

Analysis of Research Trends Related to Forest Play: Focusing on Domestic Dissertations

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Abstract

The purpose of this study was to investigate the research trend of forest play. The purpose of this study is to provide basic data for the vitalization of forest play research by analyzing the research period, research content, and research methods. For this study, 57 domestic master's and doctoral dissertations were extracted through the National Assembly Library and the Research Information Sharing Service(RISS) with the keywords of 'forest', 'play', and 'forest play'. The frequency and percentage were calculated by analyzing forest play research based on four criteria: research period, research content, research method, and research subject. As a result of the research, first, the trend of forest play research by period is from 2011 to 2021, with 49 articles (85.9%) for master's degrees and 8 articles (14.1%) for doctor's degrees. Second, the trend by research content was found to be 16 basic studies (28.1%) and 41 practical studies (71.9%). Forest play research is being actively conducted centered on practical research. Third, the trends by research method were in the order of 39 quantitative studies (68.4%), 17 qualitative studies (29.8%), and 1 literature study (1.8%). Forest play research is focused on quantitative research, and comparatively qualitative research and literature research account for a low proportion. Fourth, the trend by study subject was 56 single subject studies (98.2%). The single subjects were 52 children (91.2%), 3 teachers (5.2%), and 1 pa-

rent (1.8%). As for the mixed subjects, there is one study (1.8%) targeting children and parents, and it is necessary to conduct a study with mixed subjects. As for the study of material subjects, 42 articles (73.7%) in the natural environment, 13 articles (22.8%) in educational institutions, and 2 articles (3.5%) in the media were found in the order. Research on the home environment related to forest play is insufficient, so research on parents, children-parents, and home environment related to forest play should be conducted in the future.

〈 Keywords 〉

Forest play, Research trends

I. Introduction

Children living in the modern society of urbanization, industrialization, and informationization have less space and time to interact with nature, and spend a lot of time in artificial play facilities and learning. Children who are increasingly distant from nature have problems such as excessive selfishness, lack of sense of community, poor sociality, emotional anxiety, lack of patience, lack of self-regulation, obesity, and depression (Han, 2016). Through forest play that can be close to nature, children can recover their lost senses and respect the right to play, thereby solving various problems of children.

A space called a forest can develop a child's body, mind, and faith. The forest is not artificial education, but natural play. Through forest play that children experience, they can recognize the beautiful nature created by God, the relationship between humans and nature, and the value of nature. In addition, children's bodies and minds can be healthy through for-

est play (Han, 2016).

Due to the increase in non-face-to-face online education and indoor activities due to COVID-19, interest in forest play is increasing for physical development of children and relieving emotional stress. The importance of forest play for children is increasing as the 'child-centered, play-centered' curriculum, which is important in the 2019 revised Nuri curriculum, a national level kindergarten curriculum, has been strengthened. A Study on Forest Kindergarten and Forest Play-focused Children's Studies(Boo, 2012; Chun, 2013; Kim, 2011; So, 2012; Yoon, 2013), Forest Playground Research(Lim, 2014), Teachers Research(Kang, 2015; Kim, 2021) is continuously being conducted. Research trend analysis research focusing on forest play is lacking.

For research on forest play-related research trends, there is 'analysis of research trends related to infant forest play' by Han(2019). This study analyzed forest play research for infant by year, research subject, research topic, developmental area, research method, and research content. By period, forest play-related research began in 2011 and showed a gradual increase. As the subject of research, there were more studies on infant than teacher. As for the research topic, the study on the effect of forest play was the most at 37.5%. Research between forest play and social-emotional development took the highest proportion at 50%. The study of forest play for infants consisted of 53.1% of experimental studies.

A study on the Christian perspective on forest and ecological early childhood education was analyzed in a study on religious-related forest and ecological early childhood education research trends (Jeong & Hwang, 2019). Research from 1996 to 2019 revealed the lack of research from a Christian

perspective. In addition, research on children was conducted the most, and literature research was conducted with a significant proportion.

Research trend refers to a research method in which research trends are identified or characteristics are discovered and discussed by classifying studies in several literatures with certain items(Lee, 2017). This study intends to suggest implications for future research tasks for forest play by analyzing the current status and characteristics of forest play research.

