

The Correlation and Influence between Mother's Play Beliefs on Child's Playfulness and Happiness



Mi-Young An, Susie Yoon, Bogyong Yun

Abstract: This study was conducted with 157 mothers with children aged 3 to 5 who were living in attending a daycare center in J city to examine the correlation and influence between mothers' play beliefs and play participation on children's play performance and happiness. Specifically, we sought to answer the following: (1) Do mothers' play beliefs, children's playfulness, and infant happiness differ depending on the children's background variables? (2) What correlations and influences do mothers' play beliefs and the degree of play participation have on children's play performance? (3) What is the relationship between mothers' play beliefs, playfulness of children, and happiness of children? The data collection period was about two weeks from the fourth week of September to the first week of October 2018. For the collected data, t-test, Pearson's correlation analysis, multiple regression analysis, and one-way ANOVA were performed using the SPSS 22.0 program. The research results are as follows. First, according to the background variables of the children, the mother's play beliefs, the infant's playfulness, and the infant's happiness were different. The play support beliefs, there was no significant difference in the age of young children but mothers of 5-year-old children showed that they supported learning-centered beliefs more, and the level of play performance and happiness of 5-year-olds was the highest. According to the number of children, the two-child and multi-child parent groups supported the play support belief, and the one-child parents supported the learning support belief, and the children's playfulness and happiness were found to be highest in the order of multiple children, two children, and one child. Second, play support belief showed a significant correlation with play participation and children's play performance. The higher the mother's play support belief was, the higher the play participation rate and the higher the infant's playfulness were. Conversely, the more mothers held the learning-centered belief, the lower the play participation rate was. Third, the higher the mother's belief in play support, the higher the level of playfulness of children, and the level of playfulness were, the higher the happiness of children was. This study is meaningful in recognizing the importance of parents having the correct perception of children's play and in

providing basic data for parent education to promote the development of playfulness and happiness in children.

Keywords: Mother's Play Beliefs; Mother's Play Participation; Child Playfulness; Child Happiness.

I. INTRODUCTION

In today's society, the excessive enthusiasm for early education has reduced the opportunities for and enjoyment of learning through play by having children spend a great deal of time learning, thereby losing playtime and time in play environments. From an adult's perspective, play can be a meaningless activity, but play is the main activity that makes up young children's development.

Play is the child's life, including his or her thoughts, behaviors, and experiences related to development. For children, play is the essence of life and life itself, and it helps children learn effectively as a mediator that can contact the surrounding world [1]. Play is one of the important activities in infancy because it is a universal and natural activity that can be called the whole of a child's life and plays a role in growing up as a harmonious member of society. Through play, children understand their surrounding world, feel happiness and joy, achieve emotional and physical development, and acquire social skills to promote desirable growth [2].

Playfulness refers to a tendency or attitude that causes certain behavior, a potential force that makes play fun, and an attitude toward play that is revealed externally [3]. Children's playfulness is used as a tool to help children express their emotions voluntarily, which allows them to use their imagination, play various roles, and enjoy themselves.

Among the various factors that determine children's playfulness, parents, in particular, are the first element of the environment a child experiences and the most crucial factor in determining a child's experience [4]. Also, they are models that allow children to learn about their relationships, attitudes, and thoughts about things for the first time [4]. The influence of parents on play attributes of children depends on the belief systems the parents have regarding the young child's play, and when parents lead play-centered live, children have the power to draw out their potential through voluntary play [3]. Parents' play beliefs are important because play is life itself for children [5]. In particular, the play beliefs of the mother, who interacts closely with children and becomes a playmate, are expected to affect young children's playfulness.

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The higher the mother's perception of play is, the more active the child's participation in the play will be, and the more sensitive the mother is to promoting the play, the more an appropriate play environment is accordingly provided [5]. The mother's belief in play affects the way of participation in play and interaction with children and will impact the mother's behavior toward children's play. In other words, the mother's belief system in individual play influences her parenting attitude, resulting in different development and play of her children [3]. The more mothers think about play positively and recognize play importantly, the more they actively participate in play with children [6], and the more positive the play interaction [7] is, the more positive the influence on play and playfulness of children is [3].

As children achieve overall development through play, they feel enjoyment and relieve negative emotions such as inner tension, and thus play is a factor that significantly affects the children's happiness.

Through play, children feel joy continuously in daily life and experience happiness by reflecting on their way of life and world. Considering that the mother's play belief affects young children's playfulness, it can be inferred that the mother's belief in the play of young children will affect the happiness of young children. The more mothers recognize the developmental value of play and participate in play with their children, the greater the young children's happiness will be [2].

In this light, this study aims to investigate how mothers' play beliefs and frequency of participation affect children's playfulness and how children's playfulness affects children's happiness. The relationship between mother's play belief, children's playfulness, and children's happiness is also examined. Through this, the study aims to provide essential data for the development of educational programs so that mothers can recognize positive play beliefs, meanings, and importance of play and help children improve their playfulness and happiness.

The research questions set according to this purpose are as follows.

First, what correlation does a mother's play belief and play participation have with children's playfulness?

Second, do the mother's play belief, children's playfulness, and young children's happiness differ according to the children's background variables?

Third, what are the correlation between a mother's play beliefs, children's playfulness, and infant happiness?

There is a growing awareness of child play and an ever-increasing interest in parents' play beliefs as a significant factor affecting child play [8]. The mother's belief in play is formed by giving value to the mother's thoughts and feelings about play, and how play contributes to the development and achievement of the young child, and the mother's belief in play in turn affects the young child's behavior and development [9]. The mother's play beliefs were considered by Farver and Howes [10] as the value and goal of the play recognized by the mother. Haight, Parke, and Black [6] conceptualized this by dividing it into cognitive, affective, and motivational factors according to whether the mother considered the play developmentally important, whether the play was fun, or whether the parents considered play participation important [11].

