

Analysis of Creativity Research Trends Related to Early Childhood Teachers : Focusing on Domestic Thesis

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Abstract

This study aims to provide basic data for revitalizing creativity research related to early childhood teachers by analyzing creativity research related to early childhood teachers. For this study, 103 master's and doctoral dissertations in Korea, which were searched through the National Assembly Library and the Research Information Sharing Service (RISS), were selected under the themes of 'early childhood teacher', 'creativity', and 'creativity research trends'. The frequency and percentage were calculated by analyzing creativity research related to early childhood teachers with five criteria: research period, research content, research method, research subject, and creativity factor. As a result of the study, first, as for the trends of creativity research related to early childhood teachers, 91 master's theses (88.3%) and 12 doctoral theses (11.7%) were conducted from 1991 to 2022, focusing on master's theses. Second, trends by research content were found in 20 basic studies (19.4%) and 83 practical studies (80.6%). Creativity research related to early childhood teachers is being actively conducted centering on practical research. Third, trends by research method showed 96 quantitative studies (93.2%), 7 qualitative studies (6.8%), and 0 literature studies (0%). Creativity studies related to early childhood teachers were being conducted with a focus on quantitative research. Fourth, the trend by research subject consisted of 100 studies (97.1%) related to early childhood teachers and 3 studies (2.9%) related to pre-service early childhood teachers. Fifth, trends by creativity factor were found in 56 studies (54.4%) related to teacher's variables and 47 studies (45.6%) related to creativity education methods. Studies related to teacher's variables were relatively higher than creativity education methods. As a result of this study, there is a lack of Christian education research in creativity research related to early childhood teachers, so it is expected that it will be done in the future.

Key Words

Early childhood teachers, Creativity, Research trends

유아 교사 관련 창의성 연구 동향 분석 : 국내 학위 논문 중심으로

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논문 요약

연구 목적 : 본 연구는 유아 교사 관련 창의성 연구를 분석하여 유아 교사 관련 창의성 연구의 활성화를 위한 기초 자료를 제공하고자 한다.

연구 내용 및 방법 : 본 연구를 위해 '유아 교사', '창의성', '창의성 연구동향'을 주제로 국회도서관과 학술연구정보서비스(RISS)를 통해 검색된 국내 석·박사학위논문 103편을 선정하였다. 유아 교사 관련 창의성 연구를 연구시기, 연구내용, 연구방법, 연구대상, 창의성요인의 5가지 준거로 분석하여 빈도와 백분율을 산출하였다.

결론 및 제언 : 연구결과, 첫째, 유아 교사 관련 창의성 연구의 시기별 동향은 1991년부터 2022년까지 석사논문 91편(88.3%), 박사논문 12편(11.7%)으로 석사논문중심으로 연구가 이루어지고 있었다. 둘째, 연구내용별 동향은 기초연구 20편(19.4%), 실천연구 83편(80.6%)으로 나타났다. 유아 교사 관련 창의성 연구는 실천연구 중심으로 활발히 이루어지고 있다. 셋째, 연구방법별 동향은 양적연구 96편(93.2%), 질적연구 7편(6.8%), 문헌연구 0편(0%) 순으로 나타났다. 유아 교사 관련 창의성 연구는 양적연구 중심으로 이루어지고 있었다. 넷째, 연구대상별 동향은 유아교사 관련 연구 100편(97.1%)과 예비유아교사 관련 연구 3편(2.9%)으로 이루어졌다. 다섯째, 창의성요인별 동향은 교사변인관련 연구 56편(54.4%)과 창의성 교육방법 관련 연구 47편(45.6%)으로 나타났다. 교사변인관련 연구가 창의성교육방법보다 상대적으로 높게 나타났다. 본 연구결과, 유아 교사 관련 창의성 연구에서 기독교교육 연구가 부족하여, 향후 이루어지길 기대한다.

〈 주제어 〉

유아 교사, 창의성, 연구 동향

I. Introduction

With the advent of the 4th industrial revolution era, the overall life is changing due to the development of science, technology, information, and communication, and in this flow, cultivating creative convergence talents is more important than anything else(Park, 2019). Humans with developed creativity are characterized by adapting to changes more quickly, being flexible in ways of thinking and behaving, and being immersed in their work and interested in various aspects(Choi, 2019). In other words, a person with developed creativity has a high possibility of having a healthy body and mind, positive experiences, and a happy life worthy of a human being.