For this study, analysis criteria were established based on the research period, research content, research method, and research subject based on analysis tools related to early childhood education research trends (Jeong & Hwang, 2019; Kim, 2021; Woo, 2011). In the study of forest play conducted from 2011 to 2021, the research trend and characteristics were analyzed in the four axes of research period, research content, research method, and research subject to explore potential research tasks and development directions of forest play research.

The research questions set according to the necessity and purpose of this study are as follows.

1. What is the trend of forest play theses by research period?
2. What is the trend of forest play theses by research content?
3. What is the trend of forest play theses by research method?
4. What is the trend of forest play theses by research subject?

II. Theoretical background

1. The meaning of forest play

The forest is an environment suitable for children to run around freely and experience infinite imagination and curiosity through their senses, and it is an open space where education takes place(Park, 2005). A forest is a place where the living creatures of the forest can directly experience the way of co-existence and coexistence(Shin, 2012). These forests are effective for human mental healing and serve as a haven where people can take stability(Kang & Kim, 2012). Therefore, a forest is a place where trees are gathered and various animals and plants coexist to form an ecosystem. When humans interact with the forest, wisdom about life order can be obtained. In addition, it is a place where the scope of life is expanded to the outdoors, and mental healing is performed along with physical development(Han, 2019). The forest is not a standardized facility, but a space in which children experience nature in a space called the forest and pursue holistic development. The meaning of the forest is not a closed space or mechanized space, but an open space as it is and a space where you can experience all the natural elements between the sky and the earth.

Forest play in Korea are generally held at forest kindergartens and forest experience centers. The concept of forest play in Korea was first introduced by a forest kindergarten in Germany(Lee, 2003). In 2008, forest experience was made by the Korea Forest Service with the educational goal of holistic growth and development centered on national forests and natural recreation forests(Kim, 2019). In the 2nd standard child-care process in 2012, the human figure of 'a person who loves nature' was added to reflect the changes of the times in ecology, forest, and nature. Through this, it was recognized that forest play is an important trend of the times, and the im-

portance of forest play was emphasized.

Experiences in the forest are called variously. Forest play (Lee, 2015; Lim, 2018), forest play activity (Bae, 2015; Ji, 2020), forest experience play (Jeong, 2017), Forest infant education (Lee, 2013), Forest Kindergarten (Lee, 2007), forest ecology program (Lee, 2003), and nature-friendly education (Cho, 2005). In general, playing in the forest is the key.

The 2019 revised Nuri curriculum has changed from a teacher-centered curriculum of planned activities to a 'child • play-centered' curriculum centered on child-led play. Therefore, from the viewpoint of respecting the initiative and autonomy of children, children's play and educational experiences in the forest are called 'forest play'. Forest play is a sensory exploration process in which children directly see, hear, touch, and feel natural objects(Lee, 2006). Forest play makes child feel what it is to be with nature and allows child to experience the vitality of living beings(Lee, 2003). In addition, forest play enhances social ability to understand various situations and to experience various problem-solving methods thanks to abundant natural resources that are not artificial(Choi, Seok & Park, 2013).

When forest play is experienced as in everyday life, children feel more comfortable with nature in the process of growing up, and have a sense of friendliness and stability to nature. Therefore, forest play means free play and planned play where children can experience nature in a place called the forest, feel it with all five senses, and freely express their free emotions(Yoon, 2013). Therefore, forest play is a free play and activity that allows children to experience the five senses with natural objects while playing freely in various places such as the children's forest experience center, the general forest, veg-

etable gardens, parks, and playgrounds (Kim, 2021).

2. The value of forest play

Forests affect the human immune system. In particular, oxygen supply and adequate sunlight experience for children with weakened immunity are important for the formation of immunity(Lee, 2014). Clear oxygen supply to children is important for brain development, and sunlight produces serotonin, a neurotransmitter that makes you feel a sense of stability and happiness, and produces alpha waves that stabilize brain waves, which improves concentration, memory, and creativity.

Forest phytoncides are more emitted from conifers than from hardwoods. In addition, phytoncide purifies and sterilizes forest air from pests, fungi, and pathogens(Lee, 2011). Children who experience phytoncide through forest play increase mental stability and body immunity. Therefore, forest experience is effective for enhancing immunity of growing children.

Through forest play, children's sensory abilities are developed while experiencing various natural objects. Also, while playing in the forest, language is developed through the names and interactions of natural objects. In the process of resolving problem situations that occur in forest play, cognitive development of mathematical solution ability and scientific inquiry ability takes place(Jang, 2012).

