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Preschool Educational Approaches: A Comparative Study

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ABSTRACT

Received: 24 August 2021 Revised: 03 October 2021 Accepted: 13 October 2021 Online: 09 March 2022 The aim of research was a comparative study of preschool educational approaches. In this research, the components of goals, content, teaching method, educational atmosphere and evaluation in romantic, humanistic, Montessori, Waldorf and Reggio Emilia approaches have been compared. The method of data collection and analysis were documentary and Bereday's four-step approach respectively. In dimension of goals, all approaches emphasize the enrichment of the child's imagination through the senses. In the activities dimension, all approaches emphasize the learning process. Montessori and Reggio Emilia's approach, more than other approaches, design activities in a more problem-oriented manner. In the Montessori, Reggio Emilia and Waldorf approaches emphasized the question-and-answer method and indirect transmission of material to the child. In particular, the Reggio Emilia and Waldorf approaches have made the learning method the basis of child-teacher interaction, and teaching means the process of helping children learn research. In the dimension of educational atmosphere, human interaction with the environment - through the senses - is the basis of education in all approaches. In the evaluation dimension - with the exception of the Montessori approach which focuses on the extent to which predetermined goals are achieved-, other approaches do not emphasize learning standards and the evaluation is not done in the traditional way. Iranian curriculum planners are encouraged to use the findings of the present study to develop a suitable approach for early childhood education.

KEYWORDS

Early Childhood Montessori Approach Preschool Education Reggio Emilia Approach Waldorf Approach

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1. Introduction

In many educational systems, preschool is not considered as a formal and general education. However, this stage has a valuable place among educators due to its strong impact on the formation of psychological traits and characteristics of the child, creating appropriate conditions for improving the level of skills learning and social maturity of the child (Barnett, 2011; Cole, 2017). Economically, research has shown the effect of preschool on reducing social and economic costs (Economist Intelligence unit, 2012; UNICEF, 2019). Studies have also indicated that preschool increases household income - through mothers' work-, children vocabulary of poor families and academic achievement in primary and junior secondary schools (Cole, 2017, Mofidi, 2009). Despite the positive and permanent effects of preschool education, its informal structure has meant that the Ministry of Education in many countries does not play a significant role in the preparation, development, implementation and monitoring of its curricula and educational approaches. Also, since in most countries, the establishment and management of preschool centers is done by the private sector, the managers and teachers of these centers do not have precise approaches to adopt the training programs. Despite this disappointing outlook, it must be acknowledged that in recent decades, awareness of the positive effects of preschool has been on the rise in many societies (Mohammadi Farsani, 2016). For this reason, nowadays attention to various curriculum approaches and their suitability for implementation in preschool has become one of the areas of interest for curriculum researchers.

The purpose of research was a comparative study of preschool education approaches. Since the perspective of growth and fitness as well as the characteristics of the curriculum are consistent with the nature of education in this stage (Eisner, 2002), the approaches of preschool education are examined and compared. Base this purpose, it is necessary to mention findings of previous research:

McCree, Cutting, & Sherwin, (2018) conducted a combined longitudinal study of 11 disadvantaged children ages 5 to 7. The results showed an important link between emotional learning and well-being developed in outdoor environments and academic growth. Bertram & Pascal (2016) also explore the international perspectives of the curriculum framework and evaluate preschool education. The results indicated that in this period, various evaluation methods should be used. Şahin, Sak & Şahin (2013) examined

parents' attitudes about preschool education. The findings reveal that parents placed special emphasis on the supportive role of this period on the social development of children and their preparation for higher levels of education. Anders et al. (2012) also examined the learning environments of home and preschool centers and the relationship between these two environments with early childhood skills. The findings showed that the quality of home learning environment is strongly associated with arithmetic skills in the first year in kindergarten and this advantage is maintained at later ages. Ozar (2012) investigated the Swedish-language preschool curriculum. The results highlighted that this tradition of preschool education emphasizes the importance of play in a child's development and learning. Sandstrom (2012) examines the characteristics and quality of preschool education in Spain. Their findings indicated that preschool centers with a planned structure and under the supervision of the private sector have more favorable conditions. Kanyal & cooper (2010) examined children's perceptions of school experiences. The finding revealed that children like to come to school and enjoy activities with friends and teachers. Sheridam, Giota, Mehan & Yoonwon (2009) conducted a cross-cultural research on the quality of preschools in South Korea and Sweden. Their findings revealed that Swedish child care programs are rated higher in all evaluations - and subsets of scales. Riggal & Sharp (2008) also examined the structure of preschool education in the UK. A comparative study of pre-school and primary education of other countries was formed by research team. Basic questions were also asked about the strengths and weaknesses of each system, structure, timing, elements and activities, and it was concluded that preschool - from the ages of five and six - should be included in formal public education. The finding of Jacobson (2008) on kindergarten curriculum and its effect on skills show that a strong emphasis on play can lead to increased learning and development in children and more achievement in social skills and higher education. Glazer (2003) concluded that the activities designed and implemented in preschool centers to develop creative thinking, problem solving, verbal and language development, and social relationships are largely close to the expected standards and levels. Moore (2001) pays attention to the role of designing a suitable educational environment for children and receiving appropriate architecture should be designed according to child care programs and needs.