Creativity is a latent characteristic that everyone has from birth, and efforts to develop and cultivate creativity are important during infancy when brain activity in the frontal lobe, which handles thoughts and emotions, is active(Yoon, 2008). The period of creativity development is considered to be 4-5 years old, and infancy is considered the optimal period for the expression of creativity(Bae, 2017). In Korea, early childhood creativity research has shown an increasing trend since 1995, when the 5th kindergarten curriculum, which advocated creativity education, was applied. Creativity research increased significantly in 2001(Hwang, 2008), and until 2022, research on children's creativity continues to be conducted.

Research on creativity research trends in early childhood education includes analysis of creativity research trends from 1970 to 2006(Hwang, 2008), creativity research trends from 1984 to 2011(Baek, 2012), creativity research trends from 1998 to 2016(Kim, 2017), An analysis of creativity research trends from 2010 to 2017(Cho, 2018) and a research trend analysis of creativity from 2000 to 2019 (Park, 2019) have been conducted. From the 1970s to the present, research on the research trend of children's creativity has been conducted continuously.

Research on early childhood creativity research trends is being conducted by period, but the analysis of changes in the kindergarten curriculum is lacking. Creativity education is also affected by changes in the kindergarten curriculum, so it is necessary to analyze the changes in the kindergarten curriculum. Most of the research trends in early childhood creativity have been analyzed with a

focus on creativity studies targeting young children and research in academic journals. It is necessary to analyze creativity research on 'teacher' as a subject that affects children's creativity.

Research trend refers to a research method that identifies trends in research or discovers characteristics of research by classifying studies of various literatures with certain items and discusses them(Lee, 2017). For this study, based on the analysis tools related to early childhood education research trends(Kim, 2021), the analysis criteria were set for the research period, research content, research method, research subject, and creativity factor. This study was intended to present basic data for creativity research tasks related to early childhood teachers in the future.

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

1. What are the trends of creativity research related to early childhood teachers by research period?
2. What are the trends of creativity research related to early childhood teachers by research content?
3. What are the trends of creativity research related to early childhood teachers by research method?
4. What are the trends of creativity research related to early childhood teachers by research subject?
5. What are the trends of creativity research related to early childhood teachers by creativity factors?

II. Theoretical background

1. Kindergarten curriculum and creativity education

The primary kindergarten curriculum was first enacted and promulgated in 1969 by the Ordinance of the Ministry of Education. In 1979, 10 years after the first curriculum was enacted, the second kindergarten curriculum was announced by

the Ministry of Education. Then, in 1981, the 3rd Kindergarten Curriculum was revised, and in 1987, the 4th Kindergarten Curriculum was researched and developed. The 5th curriculum was announced in 1992, and the 6th curriculum was announced and implemented in 1998 to establish a new education system (Kim, 2017).

The government enacted and promulgated the revised kindergarten curriculum in 2007, and in 2012, through the Nuri Curriculum for 3-5 years old, the curriculum divided into kindergarten and daycare center was integrated. Currently, a child-centered, play-centered curriculum is being implemented through the 2019 revised Nuri Curriculum.

〈Table 1〉 Changes in kindergarten curriculum and creativity education (Kim, 2017)

Kindergarden curriculum	Notice	Creativity education area	Creativity education goal
1st	1969.2.	Entertainment life	Cultivating aesthetic attitude and creativity
2nd	1979.3.	Social and emotional development	Cultivation of aesthetic expression ability and creative attitude
3rd	1981.12.	Emotional development	Cultivation of aesthetic sense and creative expression skills
4th	1987.6.	Cognitive development	Cultivating imagination and creativity through play
5th	1992.9.	Creative thinking	Fostering creative problem-solving skills and creative attitudes
6th	1998.6.	Creative inquiry development	Fostering an integrated creative spirit of inquiry through various methods such as inquiry, language, and expression
2007 revision	2007.12.	Creative inquiry development	Composing with an emphasis on creativity, having the experience of freely and creatively expressing one's thoughts and feelings
3-5 years old Nuri curriculum	2011.9.	Autonomy and creativity cultivation education through all areas	Fostering autonomy and creativity through all areas
2019 Revised Nuri curriculum	2020.3.	Growth and learning through play experiences	Cultivate imagination and creativity with curiosity and inquiry

2. Early childhood teachers and creativity

As a factor influencing children's creativity, teacher variables are important. Teacher's creativity, teacher's language type, question type, teacher's instructional method, teacher's intervention, and interaction between children and teachers affect children's creativity(Kim, 2017; Kim & Park, 2017). In order to nurture creative talents, which are targeted in the current kindergarten curriculum, it is most important to create an environment and interaction in which young children can express their creative thinking. Teachers should be able to implement strategic teaching behaviors to promote children's creativity(Shin, 2011). Teachers should allow children to ask questions by applying various teaching behaviors, and use various and creative methods that deviate from the correct answer by inducing observation using their senses(Lee, 2017).