Fogle [12] considered that parents' beliefs about play affect the play participation role and learning activity, and classified play beliefs into 'play support belief' and 'academic

focus belief'. Play-centered support belief refers to the belief held by parents that play is important for their children's holistic development and children should actively participate in a play. Learning support belief refers to the belief that play is not helpful for children's development and that the children do not have to actively participate in play and that learning activities are more valuable [13].

Parents' play beliefs differ from individual to individual and are closely related to their children's playfulness. The more parents believe in support of play, the more actively and frequently they participate in play with their children, and the child can achieve holistic development through play and demonstrate his or her potential accordingly. If parents believe more in learning, they perceive play as a means of stimulating learning, not as a tool to draw out their children's potential. Experience of involuntary play can cause children to have difficulty achieving their potential and maladjustment in play with their peers [3].

As the number of dual-income families increases due to women's entry into society, parents' opportunities to participate in their children's play are gradually decreasing. Recently, on the other hand, the role of parents as play participants has also been emphasized, as children's play has been highlighted as an element of overall development rather than simply play.

The more mothers perceive play as a mechanism of their children's holistic development, the more children planning various play activities, actively participate in play, interact with each other, and activate play [11]. As a play participant, the mother also raises the level of play by planning the child's play and having a role of facilitating the play to take place actively. Therefore, the mother is the most influential environmental provider, guide, and subject of play. In order for children to achieve full development and positive growth, an appropriate play environment should be provided and encouraged and parents should be supported as play participants to help children participate in play joyfully.

The 2019 revised Nuri course has been reorganized to realize holistic development and child-led learning through play, and the value and importance of play are emphasized. For young children, play is life itself and a means of expressing oneself. Children grow and develop through play and find joy and enjoyment. Play enables children to recognize and describe the world around them and helps them develop holistically [3]. Fröbel [14] emphasized the importance of play, saying, "Play is the purest mental product of a child, and at the same time, it is a process that creates freedom, joy, comfort inside and outside oneself, and harmony with the world as a process of exerting the child's inner strength"[15]. Play is the expression of inner elements such as children's thoughts, emotions, and feelings regarding the outside world. Children develop senses through play, self-regulation and self-expression become possible, and physical development and social relationships can be formed. For children in infancy, a time when various abilities are acquired and developed, play is an effective learning medium and provides the foundation for developing the whole person [3]. Play is a human instinct and a spontaneous process that forms pleasure, and playfulness is a significant factor that enables children to play [16].



Playfulness is a concept proposed by Liberman [17] and is a potential characteristic that supports cognitive, emotional, social, and personality aspects. It refers to a motivation and tendency that enables children to enjoy play at full [16]. Aguilar [18] defined playfulness as the perception or attitude of a person to act voluntarily during activities, and Barnett [19] characterized play as being able to identify an infant's attitude or inclination to play [20]. The play of children is the process of internal synchronization, and playfulness differs by individual, and playfulness is naturally shown through play rules [21]. Dewey [22] emphasized the importance of playfulness in children's play attitude, and it was seen that playfulness involves an open mind to pursue children's self-development and awareness that the result of the activities will be valuable [23].

In terms of playfulness, Lieberman [17] presented five characteristics, physical spontaneity, social spontaneity, cognitive spontaneity, expression of pleasure, and sense of humor, to understand playfulness's nature. Cognitive spontaneity is the level to which children lead play and flexibly use the sense of play through various thoughts; the expression of pleasure is the degree of expressing joy and happiness while playing, and the sense of humor during play. For example, it can refer to the level to which children are good at telling exciting stories.

Children's playfulness is observed in children's play behavior and is closely related to development. Children with high playfulness are more likely to relate to their peers, actively lead play, and have a high level of self-regulation. In this way, playfulness affects young children's development, such as leadership, sociality, creativity, peer relationships, and self-regulation.

A happy life is pursued by humanity, and since ancient times, many scholars have considered and defined happiness. From Socrates, Plato, and Aristotle's theories of happiness to studies dealing with modern happiness, interest in the importance of happiness and efforts to elucidate it scientifically have continued [24]. Happiness has been defined differently by the times, culture, and people, but it is the ultimate goal of humanity and a value that has been pursued in common regardless of the time and context [25].

Happiness means a state of feeling sufficient satisfaction and joy in life (National Institute of the Korean Language, 1999). In psychology, Wilson [26] used the subjective sense of well-being for happiness in the same sense as happiness [27]. Happiness has a significant impact on life and is an effective mechanism for human growth and development [21]. Happiness experienced in children is highly sustainable and significantly influences children's social adaptation and harmonious development of their mind and body [28].

Children's happiness means that the children apply themselves actively and positively in their daily lives, feel pleasure, and feel satisfied with themselves [29]. Early childhood is a time of active play and experience, and thus children can have healthy and positive emotions and grow up engaging in social activities with a more pleasant mind [30]. The happier children are, the more positively they think, take on new challenges, and assume leadership roles. Happy children are more emotionally healthy and physically and have a positive mindset and concentration, and thus they grow up feeling happier by pursuing active lives on their own [25]. Such activism and positivity can express the potential of the children to live meaningful lives and overcome and exclude negative aspects in life [30].

II. RESEARCH MATERIALS

A. The mother's play belief

To measure the mother's play belief, Fogle's Parent Play Beliefs Scale (PPBS) used in a study by Yoon [31] was utilized. It is organized as a 5-point Likert scale, where the participant responds from 1 point 'I do not agree' to 5 points of 'I agree very much', and the higher the score, the higher the tendency of the sub-factor. The higher the playground belief score, the more parents believe that infant play is an enjoyable activity and has a positive effect on development. This means giving more importance to activities. The total Cronbach α value of the mother's play belief scale was .72.