In Iran Baqershahi (2021) designed the preschool growing curriculum model using Reggio Emilia approach. The results showed that Reggio Emilia approach is a creative and innovative model that leads to the growth of creativity in children. Fathi, Arefi & Targhijah (2009) studied the formation of a curriculum inspired by the Reggio Emilia approach for children aged 6 to 8 years and found that by examining children's interests and concerns and documenting it, teachers can expand projects for learners. The curriculum is also created by children and formatted by teachers. Various steps such as listening, asking and explaining topics, anticipating future steps and preparing for support, documenting the whole process and collaboration with colleagues, children and parents were also part of the planning steps. Hedayati, Borjali & Bazargan (2015) investigated the effectiveness of physical and artistic education activities - with emphasis on the effect of music - on the health and reducing anxiety of preschool children. The results reveal that to have a healthy and vibrant life, the interaction between physical and mental health is essential. Mehrvarz, Haghighi & Mohammadzadeh (2015) studied the role of preschool curriculum in developing language skills among boys and girls - considering its importance as the first skills of communication between children and the environment. After comparing children's language skills scores before and after training, girls had more growth than boys in the "word differentiation" component. Nadi & Eftekhari (2015) designed the entrepreneurship curriculum model for the preschool education and emphasized the importance of this skill in the social dimensions of the early childhood period.

Amini Golestani & Noorabadi (2015) proposed the design of a preschool curriculum model based on Postalotsi theory, which tends to a humanistic approach. Findings suggest that not all children's questions should be answered so that they can try to find the answer themselves. Therefore, in order to do this better, children need to develop their judgmental powers of reasoning. Babolli Bahmaei, Saadatmand, Yarmohammadian & Yuzbashi (2018) studied the main elements of the curriculum based on the Montessori approach. The finding highlighted that Montessori considers the main goal of preschool education to be the development of independence and the acquisition of individual and social skills, and suggests methods of self-learning, self-assessment and self-correction to achieve this goal. Ahmadzadeh & Salehi (2017) analyzed the place of developing life skills in the preschool curriculum. Findings indicate a combined use of self-awareness, empathy, ethics, and

environmental skills with an implicit emphasis on interpersonal and social communication skills, decision making, problem solving, and coping with emotions. Gramipour, Kian & Kikhahi (2016) examined the relationship between the quality of religious education curriculum and the religious attitude of preschool children.

The findings indicated that the relationship between religious education curriculum and children's religious attitudes was very weak- compared to other social and economic factors. Mirzaei, Ahmadi & Naraghizadeh (2016) compared the goals and content of the implemented and intended curriculum in preschool centers. The results indicated that the most common goal of preschool centers is to develop mental skills and learn Persian language. Also, the goals of the implemented curriculum are largely in line with the intended curriculum, but there is a difference in content between the two programs. Akhsh (2017) investigated the situation of preschool education and curriculum in Iran. Findings showed that the most important challenges are related to preschool macro-management, curriculum, employment status and manpower salary, and problems related to the family and parents. Armand & Ghasemirad (2013) have examined preschool education in South Korea. The results showed that preschool centers in this country cover children aged 3 to 5 years.

The most important goals of preschool education in South Korea are to develop habits for a healthy life and physical progress, ability development, development of habits necessary for daily life, and cultivating a sense of love for family, friends and neighbors. Fattahi (2012) examined preschool education in Iran, Germany and South Korea. The findings indicated that in Iran, most teachers do not have a university degree. In Germany 91% and in Korea 56% of teachers have a bachelor's degree. Also, the welfare facilities in private centers for Iranian teachers are low, which reduces their job motivation. In Iran, educational programs are influenced by religious goals and teachings, while less attention is paid to the emotional and physical-motor dimension of children. In Germany and South Korea, the objectives of early childhood education place more emphasis on citizenship education. In terms of cost and investment, in Iran the government allocates a small budget for preschool education and funding is mainly the responsibility of parents. Ghorbani (2010) compared the evolution of reforms in Iran preschool education with the United States, Germany and the United Kingdom. Findings reveal challenges such as small number

of children available at preschool centers, lack of citizenship education, modern and sustainable approach to teacher education, attention to minorities and working mothers, accurate evaluation system, lack of expertise, and weakness of organizational structure of preschool education has made differences between Iran and other countries. Saadatmand & Sarlak (2012) have assessed the needs of the preschool curriculum from the perspective of principals and teachers.