Teachers' teaching behaviors and activities are closely related to children's creativity(Kim, 2019). Teacher's teaching creativity affects children's play and leads to various ideas and methods of play. Therefore, it is necessary to analyze creativity studies related to teachers for the development of creativity in the field of early childhood education.

III. Research method

1. Subject of research

For this study, domestic master's and doctoral dissertations published from 1991 to 2022 by the National Assembly Library and the Research Information Sharing Service(RISS) provided by the Korea Education and Research Information Service were analyzed for 'early childhood teachers', 'creativity', and 'research trends in creativity'. searched by subject. A total of 103 articles were selected by arranging a list of overlapping studies among creativity papers related to early childhood teachers. The frequency and percentage were calculated by classifying and analyzing papers based on research period, research content, research method, research subject, and creativity factor.

2. Research tools

This study analyzed the following criteria to identify the trends of creativity research related to early childhood teachers. First, this study was classified according to the year of publication of thesis and master's and doctoral degrees. The year of publication was divided into 6 periods according to changes in the kindergarten curriculum from the beginning of creativity research to the present(Kim, 2016; Kim, 2017). 1st period 4th Kindergarten curriculum(1987), 2nd period 5th Kindergarten curriculum(1992), 3rd period 6th Kindergarten curriculum(1998), 4th period 2007 revised Kindergarten curriculum(2007), 5th Period The master's degree and doctoral degree were analyzed by dividing them into the 3-5 years old Nuri curriculum(2012) and the 6th period, the 2019 revised Nuri curriculum(2020).

〈Table 2〉 Criteria for classifying research contents

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 creativity • The theory of creativity • The Philosophical Background of creativity • Awareness and Reality of creativity 	<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) • Evaluation (research tool development, teacher evaluation)

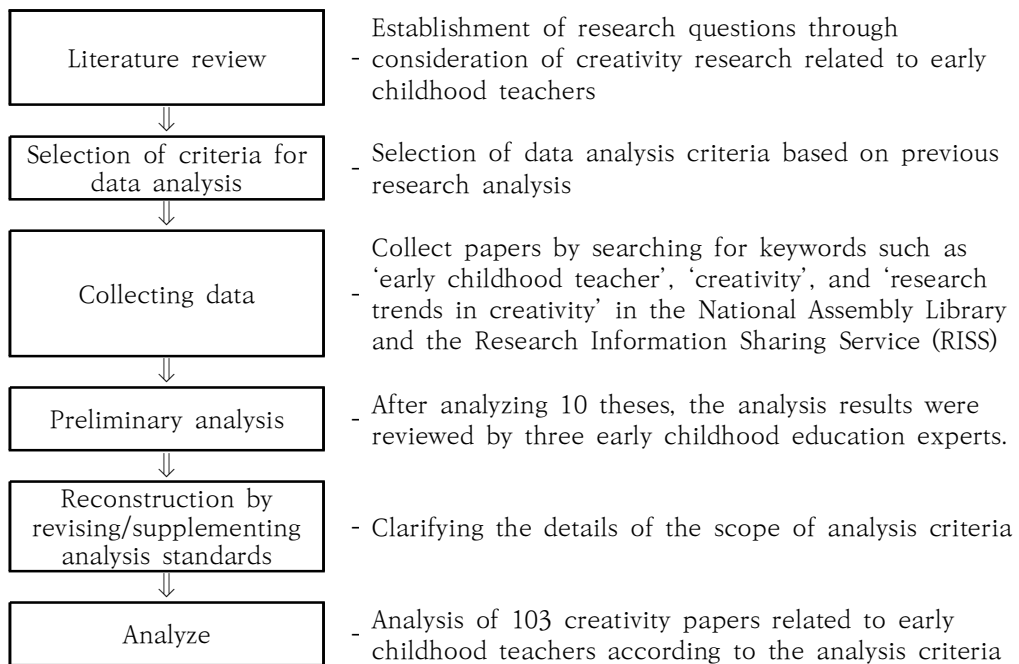
Through this, it was possible to grasp the increase and decrease in creativity research according to the process of kindergarten curriculum change. Second, the classification criteria according to research contents were selected as shown in 〈Table 2〉 by referring to previous studies(Kim, 2021; Jeong & Hwang, 2019). Third, the analysis criteria for the research method were classified into quantitative research, qualitative research, and literature research by reviewing previous studies(Kim, 2021). Quantitative research included experimental research, survey research, and correlational research, while qualitative research included cultural technology research and case studies. Literature research included the type of research on analysis, evaluation, etc. by collecting literature. Fourth, the classification criteria for each research subject were divided into early child-

