindergarten in Athens. The program was conducted as part of the curriculum in the period from March 11th to June 10th, 2022, for 3 sessions per week and each session lasted 30 minutes.

The participants in the course were children of two co-located kindergarten units. Each kindergarten unit consisted of 2 classes. Provision was made so that the children participating from each kindergarten were similar as to their age and characteristics. More specifically, the two groups chosen, bore similarities as to the number of boys and girls and the number of children with a background of migration. The teachers involved, were women, of middle age, of Greek nationality and with the same culture. Four teachers, 2 of each class, participated in the study. All children of both classes attended the same course in the Greek language.

The elements mentioned above composed the characteristics of the two participating groups. Regarding the two participating groups involved in the experimental study, the intervention was applied to the first

group, and it was not applied to the second group.

Table 1. Participating groups

| Characteristics | Experimental Group | Control Group |
|----------------------|--------------------|---------------|
| Boys | 13 children | 14 children |
| Girls | 11 children | 11 children |
| Total | 24 children | 25 children |
| Migratory Background | 9 children | 8 children |

Aim of research

The aim of this research is to identify the effects of physical education as part of the school curriculum on pre-school children with a background of migration and, at the same time, investigate how outdoor activities performed during the lesson contribute to the inclusion of these children.

Hypothesis

Children with or without a background of migration who participate in an educational program based on PE and outdoor activities aiming at inclusion will show greater development of their emotional skills (empathy, self-awareness, and self-regulation) compared to those (children) who will not participate in this program.

Methods, strategies and tools of teaching

The program of physical education implemented in the experimental research, utilized a series of pedagogical methods, strategies and tools with the purpose of fulfilling the necessary goals. During the implementation of the activities, student-centered learning was used, during which the children take on an active role while the teachers act as supporters.

Table 2. Curriculum of skills that targeted emotional skills

| Dates | Activity | Target |
|---------------|--------------------------------|------------------------------------|
| 9-13 May | Sculptors | Emotional skills |
| | Fruit picking | Cooperation and adaptability |
| 16-20 May | Surfing | Cooperation and empathy |
| 23-27 May | The ball of responsibility | Cooperation and empathy |
| | The stations of respect | Cooperation and empathy |
| | Ships and rocks | Cooperation and empathy |
| 30 May-3 June | The big snake: game with rope | Self-regulation and self-awareness |
| | The fisherman’s net | Self-regulation and self-awareness |
| | The big snake: game with rings | Self-regulation and self-awareness |

Sculptors: a game played in pairs. The children stand divided in pairs. In each pair, one is the sculptor and one is the statue. The sculptor moves the body of the statue to display how it feels. The child playing

the statue has to find which emotion is enacted.

Fruit picking. The children move around in the school yard and go to the trees. There, they will find baskets where they are supposed to put the fruit they pick from the trees.

Surfing: game of touch and movement. Mats are placed on the ground of the school yard. Children lie down on the mats while a much lighter child lies on top. The children who are lying underneath, start moving to the same direction so as to also put in motion the child on top. During this activity, the children on top change places.

The ball of responsibility: a game with balls. The children are divided in pairs. Each pair gets a ball which they have to keep and place somewhere safe. Until this happens, the children have to cooperate and protect their ball.

The stations of respect: a game of movement with balloons. Big hoops are placed on the ground of the yard. The children are divided in pairs. Each pair takes one balloon. The purpose of the game is for every pair to move over all the hoops-stations, protecting the balloon.

Ships and rocks: a team game of movement. The children are divided in groups of three. Each group moves holding each other's hands. Cones have been placed on the ground and children have to move around them without breaking their chains. The rocks are the cones and the ships are the rows of children holding hands.

The big snake: a game with a rope. The children are given a long rope which they have to hold on to in a row, one behind another. With the teacher's whistle, the children have to sit down, holding on to the rope in order to save the snake.

The fisherman's net: a team game with movement. The children are first divided into two groups. The first group is the fisherman, and the second group is the fish. The first group holds hands forming a human chain and tries to surround the second group – the fish- while they are moving around the school yard.

The big snake: a game with rings. The children are given rings which they have to hold on in a row, one behind another. With the teacher's whistle, the children have to sit down, holding on the ring in order to save the snake.