The results reveal that the needs of the preschool curriculum are as follow: health and safety skills with an average of 59.4, language skills with an average of 55.4, citizenship culture with an average of 4.42, art and creativity with an average of 9.4, physical education with an average of 4.6 and religious education with an average of 3.83. Adib & Piri (2009) have provided a model for the preschool curriculum of bilingual children. Findings showed that the elements of the optimal curriculum model include general and specific objectives, content organization, learning activities, educational methods, evaluation, role of the instructor, role of manager and parents. Arabi (2008) also proposed a model for the curriculum of bilingual kindergarten children. Finding highlighted that by creating readiness, correct pronunciation of words and focusing on receiving oral messages, Persian language can be taught to these children. The general purpose of the research is a comparative study of preschool education approaches and the sub-objectives are:

- What are the similarities between components of preschool education approaches?
- What are the differences between components of preschool education approaches?

2. Research Method

The method of the present study was comparatively qualitative and the method of data collection was documentary. The research population included sources and documents related to the research topic. Through targeted sampling method, 240 sources were documented and analyzed. To determine the reliability of the data, attempts were made to consider concepts and terms based on specific definitions. Researchers self-review and opinions of experts were also used to determine the validity of the data (Kian, 2020). Bereday's method includes steps of description, interpretation, juxtaposition and

comparison was used for data analysis. In addition, the researchers categorized key concepts and extract themes using inductive content analysis and opinions of experts. In the findings section, the results of a comparative study as well as component analysis will be presented.

3. Findings

The findings of the comparative study of educational approaches using the Bereday's stages are presented as follows:

A) Description and Interpretation

In the description stage, the components are described by studying the documents. In the interpretation phase, the researchers analyzed the data collected from different sources to be able to make accurate judgments about the approaches (Madandar Arani & Kakia, 2019).

1) Educational ideals

1-1) Romantic Approach

The field of education in the last 250 years has experienced a variety of educational approaches. Rousseau's educational perspective and its expansion in the nineteenth century are thought to be the basis for the emergence of new educational approaches. According to Rousseau, the purpose of education is to cultivate a free man for society and to cultivate understanding, character and moral reason in a natural way (Hosseiniehkhah, 2018a). Free man means to free the child from dependence on the thoughts of others and not to allow others to think for him. This is evidence of the importance that Rousseau attaches to the concept of freedom (Zirkzadeh, 2019). Other ideals of education are teaching self-control and self-education to the child to face various events and solve life problems (Sadeghi & Sarmadi, 2018). According to Rousseau, man must be trained to be human. What children should be taught is the science of human responsibilities (Stroll & Popkin, 2020).

1-2) Humanistic approach

The term humanism has many definitions and a long history. The theory of humanism became the third force in psychology in the 1950-1960s in response to psychoanalytic approaches and behavioral patterns. The purpose of education in this approach is to provide conditions for the child to develop inner motivation and realize her/his talents to pay attention to the application of higher levels of attitudes such as values, abilities, talents, skills and interpersonal relationships (Lyubov et al, 2018). At this stage, the child realizes that she/he has these qualities as much as others and can act and behave according to the values. He also finds that he is able to nurture himself, others and the environment and become a successful citizen (Johnson, 2014).

1-3) Montessori approach

Montessori believes that the child acquires environmental knowledge through her/his senses. Therefore, she emphasizes teaching with the help of the senses and self-learning, and emphasizes the training of the five senses and the skill of mastering the environment in children. Montessori also emphasizes the impact of environmental factors on how a child grows and role of physical activity in learning abstract concepts and applied skills (Cole, 2017). Other goals of education in this approach are as follow: discovering the interests and inner forces of the child (Hashemi & Jafarpour, 2018), identifying intellectual abilities and talents (Aboutalebi, 2015), identifying areas of emotional and social development of the child and physical, motor, intellectual, linguistic and ethical aspects, strengthening personal discipline skills (Salari & Nademi, 2014) and the habit of self-discipline and sense of responsibility for others (Fuller, Bridges & Pai, 2007)

1-4) Waldorf Approach

Steiner founded the Anthroposophy Society in 1912. His useful experience in founding this association helped him to establish in 1919 the first school near the Waldorf factory, Stuttgart (Germany). According to Steiner, the development of inner capacities is done by

using the experiences and learnings of the child and multifaceted education between soul, thought, feeling and desire (Kreis & Circle, 2016). Steiner linked these three aspects to the physical parts of the body, connecting thought to the head, feeling to the heart, and desires to the organs. According to this approach, educational programs in the form of art help to express feelings and respond to children's inner needs (Garner, 2007).

1-5) Reggio Emilia approach:

This approach was invented by Loris Malagatsi and a group of villagers in Vilella around the Italian city of Reggio Emilia after World War II. For proponents of this approach, a sense of freedom, interaction and cooperation, development of trust in each other, respect for different opinions, ability to communicate consistently with peers and adults (social development), strengthen a sense of identity, and research skills (including observation, description, questioning, organizing and classifying, curiosity, discovery, and problem-solving power, familiarity and use of different materials and media), develop the childern's ability to express feelings and knowledge, mental structures and encourage thinking. From this point of view, every child is an intelligent, curious, creative and capable creature with her/his own rights, and she/he should not be considered an unworthy creature with simple needs. By increasing the child's ability to design and create any work, it is possible to help express the child's feelings (Habibi & Ahmadi Qaracheh, 2020).

