2015 KICCE Project Report Abstracts

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Plan for Strengthening and Protecting the Rights of Kindergarten Daycare Teachers

The purpose of this research is to arrange the content and category in order to assure the rights for the teachers who are working at the Early Childhood Education and Childcare field (ECEC), and also to centrally analyze the related legal system to investigate how domestic and foreign kindergarten and daycare teachers' legal rights are being secured. The perception of the teachers on their own rights, as well as the reality of the teachers' rights and their needs, depending on institution's type, on the working environment and treatment are examined. Therefore, the goal is to provide a road-map which can facilitate the policy that encourages to prepare a legal and institutional system to reinforce the rights for the teachers.

In this research, teachers' rights of the kindergarten and daycare were based on the Recommendation Concerning the Status of Teachers from the ILO/UNESCO (1996) and the classification from the work of Mi-Sook We (2005), and was categorized as 'Right and autonomy of education as a professional occupation', 'Right to request for improvement on working conditions and guarantee of living', 'Right to request for welfare facility system' 'Secured identity as well as the privilege of freedom from arrest', 'Right to bring up a law suit and teachers association social activity right'. The subjects of the survey were full-time employed kindergarten and daycare teachers who are in charge of education along with childcare, and were randomly assigned, since it was believed that different types of established institutions would yield different working environments. Therefore, including 601 kindergarten instructors, 906 daycare teachers, 1,507 responses were in total analyzed.

In order to suggest the improvement methods for the kindergarten and daycare teachers' rights, this research suggests the facilitating road-map to improve the teachers' rights based on the analysis of current legislation, comparison of foreign case studies, and investigation on proceeding research studies. First of all, for the methods to enhance the awareness, amending the perception of the society towards kindergarten and daycare instructors while also enforcing the teachers with the legal knowledge they are assured with were recommended. Second, in order to establish a legal status of kindergarten daycare instructors, the definition of teaching staff specified in the legal system needs to be redefined by distinguishing teacher and employee, and the right categories that need to be reinforced in a consecutive

order for the teachers to perform their tasks were advised, while including the context on how such categories related with teachers' rights aren't covered within the legal system. Third, based on the results of the policy support requirements of the kindergarten and daycare teachers requested carry on their tasks efficiently, supporting policy plans were subdivided into short, mid and long-term.

The following details are the facilitating road-map to enhance the kindergarten daycare teachers' rights.

- 1. For the strategies to improve awareness, 1) Emphasize the professional roles of kindergarten and daycare teachers, 2) Efforts required from the government to enhance the perception of the teachers' right related legal system among kindergarten and daycare instructors.
- 2. For the plans to stabilize the legal position of kindergarten and daycare teachers,

 It is necessary to redefine the 'teaching staff' definition stated in The Infant
 Care Act and classify into 'childcare teacher' and 'employee',
 There should be
 guaranteed additional law for 'Secured Identity' and the 'Privilege of freedom from
 arrest' which targets the daycare teaching staffs,
 Supplement and consecutive
 enforcement should be conducted on the 5 categories that are related with teachers'
 rights in order for the kindergarten and daycare teachers to smoothly perform their
 role as instructors.
- 3. For policy assistance on institutional related and efficient working environment to carry on the teachers' task short, mid and long-term plans are suggested.

In the short-term 1) Supporting workforce, 2) Providing additional labour force, 3) Decreasing working hours, 4) Securing break periods, 5) Increasing salary

During the mid-term 1) Expanding flexible and selective working hours, 2) Increasing training program opportunities, 3) Providing abroad training programs, 4) Furnishing efficient working environments and areas for relaxation.

In the long-term 1) Supporting teachers' organizational activities, 2) Enlarging promotion opportunities.

Measures to Reinforce Customized Child Care Service for Child Care Centers and Kindergartens

Focused on time-extended childcare services and hourly child care services provided by child care centers and after-class programs and child care classes provided by kindergartens

The objective of this study is to seek the measures to expand and reinforce customized child care services for infants, toddlers and after-class child care services by identifying the operation status, the usage status, the difficulties, and needs arising from operating time-extended and hourly child care services such as the time-extended child care and the 24-hour child care serviced by child care centers, and after-school programs, full day child care class and other programs. serviced by kindergartens, and to develop a monitoring index accordingly. To this end, this study examined preceding studies, collected and analyzed related laws, systems and statistical data, and analyzed existing data such as the National Child Care Actual Conditions Survey (2009, 2012), the Employment Survey, and the Economically Active Population Survey. Furthermore, we have conducted a questionnaire survey with the directors of childcare centers and kindergartens, the directors of central support centers for childcare, and respective class teachers, and developed a monitoring index for the time-extended child care serviced by childcare centers and the after-school program serviced by kindergartens.

Our proposal according to the research result is as follows:

First, we need to set-up an eligibility criteria on the time-extended child care service only for infants and toddlers requiring a care service that exceeds the standard child care time, raise the hourly wage for the hourly childcare worker to 4,000 won per hour level and gradually adjust the rate to a realistic level that reflects the rise in price. When developing the project to support a substitute teacher, the government also needs to expand its support on time-extended child care substitute teachers by setting-up separate support centers for time-extended child care teachers. Furthermore, these support centers should serve as the hub of the operation to ensure a systematic management of the time-extended child care service and to maximize the efficiency in the use of the government's fund, and support the labor cost by extending the work

time of hourly child care teachers to six hours which is an appropriate time to operate the time-extended child care service. Moreover, it is necessary to require mandatory consulting and monitoring on time-extended child care services because blind spots of the quality management often exist since the time-extended child care service is exempt from the accreditation system, and although inspections are held, the area of inspection is limited to the matters such as nutrition, safety, accounting and etc. Lastly, we suggest to newly establish an 'in-service training course for time-extended child care' in the special in-service training course program for child care teachers to maintain and develop the knowledge and skills required to perform time-extended childcare activities.