Questionnaire with parents regarding socioemotional condition of children

The **BUSSE-SR** questionnaire: **S**ocial **E**motional -**S**elf Awareness and **R**egulation created by **Bustin** (2007) (see Appendix), contains 50 questions measuring self-awareness, self-regulation, social communication-socialization, adoptive behavior – skills of pre-school age children. The questions are simple and clear, and their evaluation is based on the five answer Likert scale (1. Never, 2. Rarely, 3. A little, 4. Sometimes, 5. A lot). The five-dimension Likert scale is considered superior because it offers a balanced range of responses, providing participants with more choices to reflect their opinions. Furthermore, the five-point scale often yields more reliable data compared to scales with fewer points. The additional options can reduce random variability in responses and increase the internal consistency of the scale. In addition, having a neutral midpoint in a five-point scale can reduce response bias. It provides respondents with a non-committal option, decreasing the likelihood of forcing them into a biased response. The dimensions follow the pattern below:

Self-awareness: Includes questions 10, 13, 16, 22, 23, 38, 40, 42, 45, 48 and grading ranges from 5 to 50 points.

Self-regulation: Includes answers 2, 6, 7, 11, 15, 17, 21, 24, 25, 31, 33, 36, 44, 46 and the grading ranges

from 13 to 65 points.

Empathy: Includes questions 20 and 48 and total grading between 2 and 10 points.

Socialization: Includes questions 1, 3, 8, 12, 18, 23, 25, 26, 27, 30, 32, 33, 35, 39, 43, 47 and grades range from 16 to 80 points.

Skills: Includes questions 9, 14, 19, 28, 29, 34, 41, 50 and grading ranges from 8 to 40 points.

Higher scores indicate a higher level of socioemotional skills, in any case. This tool has been considered as reliable and has been used in multiple similar studies since it shows higher rates of Cronbach's alpha factor (Akelaitis & Malinauskas, 2018).

Self-Awareness and Regulation, Social Relationships, Empathy and Coping Skills Scale

The average grading of the each of the specific questions in the BUSSE-SR questionnaire are presents below in Figure 3. The results show the high average scoring and the scores which are higher than the critical value in almost all statements.

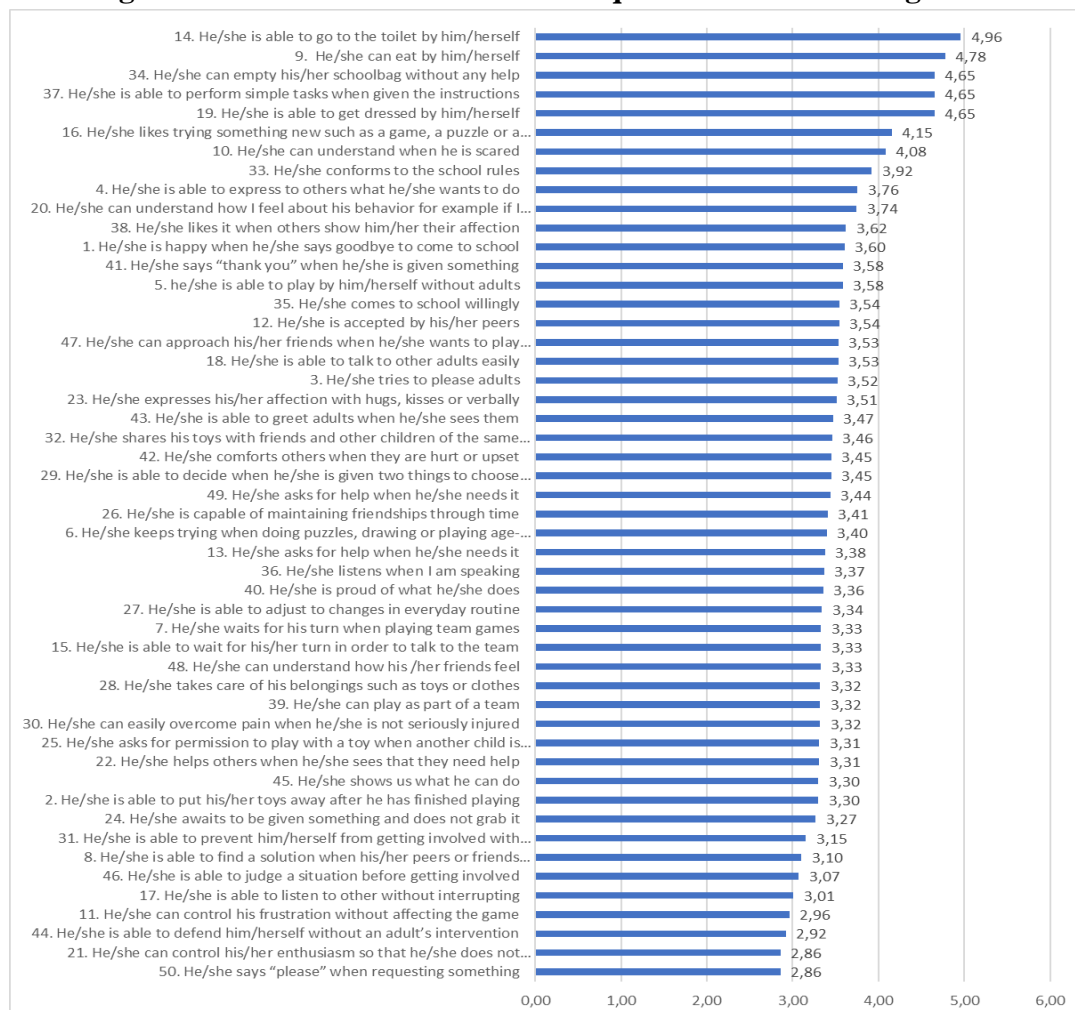
Accordingly, average grading higher than the value of 4 indicate high frequency of application of the statement in question. "14. He/she is able to go to the toilet by him/herself." ($Mean=4.96, SD=0.284$), "9. He/she can eat by him/herself" ($Mean=4.78, SD=0.508$), "34. He/she can empty his/her school bag without any help." ($Mean=4.65, SD=0.52$), "37. He/she is able to perform simple tasks when given the instructions" ($Mean=4.65, SD=0.558$), "19. He/she is able to get dressed by him/herself" ($Mean=4.65, SD=0.628$), "16. He/she likes trying something new such as a toy, a puzzle, a drawing." ($Mean=4.15, SD=0.563$) and "10. He/she can understand when he is scared." ($Mean=4.08, SD=0.637$).