2) Educational materials and activities

2-1) Romantic Approach

This approach refuses to provide lessons to the child early and uses less predetermined books and content and tries to teach the child from nature (Hosseiniehkhah, 2018a). According to the proponents of this approach, the child is not ready to understand abstract concepts and her/his mind should not be filled with various and abstract concepts. Rousseau believes that the first human perception is formed by the senses and therefore, education should be formed based on the growth pattern (Hashemi & Jafarpour, 2018).

2-2) Humanistic Approach

This approach tries to help strengthen the child's moral style and character through activities (Lyubov, 2018). To this end, this approach pays attention to individual differences and has designed a set of games namely "Frobel Gifts" for the preschool level, which includes a variety of activities - such as group singing, working with flowers, sewing and working with plants - (Hosseiniehkhah, 2018b).

2-3) Montessori Approach

This approach classified the activities based on the five topics of life skills, sensory skills, arithmetic, culture and language (Babolli et al., 2018; Habibi & Ahmadi Qaracheh, 2020).

2-4) Waldorf's approach

According to this approach, there is no specific formal educational content in preschool education and it should teach the child pre-formal skills. Although in this method, subjects such as literature, natural sciences, music, mathematics, art and physical education are presented to the child, but their training is not in the format of educational program. Attention to art education and aesthetics is also one of the main components of this approach. According to the proponents of this approach, artistic taste originates from within the child and contributes to her/his inner creativity. Artistic activities include painting and handicrafts such as weaving, carpentry, etc. Therefore, the content of the early childhood education program should pay attention to artistic forms (Garner, 2007).

2-5) Regio Emilia Approach

According to the proponents of this approach, the curriculum is evolving and progressing. Therefore, there is no pre-defined curriculum in Regio Emilia preschool centers and instead programs appropriate to children's interests are used (Yousefi, 2012). In this approach, the implementation of projects is an opportunity for the child to enter the various fields of experimental sciences, mathematics, literature, art, social studies and oral skills - such as listening and speaking and familiarity with letters, numbers, pictures and

writings -, research skills and provides different dimensional growth (Habibi & Ahmadi Qaracheh, 2020).

3) Methods of child-teacher interaction

3-1) Romantic Approach

Under the influence of nature, the child will spontaneously complete her/his abilities through contact with objects, in the sense that the child can learn a lot from the endogenous instructions of nature without the need for adult education. For children under the age of three, the instructor provides the opportunity to explore the world by strengthening the senses and suggests appropriate plays for the development of the senses (Farashbandi, 2018). In the second stage of development (2 -12 years old), the educator does not control the child's activities and she/he follows the internal guidelines (Hashemi & Jafarpour, 2018).

3-2) Humanistic Approach

Attention has been paid to self-concept, empathy and self-fulfillment of social skills and interpersonal relationships, and the coach has a facilitating role (Lyubov, 2018). In the sense that the educator creates a space full of trust, helps the child to achieve learning goals, and is open to new ideas (Mehr Mohammadi, 2010). The teacher also uses games to achieve the child's social skills and relates the material to the child's real life (McNeill, 2009) and proceeds with the child's development and does not command or forbid her or him (Joyce, 2015).

3-3) Montessori Approach

Learning is based on principal of simple observation and through direct experiences. The method of interaction is individual and objective in the sense that the instructor reduces her/his involvement as much as possible and uses less approach and speech (Yousefi, 2012). In early childhood education, the instructor creates a close connection with reality for the child through sensory and practical activities and plays a guiding role. Based on systematic observation, the coach tries to create a calm and constructive atmosphere.

The educator encourages the child to cultivate self-confidence and inner discipline so that in the stages of the child's development, she/he needs less intervention (Salari, 2014).

3-4) Waldorf's approach

Children need to ensure the continuity and repetition of everyday events that are regularly marked by day, week, month and year (Garner, 2007). The child naturally and creatively tends to learn, and therefore adults must be careful in choosing appropriate teaching methods. In this approach, the term "Cycle" is used, meaning that children and educators have been together for at least two years. This provides the child's emotional stability, countless opportunities for educators to better understand children, adjust topics based on individual needs, and promote children's social understanding (Torabi et al., 2012).

3-5) Regio Emilia Approach

The method of education is exploratory in the sense that it provides the ground for emergence of children's inner strengths and promotes their social, scientific, literary, moral and artistic development. Through the implementation of projects in the three stages of project initiation, classification of information, and final conclusions and display of documents, the teacher causes deep learning in children. The educator is a researcher who constantly evaluates the child and her/his participates in weekly sessions to improve education (Biroli, 2018).

4) Space architecture and environmental facilities

4-1) Romantic Approach

The learning process follows a nature-oriented approach and the child actively faces the environment in the sense that she/he uses her/his senses and solves problems (Hashemi & Jafarpour, 2018). The educator tries to harmonize the child's environment with nature and lead the child to self-exploration. In other words, the educator does not force the child to learn, but encourages her/him to learn by stimulating her/him to explore through interaction with the environment.