Children form an attitude to protect nature and respect life through forest play experiences. Therefore, forest play affects children's personality development. In addition, the spatial freedom and voluntary play provided by the forest affect children's positive attitudes, thoughts, and interpersonal relationships, thereby developing children's social skills(Choi, 2013). In other

words, through forest play activities, children learn the dignity of life and awe for nature, and develop personality factors such as interaction with peers, cooperation and consideration, self-regulation ability, self-esteem, and emotional stability(Lee, 2012). Children experience various experiences through forest play, and the development of the whole person is achieved. Children's lifestyles formed through forest play have a great impact on their subsequent life attitudes.

III. Research method

1. Research subject

For this study, domestic master's and doctoral dissertations from the National Assembly Library and the Research Information Sharing Service(RISS) provided by the Korea Education and Research Information Service published from 2011 to 2021 were used as the subject of 'Forest', 'Play' and 'Forest Play'. A total of 57 articles were extracted by arranging the duplicate research list by searching. In addition, the frequency and percentage were calculated by classifying and analyzing the dissertations according to the four criteria of research period, research content, research method, and research subject.

2. Research tools

This study was analyzed based on the following criteria to understand the trend of forest play research. First, this study was classified according to the year of publication of the thesis and master's and doctoral degrees. The year of issuance

was divided into 3-4 year cycles, and degrees were divided into master's and doctoral degrees. Through this, it was possible to identify a tendency to increase or decrease in quantity.

Second, the classification criteria according to the research contents were composed as shown in <Table 1> with reference to previous studies (Jeong, 2010; Jeong & Hwang, 2019; Kim, 2021).

Third, the analysis criteria for the research method were classified into quantitative research, qualitative research, and literature research by reviewing previous studies (Jeong, Bang & Yu, 2012; Kim, 2021). Quantitative research included experimental research, survey research, and correlation research, while qualitative research included ethnography and case studies. Literature research included the type of research on literature collection, analysis, and evaluation.

Fourth, the classification criteria for research subjects were divided into human subjects and physical subjects by referring to the research subject analysis criteria presented by previous studies (Jang, 2016; Kim, 2021; Woo, 2011). Individual subjects were divided into single subjects (children, teachers, parents) and mixed subjects (children-parents, children-teachers, children-children). Physical objects included educational institutions, home environments, natural environments, and media.

For the research tool used in this study, 10 dissertations related to forest play were preliminarily analyzed to ensure the clarity of data analysis criteria. Validity was secured by being verified by two early childhood education experts whether the analysis was accurately and appropriately according to the analysis criteria.

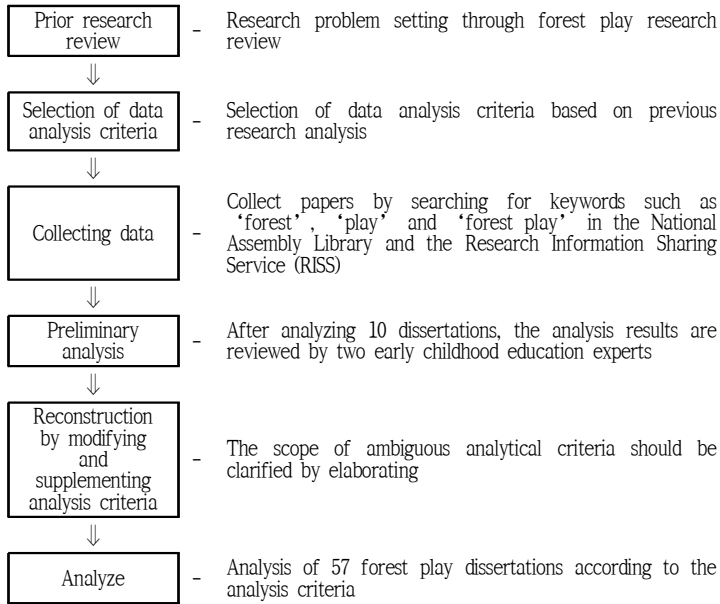
〈Table 1〉 Criteria for classification of research content

Research contents	theory research (basic research)	practice research (applied research)
Specific research contents	<ul style="list-style-type: none"> • The necessity and purpose of research on forest play • The theory of forest play • The Philosophical Background of forest play • Awareness and Reality of forest play 	<ul style="list-style-type: none"> • Curriculum and program development • Teaching and learning methods (teaching media, program effectiveness verification) • Education subject variables (children characteristics, teacher characteristics, parent characteristics) • Evaluation (research tool development, teacher evaluation, parent evaluation)

For the research tool used in this study, 10 dissertations related to forest play were preliminarily analyzed to ensure the clarity of data analysis criteria. Validity was secured by being verified by two early childhood education experts whether the analysis was accurately and appropriately according to the analysis criteria.