The questionnaire of Lee [32] was modified to measure the mother's participation in the play. The questionnaire consists of questions about mother's participation in play according to the type of play, and questions about play time with her children.

B. The mother's participation

The mother's participation in the play was divided into two related questions in this questionnaire. It consists of questions about the time of play with children and questions about the mother's participation in play. The questions about the time of play with children pertain to how much time is devoted to play and when they play; the other questions about the participation of the mother in play were presented to determine the frequency of the parent's participation in the play, the request of the parent when starting the play, and the level of participation. According to a total of nine types of play (role, stacking, pitch, body, mathematics, art and sculpture, multimedia utilization, language, and manipulation), there are three sub-units: (1) the frequency of play participation, (2) at whose request the play begins when it begins, and (3) the level of participation.

The degree of parents' participation in play was used by Won [33], who modified the classification according to the degree of participation in play by Lee [32]. The scale is a four-point scale consisting of (1) indifference, (2) looking, (3) passive participation, and (4) active participation, depending on the mother's participation in play. In order to determine the playtime with the child, the playtime was divided into weekdays and weekends, and two questions were asked about the average time to play with the child per day.

C. The playfulness of children

In order to measure the playfulness of children, this study used the Children's Play Fulness Scale, which was produced by Barnett [19], translated by Yu [29], and modified by Kim [34]. The tool is divided into five sub-variables of Lieberman's playfulness: physical spontaneity (4 items), social spontaneity (5 items), cognitive spontaneity (6 items), expression of pleasure (5 items), and sense of humor (5 items). Respondents answer using a Likert 5-point scale, from 1 point 'not at all' to 5 'strongly agree'.

The higher the score of the sub-factor, the higher the tendency of the factor is, and the higher the score, the higher the playfulness of the children. The total Cronbach' α value of the playfulness scale of young children was .92.

D. Children's Happiness

In order to measure infant happiness, the infant happiness scale developed by Lee [35] was supplemented by Kim [24] and used in this study. This tool has a total of 41 items, including ten sub-factors that measure happiness: commitment (4 items), health (4 items), spirituality (5 items), peer relationship (4 items), teacher relationship (5 items), cognition and achievement (5 items), emotion (4 items), parental relationship (3 items), life satisfaction (2 items), and family relationship (5 items). Each item comprises 5 points from 'strongly disagree' to 'strongly agree' on a Likert-style 5-point rating scale. The mother gives a rating based on the observation and perception of the infant in daily life, and the higher the score is, the higher the level of happiness. The total Cronbach α value of the infant euphoria scale was .93.

III. RESEARCH METHODS

Before conducting this study, a preliminary survey was conducted with 10 preschool education experts and 10 mothers with children of age 3 to 5 years old to check the reliability of the questionnaire and the reliability of the responses. No specific problems were found in the results. The time required to respond to the questionnaire was approximately 10 to 15 minutes.

The survey was conducted on the mothers of 3- to 5-year-old children who attended a daycare center in J city, over a period of about two weeks from September 24 to October 8, 2018. The questionnaire was distributed to the children along with the home correspondence with the consent of the principal and the cooperation of the homeroom teacher in each class, and the researcher retrieved it about two weeks after distribution. Of the 200 distributed questionnaires, 157 were recovered, and a total of 157 were used for the final analysis.

To examine the correlation between mother's play beliefs, children's playfulness, and children's happiness, SPSS 22.0 was used as an analysis tool to process the data in the following ways.

First, a frequency analysis was conducted to examine demographic characteristics. Second, a t-test and ANOVA were conducted to analyze the differences between the variables according to demographic characteristics, and Pearson's product-moment correlation coefficient was calculated to investigate the correlation between mother's play beliefs, children's playfulness, and children's happiness. Third, Pearson's product-moment correlation coefficient was calculated to examine the relationship between mother's play beliefs, participation in play, and children's playfulness.

IV. RESULTS

A. Differences in mother's play belief, children's playfulness, and children's happiness according to children's background variables

The results were subjected to an ANOVA analysis to determine if there are differences in play beliefs of the mothers according to the background variables of children <Table 1>. There was no statistically significant difference in play support belief, which is a sub-factor of mother's play belief according to children's age. Learning-centered beliefs were found in the order of 5 years old (M=2.88), 3 years old (M=4.49), and 4 years old (M=2.47). As a result of the post-mortem examination, it was found that mothers of 5-year-old children supported the learning-centered belief more than mothers of 3-year-old and 4-year-old children.

According to the age of children, the playfulness of children was the highest at the age of 5 (M=4.36), followed by the age of 3 (M=4.34) and then the age of 4 (M=4.22). The sub-factors did not show a statistically significant level. As a result of the post-hoc test, it was found that the level of cognitive spontaneity, a sub-factor of playfulness, was higher in 5-year-olds than in 4-year-olds.

The sub-factors of infant happiness according to the age of children did not show a statistically significant level, but from the results of post-mortem examination, the level of peer relationship was higher in 3-year-olds and 5-year-olds than in 4-year-olds. In the case of cognition and achievement, which are sub-factors of happiness, the level of 5-year-olds was higher than that of 3- and 4-year-olds, and in the case of emotion, the level of 5-year-olds was higher than that of 3-year-olds.