hood teachers and pre-service early childhood teachers. Fifth, the criteria for classification by creativity factor refer to Hwang(2008) research, and 'teaching variables' are teacher creativity, teaching creativity, creative leadership, creative personality, teacher education(teacher training, program), and teacher perception(concept). 'Creativity education method' was divided into teacher interaction (questions and questions), teacher role(action), teacher intervention(scaffolding), empowerment, and play. Studies that do not belong to 'Teacher Target' and 'Creativity Education Method' are classified as 'Others'.

As for the research tools used in this study, 10 studies on creativity related to early childhood teachers were preliminary analyzed to ensure clarity of data analysis standards. It was verified by three early childhood education experts to ensure that the analysis was accurately and appropriately analyzed according to the analysis standards, and thus the validity was secured.

3. Research procedure

This study was carried out by modifying and supplementing the research procedure of Kim(2021). The detailed research procedure is shown in [Figure 1].



[Figure 1] Research procedure

4. Data analysis

In this study, research subjects were analyzed by dividing them into research period, research content, research method, research subject, and creativity factors. This study analyzed the papers from 1991 to 2022 by classifying them into the transition period of the kindergarten curriculum in order to identify trends by research period. Research trends were explored by calculating the frequency and percentage of papers classified by research period, research content, research method, research subject, and creativity factor.

IV. Results

For this study, a total of 103 domestic master's and doctoral theses published from 1991 to 2022 by the National Assembly Library and the Korea Education and Research Information Service (RISS) were analyzed for trends according to the research period. The study of 'creativity related to early childhood teachers' was divided into 6 periods according to the period of change in the kindergarten curriculum, and the research trends were analyzed.

1. Trend analysis according to study period

In the first period of creativity research related to early childhood teachers (4th kindergarten curriculum, 1987-1991), one master's thesis(1%) was researched. In the second period of creativity research(5th kindergarten curriculum, 1992-1997), 4 master's thesis studies(3.9%) were conducted. In the 3rd period of creativity research(6th kindergarten curriculum, 1998-2006), 29 studies(28.2%) increased rapidly.

In the 4th period of creativity research(2007 revised kindergarten curriculum, 2007-2011), 23 studies(2 doctoral thesis 1.9%, 21 master's thesis 20.4%) were conducted. In the 5th period of creativity research(3-5 year old Nuri curriculum, 2012-2019), 33 studies(6 doctoral theses 5.8%, 27 master's thesis 26.2%) were conducted. In the 6th period of creativity research(2019 revised Nuri curriculum,

2020-2022), 13 studies(4 doctoral thesis 3.9%, 9 master's thesis 8.7%) were conducted. During the 1st to 6th semesters(1991 to 2022), 91 master's theses(88.3%) and 12 doctoral theses(11.7%) were centered on master's theses.

〈Table 3〉 Analysis of trends by research period

N=103, frequency(%)

Period	Kindergarden curriculum	Year	Master's thesis	Doctoral dissertation	Sum(%)
1st	4th	1987-1991	1(1.0)	0(0)	1(1.0)
2nd	5th	1992-1997	4(3.9)	0(0)	4(3.9)
3rd	6th	1998-2006	29(28.2)	0(0)	29(28.2)
4th	2007 revision	2007-2011	21(20.4)	2(1.9)	23(22.3)
5th	3-5 years old Nuri curriculum	2012-2019	27(26.2)	6(5.8)	33(32.0)
6th	2019 Revised Nuri curriculum	2020-2022	9(8.7)	4(3.9)	13(12.6)
Total(%)			91(88.4)	12(11.6)	103(100)