3. Research procedure

This study was conducted by modifying and supplementing the research procedure of Son(2016). The research procedure is shown in [Figure 1].



[Figure 1] Research procedure

After reviewing previous studies, data analysis criteria were selected. After collecting data from the National Assembly Library and Academic Research Information Service, 10 dissertations were analyzed with preliminary analysis, and the validity of the analysis tools were confirmed by two early childhood education experts. The collected studies (57 articles) were analyzed with the final confirmed analysis tool.

4. Data Analysis

In this study, research papers were analyzed by dividing them into research period, research content, research method, and research object. In order to understand the trends by re-

search period, the papers from 2011 to 2021 were divided into 3-4 period and the change by research period was analyzed. The frequency and percentage of papers analyzed by research period, research content, research method, and research subject were calculated.

IV. Results and Interpretation

1. Trend analysis according to research period

For this study, a total of 57 domestic master's and doctoral dissertations published by the National Assembly Library and RISS published from 2011 to 2021 were analyzed according to the research period. The research trend of 'Forest Play' was analyzed in 3-4 year cycles (2011-2014, 2015-2018, 2019-2021). The study of forest play started with one master's thesis in 2011 (Kim, 2011) and showed a gradual increase. There was only one forest play study (Kim, 2021) that was conducted by collecting data in 2020, when non-face-to-face education was conducted due to the spread of COVID-19.

Forest play research consisted of 49 (85.9%) master's theses and 8 (14.1%) doctoral theses. Forest play research was conducted mainly on the master's thesis. There were doctoral dissertations 1 in 2013 (Choi, 2013), 2 in 2014 (Ahn, 2014; Lee, 2014), 1 in 2015 (Jin, 2015), 1 in 2017 (Jeong, 2017), 1 in 2019 (Jang, 2019) and 2 in 2020 (Kang, 2020; Lee, 2020). Although there was no doctoral dissertation in 2016 and 2018, professional research on forest play continued.

〈Table 2〉 Trend analysis according to research period

N=57, frequency(%)

period	2011-2014	2015-2018	2019-2021	sum(%)
master's thesis	12(21.1)	27(47.3)	10(17.5)	49(85.9)
doctoral dissertation	3(5.3)	2(3.5)	3(5.3)	8(14.1)
sum(%)	15(26.4)	29(50.8)	13(22.8)	57(100)

Analyzing the forest play research according to the research period, 15 master's and doctoral studies in 2011-2014 (12 master's thesis 21.1%, 3 doctoral dissertation 5.3%), 29 master's and doctoral studies in 2015-2018 (27 master's thesis 47.3%, 2 doctoral dissertation 3.5%), and 13 master's and doctoral studies in 2019-2021 (10 master's thesis 17.5%, 3 doctoral dissertation 5.3%) were conducted. In particular, compared to other periods, research on forest play was actively conducted on 29 articles(50.8%) in 2015-2018. After 2019, it was possible to understand the trend of a decrease in forest play-related research as outside activities were blocked in the atmosphere of non-face-to-face activities and education due to COVID-19.

2. Trend analysis according to research content

The results of classification of the research contents by period of forest play research into theory research and practice research are as follows.

As a result of analyzing the research trend of forest play according to the research content, 16 theory research (28.1%) and 41 practice research (71.9%) were found of the 41 practice research of forest play, 36 practice research (63.1%) are master's theses, and 5 (8.8%) are doctoral dissertation. Forest play research is being actively conducted focusing on practice

research rather than theory research. In 2015-2018, the most research was conducted with 9 theory research (15.8%) and 18 practice research (31.5%). In 2019-2021, the number of theory research and practice research decreased. In the study of forest play, theory research on forest play related theories, philosophy, perceptions, and current situation was insufficient.