Table-I: Differences in mother's play belief, children's playfulness, and children's happiness according to children's ages

Factor		Classification	N	M	SD	F	P	Scheffe
Mother's play beliefs	play support beliefs	one child	44	4.39	.37	1.77	1.73	
		two children	64	4.37	.44			
		multiple children	48	4.52	.52			
	academic focus beliefs	one child	44	2.49	.83	4.63**	0.11	
		two children	64	2.47	.87			
		multiple children	48	2.88	.50			
Child's playfulness	entirety	one child	44	4.34	.46	1.164	.315	
		two children	64	4.22	.45			
		multiple children	48	4.36	.56			
	cognitive spontaneity	one child	44	4.16	.64	3.076**	.049	
		two children	64	3.98	.59			
		multiple children	48	4.30	.63			



Child's happiness	entirety	one child	44	4.28	.40	2.56	.080	
		two children	64	4.26	.41			
		multiple children	48	4.42	.336			
	relationship	one child	44	4.37	.52	5.584**	.005	b<a b<c
		two children	64	4.10	.55			
		multiple children	48	4.45	.50			
	cognition and achievement	one child	44	3.76	.73	10.230*	.000	a<c b<c
		two children	64	3.75	.77			
		multiple children	48	4.32	.61			
	emotion	one child	44	4.05	.60	4.207**	.017	a<c
		two children	64	4.12	.63			
		multiple children	48	4.37	.55			

* p<0.5, ** p<0.1

<Table-2> shows the results of one-way ANOVA to find out whether there are differences in mothers' play beliefs, children's playfulness, and infant happiness according to the number of children. Among the sub-factors of mother's play belief, according to the number of children, play support belief was highest in order of multiple children (M = 4.58), two children (M = 4.50), and one child (M = 4.27), showing a statistically non-significant difference. As a result of the post-mortem examination, it was found that the multi-child and two-child parent groups supported the play support belief more highly than the single-child parents. Learning-centered beliefs appeared in the order of one child (M=2.94), multiple children (M=2.51), and two children (M=2.36). As a result of the post-mortem examination, it was found that the learning-centered beliefs of parents of single-child children

were higher than that of parents of two-child and multi-child groups.

According to the number of children, the playfulness of children in the case of multiple children (M=4.46) was highest, followed by two children (M=4.32) and one child (M=4.23), and the sub-factors did not show a statistically significant level. As a result of the post-hoc test, it was found that the level of physical spontaneity, a sub-factor of playfulness, was higher in multi-child children than in single-child children.

According to the number of children, multiple children (M=4.45) showed the highest level of happiness in children, followed by two children (M=4.32) and one child (M=4.24). The sub-factors did not show a statistically significant level, but as a result of post-mortem examination, among the sub-factors of infant happiness, in parental and family relationships, the happiness of multi-child children was higher than that of single-child children.

Table-II: Differences in mother's play belief, children's playfulness, and children's happiness according to number of children

Factors		Classification	N	M	SD	F	P	Scheffe
Mother's play beliefs	play support beliefs	one child	44	4.27	.45	6.287**	.002	a<b a<c
		two children	64	4.50	.51			
		multiple children	48	4.58	.33			
	academic focus beliefs	one child	44	2.94	.76	10.012**	.000	b<a c>a
		two children	64	2.36	.74			
		multiple children	48	2.51	.66			
Child's playfulness	entirety	one child	44	4.23	.41	2.083	.128	
		two children	64	4.32	.55			
		multiple children	48	4.46	.45			
	physical spontaneity	one child	44	4.27	.67	4.805**	.009	a<c
		two children	64	4.40	.63			
		multiple children	48	4.70	.36			
Child's happiness	entirety	one child	44	4.24	.37	2.752	.067	
		two children	64	4.32	.41			
		multiple children	48	4.45	.36			
	parental relationship	one child	44	4.29	.50	3.313**	.039	a<c
		two children	64	4.52	.59			
		multiple children	48	4.53	.51			
family relationship	one child	44	4.00	.71	1.449*	.238	a<c	
	two children	64	3.82	.79				
	multiple children	48	4.06	.72				

* p<0.5, ** p<0.1, *** p<0.001.

B. Correlation and influence between mothers' play beliefs, play participation and children's playfulness

A Pearson's correlation analysis was conducted to investigate the correlation between mothers' play beliefs and children's play performance according to play participation, and the results are shown in <Table 3>. Looking at the correlation between each sub-factor of mother's play belief

and the sub-factor of mother's play participation, play support belief was positive in a range of .25 (p < 0.1) ~ .51 (p < 0.1) with the sub-factor of play participation showing a positive correlation.



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Play support belief showed a high positive correlation in the order of parental play participation frequency, degree of play participation, weekday play time, and weekend play time. Learning-centered belief showed a negative correlation with play participation degree ($r=-.45$, $p < 0.1$) and weekend play time ($r=-.34$, $p < 0.1$) among the sub-factors of play participation. However, there was no statistically significant correlation with weekday play time and play participation frequency.

Looking at the correlation between each sub-factor of play belief and the sub-factor of children's playfulness, play support belief was positively correlated with the sub-factor of children's playfulness from .53 ($p < 0.1$) to .71 ($p < 0.1$), showed a high correlation in the order of physical spontaneity, cognitive spontaneity, social spontaneity,

expression of pleasure, and sense of humor. Learning-centered belief showed a negative correlation with physical spontaneity ($r=-.31$, $p < 0.1$) and expression of pleasure ($r=-.30$, $p < 0.1$) among the sub-factors of children's playfulness. There was no statistically significant correlation with social spontaneity, cognitive spontaneity, and sense of humor.

These results indicate that the more a mother holds a play support belief, the more time she spends on playing with her child, and the more frequently she participates in her child's play as a play participant, the higher the playfulness of her child is. On the other hand, it indicates that the more mothers have learning-centered beliefs, the less they participate in play in terms of time and frequency, and the lower the playfulness of children is.

