

Poster Session 3
Room RHMZ03

ECEC pedagogy

Extraction of non-cognitive skills perceived as having subjective benefit from autobiographical memory of physical play experiences in early childhood

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Keywords

Non-cognitive skills, physical play experiences in early childhood, text mining using KH Coder

Abstract

The ultimate goal of this study was to identify the determinants and mechanisms of the development of non-cognitive skills in physical play experiences (PPE) in early childhood (EC). Non-cognitive skills are believed to be the most efficiently acquired in EC when the brain is highly elastic. Research on this topic has been conducted worldwide, including by the Organisation for Economic Co-operation and Development (OECD) ¹⁾. However, existing research merely suggests the possibility that quality of care and play experiences in early years might influence subsequent development of non-cognitive skills. There is insufficient evidence to prove this hypothesis.

“Physical play” was defined as a general term for “play” in which children perform by vigorously using their entire body and mind. Theoretical discussions have begun to explain how PPE during unstructured playtime in EC could affect children’s development of non-cognitive skills. However, to date, there has been no empirical study to validate these putative associations.

Therefore, this research aimed to verify the hypothesis that acquiring non-cognitive skills is affected by PPE in EC. To provide concrete evidence, a cross-sectional retrospective study was used despite the difficulty in finding the confounder in retrospect. These surveys were conducted under the Aichi University of Education Code of Ethics.

Prior to this research, two studies were conducted to obtain new findings ²⁾. The first was a questionnaire survey conducted with university students. Structural equation modelling was used to examine the effect of PPE in EC on non-cognitive skills while in university, as represented by the Big Five personality traits. The second study examined the perceived benefits of PPE, thus participants were asked to write freely about their autobiographical memories of PPE in EC. The narratives were visualized through co-occurring network analysis with text mining using the KH Coder. Co-occurrence network analysis was used to visualize the relationships between participants’

non-cognitive skills as an adult represented by self-rated personality traits and elements of their autobiographical memories of PPE in EC. The results showed a correlation between personality traits and the quantity and quality of the autobiographical memories of PPE.

Based on these findings, the research reported here aimed to ensure the relationship between PPE in EC and non-cognitive skills. To this end, non-cognitive skills recognized as subjective benefits were extracted from the autobiographical memory of PPE in EC. As non-cognitive (social-emotional) skills, the ability to "achieve objectives," "cooperate with others," and "control emotions" were used as defined by the OECD ^{3) 4)}. In accordance with Research II, text mining was conducted using the KH Coder, focusing on a hierarchical cluster analysis of words appearing frequently, an analysis of the association with elements in non-cognitive skills, and co-occurrence network analysis. The results showed some similarities between subjective and non-cognitive skills perceived as the quality of play. It was acknowledged that they felt a unique subjective benefit for each childhood PPE.

These results appear to support the study's hypothesis and therefore imply the importance of PPE during EC as the determinants of the development of non-cognitive skills.

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Study on Emotional Education Teaching Course Using Emotional Picture Books in Kindergarten

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Keywords

Negative emotion, picture book, emotional education

Abstract

This study collects five types of emotions frequently appearing in this research: object-anger, fear, worry, sadness, and low self-esteem. Combining children's life experience, 10 picture books were selected suitable for the research object and in line with emotion-related educational issues, and designs a series of emotions educational courses. According to the qualitative research method, the researchers collected data and analysis through teaching documentary, observation records, children's works, interviews, etc., and explored the effectiveness of children's development of these five emotional abilities after the implementation of emotional education courses.

The researchers used the emotional picture book to draw up ten emotional education lesson plans for a period of 10 weeks. Through the collection, summary and analysis of multiple data, the research conclusions are as follows: 1. The growth of children in the four abilities of emotion awareness and recognition, emotion understanding, emotion expression, and emotion mediation. 2. The growth and improvement of teachers' own teaching ability and emotional education concept. Researchers suggest that the latter should be implemented in the future. Emotional courses can be integrated into thematic courses and life education. Depending on the children's abilities and conditions, the types and levels of emotions can be increased, which can not only help children discover their emotional abilities, but also enhance teachers' emotions.