4-2) Humanistic Approach

In this approach, the learning environment is participatory, which means that the participation of parents and the local community is considered an important element in the education process, which is based on special attention to collective wisdom. In this way, harmony is created between the environment and the family, because educators believe that the educational space is not limited to the school, but the whole life of the children is considered as the center of education. On the other hand, this idea also gives meaning to the individuality of the child in social life, that is, as much as the child learns to value her/his individuality and creativity, she/he also learns that this individuality finds meaning in the context of collective life (Lyubov et al, 2018).

4-3) Montessori Approach

According to the proponents of this approach, the learning environment is prepared and diverse in which mobility is seen and is ready for the maximum exploration and learning of children (Mofidi, 2014). Exploratory learning, with special features and with the aim of less adult intervention in education, creates more self-learning opportunities for children. The environment is equipped with a variety of educational tools and aids to nurture the child's senses. Also, the environment is prepared in a way to encourage independence, self-discipline and learning in children (Ahmadvand & Sheikh Kolahdooz, 2017). In this approach, equipment is adjusted to children's level of vision, tables and chairs are available to children's size and short shelves are available to them. Teaching methods prepared child to be independent and learn from all her/his experiences without the help of adults. In addition, the tools are made of bright and washable colors (Mofidi, 2014).

4-4) Waldorf Approach

In childhood (birth to seven years old) tendencies and desires are more evident in the child's behavior and therefore the environment is carefully designed to enhance the child's development (Torabi et al., 2012). At this age it is better for the educator to pay attention to the physical aspects of the child. It means that good nutrition, proper exercise,

free activities and anything that can strengthen the child's body and soul are valuable. Accordingly, children are more engaged in play and the natural living space is provided for children (meaning that they are carpenters, weavers, cook breads, make food, play music, etc.). Children experience in this context and slowly get acquainted with all these areas of life (Yousefi, 2012).

4-5) Regio Emilia Approach

Proponents of this approach refer to the learning environment as the third teacher, which supports children's imagination (Talib & Tafraji, 2018, Fathi, Arefi & Targhijah, 2009). Pleasant space centers with beautiful design, harmonious, and full of peace - which facilitates communication and exploration for the child. In this way, teacher respects children as curious and creative creatures (Talib & Tafraji, 2018). The presence of large windows allows natural light to enter the building and while creating a pleasant feeling; it makes nature outside, part of the inside. Part of the door is made of glass so that the outside environment is visible. Playgrounds, hills for climbing, spiral staircases suitable for children's height, trees planted by children and a picnic table are among the visible items of outdoor space (Fathi, Arefi & Targhijah, 2009).

5) Feedback and correction methods

5-1) Romantic Approach

Judgment is made by the child himself, and since the child does not learn anything as a parrot - but learns through experience - so she/he is not expected to give lectures and know-how. The child is encouraged to honestly express the thoughts and actions that arise from her/his nature (Sadeghi & Sarmadi, 2018).

5-2) Humanistic Approach

The teacher does not judge or test children. Therefore, the child helps her/his growth by discovering the differences between her/him and others and without being in a competitive environment. This environment enables children to have better social relationships and increase the possibility of empathy, understanding and participation with

others, and children are able to identify their weaknesses (Lyubov et al, 2018). The educator also tries to have honest feedback and help to the child (Miller, 2019). Of course, the nature of this feedback should be focused on the child's efforts and not on her/his ability (Kadivar, 2014).

5-3) Montessori Approach

In designing the child's play equipment, attention has been paid to the principle of self-correction, which is one of the feedback methods. It means that the child both realizes mistakes and corrects himself while playing (Aral, 2015). In fact, the direction and correction of child behavior is done through the structure of the environment and therefore methods and tools are modifiers of child behavior (Hosseinpour, 2015). Instructors pay attention to the progress of children by observing and preparing checklists and focusing on the learning process (Ziadbakhsh, 2015).

5-4) Waldorf Approach

Children's learning rate is achieved through continuous feedback. The instructor provides descriptive information about how the children attend the class and the extent of their activities and participation. Teacher also exposes the activities that children have done individually or in groups as a collection and sometimes as an exhibition to parents (Dali, 2017).

5-5) Reggio Emilia Approach

In this approach, the method of documentation is emphasized and the activities performed by children in different stages are recorded in various ways and there is no such thing as exam, score and leveling (Soltani & Oblasi, 2015). Some of these documentation methods include instructors' daily reports, specific individual and group activities (Vargas-Baron & Schpper, 2012).

B) Juxtaposition and comparison of components of educational approaches

In the juxtaposition stage, the results obtained from the previous stages are compared together according to the characteristics of the studied component. Criteria are calculated

in the comparison stage accurately and according to the details, based on similarities and differences (Khajoui et al., 2019).