Table-III: Relationships between mothers' play beliefs, play participation, and children's play performance

		Mother's Play Beliefs		Mother's Play Participation				Children Playfulness				
		Play Support	Academic Focus	Weekday Play Time	Weekend Play Time	Play Participation Frequency	Play Participation Degree	Physical	Social	Cognitive	Pleasure	Humor's Sense
Mother's Play Beliefs	Play Support	1										
	Academic Focus	-.309**	1									
Mother's Play Participation	Weekday Play Time	.316*	.042	1								
	Weekend Play Time	.253*	-.344**	.391**	1							
	Play Participation Frequency	.517*	.051	.400**	.256**	1						
	Play Participation Degree	.383*	-.455**	.263**	.448**	.448**	1					
Children Playfulness	Physical	.710*	-.318**	.252**	.289**	.364**	.350**	1				
	Social	.562*	-.085	.192*	.074	.409**	.254**	.582*	1			
	Cognitive	.612*	.059	.289**	.082	.447**	.172*	.569*	.710**	1		
	Pleasure	.550*	-.300**	.211**	.261**	.258**	.274**	.688*	.448**	.541**	1	
	Humor's Sense	.539*	-.145	.263**	.253**	.350**	.330**	.570*	.495**	.560**	.648*	1

* $p < 0.5$, ** $p < 0.1$

In order to examine the effect of mother's play belief on children's playfulness, a multiple regression analysis was conducted with infant playfulness as a dependent variable and a sub-factor of play belief as an independent variable, and the results are shown in <Table 4>. The Durbin-Watson coefficient was calculated as 1.827, which was close to 2, confirming independence between the measured values. As a result of diagnosing multicollinearity between independent

variables, it was verified that there was no multicollinearity between independent variables with tolerance and VIF values of 0.1 or more and less than 10, respectively.



As a result of analyzing the effect of mother's play belief on children's playfulness, mother's play belief explains 52.3% of children's playfulness, and the effect on playfulness of play support belief ($\beta=.744$) was confirmed, excluding

academic focus in mother's belief. As a result of confirming the non-standardized coefficient for the mother's play belief, it can be predicted that the higher the play support belief ($B=.818$) is, the higher the playfulness of children is.

Table-IV: Effect of mother's play beliefs on children's playfulness

Dependent Variable	Independent Variable	B	β	S.E	t	ρ	Tolerance	VIF	R ²	F	Durbin-Watson
Children Playfulness	Play Support	.818	.744	.07	12.759	.000	.904	1.106	.523	86.119	1.827
	Academic Focus	.038	.060	.064	1.022	.308					

C. Correlation between mother's play belief, children's playfulness, and children's happiness

A Pearson's correlation analysis was conducted to investigate the correlation between mother's play belief, children's play performance, and children's happiness. The results are shown in <Table 5>. Looking at the correlation between each sub-factor of mother's play belief and sub-factor of children's happiness, the play support belief has a positive correlation with the sub-factor of children's happiness from .20 ($p < 0.5$) to .49 ($p < 0.1$). This showed a high correlation in the order of spirituality, peer relationship, emotion, parent relationship, family relationship, teacher relationship, health, life satisfaction, commitment, and cognition and achievement. Academic-focused belief showed a positive correlation with cognition and achievement ($r=.35$, $p<0.1$) and emotion ($r=.22$, $p<0.1$) among the sub-factors of infant happiness, and showed a statistically non-significant correlation with other sub-factors.

Looking at the correlation between each sub-factor of children's playfulness and each sub-factor of children's happiness, physical spontaneity showed a positive correlation between .26($p<0.1$) and .41($p<0.1$) with sub-factors of euphoria, with the exception being cognition and achievement. Spirituality, family relationship, emotion, parent relationship, peer relationship, health, life satisfaction, immersion, and teacher relationship showed a high correlation in that order.

Social spontaneity was positively correlated with sub-factors of infant happiness from .18 ($p < 0.5$) to .44 ($p < 0.1$), and among the sub-factors of happiness, it showed the lowest correlation with life satisfaction and the highest correlation with peer relationship. Cognitive spontaneity was positively correlated with sub-factors of euphoria from .23($p<0.1$) to .56($p<0.1$). Emotion, spirituality, peer relationship, immersion, teacher relationship, cognition and achievement, family relationship, health, parent relationship, and life satisfaction showed a high correlation in order.

Expression of pleasure showed a positive correlation between .22($p<0.1$) ~ .49($p<0.1$) with sub-factors of children's euphoria excluding cognition and achievement, and had the lowest correlation with commitment among sub-factors of infant euphoria. It showed the highest correlation with family relationship. Among the sub-factors of humor and children's happiness, health ($r=.20$, $p<0.5$) showed the lowest correlation, and family relationship ($r=.43$, $p<0.1$) showed the highest correlation. Cognition and achievement were statistically significant.

The higher the mother's belief in play support was, the higher the level of playfulness of children, and the higher the level of playfulness, the higher the happiness of children. The higher the mother's learning-centered beliefs were, the higher the cognitive spontaneity was in children's playfulness. The results of this study indicate that the higher the mother's belief in play support is, the higher the child's playfulness and the higher the child's sense of happiness are, as the child's playfulness influences the happiness.

Table 5. Correlation Analysis: mother's play beliefs, children playfulness, and children happiness.