An Action Research on Kindergarten Teachers' Teaching Process of Peer-themed Courses-an Example of a Public Kindergarten of Elementary School

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Keywords

Peer, themed courses

Abstract

The purpose of this study was to explore the implementation process of kindergarten teachers conducting peer-themed courses in order to examine the growth and change of young children. This study adopted action research, and the research participants were 12 children aged 4 to 5 in the teaching class.

The research content included a concept network for teachers to implement teaching activities, teaching activities, reflection and correction as well as children's Growth and Changes in Peer-themed Courses. Finally, based on the research results and findings, provide references and suggestions for future researchers in peer-themed courses The following conclusions are obtained based on the results of this study:

1. The implementation of the peer-themed curriculum helps kindergarten teachers to better understand the interaction and popularity between young children.
2. Childrens' growth and change in peer-themed courses: Through diverse teaching activities, construct peer interaction concepts and behaviors, and enhance understanding and concern for peers. From multiple group activities, increase the number of children's communication, and then trigger the active behavior of shy children. Through discussion and implementation of emotion and conflict resolution methods this helps children's emotional control and conflict resolution. Physical interactive games, increase children's communication and dialogue, and have fun with friends was also important.

An Action Research on Using Chinese Theme Picture Book Teaching Strategies to Explore the Chinese Abilities of Kindergarten Primary and Middle Classes-An Example of a Public Kindergarten in Elementary School in Taipei City

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Keywords

Picture book teaching, subject teaching, language ability

Abstract

This action research study aimed to explore the use of Chinese theme picture book teaching to guide the language performance of 12 children aged 3 to 4 years old in a public kindergarten in Taipei City. The main purpose of this study was to explore the teaching process in theme courses using theme picture books to see what impact this had on children's Chinese performance. This included their ability to understand spoken language, image symbols and text, and how they expressed this through body movements, spoken language, and body movements.

During subject teaching the teachers used theme picture books to explore the children's language ability, and used the teaching strategies designed by the researchers. This helped improve the children's language ability. Suggestions are made based on the research results, with reference to the provision of teacher education, parents, and future researchers.

What Does “Richness” in Preschool Children’s Musical Expression Mean to Nursery School Teachers?

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Keywords

Richness of musical expression, perspective of nursery school teachers, investigating episodes

Abstract

In recent years, a number of Japanese early childhood education studies have focused on not only knowledge and techniques acquisition but also various forms of expression, including music as well as the means of free expression unique to preschoolers, particularly emphasizing the “richness” of mental workings. Such studies are based on the notion that it is undesirable to provide instruction that exclusively aims to teach children how to sing and play musical instruments. However, it has been indicated that excessive avoidance of imparting knowledge and techniques is problematic. As per the Course of Study for Kindergarten, Japan’s governmental guidelines, the term “richness,” which is delineated as one goal in the domain of “expression,” has a broad meaning that causes ambiguity in the goals and evaluation of musical expression. In the practice of both research and education, it is extremely important to clarify what teachers consider as “richness” in children’s musical expression. Thus, the present study investigates how teachers perceive “richness” in children’s musical expression, to delineate a more concrete concept of “richness.”

A questionnaire survey was conducted with Nursery School Teachers to determine which of the expressions by their children appeared musically “rich” to them. First, verbatim records were produced for 650 cases from the survey forms collected from 435 teachers.

Nursery Teachers' Support for Young Children in Creating a Rich Playground Experience in ECEC Facilities: Analysis by Text Mining

Nursery Teacher's Responses

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Keywords

High-quality playground environment, rich experiences of children, nursery teacher's support

Abstract

This study aims to create an assessment scale for providing a high-quality playground environment and nursery teachers' support of Early Childhood Education Care (ECEC) facilities. There are two objectives in creating this scale. The first objective is "The rich experiences of children in the playground". The second objective is "The nursery teachers' support in creating a rich experience for children" Furthermore, we aim to create an assessment scale that can be used in the plan-do-check-act (PDCA) cycle by capturing the relationship between two objects.

We performed a quantitative text mining analysis of 105 data sources that we surveyed in 2019 and described co-occurrence networks. These data are nursery teachers' responses. The themes of these responses are about the two objects above.