1) Educational Ideals

In the juxtaposition, the ideals were compared according to behavioral criteria, developmental dimensions, individual and social skills, art and creativity, and religious upbringing. The results are presented in Table 1.

Table 1 Comparison of educational ideals

Compon ent	Compariso n criteria	Criteria classification	Romantic	Human ism	Montes sori	Waldo rf	Reggio Emilia
Educatio	Behavioral	Cognitive	-	-	✓	-	✓
nal	domain	Emotional	-	-	✓	✓	✓
ideals		Psycho-motor	-	-	-	✓	
	Growth	Individual	✓	✓	✓	✓	✓
	dimensions	social	-	✓	-	-	✓
	Individual and social	Personal, hygienic	✓	✓	✓	✓	
	skills	educational	-	-	✓	✓	-
		Emotional	-	✓	✓	✓	-
		Establish social communication	-	√	✓	✓	✓
		Language skills	-	-	✓	✓	✓
		Familiarity with cultures	-	✓	-	✓	-
		Familiarity with sustainable development goals	-	-	-	-	-
		Research and exploration	-	-	-	-	✓
	Art and Creativity	Creative Thinking	-	-	-	✓	✓
		Talents	-	-	✓	✓	✓
		Artistic nature	-	-	✓	✓	✓
		Expressing thoughts and knowledge	-	-	-	✓	
	Religious	Ethical skills	-	-	-	✓	
	education	Familiarity with different	-	-	-	-	✓

religions					
Respect for the opinions of others	-	-	-	-	√

According to the table 1, in behavioral domains, Montessori and Reggio Emilia's approaches focus more on cognitive and emotional domains than other models, while Waldorf's approach focuses on psychomotor and emotional domains. In the developmental dimension, the Romantic, Montessori, and Waldorf approaches emphasize the dimensions of individual development, while the humanistic and Reggio Emilia approaches focus on both the individual and social development aspects of the child. In individual and social skills, the romantic approach emphasizes personal-health skills, but the Montessori and Waldorf approaches emphasize the development of the child in all physical, educational, linguistic and social dimensions, and the humanistic approach emphasizes social development. While Reggio Emilia's approach emphasizes research and exploration skills, in the arts and creativity criterion, Waldorf's approach emphasizes the cultivation of creative thinking and talent. Montessori, Waldorf, and Reggio approaches also emphasize the development of artistic talent and taste. In religious education, Waldorf's approach emphasizes moral skills and Reggio Emilia's approach to respecting the opinions of others. Also, the Waldorf and Reggio Emilia approaches have the greatest agreement between the established criteria, including the dimensions of growth, individual and social skills, and the other approaches have shown this agreement less. In the following, the steps of juxtaposition and comparison of other components are presented. The components of educational materials and activities were compared based on the criteria of cognitive, psychomotor knowledge, social studies, artistic knowledge, moral knowledge and life skills. The results are presented in Table 2.

Table 2 Comparison of educational materials and activities

Compon	Compariso	Criteria	Romant	Humanis	Montess	Waldor	Reggio
ent	n criteria	classificatio	ic	m	ori	f	Emilia
		n					
Educatio nal material	Cognitive Knowledg e	Sensory communicati on	✓	✓	✓	✓	✓
s and		Language	-	✓	✓	✓	✓
activities		Verbal Word	-	-	✓	✓	✓
		Experimental Science	-	-	✓	✓	✓
		Familiarity with numbers	-	-	✓	✓	✓
		Pictures	-	-	✓	✓	✓
		Research skills	-	-	✓		✓
		Environment al literacy	-	-	-	?	-
		Vocabulary		✓	✓		✓
		Concepts of numbers	-	-	✓		✓
		Patterns and relationships	-	✓		✓	✓
		Geometry and spatial perception	•	-	√	✓	✓
		Natural Sciences and Mathematics	,	-	✓	✓	√
		History	-	-	-	✓	
		Geography	-	-	-	✓	
		Technology in conjunction with science	-	-	-	-	-
	Psycho- motor knowledge	Physical training and senses	✓	√	√	√	✓
		team work	-	-	-	✓	
		Familiarity with tools and how to work	-	-	√		✓

Social studies	Introducing jobs		✓	✓	√	√
	Ethnology	-	✓	•	-	✓
	Introducing different cultures		√	-	-	✓
Artistic knowledge	Creative show	-	-	-	✓	
	Technology in conjunction with art	-	•	•	√	ı
	Familiarity with pictures	-	✓	✓	✓	-
	Music	-	-	✓	✓	•
	Art activities	-	✓		✓	-
	Theater	-	-	✓	✓	
Ethical knowledge	Strengthen moral style and character	-	✓	-	✓	✓
Life Skills	listening	✓	✓	✓	✓	✓
	talking	✓	✓	✓	✓	✓
	Creating and growing critical thinking	-	✓	-	√	-
	development of compassion- based ethics	-	~	-	√	-
	Strengthen personal responsibility	✓	✓	✓	✓	✓
	Environment al Protection	-	-	•	✓	✓
	Familiarity with environment al regulations	-	-	-	-	-