2. Trend analysis according to research contents

The results of classifying the research contents by period of creativity research related to early childhood teachers into basic research and practical research are as follows. As a result of analyzing the trend of creativity research related to early childhood teachers according to the research contents, 20 basic studies (19.4%) and 83 practical studies (80.6%) were found. Practical research (72 master's thesis, 69.9%, 11 doctoral thesis 10.6%) was more active than basic research. In the 3rd period (6th kindergarten curriculum, 1998-2006), 24 pieces (23.3%) of practice studies were conducted the most. In research on creativity related to early childhood teachers, there was a lack of basic research such as creativity-related theory, philosophy, perception, and fact-finding survey.

〈Table 4〉 Analysis of trends according to research contents

N=103, frequency(%)

Period	Kindergarden curriculum	Year	Master's thesis		Doctoral dissertation		Sum (%)
			T	P	T	P	
1st	4th	1987-1991	0 (0)	1 (1.0)	0 (0)	0 (0)	1(1.0)
2nd	5th	1992-1997	0 (0)	4 (3.9)	0 (0)	0 (0)	4(3.9)
3rd	6th	1998-2006	5 (4.9)	24 (23.3)	0 (0)	0 (0)	29 (28.2)
4th	2007 revision	2007-2011	6 (5.8)	15 (14.6)	0 (0)	2 (1.9)	23 (22.3)
5th	3-5 years old Nuri curriculum	2012-2019	7 (6.8)	20 (19.4)	0 (0)	6 (5.8)	33 (32.0)
6th	2019 Revised Nuri curriculum	2020-2022	1 (1.0)	8(7.7)	1 (1.0)	3 (2.9)	13 (12.6)
Total(%)			19 (18.5)	72 (69.9)	1 (1.0)	11 (10.6)	103 (100)

T = Theory research P = Practice research

3. Trend analysis according to research method

The results of analyzing trends according to research methods (quantitative research, qualitative research, literature research) by period of creativity research related to early childhood teachers are as follows. As for creativity research methods related to early childhood teachers, 96 quantitative studies (93.2%), 7 qualitative studies (6.8%), and 0 literature studies (0%) appeared in the order. Creativity studies related to early childhood teachers were being conducted with a focus on quantitative research. In the 3rd period (6th kindergarten curriculum, 1998-2006), 28 articles (27.2%) of quantitative studies were conducted the most. There were relatively few qualitative studies (6 master's thesis, 1 doctoral thesis) and literature research.

〈Table 5〉 Trend Analysis by Research Method

N=103, frequency(%)

Period	Kindergarden curriculum	Year	Master's thesis			Doctoral dissertation			Sum (%)
			QN	QL	L	QN	QL	L	
1st	4th	1987-1991	1 (1.0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (1.0)
2nd	5th	1992-1997	4 (3.9)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	4 (3.9)
3rd	6th	1998-2006	28 (27.2)	1 (1.0)	0 (0)	0 (0)	0 (0)	0 (0)	29 (28.2)
4th	2007 revision	2007-2011	19 (18.4)	2 (1.9)	0 (0)	2 (1.9)	0 (0)	0 (0)	23 (22.3)
5th	3-5 years old Nuri curriculum	2012-2019	24 (23.3)	3 (2.9)	0 (0)	5 (4.8)	1 (1.0)	0 (0)	33 (32.0)
6th	2019 Revised Nuri curriculum	2020-2022	9 (8.7)	0 (0)	0 (0)	4 (3.9)	0 (0)	0 (0)	13 (12.6)
Total(%)			85 (82.5)	6 (5.8)	0 (0)	11 (10.7)	1 (1.0)	0 (0)	103 (100)

QN = Quantitative research QL = Qualitative research L = Literature research

4. Analysis of trends according to research subjects

In order to understand the trends according to the subject of research by period of creativity research related to early childhood teachers, the research subjects were analyzed by dividing them into early childhood teachers and pre-early childhood teachers. Among the research subjects of early childhood teachers-related creativity research, 100 studies (97.1%, 88 master's theses and 12 doctoral theses) were related to early childhood teachers, and 3 master's theses (2.9%) were related to pre-service early childhood teachers. Research was conducted centering on early childhood teachers, and research on pre-service early childhood teachers was insufficient. In the 3rd period (6th kindergarten curriculum, 1998-2006), 28 studies (27.2%) of early childhood teacher-related studies were conducted the most.