Second, we propose to increase the number of institutions providing hourly child care services focused on the areas with demand, then reassign these institutions following an assessment on their accessibility, the child care environment, the service quality and etc. More than two hourly child care classes should be assigned per institution. Furthermore, we should conduct more active trainings and monitoring related to the hourly child care, reinforce the requirement of hourly child care teachers to complete their in-service trainings on infants and toddlers' child care, expand the support on substitute teachers to assist hourly child care teachers and actively hold promotions on the hourly child care service at the community level. Lastly, in the mid to long term, we propose to expand the days and hours of operation of the hourly child care service.

Third, we should set-up an eligibility criteria to qualify for the after-school program, enforce a mandatory submission of supporting evidences, and reinforce inspections on after-school programs to prevent the program from being centered on specialized educational programs. Furthermore, the trainings for teachers in charge of the after-school program should be held on a regular basis, and the working condition and staffs' job satisfaction should be improved by recognizing the experience of the teacher in charge of the after-school program in proportion to the level of experience of teachers in charge of the basic curriculum class if the after-schoolteacher works for more than 8 hours a day, and by assigning tasks that arc directly related to the after-

school program. Furthermore, it is necessary to provide a differentiated support for the infants and toddlers who must receive additional educational activities other than the basic education activity or a child care service to receive priority support, flexibly adjust the hour of operation according to the circumstance of kindergartens, and setup an eligibility criteria to qualify for the child care class and enforce a mandatory submission of supporting evidences. Lastly, it is necessary to implement mandatory trainings for the teachers in charge of the child care class, and supervise and provide consulting services for child care classes on a regular basis.

The Study of Sustainable Child Care Support Field for Inter-Korea Exchange and Cooperation

Yunjin Lee Ahreum Kim Ilgue Kang Giwoong Son Junbum Lim

Until now, support projects for infants and children in North Korea focused on health and medical field. Considering if North and South Korea come to the level where they exchange and cooperate reciprocally, the support should expand its territories to education and child care as well. Therefore, this study tried to discover sustainable projects in education and child care and various ways to push forward these projects when inter-Korean relation is improved. The study collected the data on education in Germany, and the cases of China-Taiwan exchange and cooperation in the field of child care. In order to collect the data and conduct interviews with the officials, Yian-Ji-Shi visited from China and Japan. In addition, opinion survey targeting 53 experts was conducted and the survey on 800 people in public was completed. Main findings of the study are as follows.

In case of Germany and China-Taiwan, exchange and cooperation in non-political field are not only sustainable, but also have positive effects on political field. Currently, South Korea's support projects for North Korea are currently ceased, while Korean private organization located overseas and international organizations (UNICEF, WEP, FAO, UNFPA, WHO) still continues their effort. However, their projects were not about economic assistance from the humanitarian perspective or a project of emergency relief, but to mainly promote welfare of North Koreans and developmental cooperation project to construct infrastructure. The development cooperation project was already held in 2005 when South Korean government implemented North Korea infant and child support project. The study was able to find out the fact that development cooperation project maintained the relationship between the donor country and beneficiary country and eventually contributed to promote the welfare of the beneficiary country's residents.

The level of unification that most South Korean desired was 'coming and going to North and South freely', and the most concerned issue after the unification was the economic conflict between the North and the South. On the other hand, the education on Korea's unification starting from early childhood was recognized as desirable. The survey on the general public also found out that 'internal conflict among South Koreans' is an issue that our society has to solve.

The tasks in the field of education and child care drawn from the experts opinion survey included forming a consultative group between the North and the South, holding conventions and conferences regularly, output of common statistical data of the North and South Korea, North and South Korea's joint establishment and management of day care center, kindergarten, joint development and implementation of unification education, expanding children' exchanges between the two. Based on the findings of the study, the directions of specific promotion for the overall exchange and cooperation are 1)firstly conducting exchange and cooperation before discussing the unification, 2)preparing the legal foundations to support North Korea's infants and children and to increase the exchange and cooperation, 3)proceeding the economic cooperation to reduce the economic gap between the North and the South with establishing day care centers and kindergarten for the workers of the economic cooperation, 4)proceeding the exchange cooperate projects depending on the changes that North Korea shows, and 5)solving the internal conflicts among South Koreans.

The study suggests that the policy plan for the field of education and child care should reflect the North and South's relation, and the strategy should be different among the stages; stalemate relation, and initial, middle, long stage of improvement.

For example, if North and South Korea's joint convention is held, the level of North and South Korea's relation should be considered when selecting the convention's main topic. Also during the stalemate stage, supporting the day care center in Gaesong area should be focused on supplying the goods, and expands its cooperation field once the relation improves such as opening regular meetings with education and child care experts, director and teachers. For a long-term stage, it is suggested to establish and operate the workplace nursery(day care center) in the economic cooperation of the North and the South.

Utilization of Decent Part-time Jobs in Childcare Center and Kindergarten

Hyomi Choi Jeong Won Lee Dongha Lee

The aim of this study is to examine the issue of adequately allocating personnel and utilizing decent part-time jobs for the purpose of enhancing the service of childcare and education in childcare centers and kindergarten.

Within this context, we began the study by first examining the current status of part-time employment in childcare centers and kindergartens, as well as assessing the possibility and the facilities' potential demand for such workers in the future. In doing this, we looked into the working conditions and grievances of part-time workers, using these insights to inform some suggestions to improve the working conditions and quality of work in such jobs. Finally, we examined the attitudes of childcare teachers and kindergarten teachers regarding part-time work, as well as the willingness of job-seekers to join part-time jobs. We used these findings to explore various ways to support the utilization of part-time assistance. For this purpose, we reviewed previous literature, analyzed key statistical data, conducted surveys, analyzed their results, and conducted in-depth interviews, as well as consulting with experts.