According to the table, in the cognitive dimension, romantic and humanistic approaches focus more on the use of nature and the stages of the child's development, while Montessori and Reggio Emilia approach focus more on science and mathematics. The humanistic approach and Reggio Emilia focused more on social studies. In terms of artistic knowledge, Waldorf's approach places more emphasis on art. The criterion of moral knowledge is considered by the proponents of the humanistic approach. Montessori and Reggio Emilia's approach also emphasizes life skills. Waldorf's approach is most consistent with the criteria set, including cognitive, artistic, and life skills, and the least consistent with the romantic approach. Other results are reported in Table 2. The methods of interaction in the approaches were compared based on the criteria of active, exploratory, play and participatory methods. Table 3 shows the results.

Table 3 Comparison of Methods of child-teacher interaction

Compon	Compariso	Criteria	Romant	Humanis	Montesso	Waldo	Reggio
ent	n criteria	classification	ic	m	ri	rf	Emilia
Methods of child-	Active method	Self-learning method	-	-	✓	-	-
teacher interacti on		Child follows nature for physical development	✓	-	-	-	-
		Attention to self-concept	•	✓	-	-	-
		Active teaching method	-	√	-	-	-
	Explorator y method	Project method	-	-	✓	-	✓
		Simple observation	✓	✓	✓	✓	✓
		Problem solving		-	✓	-	✓
		active spontaneity in activities	-	-	-	✓	✓
		Teacher as a researcher	•	-	-	-	✓
		Learning from nature	-	-	-	-	-
	Play	Use elements of harmony & repetition	-	-	-	✓	-
		Creating a platform for mental thought	-	-	√	-	-

	Use of art	-	ı	ı	✓	✓
	method of	-	-	-		
	Training				-	✓
	Creativity					
Participato	Collaborative	-		-	-	
ry method	learning		✓			-
	pattern					
	Create an	-				
	open and		_	✓	✓	√
	trusting		_	·	,	·
	atmosphere					
	Loop	-	-	-	1	_
	approach					_

According to the table, in the active method criterion the romantic approach emphasizes more on nature's inner guidelines for physical development of child, while the proponents of the humanistic approach pay attention to the importance of self-concept in using the active teaching method model. Montessori approach to achieving the goals of different dimensions of child development goes to the self-learning method along with play and individual methods. In the exploratory method criterion, Reggio Emilia's approach emphasizes the exploratory method, but the Montessori approach emphasizes the projectoriented method. In terms of play, Waldorf's proponents emphasize the elements of harmony, repetition, and respect for the child. In the participatory method criterion, the humanistic approach has considered the application of the participatory learning model due to the importance of interpersonal skills, but Waldorf's approach emphasizes the application of the loop method. Also, Reggio Emilia's approach has the most and the romantic approach has the least agreement between criteria such as exploratory, play and participatory method.

Based on the data in Table 4, popular approaches in the field of early childhood education were compared based on the criteria of natural and manipulated environments. In the ready-made environment criterion, Montessori and Reggio Emilia approaches place more emphasis on the predetermined environment, while the Waldorf approach emphasizes the role of both the predetermined and nature-oriented environment and seeks more natural materials use in the child's educational environment. The humanistic approach also emphasizes the creation of a collaborative learning environment (between the educational environment and the family, family and local community, individuality and individual creativity in social life). In the nature-based criterion, the educational space in the romantic approach is more nature-oriented and natural space is used for education. According to the findings, it can be inferred that except for the romantic and humanistic approaches, the rest of the approaches have the highest compliance with the set criteria including the nature-oriented.

Table 4
Comparison of Space architecture and environmental facilities

Compon	Compariso	Criteria	Romant	Humanis	Montesso	Waldo	Reggio
ent	n criteria	classification	ic	m	ri	rf	Emilia
Space architect ure and	predetermi ned environme	environment for observation	-	1	√	-	√
environ mental facilities	nt	environment for exploration	-	1	√	-	~
		environment to strengthen senses	-	✓	√	✓	~
		environment for the emergence of interests	-	1	✓	√	✓
		Facilitating space for communicatio n, exploration and research	-	✓	√	-	✓
		Existence of suitable open space	-	-	√	-	√
	Nature- oriented	Actively confront the environment	✓	-	-	✓	-
		Encourage self- exploration	✓	-	-	✓	-
		Coach coordination with nature	✓	-	-	✓	-
		Adapting the learning environment	√	-	-	√	-

	to the learners needs					
	Enrich environment	✓	✓	✓	✓	✓
	Participatory and active environment	-	✓	√	✓	✓
	Ecology training in parks	-	-	-	-	-