〈Table 3〉 Trend analysis according to research content

N=57. frequency(%)

period		2011-2014	2015-2018	2019-2021	sum(%)	Total(%)
M	theory research	3(5.3)	9(15.8)	1(1.8)	13(22.8)	theory research 16(28.1)
	practice research	9(15.8)	18(31.5)	9(15.8)	36(63.1)	
D	theory research	.	2(3.5)	1(1.8)	3(5.3)	practice research 41(71.9)
	practice research	3(5.3)	.	2(3.5)	5(8.8)	
sum(%)		15(26.4)	29(50.8)	13(22.8)	57(100)	

M = master's thesis D = doctoral dissertation

3. Trend analysis according to research method

The results of analyzing the trends according to the research methods (quantitative research, qualitative research, literature research) by period of forest play research are as follows.

As for the research method of forest play, 39 quantitative studies (86.4%), 17 qualitative studies (29.8%), and 1 literature study (1.8%) were found in the order. Forest play research was focused on quantitative research methods. There were 35 (61.3%) master's theses on the field of forest play, centered on quanti-

tative research. Research is being conducted in a balanced way, with 4 quantitative studies (7%) and 4 qualitative studies (7%) in the doctoral dissertations related to forest play. In 2015 -2018, forest play research consisted of 19 quantitative studies (33.3%) and 8 qualitative studies (14%).

〈Table 4〉 Trend Analysis by Research Method

N=57, frequency(%)

period		2011-2014	2015-2018	2019-2021	sum(%)	Total(%)
M	quantitative research	8(14.0)	19(33.3)	8(14.0)	35(61.3)	quantitative research 39(86.4)
	qualitative research	4(7.0)	8(14.0)	1(1.8)	13(22.9)	
	literature research	.	.	1(1.8)	1(1.8)	
D	quantitative research	3(5.4)	.	1(1.8)	4(7.0)	qualitative research 17(29.8)
	qualitative research	.	2(3.5)	2(3.5)	4(7.0)	literature research 1(1.8)
	literature research	.	.	.	0	
sum(%)		15(26.4)	29(50.8)	13(22.8)	57(100)	

M = master's thesis D = doctoral dissertation

In the literature study, one volume (1.8%) was conducted in 2019. It can be seen that there is a lack of literature research on forest play. In the research method of forest play, there are insufficient studies using qualitative research and other methods (mixed study of quantitative and qualitative research).

4. Trend analysis according to research subjects

In order to understand the trends according to the research subjects for each period of forest play research, the research

subjects are divided into human subjects and material subjects (educational institutions, home environments, natural environments, media), and the human subjects are single subjects (children, teachers, parents) and mixed subjects (children-parent, children-teacher, between children) were analyzed in detail.

In the study subjects of the forest play study, the human subjects were 56 single subjects (98.2%) and 1 mixed subjects (1.8%). Among single subjects, there were 52 studies (91.1%) targeting children, 3 studies (5.3%) targeting teachers, and 1 study (1.8%) targeting parents. Forest play research showed a high proportion of studies targeting children. As for the mixed subject study, it can be seen that there was only one study (1.8%) targeting children and parents, and there was a lack of mixed subjects.

〈Table 5〉 Trend Analysis by Research Subjects

N=57, frequency(%)

period		2011 -2014	2015 -2018	2019 -2021	sum	total(%)
H	S	children	14(24.6)	26(45.5)	12(21.0)	52(91.1)
		teacher	·	2(3.5)	1(1.8)	3(5.3)
		parent	1(1.8)	·	·	1(1.8)
	M	children-parent	·	1(1.8)	·	1(1.8)
		children-teacher	·	·	·	0(0)
		between children	·	·	·	0(0)
sum(%)		15(26.4)	29(50.8)	13(22.8)	57(100)	
P	educational institution	3(5.3)	8(14.0)	2(3.5)	13(22.8)	57(100)
	home environment	·	·	·	0(0)	
	natural environment	12(21.1)	21(36.8)	9(15.8)	42(73.7)	
	media	·	·	2(3.5)	2(3.5)	
sum(%)		15(26.4)	29(50.8)	13(22.8)	57(100)	

H=human subject P=physical subject S=single subject M=mixed subject

By research period, there were 26 papers (45.5%) targeting children in 2015-2018, which was more than any other period. Since there are relatively few studies on parents in a single subject, research on parents related to forest play is required.