Following are the highest average scores in the statements "33. He/she conforms to the school rules" ($Mean=3.92, SD=0.491$), "4. He/she is able to express to others what he/she wants to do" ($Mean=3.76, SD=0.432$), "20. He/she can understand how I feel about his/her behavior for example if I am angry." ($Mean= 3.74, SD=0.483$), "38. He/she likes it when others show him/her their affection" ($Mean=3.62, SD=0.528$), "1. He/she is happy to say goodbye and come to school." ($Mean=3.6, SD=0.87$), "41. He/she says "thank you" when he/she is given something." ($Mean=3.58, SD=0.641$), "5. He/she can play by himself without adults." ($Mean=3.58, SD=0.702$), "35. Comes to school willingly." ($Mean=3.54, SD=0.839$), "12. He/she is accepted by his/her peers" ($Mean=3.54, SD=0.54$), "47. He/she can approach his/her friends when he wants to play with them." ($Mean=3.53, SD=0.502$), "18. He/she is able to talk to other adults easily." ($Mean=3.53, SD=0.692$), "3. He/she tries to please adults." ($Mean=3.52, SD=0.677$), "23. He/she expresses his/her affection with hugs, kisses or verbally" ($Mean=3.51, SD=0.579$), "43. He/she is able to greet adults when he/she meets them." ($Mean=3.47, SD=0.706$), "32. He/she shares his/her toys with friends of the same age" ($Mean=3.46, SD=0.612$), "42. He/she comforts others when they are hurt or upset" ($Mean=3.45, SD=0.52$), "29. He/she is able to decide when he/she is given two things to choose from" ($Mean=3.45, SD=0.611$), "49. He/she seeks help when he/she needs it" ($Mean=3.44, SD=0.499$), "26. He/she is capable of maintaining friendships through time." ($Mean=3.41, SD=0.494$), "6. He/she keeps trying when doing puzzles, drawing or playing age-appropriate games." ($Mean=3.4, SD=0.67$), "13. He/she asks for help when he/she needs it." ($Mean=3.38, SD=0.634$), "36. He/she listens when I am talking to him/her." ($Mean=3.37, SD=0.485$), "40. He/she is proud of what he/she does." ($Mean=3.36, SD=0.482$), "27. He/she is able to adjust to the changes of our everyday routine." ($Mean=3.34, SD=0.745$), "7. He/she waits for his/her turn when playing a team game." ($Mean=3.33, SD=0.552$), "15. He/she is able to wait for his/her turn to speak to the team." ($Mean=3.33, SD=0.685$), "48. He/she can understand how his/her friends feel." ($Mean=3.33, SD=0.493$), "28. He/she