		Mother's Play Beliefs		Children Playfulness				Children Happiness										
		Play Support	Academic Focus	Physical	Social	Cognitive	Pleasure	Humor	Parent Relationship	Teacher's relationship	Peer-relationship	Cognitive and Achievement	Family relationship	Immersion	Spirituality	Emotion	Health	Life Satisfaction
Mother's play beliefs	Play support	1																
	Academic focus	-.309**	1															
Children Playfulness	Physical	.710**	-.318**	1														
	Social	.562**	-.085	.582*	1													



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	Cognitive	.612**	.059	.569**	.710**	1														
	Pleasure	.550**	-.300**	.688**	.448**	.541**	1													
	Humor	.539**	-.145	.570**	.495**	.560**	.648**	1												
Children Happiness	Parental Relationship	.442**	-.060	.350**	.214**	.284**	.313**	.379**	1											
	Teacher's relationship	.405**	.070	.262**	.314**	.401**	.297**	.305**	.463**	1										
	Peer-relationship	.480**	.049	.336**	.442**	.495**	.296**	.337**	.433**	.496**	1									
	Cognitive and Achievement	.204*	.350**	.137	.290**	.364**	.058	.100	.274**	.313**	.519**	1								
	Family relationship	.439**	-.115	.375**	.268**	.329**	.495**	.430**	.576**	.476**	.461**	.310**	1							
	Immersion	.303**	.114	.285**	.381**	.432**	.223**	.256**	.280**	.269**	.451**	.498**	.442**	1						
	Spirituality	.494**	.059	.417**	.405**	.559**	.362**	.401**	.381**	.414**	.554**	.379**	.517**	.565**	1					
	Emotion	.471**	.223**	.373**	.438**	.565**	.234**	.317**	.423**	.504**	.555**	.469**	.386**	.398**	.637**	1				
	Health	.404**	-.138	.299**	.258**	.327**	.257**	.203**	.480**	.330**	.355**	.258**	.531**	.304**	.398**	.380**	1			
	Life Satisfaction	.376**	-.065	.299**	.181**	.234**	.259**	.269**	.498**	.506**	.343**	.257**	.568**	.308**	.355**	.300**	.589**	1		

* p<0.5, ** p<0.1

V. DISCUSSION & CONCLUSIONS

In this study, the correlation between mother's play belief and play participation and children's play performance and happiness was investigated. The following discussion is based on the results obtained through this study.

First, as a result of examining the differences in play beliefs according to children's age, there was no statistically significant difference in play support beliefs. Still, learning-centered beliefs were found in the order of 5, 3, and 4 years of age. It was found that mothers with five-year-old children supported the learning-centered belief more than mothers with three- or four-year-old children. It can be inferred that mothers place more importance on learning stimuli and learning-oriented activities due to the social atmosphere of preschool learning.

As a result of examining the differences in playfulness according to the age of children, playfulness was found to be highest in the order of 5, 3, and 4-year-olds, and cognitive spontaneity, a sub-factor of playfulness, was found to be higher in 5 than 4-year-olds. This is partially consistent with a study [37] in which it was found that the playfulness of 3-year-old and 5-year-old children was higher than that of 4-year-old children, but previous studies reported that there was no difference in the playfulness of children according to age [38, 39]. Further research is thus needed on the change in playfulness depending on the age of children.

The sub-factors of infant happiness according to the age of children did not show a statistically significant level. Still, the level of peer relationship was higher in 3 and 5-year-olds than in 4-year-olds. In the case of cognition and achievement, which are sub-factors of happiness, the level of 5-year-olds was higher than that of 3 and 4-year-olds, and in the case of emotion, the level of 5-year-olds was higher than that of 3-year-olds. As a result of examining the differences in mothers' play beliefs according to the number of children, the play support beliefs were highest in the order of multiple children, two children, and one child, and the learning-centered beliefs were highest in the order of one child, multiple children, and two children. According to the number of children, children's playfulness and infant happiness were highest in multiple children, followed by two children and one child, and the sub-factors did not show statistically significant levels.

Second, mothers' play beliefs and play participation showed a positive correlation. Play support belief showed a positive correlation with the sub-factor of play participation, and learning support belief showed a negative correlation with the degree of play participation and weekend play time among the sub-factors of play participation.

A mother's play-supportive beliefs indicate that she spends more time playing with her children, and that she participates more frequently in her children's play as a play participant. On the other hand, the more mothers hold learning support beliefs, the less they participate in play in terms of time and frequency, and the lower the playfulness of children, and a study that reported that mothers' play beliefs affect play participation with their children is also partially consistent with the present findings [40].

In previous studies [3, 40, 41, 42, 43, 44, 45, 46] examining parents' play beliefs, the more mothers held play support beliefs, the more time they spent in play with their children and the more positively they interacted with their children. This is also consistent with playing together and actively participating.

Mother's play support beliefs showed a strong correlation with the sub-factors of children's playfulness. This means that the higher the mother's view of play as an important mechanism for holistic development rather than simple play is, the more important the meaning of play is and the higher the child's playfulness is. This is in line with a study [3] that reported that children's playfulness differed according to the mother's beliefs about play and participation in play. It is also consistent with the results of studies [6, 40] that showed that the more important a mother considers play, the more she actively participates in play with her children.

This is also partially related to previous studies [44] that reported that when mothers are interested in and participate in their children's play, their children's play becomes richer and higher. In other words, the more the mother supports play and the more actively she participates in the children's play, the higher the child's playfulness will be through the provision of a variety of physical environments, leading to a higher level of play. On the one hand, the mother's learning support belief showed a negative correlation with physical spontaneity and expression of pleasure among the sub-factors of children's playfulness. This is also partially consistent with the results of previous studies [3, 40] that reported that mothers had a negative effect on their children's play development when they held learning support beliefs.

Third, mother's play beliefs, children's playfulness, and infant happiness were positively correlated. The sub-factors of play support belief and children's playfulness showed a high correlation in the order of physical spontaneity, cognitive spontaneity, social spontaneity, expression of pleasure, and sense of humor. Learning-centered beliefs showed a negative correlation with physical spontaneity and expression of pleasure among the sub-factors of children's playfulness, and showed no statistically significant correlation with social spontaneity, cognitive spontaneity, and sense of humor.

The higher the mother's learning support beliefs were, the higher the cognitive spontaneity in children's playfulness was. This is consistent with the results of previous studies [3, 9, 12, 47] showing that children of parents with a play support belief display a high level of playfulness. These research results support the results of [3] and [12], who argued that children's playfulness differs according to the parents' beliefs regarding their children's play.