Our main findings can be summarized as follows. First, compared to childcare centers, kindergartens had relatively higher demand for more part-time assistance, with the composition of their workforce being largely dependent on the type of establishment. Second, the most serious perceived shortcoming of part-time workers was that they had a 'lower sense of responsibility compared to full-time workers'. The most commonly reported difficulty regarding the hiring of part-time assistance was the difficulty of matching wage offers due to the high reservation wage of those seeking part-time jobs. Third, it was evident that childcare centers and kindergartens were different not only in their share of part-time workers, but also in their working conditions, depending on the tasks they performed. Fourth, while the majority of part-time workers in childcare centers and kindergartens were employed on contracts of less than a year, they mostly expected to be able to continue working beyond a year as long as no problem was encountered. Fifth, part-time workers at childcare centers and kindergartens mainly worked part-time because they needed time to care for their own children, and expressed high levels of satisfaction with their part-time work. However, few enjoyed equal working conditions (proportional to hours worked)

in terms of bonus pay, severance pay, and day offs. Sixth, while job-seekers were very positive attitudes toward part-time work, their receptiveness to jobs in childcare centers and kindergartens was somewhat dependent on the tasks they were expected to perform.

Based on these findings, we propose the following policy suggestions. First, support for the placement of part-time personnel in childcare centers and kindergartens must prioritize assistant teachers and afternoon childcare teachers. Second, it needs to be a moderate upward adjustment in the wages of part-time workers from current levels, while the security of employment must be extended to part-time workers overall, regardless of the tasks they perform. Third, considering the fact that the work in childcare centers and kindergartens – regardless of the tasks performed – is special in that it occurs in the close proximity of children, all personnel employed by childcare centers and kindergartens must be provided with training programs to bolster basic competence and understanding of their workplace and the realities of working with children.

A Study of Grandparents Raising Young Grandchildren and Support System

Yunjin Lee Mikyung Kwon Seungjin Kim

The purpose of this study is to provide preliminary data for policy making by researching the support of grandparents' raising grandchildren nationwide. Also, the study suggests the rational support plan and the establishment of directions for supporting grandparents raising grandchildren. The study surveyed 500 grandparents who are currently raising grandchildren and their child(parents). Also, the survey targeting 1,000 people in public was conducted for collecting objective opinions about the financial assistance of grandparents raising grandchildren. Main findings of this study are as follows.

Number of grandmothers exceeded grandfathers (95.6%). Among grandmothers, more than half were maternal grandmothers (56.8%). Number of grandchildren was 1.15 in average and the average age was 28.8 months. Grandmothers started to raise their grandchildren when they were 7.78 months in average until 21.0 months in average as for now. The study showed that the grandparents started to raise grandchildren when they were just born, and it lasted for a long period.

90.2% of the families who fostered their children to grandparents were double-income households and 7.2% were single-income households. These double-income households shared typical middle class characteristics. As for the motive of grandparents raising grandchildren, nurturing by 'grandchildren's parents' request'(76.0%) was higher than 'voluntary nurture'(24.0%). Most of the grandparents(78.6%) were raising grandchildren even though they did not live with them. Furthermore, grandparents spent average 5.25 days per week and average 42.53 hours per week for nurturing grandchildren, and the hours were equivalent to working hours of wage earner. Half of the grandparents received child rearing expenses periodically and average amount of child rearing expenses per month was approximately 572,100 won.

According to the public opinion survey asking about the opinions of supporting policy on child rearing expenses for grandparents raising grandchildren, 82.2% of grandparents and parents, and 80.2% of general public agreed on the policy. Also, if the supporting conditions were the same among the grandparents and 'public nanny

service' which the government dispatches, parents and general public tended to prefer grandparents.

Based on the findings of this study, the study suggests that the current 'public nanny service' should also include the grandparent child rearing service. The suggestions are as follows; 1) since grandparents not only nurture the grandchildren, but also are required to do house chores, the benefit should be in accordance with 'hourly comprehensive service' of public nanny service. 2) the service should mainly support the double-income households working more than 40 hours a week. 3) supporting the grandparents with child rearing counseling, monitoring the benefit with filling out the monthly report by trained 'nurturing adviser for grandparents'.

In addition, many grandparents are interested in educational program about raising their grandchildren, but it is only implemented in Seoul and metropolitan areas. Therefore, the government's support is necessary, so that it can be implemented nationwide. Also, for the grandparents raising grandchildren, but not able to attend the education program, 'door-to-door' education program by nurturing adviser for grandparents is suggested.

KICCE Childrearing Price Index and Parents' Perception of the Childrearing Cost (III)

Yoon Kyung Choi Jinah Park Seokjin Woo Jia Bae

This study produced the third-year computation of Korean Childrearing Price Index(CPI) and Parents' Perception of Childrearing Costs for the Korean household of young (0~5 year old) children.

2015 KICCE Childrearing Price Index's(CPI) indexes (I~III, IV~VI) all got higher compared to the 2014 indexes, showing 1~4% of annual increase. This is understood to be resulting mainly from the increase of ECEC costs and prices. However, the increase rate of KICCE CPI for low income families with 0-5 year of young children, were relatively lower than the other SES class' CPIs. This is interpreted that the low income families tend to buy relatively lower or lowest price of childrearing products, in other words showing the lack of buying power of high quality-high price products. The online CPI's increase rate was not low, even higher than off-line market price index of childrearing products. The online purchase needs to be accompanied by specific searching strategies of the lowest prices of products. Otherwise, the increase steepness of online CPI is usually higher than off-line index's.

Parents' Perception of Childrearing Costs for the household of 0~5 year old children, was different between 0-2 and 3-5 olds. This is partially due to the government's higher concentrated efforts and funding of child care supports for younger children of 0-2. The perception of costs was higher for the household with 3-5 olds. Despite this trend, overall 2015 Parents' Perception of Childrearing Costs got better slightly, compared to 2014's.