〈Table 6〉 Analysis of trends by study subject

N=103, frequency(%)

Period	Kindergarden curriculum	Year	Master's thesis		Doctoral dissertation		Sum (%)
			T	P.T.	T	P.T.	
1st	4th	1987-1991	1 (1.0)	0 (0)	0 (0)	0 (0)	1 (1.0)
2nd	5th	1992-1997	4 (3.9)	0 (0)	0 (0)	0 (0)	4 (3.9)
3rd	6th	1998-2006	28 (27.2)	1 (1.0)	0 (0)	0 (0)	29 (28.2)
4th	2007 revision	2007-2011	21 (20.4)	0 (0)	2 (1.9)	0 (0)	23 (22.3)
5th	3-5 years old Nuri curriculum	2012-2019	26 (25.2)	1 (1.0)	6 (5.8)	0 (0)	33 (32.0)
6th	2019 Revised Nuri curriculum	2020-2022	8 (7.7)	1 (1.0)	4 (3.9)	0 (0)	13 (12.6)
Total(%)			88 (85.4)	3 (3.0)	12 (11.6)	0 (0)	103 (100)

T = Teacher P.T. = Pre-service teacher

5. Analysis of trends according to creativity factors

In order to identify trends according to creativity factors by period in creativity research related to early childhood teachers, it was analyzed by dividing into teacher variables, creativity education methods, and others. In the analysis of creativity factors related to early childhood teachers, 56 studies (54.4%, 49 master's theses and 7 doctoral theses) related to teacher variables, and 47 studies (45.6%, 42 master's theses and 5 doctoral theses) related to creativity education methods (5 doctoral dissertations). Studies related to teacher variables were relatively higher than creativity education methods. In the 3rd period (6th kindergarten curriculum, 1998-2006), 22 studies (21.4%) on creativity education methods were conducted a lot. In the 5th period (3-5 years old course, 2012-2019), 21 studies (20.4%) of teacher variable-related studies were conducted.

〈Table 7〉 Analysis of trends according to creativity factors

N=103, frequency(%)

Period	Kindergarden curriculum	Year	Master's thesis			Doctoral dissertation			Sum (%)
			T.V.	C.E.M.	etc	T.V.	C.E.M.	etc	
1st	4th	1987-1991	1 (1.0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (1.0)
2nd	5th	1992-1997	0 (0)	4 (3.9)	0 (0)	0 (0)	0 (0)	0 (0)	4 (3.9)
3rd	6th	1998-2006	7 (6.8)	22 (21.4)	0 (0)	0 (0)	0 (0)	0 (0)	29 (28.2)
4th	2007 revision	2007-2011	12 (11.7)	9 (8.7)	0 (0)	2 (1.9)	0 (0)	0 (0)	23 (22.3)
5th	3-5 years old Nuri curriculum	2012-2019	21 (20.4)	6 (5.8)	0 (0)	2 (1.9)	4 (3.9)	0 (0)	33 (32.0)
6th	2019 Revised Nuri curriculum	2020-2022	8 (7.7)	1 (1.0)	0 (0)	3 (2.9)	1 (1.0)	0 (0)	13 (12.6)
Total(%)			49 (47.6)	42 (40.8)	0 (0)	7 (6.8)	5 (4.8)	0 (0)	103 (100)

T.V. = Teacher variable C.E.M. = Creativity education method

V. Conclusion

In this study, 103 master's and doctoral dissertations related to creativity related to early childhood teachers published from 1991 to 2022 were analyzed for research trends by examining the research period, research contents, research methods, research subjects, and creativity factors. Based on the research results, the discussion is as follows.

1. Tendencies of the study period of creativity papers related to early childhood teachers

Creativity research related to early childhood teachers started with 1 study (1%) in the 1st period (1987~1991), and 4 studies (3.9%) were conducted in the 2nd period (1992~1997). In the 3rd period (1998~2006), it increased to 29 studies (28.2%). In the 4th period (2007~2011), it decreased as 23 studies (22.3%) were conducted, but in the 5th period (2012~2019), it increased as 33 studies (32%)

were conducted. In the 6th period(2020~2022), 13 studies(12.6%) were conducted. During the 1st to 6th semesters(1991~2022), 91 master's theses(88.3%) and 12 doctoral theses(11.7%) were centered on master's theses.