takes care of his belongings such as clothes, toys etc. ($Mean=3.32, SD=0.585$), “39. He/she can play as part of a team.” ($Mean=3.32, SD=0.567$), “30. He/she is able to overcome pain quickly, if it does not involve a serious injury. ($Mean=3.32, SD=0.683$), “22. He/she helps others when he/she sees they need help.” ($Mean=3.31, SD=0.485$), “25. He/she asks for permission to play with a toy when another child is using it.” ($Mean=3.31, SD=0.616$), “45. He/she shows us what he can do.” ($Mean=3.3, SD=0.541$), “2. He/she is able to put his toys away when he/she has finished playing.” ($Mean=3.3, SD=0.629$) και “24. He/she awaits to be given something and does not grab it.” ($Mean=3.27, SD=0.584$)

Average frequency scoring was noted in the following statements: “31. He/she is able to prevent him/herself from being involved with other children in something they are not allowed to do” ($Mean=3.15, SD=0.615$), “8. He/she is able to find a solution when peers or friends disagree, without quarreling” ($Mean=3.1, SD=0.666$), “46. He/she is able to judge a situation before getting involved” ($Mean=3.07, SD=0.523$) and “17. He/she is able to listen to others without interrupting them.” ($Mean=3.01, SD=0.753$). Finally, the lowest frequency scoring appeared in the statements: “11. He/she is able to control his/her frustration with no effect to the game.” ($Mean=2.96, SD=0.608$), “44. He/she is able to defend him/herself without an adult’s intervention” ($Mean=2.92, SD=0.447$), “21. He/she can control his enthusiasm so as not to upset others.” ($Mean=2.86, SD=0.574$) and “50. He/she says “please” when requesting something” ($Mean=2.86, SD=0.574$).

Figure 1. Mean values of BUSSE-SR questions in decreasing order



Conclusions

The research hypothesis concerned the effects of the intervention on the emotional development of children with and without a background of migration. This hypothesis was confirmed by showing that the intervention of physical education and outdoor activities led to the development of self-regulation, self-awareness, and empathy of all children, regardless of whether they have a background of migration or not. The statistical analyses performed showed the strengthening of these skills after the end of the intervention. The confirmation of the research hypothesis highlights the connection between physical education, inclusion, and emotional development of children. In more detail, at the heart of the psychopedagogical approach to inclusion is the emotional development of children which is critical at all stages of their development. According to Bisquerra Alzina and Escoda (2007), the school is a social environment that must promote the emotional development of children by emphasizing the provision of information that allows individuals to process, express and understand emotions.

This duty of the school is also visible in cases of inclusive education which addresses all students by offering them equal opportunities for emotional development (Soriano-Ayala & Cala, 2017). Therefore, inclusion programs, when implemented effectively, lead to the development of emotional skills in students, as was the case in the present research.

In addition, the positive effects of the intervention on children's emotional skills arise from the nature of the educational program in which physical activity plays a prominent role. In their research, Garrido et al. (2012) emphasized that physical activity offered via physical education is related to the development of a range of emotional skills, such as self-control, emotion regulation and empathy. In this way, physical education is a key tool for inclusion that helps individuals develop the skills they need to break free from stereotypes and prejudices and embrace diversity (Llopis-Gois, 2010). In the research by McGowan et al. (2021) it appears that the performance of physical activities in kindergarten leads to the strengthening of students' self-regulation. Therefore, the findings of the present work regarding the benefits of the physical education program in the emotional development of children shows common points with the findings of corresponding empirical studies.

Limitations and future research

As mentioned above the program appeared to strongly affect inclusion in the kindergartens implemented. However, implementation of outdoor activities for a long term, not only short term as in the present research, could verify the findings. In addition, implementing the program and connecting PE with the community could induce stronger results. Introducing more qualitative tools with children and not only parents would be useful for future research.

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