By using a KH coder, we can clarify the realities of these words in the texts, which nursery teachers wrote freely. The size of the plots indicated the number of times words appeared, and the line connecting the plots indicated the frequency of the pattern in which the words appeared.

(a) The rich experiences of children in the playground are aggregated into eleven subgraphs.

- ① The rich and expanded play by using natural materials
- ② Awareness methods and acts to use natural materials and tools through a process of their utilization
- ③ The play that children extended, by creating an awareness of the characteristics of natural materials and the method of using tools
- ④ Enjoying physical play in competitive situations through the nursery teacher's direct support, the relationship built by attractive games, the children's knowledge, and conversations with their friends
- ⑤ Rich ideas and play generated from variable material circumstances
- ⑥ Constructive play made by using plenty of fluid materials such as sand
- ⑦ The rules that children generated and follow
- ⑧ Tools and materials that children can feel the character of natural materials
- ⑨ The play using the character of natural materials
- ⑩ The Diversity and expandability of the play
- ⑪ Consciousness to solve problems by improving concentration and thinking

(b) The nursery teacher's support in creating a rich experience for children is aggregated into nine Subgraphs.

- ① Support children to play using the character of natural materials
- ② Support children and empathize with them to play with variable natural materials

- ③ Being conscious of the necessity and the method of supporting children by involving play
- ④ Cooperative support for children, by preparing materials and tools necessary for children to play with.
- ⑤ Encourage children to notice differences in natural colors and teach them how to extract natural colors
- ⑥ Involving children directly to extend the play that used natural materials
- ⑦ Support children and enjoy playing with them
- ⑧ Detailed consideration so that children can enjoy playing.
- ⑨ Sharing the contents of the discovery with children, or allow children to share

The Joint Display composed the frequency of the words that appeared and the co-occurrence of networks provided 87 items as a scale of evaluation for ECEC facilities in the playground.

The Processes How One-Year-Olds Toward for Their Involved Play

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Keywords

Daycare for Infants; Involved Play; One-Year-Olds; Qualitative Research

Abstract

In Japan, following an increase in the demand for daycare for infants, national guidelines were revised to be more focused about daycare for infants than before.

In Japanese daycare centers, much of the children's life is play centered. However, it is not enough for their growth to play without engrossment. The experiences of involved play are important because such play remains in their mind and leads to spontaneous actions for next activities. The concept of involved play is represented as the word "Asobi-komi" in Japanese. Akita (2006) said that in the situation of involved play, children play not because they want to be evaluated but because it is just interesting for them. Moreover, such children don't mind the results of their actions in the play. Until now, there are some studies about children's involved play, for example, the features of involved children in play (Abe,2017; Kawabe,2015).

However, these are few studies that target the children in the range of 0-2 years old or early infancy. Judging from the results and considerations, most studies target children 3-6 years old or in early childhood. Studies targeting children of early infancy are needed because they will have differences about how to play and toward involved play compared to older children.

This study focused on one-year-olds and revealed the process of their accumulations of actions in their free-flow play in Japanese daycare centers by using the Trajectory Equifinality Model. There were two reasons to choose the age. First, a variety of play could be observed. This is because most of the children over one-year-old could start walking and join in a variety of play. The age is considered to the point that the type of play spreads and variety of involved play could be seen. Second, the different and age specific features could be revealed. The features of children of early childhood in involved play usually express the word, "collaboration". However, one-year-olds usually play alone more than collaborate with friends. Therefore, focusing on one-year-olds, characteristic features not seen in early childhood could be revealed. Moreover, environmental factors around the involved play would visualize, while making TEM diagrams.

Here we show that the process that one-year-olds toward involved play by making TEM diagrams.

To visualize the process, the age specific features of children in involved play would be revealed. Moreover, environmental factors around them would also be understood. Then, the study will help teachers working at daycare centers. This is because they would be able to support infants with such understanding that children could join involved play if teachers appropriately support them. To keep the understanding that how infants engage in involved play in teachers' minds would improve the quality of daycare for infants. This is because these teachers could provide such support as seeing through the realization of involved play in daycare for infants.