Examining the correlation between each sub-factor of children's playfulness and each sub-factor of children's happiness, physical spontaneity showed a positive correlation with sub-factors of happiness, with the exception being cognition and achievement. The results of this study showed

that the higher the mother's belief in play support is, the higher the child's playfulness will be, and the higher the child's sense of happiness, as the child's playfulness influences the happiness.

This is partially consistent with the results of [48], who argued that the higher the playfulness of children, the higher the level of euphoria, and also with the results of a previous study [49] showing that the higher the playfulness, the more active participation in the play situation increases the sense of euphoria. Toddlers achieve cognitive, physical, social, and emotional development through play and experience pleasure, satisfaction, joy, and a sense of achievement. It can be said that the positive emotional experience through play affects the child's happiness.

Children experience the resolution of negative emotions through play as well as pleasure at the same time. The experience of pleasure through play influences the happiness of the children. Considering that childhood happiness affects life after becoming an adult, we explore various variables that affect the playfulness of children. The findings in [43] also suggest that various methods should be sought to increase the happiness of children.

Nonetheless, this study has some limitations. First, the results of this study may be different from the real world because the mothers' responses may be self-rationalized by relying on the parent's self-report method. Therefore, in order to measure more accurately and objectively, various research methods and approaches such as observation of children's play by experts and in-depth interviews with mothers are required.

Second, since this study targeted 157 mothers of children aged 3 to 5 years of age in J City, the number of cases was not sufficient and the results were limited to generalize the results. In order to generalize the research results, comparative research is required for various regions or social classes.

Third, despite the results of previous studies showing that the mother's beliefs about play may vary depending on the demographic background, we were unable to take into account the mothers' educational background and household income level. In follow-up studies research should be conducted by controlling the demographic background of the mothers.

Despite these limitations, the significance of this study is as follows.

It was found that the child's playfulness is more significant as the more positive a mother's play beliefs on her child. The study is meaningful because it can be used as primary material for developing programs that can enhance mothers' play beliefs.

REFERENCES

1. Lee, H. J. The relationship among the parents' play beliefs, play participation and the child's happiness : Focused on the mediating effect of parents' play participation. Master's thesis, The Graduate School Ewha Womens University, Seoul, Korea, 2016.
2. Choi, Y. S. The effect of parent's play participation and children's playfulness on children's happiness. Masters dissertation, Kyungpook National University. Daegu, Korea, 2018.



The Correlation and Influence between Mother's Play Beliefs on Child's Playfulness and Happiness