Among the material subjects, 42 studies (73.7%) related to the natural environment (forest kindergarten, forest experience center, etc.), 13 studies (22.8%) related to educational institutions, and 2 studies related to media (3.5%) were made. There was no study on the home environment related to forest play by period. As there are no studies of mixed subjects (child-parent, child-child) in human subjects and studies that target the home environment in physical subjects, it can be seen that there is a lack of research related to parents and families among forest play studies.

V. Conclusion

This study examines the research period, research content, research method, and research subject for 57 master's and doctoral dissertations related to forest play published from 2011 to 2021 and analyzes the research trends. It was intended to provide basic data necessary for the search. Based on the results obtained in this study, the discussion is as follows.

1. Trends in research period of forest play thesis

The forest play research consisted of 49 (85.9%) master's theses and 8 (14.1%) doctoral dissertations. It was focused on the master's thesis. Analyzing the forest play research according to the research period, 15 master's and doctoral studies in

2011-2014 (12 master's theses 21.1%, 3 doctoral dissertations 5.3%), 29 master's and doctoral studies in 2015-2018 (27 master's theses 47.3%, 2 doctoral dissertations 3.5%), and 13 master's and doctoral studies in 2019-2021 (10 master's theses 17.5%, 3 doctoral dissertations 5.3%) were conducted. In particular, compared to other periods, research on forest play was actively conducted on 29 articles (50.8%) in 2015-2018. This research trend by period is similar to the research results of the infant forest play study(Han, 2019). In the case of the infant forest play study, the number of research papers gradually increased after starting in 2011, but after 2018, the number of research papers showed a tendency to decrease.

On July 25, 2011, the name of 'Forest Kindergarten' was changed to 'Children's Forest Experience Center' in accordance with the 'Act on the Promotion of Forest Education'. In 2012, as the human figure of 'a person who loves nature' was added in the second standard childcare course, awareness of forest play increased and research on forest play was activated after 2011.

After COVID-19, the importance of outdoor activities and forest education has been emphasized, but continuous social distancing has been strengthened, and it can be seen that forest play research is decreasing in the atmosphere of blocking outdoor activities. Therefore, continuous interest in forest play research is needed.

2. Research content trends in the forest play thesis

As a result of analyzing the contents of forest play research, 16 theory research (28.1%) and 41 practice research(71.9%) were found. Forest play research is being actively conducted

focusing on practice research rather than theory research. In 2015-2018, the most research was conducted with 9 theory research(15.8%) and 18 practice research(31.5%). The results of this study support the study that revealed the tendency of the effects and effects of forest play to appear at a high rate (Han, 2019) and the study result of Kim(2017) that variously verified the effects of forests.

It can be seen that the research contents for the verification of educational effects occupy a large proportion in research targeting children. On the other hand, basic research on forest play-related theories, philosophies, perceptions, and current situation was lacking. In general, forest play research lacks 'research on perception and situation related to forest play' in theory research and 'research related to evaluation' in practice research. Specifically, there is a need for research on the perception and current situation of children, parents, and teachers related to forest play, and evaluation research related to forest play.

3. Research methods trends in the forest play thesis

As for the research method of forest play, 39 quantitative studies (86.4%), 17 qualitative studies (29.8%), and 1 literature study (1.8%) were found in the order. Forest play research was focused on quantitative research methods. The results are similar to those of Han(2019), who analyzed the research on forest play for infants. On the other hand, Jeong & Hwang(2019), who analyzed research on religion-related forests and ecological early childhood education, revealed that literature studies were mainly conducted. In the research methods for forest play related to early childhood education, studies using liter-

ature studies, qualitative studies, and other methods (mixed studies of quantitative and qualitative research) are insufficient.

It is necessary to study the literature that can examine the value of forest play in the study of forest play. In addition, studies using qualitative research methods (ethnography, case studies, etc.) should be conducted. It is necessary to collect qualitative data through methods such as observation and interview for children, parents, and teachers who experience forest play, and then to draw meaningful results. Through this, it is possible to increase the understanding of forest play.