Current Status and Improvement Plans of Early Childhood Education and Care in Rural Areas

The purpose of this research project is to investigate the current status of early childhood education and care (ECEC) in kindergartens and childcare facilities and the social supporting system for rearing young children in rural areas of Korea. The supporting system is supposed to be provided by the institutes such as the Support Center for Childcare(SCC), the Health Family Support Center(HFSC), and the Multi-cultural Family Center(MFC). In addition, this study also explores the characteristics and needs that rural families with young children have.

Research questions to achieve these purposes are as follows: a) what are the characteristics of rural area in terms of economy, sociology, demography, and ECEC? b) what are supporting policies of central and local governments for young children in rural area? c) what are the current status of kindergartens and childcare facilities in rural areas as well as the supporting institutes such as SCC, HKSC, and MFC? d) what are the difficulties and needs related to child rearing that rural families have? and e) what strategies for developing policies can we suggest based on the results of this research?

To get the answers of these research questions, we employed research methods such as literature review, in-depth interviews, a survey, and meetings with professionals in the related fields including governmental officials.

We divided Korean rural areas into three types(A, B, C) based on demo-sociology and economic status and tried to find out their distinguishable characteristics, and thus to develop the strategies for improving ECEC and child rearing. According to the research results, Type A areas in low SES overall, and need supports especially in the quality of education for mixed age classes, children with disabilities and conduct problems, and children from multi-cultural families, and living only with a grandparent. Type B areas, which have features as typical farms, need part-time and holiday childcare services and financial supports for ECEC teachers including transportation and housing. Finally, Type C areas, which have both the characteristics of rural and urban places, should have priority in establishing public childcare facilities managed by the central and local governments.

Mid-to-Long Term Forecasts of the Demand and Fiscal Spending for Early Childhood Education and Childcare

Jinah Park Changhyun Park Ji-won Eom

As a part of the efforts to overcome the low-fertility crisis and respond to greater calls for the state's role in the care and education of infants during early childhood, government spending has increased in line with the expansion on policies including the Nuri curriculum for 3 to 5 years, free-of-charge childcare for 0 to 2 years, as well as childcare allowances. In this study, we attempt to make mid-to-long term forecasts of the future demand for early childhood education and care services by taking account of the detailed policy factors affecting all children aged 0 to 5 years, Korean society's rapidly progressing trends of low fertility and population aging, as well as the observed changes in facility use due to the expansion of related policies and subsidy spending. Based on these assessments, we then examine the projected costs implied by various policy scenarios, so as to provide basic research material to inform the design of future policies relating to early childhood education and care.

In conducting this study, we begin by examining the current status of early childhood education and care, the contents of current government policies, as well as the scale of associated spending in these areas. Second, based on data from daycare centers and kindergartens from 2003 to 2014, we forecast the demand for these facilities from 2015 to 2024, using time series models for each region and age group. Third, we construct a projection model for fiscal spending in support programs and subsidies associated with early childhood education and care, extracting possible policy determinants of the scale of the necessary spending. Based on these, we derive the projected costs associated with various different scenarios. Finally, based on our findings and expected future policies, we consider some measures to secure the stability of financing for early childhood education and care programs, as well as enhancing the efficiency of how the funds are administered.

We found that the total number of children aged 0 to 5 in 2015 was 3,194,562 persons, which would be expected to fall by 60,484 persons (1.9%) to 3,134,078 persons by 2024. The number of children eligible for enrollment in daycare centers or kindergartens, by age group, would be expected to fall by 1.4% (age 0), 1.5% (age 1), 1.4% (age 2), 1.4% (age 3), 6.8% (age 4), respectively, while rising by 1.1% in the case of 5-year olds. As of 2015, the total number of infants enrolled in daycare centers or

kindergartens was 2,108,059 persons. Using these forecasts of future demand for early childhood education and care to calculate the projected fiscal costs, we found that if the current unit costs for each component of fiscal spending remained constant, projected spending would rise from 14 trillion 481.5 billion KRW as of 2015 to 14 trillion 578.2 billion KRW by 2016, while reverting to a trend would decrease during the subsequent years to a level of roughly 14 trillion 400 billion KRW.

Our findings therefore suggest that an integrated approach must be followed in considering plans for accommodating infants in early childhood education and care facilities, as well as plans for the supply and demand of childcare services. Furthermore, in order to enhance the quality of childcare, alleviate the care burden of parents, and ensure the successful integration of daycare centers and kindergartens, we propose that long-term plans (including concrete steps for implementation) must first be drawn up to secure the means to finance the associated costs into the future. Finally, in order to enhance the efficiency of the services currently being funded by fiscal spending, we propose that the duration of free education / childcare be redefined and that standard charge rates for education and childcare services be introduced.

Issues and Tools of the International Assessment on Young Children's Learning and Development

Mugyeong Moon Wonsoon Park Junbum Lim

Assessment of young children has traditionally been one of under- researched areas because of a strong advocacy on individual difference of development in the early years as well as of concerns on negative aspects of early screening and labeling. As most of advanced countries have achieved universal ECEC services, they come to focus on enhancing the quality of services, which, in turn, direct their attention to the linkage among quality and child development and learning outcomes. Utilizing results of international assessment on young children became an important agenda across countries in monitoring holistic development of children, identifying effects of, and informing ECEC policies.

In this context, the study reviewed currently available assessment tools, such as EDI (Early Development Instrument), iPIPS (International Performance Indicators for Primary School), EAP-ECDS (Asia Pacific-Early Childhood Development Scales), MELQO (Measuring Early Learning Quality and Outcomes) and analyzed major findings of studies with these tools.