In Table 5, the feedback and correction methods are compared based on selfcorrecting criteria and feedback provided by the instructor. In the self-correcting criterion, proponents of the romantic approach encourage the child to express thoughts and actions arising from her/his own nature, and in the end the judgment is made by the child. The humanistic approach emphasizes helping the child to discover differences between themselves - without being in a competitive environment - and to strengthen the child's ability to identify and even eliminate her/his weaknesses. Waldorf's approach focuses on providing descriptive information about how children attend class, the type and amount of activities and their participation, and recording children's progress. Also in this approach, in order to identify talents and identify skills and abilities of children in the field of familiarity with nature, evaluation is done. In the criterion of providing feedback by the coach, Montessori's approach insists on applying its correction principle - which is based on observation and preparing a checklist. Reggio Emilia's approach emphasizes documenting by observing and recording conversations in the form of photography, filming, note-taking, and so on. The results show that Montessori and Reggio Amilia's approaches - and with a slight difference Waldorf's approach - were the most consistent with the established criteria, including coach feedback. In examining the components, it can be acknowledged that humanistic and romantic approaches have shown the least compatibility.

Table 5 Comparison of Feedback and correction methods

Compon	Compariso	Criteria	Romant	Humanis	Montesso	Waldo	Reggio
ent	n criteria	classification	ic	m	ri	rf	Emilia
Feedbac k and	Self- correction	Judgment by the child	√	✓	✓	-	-
correctio n methods		Strengthen the ability to identify and eliminate weaknesses	-	√	√	-	-
		Gathering facts	-	-	✓	✓	✓
		Analysis and evaluation of facts	-	-	✓	✓	-
	Provide feedback by the coach	Lack of judgment and assessment by the coach	✓	✓	√	√	✓
		Provide honest feedback based on the child's efforts, not his or her ability	-	√	-	√	√
		Use everyday natural situations for evaluation	-	-	-	√	√
		Measuring the growth and development of the child according to the goals	-	-	√	-	√
		Evaluation of the learning process and results	-	-	-	-	✓
		Talent identification and identification of skills and abilities	-	-	-	-	-

It should be noted that in addition to the results presented in each table, questions were asked in the research text. In the following, according to the results, research questions will be answered.

4. Conclusion

Much research has been done on the importance, necessity, goals, and curricula of early childhood education. Each educational approach has its own perspective on the development of the child. Some prioritize cognitive development, while others emphasize social or emotional development. It is obvious that all aspects of the child's development should be taken into consideration. By principled planning and creating coordination between physical, emotional, and social needs, while providing the appropriate space and facilities, it is possible to help the growth and development of the child's skills and abilities - according to the cognitive and social developments. This requires the design of a sound curriculum - based on the principles of developmental psychology (individual and social). Accordingly, the present researchers tried to achieve a rich set by comparatively examining the global preschool educational approaches - in the components of goals, activities, methods of interaction, space and facilities of the environment and feedback methods - in order to develop a native model for Iranian planners and researchers. By explaining the categories, the researchers provided the matching of the criteria of each approach with each of the components. Given the importance of each category, the universality of each approach becomes more apparent.

In educational ideals, the approaches of Waldorf and Reggio Emillia covered more categories. In the activities component, the Waldorf approach has the most compliance and the romantic approach has the least compliance with the activity criteria. In interaction methods, Reggio Emilia's approach had the most compliance and romantic approach had the least compliance with the criteria. In the component of space architecture, except for the romantic and humanistic approaches, the other approaches showed the most compatibility. The results related to the component of feedback and correction methods also showed that the approaches of Montessori and Reggio Emilia - and then the Waldorf approach - are most compatible. In examining all the components, it can be concluded that humanistic and romantic approaches have the least compliance with the explained criteria.

In the ideal component, all approaches focus on enriching perceptions, respecting the child's independence, and meaningful learning. Proponents of the Montessori approach differ from other

approaches in that they believe in pre-determined learning goals and environments. Romantic and Waldorf approaches also paid more attention to the growth goals of the child's organism than other approaches. This finding is in line with the results of Talaei & Barzeg (2015) and Shahin et al. (2013) regarding the importance of the role of ideals and its importance in preschool and public education.

In terms of educational activities, proponents of the Montessori approach believe in the use of predetermined content, as opposed to Waldorf and romantic approaches. Other approaches believe that while teaching, the teacher should be flexible and shift the sequence of activities and sometimes remove and create new materials. The findings of Gramipour (2016) and Saadatmand (2012) also confirm these results and the impact of educational activities on the overall development of the child. Reggio and Waldorf's equations in the component of interaction method do not consider the information transfer process as teaching but emphasize the role of research in education. Of course, all approaches to early childhood education focus on creating an effective environment for the development of the child's abilities and consider the child's interests as the main source for determining the goals and content of the programs. The findings of Ozar (2012) and Pijoka (2010) also highlight the importance of child-teacher interaction and the role of the educator in child rearing. Also, all approaches emphasize role of educational space component and child interaction with the environment. Romantic and Reggio Emilia approaches have strengthened the senses. With the exception of the Montessori approach, the other approaches do not believe in a formal assessment of the child's learning and have documented the child's progress only. Findings of the present study can help preschool curriculum planners to better identify the accepted dimensions and components of different approaches.

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