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Who is the Reader of Picture Books?: An Early Childhood Readers Research in a Japanese Kindergarten

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Keywords

Picture book, early childhood reader, relationship between children and kindergarten teacher

Abstract

In the first chapter of the first full-fledged work on picture book theory in Japan, Teiji Seta introduces Dorothy White, a New Zealand librarian, as saying that picture books are the first books children encounter. This encounter is realized not in the case that children read picture books by themselves but rather in the situation that children have adults read picture books aloud. People say that adults are reading picture books aloud to children when they see these scenes. In Japan, to describe this kind of activity, they generally use the expression “yomi-kikase,” which means “(for adults) to read picture books aloud in order to make children listen to it”. This phrase implies that the primary readers of picture books are the adults who read them aloud, and also that the children are in a subordinate position of listeners. My question has something relevant to the emissary connotation contained in the phrasing “yomi-kikase.” Who reads picture books actually?

Children's imagination, or their sense of wonder, is vibrant, dynamic and concrete, often surpassing even the most stubborn real-life experiences. As much as children accept the actual world as a concrete fact, or sometimes even more so, they experience the imagined world as an actual and alive one in which they are adventuring, playing, living and discovering everything. When children have read adults read picture books aloud, their imagination is activated and excited to make them enter into the world of picture books which they explore together with the characters in those books. Although reading picture books is a vivid experience which comes close to children themselves actually, we must say that it is difficult for us, as adults, to understand children's inner and private experience when we read picture books to them aloud.

There is a methodological difficulty for us as adults to capture children's vivid experience of picture books from an inner perspective. However, careful adults can empathetically understand and realize the vivid and dynamic imagination activated in children's picture book experiences by capturing the signs and nuances in their behavior, statements and expressions. In this study, we analyze the episodes which a kindergarten teacher summarized from some reading-picture-books scenes at her kindergarten. The following considerations would be drawn from the episodic description. Based on these episodes, I will describe the anticipated results as follows. First, children reading picture books with a lively imagination dynamically enter into the details of the world of picture books more deeply than the adults reading aloud, experiencing the adventures and stories together with the characters. Second, the quality of children's picture books experience is greatly influenced by how deeply the adult who reads the picture books aloud knows the books and the children. When children have adults, who are deeply familiar with them, read aloud picture books which this reader knows well, their picture book experience becomes more vivid and attractive.

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Foreign Folktales in Japan -Thinking through Folktale Picturebooks

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Keywords

Foreign Folktales, Japan, adaptation

Abstract

Since the Meiji Restoration in the mid-19th century, Japan has adopted many aspects of Western culture. Folktales have also been actively introduced. Even today, many of these tales are familiar to Japanese children. However, many of these foreign folktales have been rewritten, deleted or digested by translators and publishers. This paper aims to clarify the characteristics of these rewritings.

The medium used for the analysis is the picture books of folktales, because it is the most familiar medium for Japanese children to come into contact with folktales. The picture books used in this study are "The Three Little Pigs" (England), "Snow White" (Grimm), "Cinderella" (Perrault), "The Wolf and the Seven Little Goats" (Grimm) and "The Red Riding Hood" (Grimm).

The English and German folktales introduced to Japan in the early years were accepted as material for English textbooks and as educational reading material for schoolchildren. A series of fairy-tale books was compiled by Iwaya Sazanami and others who were leading children's authors in the Meiji period (1868-1912), and these books contributed to the development of children's literature. In the first half of the 20th century, the audience became younger, and the stories were widely used as subjects for picture books and "Kamishibai"-picture story shows, mainly in kindergartens throughout Japan.

Today, there are many picture books on folktales published in Japan. Many of them are also used as children's cultural property, such as "Kamishibai" and apron theatres. However, as mentioned above, many of these books have been rewritten, deleted or digested.

Their characteristics can be summarised in the following seven points

1. The elimination of cruelty
2. Avoidance of death.
3. The impartation of lessons
4. Simplification of the story (omission of repetition)
5. Infantilisation of the characters.
6. Illustrations in the style of cartoons and cute pictures
7. Influence of Disney animation.