A group of domestic and international experts provided their views on developing international assessment tools and strategies for international studies on assessing young children. A total of 45 domestic experts also participated in two rounds of indepth survey.

The study concluded that there can be four different purposes of international assessment on children including assessing child's overall development, child outcomes of certain policies, for early intervention, and for international cooperation with developing countries. In accordance of the purposes of international assessment, varied are target groups, assessment domains and sub-domains, methods and procedures, timing, validation of tools, and utilization of assessment results. Some issues are discussed in assessing young children across countries, such as cultural contexts and languages. Further studies need to be conducted to develop and validate assessment tools both in regional and global contexts, reflecting upon key values and abilities required for children in the present and the future.

Preschoolers' Current Private Education Status and Improvement Measures: Focused on the Effects of Early Foreign Language Education

Jeongrim Lee Yun Jin Bae Hye Joo Cho Yo Hyun Song Sungryong Ko Junghee Lee

The aim of the study is to scientifically clarify the effects of early foreign language education. The study tried to accomplish it with two experimental methods. First, preschoolers, third grade and undergraduate students learned Chinese language through Chinese education program and manual for 20 sessions, and a pre-test and a post-test regarding the abilities of listening, speaking, and reading were implemented. Next, eye-movement tracking and ERP(Event Related Potentials) measured to understand the sensitivity of sematic processing. Korean preschoolers', third grade and undergraduate students' patterns of eye-movement tracking and ERP were compared with those of Chinese undergraduates'. Among three age groups of Korean, researchers tried to find out which age group would show the most similar pattern with the Chinese group.

In addition, the status of early private education was explored by literature review and the analysis of national survey data focusing on early foreign language education. After reviewing the literature and data analysis, it was revealed that many preschoolers have already experienced foreign language education, and some preschoolers' lives were focused on learning foreign language. The increase of the fee for foreign language education has been social problem. In order to solve this problem, this study was completed.

After implementing the pre- and post-tests, the effects of Chinese language education were analyzed by ANCOVA. In the ANCOVA test, the scores of IQ test and REVT(Receptive and Expressive Vocabulary Test) were included as two control variables. The results were as follows. First, third graders' and undergraduate students' Chinese speaking scores were significantly higher than preschoolers'. Undergraduates' Chinese reading scores were the best among the three age groups, then was followed by third grades. Listening scores were not significantly different among three age groups, even though undergraduates' listening scores were the highest among them.

The results of measuring eye-movement tracking and ERP were as follows. First, there was a significant difference in the fixation time of Chinese undergraduates and Korean undergraduates on grammatically wrong sentences, and 85% of all

correspondents showed right answers.

Next, researchers measured the N400 which is known to indicate the sensitivity of semantic processing. Although it was not significant, the result revealed that the patterns of brainwave at the N400 were similar between Chinese and Korean undergraduate students. However, preschoolers' and third graders' brainwave patterns at the N400 location showed a big difference from those of Chinese undergraduates.

Based on these results, some political suggestions can be made. At the national level, the proper guidance regarding early foreign language education needs to be provided. For this, the scientific experimental research regarding the effects of foreign language education should be accumulated and the results should be expanded. Parents' understandings about early foreign language education need to be reconsidered. Preschooler's rights to play should be protected in order to increase children's healthy and development.

The Trend of Child Care Support Policy and its Future Challenges

The government has urgently backed up the establishment of the basic plan of child care support policy. However, a fundamental review to first evaluate child care support is required because there is lack of data on its impact on birth rate and female employment promotion policies. In this light, this report has identified and analyzed the goal and the basic direction of child care support policies and challenges to key policy in the last 10 years. A sample of 1,045 parents of young children and 98 related experts participated to identify the need to reform child care support system; later, the report outlines future challenges. The findings confirmed that child care support in 2011 needed to reconvert its direction and goal. The highlight was that parental support and the regional child care network needed to be revisited; strengthening child care in the public sector since 2006 and the reinforcement of responsibility on family and community towards child care since 2011. Child care support has focused on financially supporting child care centers, recently adding extension of child care hours. Children aged 0-5 years were entitled to child care and education support; the parents with children up to 8 years old and maximum earning of 1,000,000 KW were able to obtain child care leave eligibility and entitlement. The flexible working hours scheme has also been introduced. However, cash schemes were still limited to child care home allowance. According to the survey, support for child care centers and child care hours had greater impact. However, it was indicated that expanding public child care sectors, safe child care and strengthening early years practitioners' professionalism are yet to be solved. Cash scheme service needs to cover preschoolers; the child care system needs to be strengthened and equal parenting responsibility is also required. The target for future child care support, therefore, needs to focus on parents' rights and those of the child. It also needs to resolve the conflict between work and family life, including that of fathers. The report suggests the following: enhancing the rights for infants' and young children's choices on child care, providing cash scheme services regardless of the use of child care centers, re-establishing centers' goals according to the age of the child and restructuring the child care support system, the governments' support for expanding public child care sectors, strengthening safe child care as a key challenge, providing child care centers according to household characteristics, and fully applying exceptional day child care services to young children, and expanding child care hours through the introduction of a three month child care leave for fathers.

2015 KICCE Project Report Abstracts

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Achievements and Challenges of Childcare Policies in 2015

Childcare policy has been rapidly changed since 2006 and there is a growing need to identify its status and achievements. The study, therefore, evaluated the overall achievement of childcare policy for the past 6 years. It also presented its achievements and challenges by analysing the degree of parents' satisfaction and demands.

According to the assessments on the status of the central government' childcare policy, the expanding assistance costs of child care appeared as the main achievement. However, there was a regional disparity depending on parents' payment for child care and additional child care costs resulting in regional imbalances caused by imbalanced numbers of nurseries in different regions. Guaranteeing options through improvement of service quality and ensuring alterative child care were insufficient. The rate of accreditation was low in private and home child care compared to national and public child care, and extended-hours child care and child care for children with disabilities were not accessible.