4. Research subject trends in the forest play thesis

In the study subjects of the forest play study, the human subjects were 56 single subjects (98.2%) and 1 mixed subjects (1.8%). Among single subjects, there were 52 studies (91.1%) targeting children, 3 studies (5.3%) targeting teachers, and 1 study (1.8%) targeting parents. These results are similar to the results of a study on forest play for infants(Han, 2019) and a study on religion-related forest and ecological early childhood education(Jeong & Hwang, 2019). That is, forest play research showed a high proportion of studies targeting children. On the other hand, research on teachers and parents is insufficient, so further research on teachers and parents related to forest play is required.

As for the mixed subject study, it can be seen that there was only one study(1.8%) targeting children and parents, and there was a lack of mixed subjects. It is also necessary to study forest play that affects human relationships through research on mixed subjects between children-parents, children-teachers, and children.

Among the material subjects, 42 studies (73.7%) related to the natural environment (forest kindergarten, forest experience center, etc.), 13 studies (22.8%) related to educational institutions, and 2 studies related to media (3.5%) were made. There was no study on the home environment related to forest play by period. Because the home environment can affect children's forest play, attention to children's home environment is required.

As a result of analyzing the research subjects of forest play research, there is no research on mixed subjects (children-parents, children-teachers, children-children) in human subjects and studies on the home environment in physical subjects. It can be recognized that studies involving parents and families are necessary.

Based on the above research results and discussion, limitations are presented and suggestions for follow-up studies are as follows.

First, this study has a limitation in that it analyzes forest play research focusing on master's and doctoral dissertation. Therefore, comprehensive research trend analysis is required by analyzing academic journal related to forest play.

Second, research on forest play is generally conducted with children. It is necessary to study forest play targeting various age groups. In particular, since the experience and exposure of forest play from infancy is important, research on forest play for infants should be conducted.

Third, forest play research is focused on practice research. Since theory research on forest play can suggest the direction and theoretical basis for practice research, theory research on forest play should be activated.

Fourth, forest play research is conducted as a quantitative study to verify effectiveness. Qualitative research is needed to

study the value and meaning of forest play.

Lastly, in the study of forest play, research on Christian education related to forest play is insufficient. It is expected that research on Christian education related to forest play will be conducted.

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국문 요약

숲놀이 관련 연구 동향 분석
: 국내 학위 논문 중심으로

김민정(안양대학교/교수)

본 연구는 숲놀이가 연구 동향을 알아보고자 하였다. 숲놀이가 연구의 연구시기, 연구내용, 연구방법 연구대상을 분석하여 숲놀이 연구의 활성화를 위한 기초 자료를 제공하고자 한다. 본 연구를 위해 '숲', '놀이', '숲놀이'를 주제로 국회도서관과 학술연구정보서비스(RISS)를 통해 검색된 국내 석·박사학위논문 57편을 추출하였다. 숲놀이 연구를 연구시기, 연구내용, 연구방법, 연구대상의 네 가지 준거로 분석하여 빈도와 백분율을 산출하였다. 연구결과, 첫째, 숲놀이 연구의 시기별 동향은 2011년부터 2021년까지 석사학위 49편(85.9%), 박사학위 8편(14.1%)으로 석사학위 중심으로 숲놀이 연구가 이루어지고 있다. 둘째, 연구내용별 동향은 기초연구 16편(28.1%), 실천연구 41편(71.9%)으로 나타났다. 숲놀이 연구는 실천연구 중심으로 활발히 이루어지고 있다. 셋째, 연구방법별 동향은 양적연구 39편(68.4%), 질적연구 17편(29.8%), 문헌연구 1편(1.8%) 순으로 나타났다. 숲놀이 연구는 양적연구 중심으로 이루어지고 있고, 상대적으로 질적연구와 문헌연구가 낮은 비율을 차지하였다. 넷째, 연구대상별 동향은 단일대상 연구가 56편(98.2%)으로 나타났다. 단일대상은 아동 52편(91.2%), 교사 3편(5.2%), 부모 1편(1.8%) 순으로 나타났다. 혼합대상은 아동과 부모를 대상으로 한 연구가 1편(1.8%)으로 혼합대상으로 이루어진 연구가 필요하다. 물적대상 연구는 자연환경 42편(73.7%), 교육기관 13편(22.8%), 매체 2편(3.5%) 순으로 나타났다. 숲놀이 관련 가정환경 연구는 부족하여, 추후 숲놀이와 관련된 부모, 어린이-부모, 가정환경 등에 대한 연구가 이루어져야 한다.

〈 주제어 〉

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