There was no doctoral dissertation from the 1st to 3rd period(4th to 6th kindergarten curriculum, 1987~2006). In 2009, the Ministry of Education, Science and Technology proposed 'Creativity and Character Education' as a national development strategy to nurture 'talents who can create new values and live together' as a policy(Choi, 2016). The Ministry of Technology(2013) emphasized the importance of creativity and character education. Reflecting this educational policy direction, it is thought that the number of 33 studies increased rapidly during the 5th period(2012~2019). It is similar to the results of a study by Park (2019), which revealed that the number of research publications related to early childhood creativity increased from 2008 to 2015.

2. Trends in research contents of creativity papers related to early Childhood Teachers

As a result of analyzing the trend of creativity research related to early childhood teachers according to the research contents, 20 basic studies (19.4%) and 83 practical studies (80.6%) were found. Practical research (72 master's thesis, 69.9%, 11 doctoral thesis 10.6%) was more active than basic research. In the 3rd period (6th kindergarten curriculum, 1998~2006), 24 pieces (23.3%) of practice studies were conducted the most. In research on creativity related to early childhood teachers, there was a lack of basic research such as creativity-related theory, philosophy, perception, and fact-finding survey. There was a lack of basic research on creativity related theories and philosophies related to early childhood teachers. In general, research on creativity related to early childhood teachers lacks 'research related to creativity and philosophy' in basic research and 'research related to evaluation' in practical research.

3. Trends in research methods of creativity papers related to early childhood teachers

As for creativity research methods related to early childhood teachers, 96 quantitative studies (93.2%), 7 qualitative studies (6.8%), and 0 literature studies (0%) appeared in the order. Creativity studies related to early childhood teachers were being conducted with a focus on quantitative research. There was a relatively lack of qualitative research and literature research. This is the same as previous research results(Kim, 2017; Park, 2019) that quantitative research was used most often. Therefore, literature research is needed to examine the value and meaning of creativity related to early childhood teachers in the study of creativity related to early childhood teachers. In addition, studies using qualitative research methods should be conducted. Through this, it is possible to increase the understanding of creativity related to early childhood teachers.

4. Tendencies of research subjects in creativity papers related to early childhood teachers

Among the research subjects of creativity research related to early childhood teachers, there were 100 studies (97.1%) related to early childhood teachers, and 3 master's theses (2.9%) related to pre-service early childhood teachers. Research was conducted centering on early childhood teachers, and research on pre-service early childhood teachers was insufficient. In the 3rd period (6th kindergarten curriculum, 1998~2006), 28 studies (27.2%) of early childhood teacher-related studies were conducted the most. As a result of analyzing the research subjects of creativity research related to early childhood teachers, research on pre-service early childhood teachers is needed.

5. Trends in creativity factors of creativity papers related to early childhood teachers

In the analysis of creativity factors in early childhood teacher-related creativity studies, 56 studies (54.4%) related to teacher variables and 47 studies (45.6%)

related to creativity education methods were made. It is similar to the research result of Park (2019), who said that ‘teacher’s creativity’ and ‘teacher’s question or questioning type’ were the most studied among creativity variables. Studies related to teaching variables were relatively higher than creativity education methods. In the 3rd period (6th kindergarten curriculum, 1998~2006), 22 studies (21.4%) on creativity education methods were conducted a lot. In the 5th period (3-5 years old course, 2012~2019), 21 studies (20.4%) were conducted on teacher variables. As the 2007 revised Nuri Curriculum was changed, the gradual increase in research on teacher creativity indicates that teacher creativity is an important factor in early childhood creativity education.

Based on the above research results, suggestions for follow-up research are as follows. First, since this study analyzed creativity research related to early childhood teachers with a focus on master’s and doctoral degrees, it is required to analyze academic papers and analyze comprehensive research trends in the future. Second, research on creativity related to early childhood teachers was conducted centering on early childhood teachers. Creativity research on pre-service early childhood teachers is needed. Third, research on creativity related to early childhood teachers is being conducted centering on practical research. Since basic research on creativity related to early childhood teachers can present the direction and theoretical grounds for practical research, basic research on creativity related to early childhood teachers should be activated. Fourth, research on creativity related to early childhood teachers is conducted with a focus on quantitative research to verify effectiveness. Qualitative research is needed to study the value and meaning of creativity. Lastly, there is a lack of Christian education research related to creativity in creativity research related to early childhood teachers. It is hoped that research on Christian education linked to creativity will be made.

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