There were regional differences in assistance costs for childcare per child, and these insufficient financial supports for national and public nurseries brought regional disparities that could be seen social challenges to be solved in the near future.

Parents of young children were highly satisfied with geographical accessibility of the service whilst the parents were burdened by the cost of child care. The parents were not satisfied with teachers' professionalism as well.

According to the survey, the study suggests the followings; first, improving the government's support for service accessibility, expanding the numbers of national and public nurseries, building the support system, enhancing a private nurseries infrastructure for alternative public nurseries, improving the service accessability of Support Center for Childcare; second, improving the regulation of the cost of child care services, strengthening the cash service for children; third, prioritizing the budget to supply nursery nurses, and subsiding the support to provide a high quality nursery service, strengthening the consulting support system; forth, enhancing options for parents of young children, strengthening the role of Care Support for Childcare for vulnerable social groups.

Outcomes of the Early Childhood Education Policy in 2015 and Future Tasks

Eun-Young Choi Jinwha Lee Seungjin Kim

The purpose of this study is to collect overall information on and to asses the outcome of early childhood education in 2014, and to set future tasks for early childhood education policy by analyzing related issues that require in-depth analysis. In conducting the research, we analyzed annual education statistics reports of the Korean Educational Development Institute (KEDI), early childhood education annual reports, Ministry of Education internal reports, reports by municipal and provincial offices of education as well as other related documents. In addition via interviewing child-abuse specialists, kindergarten staffs (principal, teacher, etc) and parents, we investigated the status and perception of child abuse taking place at institutions. We also conducted a survey among kindergarten staffs and parents on the state and their perception of child abuse. Furthermore, we held advisory conferences comprised of professionals and academics working in the field of early childhood education to receive advice on research directions, survey contents and questions as well as policy suggestions. Numerous meetings on data collection on early childhood education and research collaboration took place.

Major findings of this study are as follows. First, according to the overall current status analysis of 2014 early childhood education, the number of kindergartens, the number of classes and kindergarten attendance rate have increased compared to the previous year. In particular, the attendance rate for 5-year-old children, 60.0%, showed the greatest increase among age groups with a 3.6% increase. Nevertheless, the number of children enrolled in kindergartens was 652,546, a 5,642 decrease compared to 2013. The number of kindergarten staffs at public kindergartens was 11,931 while the number of staffs at private kindergartens was 36,599, 3.1 times greater than the former. The percentage of children enrolled at public kindergartens increased 0.6% to 10.7% compared to 2013. Furthermore, children per kindergarten staff ratio continued to show a decrease becoming closer to the OECD average. As reported by the early childhood education financial indicators, 0.291% of GDP was spent on early childhood education in 2014, a continuous upward trend since 2010 when it was 0.127%, and 8.7% of total expenditure on education was spent on early childhood education which more than doubled 3.5% in 2010. The amount of government

funding for kindergarten tuition of 3 to 5 year old children was 143 billion won, and the ratio of total enrolled children to children receiving funding was 101.8%. 97.2% of kindergartens were reported to be providing after-school programs, and 67.5% of enrolled children participated in such programs, a rise compared to 2013. In 2014, the first year evaluation of the third kindergarten evaluation which included 2,635 kindergartens (29.9% of all kindergartens) was completed. The number of early childhood education collaborative networks which showed a decreasing trend until 2011 started to increase since 2012. There was also a steady increase in the number of early childhood education and development institutes with a total number of 14 in 2014. In addition there were 14 experience education institutes as of 2014. Second, according to our review of early childhood education projects of 17 municipal and provincial offices of education, there was a great discrepancy in budget among the different regional offices. In addition, among the 17 offices, there were offices for which government funding in 2015 increased or decreased compared to 2014 as well as offices that did not receive any funding at all. Third, this study reviewed the concept of child abuse, relevant policy and current state of child abuse through indepth analysis and researched, compared and analyzed the perception of general types of child abuse and child abuse treatments among kindergarten staff and parents of young children.

Based on the findings, this study suggested numerous future directions and tasks for early childhood education policy including the expansion of public infrastructure for early childhood education, secure and efficient allocation of funding for early childhood education, better compensation and working conditions for kindergarten staff, stable establishment of a quality management system, and expansion of and strengthening the role of early childhood education support systems. Furthermore, this study discussed and suggested policies to prevent child abuse at the central, regional and kindergarten level.

Measures to Substantiality of Childcare Support for Improving Fertility and Work-Family Balance(V)

Namhee Do Eunjin Kang Jieun Choi

Improvement Measures and Current Status of Establishment of Industrial Complex Childcare Centers

In recent years, the Ministry of Employment and Labor, has expanded the support for industrial complex and small-medium enterprise consortium-type workplace childcare centers Although Industrial complex childcare centers also increased, there was disappointment, because it did not reflect the needs and requests of the unionized workers. In this context, this study seeks to identify the workers' requests for childcare and the current state of nursery management while seeking the points of improvement regarding nursery establishment and management, and proposes methods to improve the substantiality of industrial complex childcare centers, and to help workers to make a balance between work and family.

In this study, a literature review, survey research, and in-depth interviews were conducted. The research subjects consisted of 1,000 industrial workers who send their children to industrial complex childcare centers or nearby childcare centers, and 250 directors of industrial complex childcare centers or nearby childcare centers directors.

The main findings of this study are as follows.