3. Kim, Y. H. The relationships among mothers' rearing attitude, play beliefs and young children's playfulness. *Child Care Support Research*, 2012, 2, pp. 27-46.
4. Park, E. J. Relationships between Mothers' Play Beliefs and their Young Children's Emotional and Social Development. Masters dissertation, Konkuk University, Seoul, Korea, 2012.
5. Kang, J. Y.; Lee, J. H. Mother's Play Belief and Young Children's Peer Competence : The Mediating Effects of Young Children's Playfulness. *Journal of the Korea Academia-Industrial cooperation Society*, 2020, 7, pp. 453-461
6. Haight, W. L.; Parke R. D.; Black, J. E. Mother's and Fathers' beliefs about and spontaneous participation in their toddlers' pretend play. *Merrill-Palmer Quarterly*, 1997, 2, pp. 271-290.
7. Fogle, L. Parent Beliefs about play: Relation with parent-child play interaction and child peer play competence. Doctoral dissertation. University of South Carolina, Chapel Hill, U. S. A. 2003.
8. Choi, M. J. The Effects of Parent Play-belief, Child's Self-elasticity, and Peer-play Interaction on the Young Children's Playfulness. Masters dissertation, Korea national Open University, Seoul, Korea, 2020.
9. You, M.; Yoo, M. S. The effects of maternal beliefs about play and emotional expressiveness on children's playfulness. *Journal of The Korean Association for Play Therapy*, 2008, 4, pp. 53-63.
10. Farver, J. M.; Howes, C. Cultural differences in American and Mexican mother-child pretend play. *Merrill-Parmer Quarterly*, 1993, 3, pp. 344-358.
11. Jung, H. H. The Effects of the Mother's Play Beliefs on the Playfulness of Young Children. Masters dissertation, Gwangju National University of Education, Gwangju, Korea, 2020.
12. Fogle, L. Parent Beliefs about play: Relation with parent-child play interaction and child peer play competence. Doctoral dissertation. University of South Carolina, Chapel Hill, U. S. A. 2003.
13. Chae, M. K. The Relationships among Mother's Unstable Attachment and Children's Playfulness : Moderating Effect of Mother's Play Support Beliefs. Masters dissertation, Kyung Hee University, Seoul, Korea, 2018.
14. Fröbel, F. On the Education of Man (Die Menschnerziehung), Keilhau/Leipzig: Wienbrach, Germany, 1826.
15. Kim, Y. M. The effects of teachers' play-teaching efficacy and teacher-child interactions on children's playfulness. Masters dissertation, Yonsei University, Seoul, Korea, 2018.
16. Park, S. J. The Relationship between Dispositions, Playfulness, and Creative Leadership of the Infants. Masters dissertation, Soongsil University, Seoul, Korea, 2018.
17. Lieberman, H. N. (1965). Playfulness and divergent thinking: An investigation of relationship at the kindergarten level. *Journal of Genetic Psychology*, 1965, 107, pp. 219-224.
18. Aquilar, T. E. Social and environmental barriers to playfulness. In J. L. Frost & S. Sunderine (Eds.), *When children play*. Wheaton, England: Association for Childhood Education International, 1985, pp.73-76.
19. Barnett, L. A. Developmental benefit of play for children. *Journal of Leisure Research*, 1990, 22, 138-153.
20. Sim, M. Y. The structural relationships among the variables on mothers' play beliefs, play participation, child-rearing role practice and children's playfulness and sociality. Doctoral dissertation. Sungshin Women's University, Seoul, Korea, 2018.
21. Lee, D. H. The Effect of strengths and playfulness on happiness of children. Masters dissertation, Pusan National University, Pusan, Korea, 2020.
22. Dewey, J. *How we think: A restatement of the relation of reflective thinking to the educative process*. Boston: Health and Company, 1933.
23. Moon, S. Y. The Influence of Parent's Playfulness and Play Participation on Young Children's Playfulness and Resilience. Doctoral Dissertation, Wonkwang University, Iksan, Korea, 2020.
24. Kim, J. L.; Kim, N. H. Relations among mothers' happiness, parenting behaviors, and children's happiness. *Journal of Life-span Studies*, 2014, 1, pp. 19-32.
25. Lee, K. M. Ideas for implementing pursuit of happiness education in early childhood education settings. *Korean Journal of Children's Media*, 2009, 8, pp. 165-181.
26. Wilson, W. R. Correlates of avowed happiness. *American Psychological Association*, 1967, 67, pp. 294-306.
27. Lee, C. K. The effect of integrated education on young children's feelings of happiness: utilizing children's songs for personality education. Masters dissertation, Ulsan National University, Ulsan, Korea, 2017.
28. Go, J. L. An Analysis of Mediating Effect of Parent's Play support belief and Play participation in Relation of Preschooler's Playfulness and a Feeling of well-being. *The Journal of Learner-Centered Curriculum and Instruction*, 2020, 16, pp. 483-503.
29. Yu, S. H. The Effect of Children's Happiness Program Utilizing Picture Books on Their Happiness and Self-Resilience. Masters dissertation, Keimyung University, Daegu, Korea, 2014.
30. Eum, J. H. The Effects of Creative Leadership Programs on Children's Happiness and Emotion. Masters dissertation, Dongguk University, Seoul, Korea, 2018.
31. Yoon, S. I. The relationship between play beliefs, play participations of dual-earner parents, and two-year-old toddler's playfulness. Masters dissertation, Yonsei University, Seoul, Korea, 2011.
32. Lee, S. M. The Effects of Parent-Child Play and Private Education on Children's Happiness. Doctoral Dissertation, Ewha Womens University, Seoul, Korea, 2015.
33. Won, H. Y. Study on the relations between father's play participation level and child's social ability. Masters dissertation, Seoul Women's University, Seoul, Korea, 1997.
34. Kim, M. S. A Study on the five-year-old children's playfulness perceived by teachers. Masters dissertation, Korea National University, Cheongwon, Korea, 2001.
35. Lee, E. J. A Study on Development of a Happiness Scale for Young Children : Based on early childhood educational institution. Doctoral Dissertation, Sungkyunkwan University, Seoul, Korea, 2010.
36. Ong, M.H.A.; Puteh, F. Quantitative data analysis: Choosing between SPSS, PLS, and AMOS in social
37. Jang, Y. S.; Cho, H. J. The Relationship between Parenting Style and Young Children's Playfulness. *Early Childhood Education Research & Review*, 2006, 1, pp. 251-268.
38. Choi, E. H., A Study on leadership, playfulness and emotional intelligence of young children. Masters dissertation, Chung-ang University, Seoul, Korea, 2010.
39. Kim, Y. H. The types of playfulness in Korean children. Doctoral Dissertation, Sookmyung Women's University, Seoul, Korea, 1995
40. Kim, M. S.; Cho, H. R.; Park, Y. L.; Shin, H. Y. The Study of Parents and Children Regarding Play: Focused on Parental Play Beliefs and Play Participation. *Journal of Parent Education*, 2013, 5, pp. 37-54.
41. Lee, J. W.; Lim, W. S.; Cho, S. Y. The Relationship between Mothers' Belief of Play, Children's Emotional Competence and Adjustment to Preschools. *Journal of Educational Studies*, 2009, 3, pp. 149-170.
42. Kang, I. S.; Moon, H. J. The effect that mothers' parenting intelligence, play beliefs and leadership in young children have on peer play of young children. *Early Childhood Education Research & Review*, 2012, 16, pp. 233-252.
43. Nam, Y. H.; Kim, K. J. The effects of mothers' play beliefs on young children's peer competence and creative characteristics. *Journal of The Korean Society for Study of Child Education and Care*, 2013, 13, pp. 61-80.
44. Lee, H. J.; Chung, H. W. The relationship among the parents' play beliefs, play participation and the child's happiness : Focused on the mediating effect of parents' play participation. *Early Childhood Education & Care*, 2016, 4, pp. 77-95.
45. Kim, Y. N.; Lee, K. O. The relationship of 5 years old children's playfulness and their mothers' and fathers' play beliefs. Paper presented at the annual meeting of the Korea Child Education. 2017, pp. 176-177.
46. Kim, J. J.; Park, H. S. The effects of father's play beliefs on play flow and peer play behavior of young children, with particular focus on the mediating effects of father's play participation. *Korean Journal of Child Education & Care and Card*, 2017, 17, pp. 29-48.
47. Kim, J. Y. Differences in Children's Playfulness and Leadership Depending on the Level of Parents' Play Belief. Masters dissertation, Cheonnam National University, Gwangju, Korea, 2012.
48. Moon, M. J. The Relationship of Life Satisfaction at a Daycare Center Children's to Playfulness and Peer Competence. Masters dissertation, Yonsei University, Seoul, Korea, 2016.
49. Choi, M. S.; Song, S. O. The Effects of Young Children's Playfulness on Their Self-Regulation and Adjustment to Child Care Center. *The Korean Journal Child Education*, 2013, 2, pp. 277-292.

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