A common feature of many picture books of folktales is that they try to hide the negative aspects of life and society from the eyes of children. They tend to avoid depictions of "eating life", which is an essential part of life, and direct depictions of the death of the wolf, which is a symbol of evil. In some cases, the stories contain lessons that are not inherent in folktales, such as the emphasis on hard work. Many retellings omit the three repetitions which are an important feature of folktales. The characters are

extremely infantilised, and it is like playing pretend. The pictures are often cartoon-like or in the style of cute pictures, and do not seem to depict the world of the folktales. It is no exaggeration to say that very little is known about the non-Disney versions of Snow White and Cinderella.

The foreign folktales that Japanese children encounter today are not the original tales retold by Jacobs and Grimm, but short, easy-to-digest tales with the death and cruelty removed. However, the robustness of the original skeleton of the folktale is what keeps it interesting.

The above characteristics are thought to reflect the creator's view of children.

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A Meta-Analysis on the Effects of Sensory Activity on Infant Development

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Keywords

Sensory activity, infant development, meta-analysis

Abstract

This study aimed to assess the effects of sensory activity on infant development through meta-analysis and to explore the moderators that affect the development of infants.

Fifty-three studies were selected from master's and doctoral dissertations and academic papers published in Korea from 1999 to 2020.

Key findings are as follows. First, the overall effect index of sensory activity on infant development was 1.33, and it was concluded that the effect was large when judged by Cohen's effect criterion. Second, sensory activity showed the largest effect size was on physical development, followed by emotional development, social development, language development, and cognitive development. Third, as a moderators of sensory activity infant development, the age was 2 years old and the number of experimental treatments was 14 or less.

The results of this study provided practical information for subsequent research on sensory activity and application in the field.

The Effect of Teacher's Empathy Ability and Playfulness on their Positive Behavior Support for Managing Challenging Behaviors of Young Children

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Abstract

Introduction

There is considerable evidence that social, cognitive, and behavioral problems in childhood tend to be exhibited through academic disruption, crime, violence, and drug addiction in later adolescence and adulthood (Hauser-Cram & Woodman, 2016). One of the promising approaches addressing the challenging behaviors in young children is Positive Behavior Support, which has been used in special education. Positive Behavior Support consists of 3 stages. The first stage of positive prevention strategy is to look for the underlying causes of challenging behaviors and its surrounding variables. The second stage is to provide positive support for children with challenging behaviors. Positive Behavior support of first and second stage (not third stage) have been an effective approach used on ordinary children as well as disabled children (Kim, T., 2021). A teacher's expertise is an important variable in determining the effectiveness of challenging behavior strategies including Positive Behavior Support (Kim, Y., 2020), It is necessary to determine the effects of the variables of the teacher's beliefs and values as well as their sociocultural background (Kwon, H., 2013).

Empathy, the ability to understand another person's emotional and psychological experiences, is distinguished by cognitive and emotional factors. It is profound in understanding a child's behavioral problems by vicariously experiencing a child's experience (Park, S., 1994). Studies have shown that a teacher's empathy is also helpful in supporting children's challenging behaviors and managing a teacher's own emotion (Park, S., 2013). There is a prior study (Jeong, E., 2018) that examines the relationship between a teacher's empathy and challenging behavior guidance strategies including PBS. However, there is a lack of research that examines how empathy affects the teacher's PBS through their playfulness. The teacher's ability to support children's playfulness is emphasized in the Revised Nuri Curriculum. In this regard, it is worth noting that the higher the playfulness of teachers, the more preventive and positive problem behavior guidance strategies are reported (Kwon, H., 2013). Research on the impact of teacher's playfulness on positive behavior support along with empathy are few. Therefore, examining the correlations among teachers' empathy ability, playfulness, and PBS is needed.

Questions 1. What was the relationship between the teacher's empathy ability, playfulness, and PBS?

Questions 2. How did the teacher's empathy ability and playfulness affect their PBS to manage the child's behavioral problems?