- 1) An average of 80% of industrial complex childcare centers met the rate of satisfaction for capacity. 82.0% of childcare centers outside of industrial complexes were established in residential areas, 9.8% at the entrance of industrial complexes, and of those inside industrial complexes 3.5% were near industrial areas. Before the establishment of 15.7% of childcare centers, a survey on nursery demand was given to workers, of which 46.6% responded that they were not recruited by the childcare centers but rather fell below capacity.
- 2) Directors indicated that the difficulties running childcare centers were 'kindergarten recruitment', 'operating expenses and financial security', and 'childcare center staff recruitment'. The biggest reason for the difficulty of childcare centers recruitment and hiring childcare center staff is the location of the childcare centers being far from residential areas. The in-depth interviews showed that difficult accessibility to childcare centers located in the industrial complex, lack of demand, etc. posed as the most difficult challenge to recruitment of infant and toddlers.

- 4) Directors responded that when installing a new childcare centers, areas where residential areas are adjacent to industrial complexes for 'national and public childcare centers' were preferred. In the case of co-working daycares, there was the opinion that responsible large enterprises forming consortiums would be the preferred method of childcare centers establishment in industrial complexes.
- 5) In cases of the parent participation of industrial complex workers, differences in male and female were large. Most of the parent participation activities were composed of mothers. For choosing child's education and childcare facility, the deciding factors were distance, operation of vehicles, and realistic convenience.
- 6) There were many cases where industrial workers did not know of the existence of an industrial complex childcare centers, and of 13.9% of established industrial complex childcare centers, most were located near businesses. However most workers replied that the best area for an industrial complex childcare centers to be located would be near complexes close to residential areas rather than inside the industrial complex(48.3%). Opinions regarding the need for industrial complex childcare centers were divided.
- 7) Parental leave and shortened working hours during infant care for industrial complex workers and experience using parenting support programs supplied by the enterprises had a very low perceived availability to industrial workers. The most helpful industry method was chosen to be flexible working arrangements.

This study proposes the following methods of improvement for the substantiality of industrial complex childcare centers.

1) The basic direction of policies should allow industrial complexes to choose childcare centers that best suit their qualities, and as it is necessary to implement conveniently accessible childcare centers for workers and there is a need for secure operation of childcare centers, information and advertisements for industry complex childcare centers should be provided.

- 2) Regarding installment, there is a need to establish childcare centers that reflect the uniqueness of the industrial complex, and to make policies regarding the conditions of location that break down rather than differentiate childcare centers locations. Additionally, there is a need to accurately secure childcare center demand through sophisticated demand surveys geared towards workers, and the workers' requests should be reflected in the decisions regarding the location and type of establishment of the childcare centers.
- 3) Regarding operation, there is a need for increased support in operating industrial complex childcare centers, and a need for more variety of support methods for dual-income and single-income households, and a need for installment and operation consulting for industrial complex childcare centers.
- 4) For the industrial complex workers' balance between work and family, provision of company-based incentives is necessary in order to create a family-friendly culture within the industrial workplace. In addition, the method of activating parent participation of working fathers also needs to be taken into consideration.

Revising the Nuri Curriculum for Children at Age 3 to 5

The purposes of the study are to examine issues and needs regarding the implementation of the Nuri curriculum for children at age 3 to 5 and to propose recommendation for revision in terms of the general and the specific learning domains as well as explanatory guidelines and materials for teachers.

In particular, the study attempted to strengthen theoretical backgrounds and recent trends of curriculum development, to fortify the alignment with primary school curriculum as well as the Standard Childcare Curriculum for 0 to 2, and to provide a more teacher-friendly curriculum.

Two surveys were conducted respectively with 1,250 practitioners and about 50 experts regarding challenges of and needs for the implementation of the Nuri curriculum and directions and specifics of revision. A group of experts in the field provided in-depth discussion and reviews on the general and each learning domain. Furthermore, two regional workshops were held in order to discuss proposed recommendation for revision.

Based on major findings of surveys and expert meetings, a range of recommendations for revising the Nuri curriculum, such as including desirable image of a child, emphasizing integral provision of care and education, reducing amount of learning contents, appropriating the difficulty level of contents by age levels, setting overall goals rather than individual goals for each learning domain, providing detailed guidelines for child assessment, and so on.

It is highly important to have a consensus on these proposed recommendations in revising the Nuri curriculum through sustained discourse among different stakeholder groups.

Nuri Curriculum for Ages 3 to 5: Plans for Strengthening Partnerships between ECEC centers, Home, and Community

Mi Kyung Kwon Jae Seok Youn Hye Joo Cho

This study was conducted as the part of the overarching study, titled 'Monitoring and Assessment of the Nuri Curriculum', with the purpose of examining the home-community partnerships and generating plans for further improvements.

What is the meaning of home-community partnerships with regard to the early childhood care and education at kindergartens and child care centers? It could be defined as the pivotal means for supporting children's development and expanding the scope of their experiences by encouraging ongoing interactions among children's ecological systems.

This study aims to examine the connections between home and its surrounding communities that support 「Nuri Curriculum for Ages 3 to 5」 for children. Additionally, the interactions among children's ecological systems, especially focusing on the early childhood education and care institutions, are examined. By doing so, it is aimed to understand the current state of home-community connections and furthermore design future plans for improving partnerships via 「Nuri Curriculum for Ages 3 to 5」.

This study defined the concept of home-community partnership by analyzing the precedent studies and policies of relevance. Exemplary cases were collected via site-visits and interviews and were analyzed. The current state of home-community connection and the urgent needs were examined with the focus on the aspect of teaching and learning in 「Nuri Curriculum for Ages 3 to 5」. The content of a teachers' manual for 「Nuri Curriculum for Ages 3 to 5」 was scrutinized as well. Also a survey was conducted on 2,100 participants, who were either a principal, a teacher, or a parent from 700 kindergartens and child care centers.