Method

The subjects of this study were 223 teachers for children aged 3, 4, and 5 years in kindergartens and daycare centers located in Seoul, Gyeonggi-do, and Daejeon in Korea. Teacher's empathy ability (Park, S. 1994), playfulness (Jung, S. 2017), and PBS (Kim, Y., 2007) were measured, and data analysis was conducted with correlation analysis and multiple regression analysis.

Results

As a result of examining the relationship between teacher's empathy ability, playfulness, and PBS, the overall of PBS showed statistically significant correlation with the overall of teacher's empathy ability ($r=.40, p<.01$) and playfulness ($r=.20, p<.01$). For the first stage of positive prevention stage, perspective-taking ($\beta=.27, p<.001$) of empathy ability and lightheartedness ($\beta=.18, p<.05$) and whimsical playfulness ($\beta=-.22, p<.01$) of playfulness were statistically significant sub-factors. For the second stage of

positive response strategies, perspective-taking ($\beta=.26, p<.05$), empathic concern ($\beta=.19, p<.05$) of empathy ability, lightheartedness ($\beta=.24, p<.01$) and whimsical playfulness ($\beta=-.21, p<.01$) of playfulness were the statically significant sub-factors.

Discussion

The findings of this study implied that teachers' empathy ability and playfulness were influential on their tendency to adopt PBS in dealing with a child's problem behaviors. In sum, the higher the teacher's empathy ability and playfulness, the more teachers apply PBS strategies to manage child's problem behaviors. More effort is needed to figure out how to develop teacher training programs to enhance teacher's empathy ability and playfulness to help their application of PBS.

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A Meta-Analysis on the Effects of Outdoor Play on Young Children's Development

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Keywords

Outdoor play, young children's development, meta-analysis

Abstract

Studies on outdoor play have increased since 2003. Most are fragmentary studies so there are limitations in understanding them objectively. Therefore, there is a necessity to draw objective conclusions by undertaking a systematic and comprehensive analysis of these studies.

The aim of this study was to assess the effects of outdoor play for young children's development through a meta-analysis of 151 studies and 249 data sets drawn from doctoral dissertations and academic papers published in Korea from 2003 to 2020. This study also explored the moderators that affect the development of children.

Four research questions guided this study. First, how large was the effect size of the outdoor play which affects young children's development? Second, what was the effect size of the outdoor play which affected children's development different depending on area of development? Third, what was the effect size of the outdoor play which affected children's development differently depending on types of outdoor play? Fourth, what was the effect size of the influence of nature-friendly education over children's development? How did this differ according to moderator variables such as children's age, the number of children in an experiment group, the period of experimental treatment, and the number of experimental treatments?

To enable this, a total of 151 studies and 249 data were selected for doctoral dissertations and academic papers published in Korea from 2003 to 2020.

The results of the study were as follows:

First, the overall effect size of outdoor play on the development of young children was 1.51. It was concluded that the effect was large by Cohen's effect size criterion.

Second, outdoor play showed the largest effect size on emotional development, followed by physical development, cognitive development, and social development.

Third, among the outdoor play categories, nature inquiring activities showed the largest effect size, followed by exercise play, strolling activity, sand and water play, and art activities.

Fourth, the effect size of each research was heterogeneous and the moderators which explain such difference were young children's age, the number of children in an experiment group and the number of experimental treatments.

Through this study the effect of outdoor play provided practical information for subsequent research and application in the field of ECE.

A Meta-Analysis on the Effect of Growing Plant Activities for Infant with Development

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Keywords

Growing Plant, Infant Development, Meta-Analysis

Abstract

This study was to assess the effects of growing plant activities on infant development through meta-analysis and to explore the moderators that affect the development of infant.

Fifty-two studies were selected for master's and doctoral dissertations and academic paper published in Korea from 2000 to August 2020.

The results of this study were as follows:

First, the overall average effect size with a random effect model was 1.17, which can be interpreted as large effect size according to Cohen's effect size analysis criteria.

Second, among the types of growing plant activities, the effect size was the largest in growing potted plants activities, followed by mixing, backyard gardening and gardening.

Third, it was found that the effect size was large when the infants age was 3 years old and the number of experimental treatments was 10 or less as the moderators.

Through these results, growing plant activities provided information that can be effectively applied to early childhood education fields.