Based on the results of the study, the roles of each system were delineated and suggested in categories. The active agents regarding the issue of home-community partnerships were differentiated as following: the "administrative systems" included the Ministry of Health and Welfare, the Ministry of Education and government agencies; the "support systems" were comprised of Early Childhood Education Agency and Child Care Support Centers. The "local systems" involved kindergartens,

child care centers, local institutions and children's home. In this study, different roles were suggested as follows: the administrative systems must initiate policy developments and institutionalize the related polices. As for the supporting systems, content/program development for creating effective home-community collaboration, providing relevant consultation services, and distributing successful example cases were suggested. At the local system level, kindergartens and child care centers need to collaborate, and also offer diverse activities and programs to create active connections to the community.

To create supportive connections among children's ecological systems, the institutionalization of relevant policies should be conducted first. Also, public awareness and motivation need to be encouraged. Opportunities for professional developments, sharing of guidelines and successful case studies are necessary as well.

In order to promote partnership between home and community (school), we suggest encouraging the daily face-to-face teacher-parent interactions, creating adjustment programs for new-coming children, offering opportunities for fathers and working parents, and providing families with programs that enable them to play active roles in their child's education. Also, diversifying means of communication between teachers and parents is suggested.

For strengthening the mutual relevance between school and community, we suggest establishing a nation-wide online-hub that provides information on local community resources, strengthening collaboration among urban-rural early childhood education and care institutions, ensuring the alignment between the early childhood education institutions and the local elementary schools, and offering consultation programs for utilizing the local community resources. Finally, creating a community network that involves both early childhood education and care institutions is suggested.

An Investigation of the current states of the operation and use of NURI curriculum for Ages 3 to 5 and its Effectiveness

Jinwha Lee Changhyun Park Jiveon Yun

This 2015 follow-up study on the operation and use of NURI curriculum is in line with previous studies conducted annually since 2012(Kim, Yu, & Um, 2012; Kwon et al., 2013; Lee, Lee, & Jo, 2014). The current study was conducted to compare and analyze the annual differences and changes in the use of NURI curriculum. Additionally, this study analyzed the impact of NURI curriculum policy by using previously proposed methodologies. Thus, the purpose of this study is to analyze the operation and use of NURI curriculum, the changes in the operation, and the effects of policy, and to provide necessary materials to set out the general directions for NURI curriculum.

To investigate the use of NURI curriculum, the survey was carried out with 1,000 parents each from kindergartens and childcare centers, 700 directors each from kindergartens or childcare centers, 1,000 teachers each from kindergartens and childcare centers, 100 local officials and 100 general officials from the Office of Education. In addition to exploring the perception of NURI curriculum's goal attainment in the early implementation stage, 12 goals were selected from the press release distributed from the early implementation stage of NURI curriculum to June, 2015. Then we analyzed the perception of goal attainment using NURI curriculum related articles from 5 different newspaper companies.

The result showed that kindergartens and childcare centers-using parents had good understanding of NURI curriculum from both curriculum aspects and administrative and financial aspects. Also they perceived that NURI curriculum generally attained all of 12 goals, and especially perceived that the qualitative differences of kindergartens and childcare centers had been alleviated and that economic burden had been reduced. However, for consistent policy performance, they believed that the operation of curriculum should involve all social classes while preferring sliding system of childcare benefits according to income level.

Directors and teachers of kindergartens and childcare centers mostly complied with guidelines for NURI curriculum, but for a better operation they wanted cases of applying NURI curriulum, examples of best practices and development of teaching materials. Also, directors and teachers perceived that NURI curriculum generally achieved 12 goals, but responded that there was a work burden from administrative and financial management tasks and a weak educational continuity between kindergarten and elementary school.

As a delivery system of NURI curriculum, the Office of Education and local officials responded that new NURI curriculum system related tasks were operated differently, and the completion rates of separate training for NURI curriculum or educational training in general were higher for the Office of Education officials than local officials. Even within delivery system response rates were high on the perception of achieving 12 goals of NURI curriculum.

Meanwhile, the effects of NURI curriculum or its performance that newspapers had mentioned were generally about administrative and financial investment. In the early operation of NURI curriculum, discussion of the ideological dimensions such as public education and childcare, total national liability on young children's education, equal opportunity, and equal start in early life can be found while these are the effects appeared after the operation of NURI curriculum. The consistent interests seemed to be sparked by the expanding use of young children's organizations, additional financial investment, and increase in the interest of young children's education resulting from free education of young children aged 0-5, but the newspapers hardly found the educational continuity between kindergarten and elementary school as one of the effects of NURI curriculum.

Based on such results, to effectively operate NURI curriculum that has been operated for the past 3 years, we proposed improvement plans from administrative and financial policy and curriculum aspects. From the administrative and financial aspects, these are what we proposed: first, specifically construct the organizational structure and workforce arrangement for NURI curriculum system; second, restructure financial support policy for young children to prepare financial resources; third, secure organization's publicity by balancing between self-inspection and administrative supervisory management; fourth, provide support for human resources by utilizing

government policy such as providing part-time job. Next, from the curriculum aspect, we proposed the followings: first, the necessity of verifying NURI curriculum's historical, social and philosophical background; second, the continuity between standard childcare curriculum and elementary curriculum; third, pilot tests to develop various NURI curriculum applied models; fourth, the development of systematic structure for NURI curriculum training.

Developing an Inventory for Measuring Character of ECEC Teachers and Strategies for Enhancing their Character Education

The purposes of this study are to understand the current status of character education systems for ECEC(Early Childhood Education and Care) teachers, to develop a measure of the teachers' character and personality as ECEC staffs, and to suggest how to enhance character education for the teachers. To achieve these research purposes, we employed the following methods: a) reviewing related literatures and pre-performed studies, b) discussing and interviewing with professionals in this field, c) surveying of professors in ECEC teacher education programs, d) developing an questionnaire and testing it with 1,600 teachers and 600 college students majoring in ECEC nationwide.

We performed the procedure for developing an psychological instrument including extracting major factors for the personality and characters of ECEC teachers, developing a draft for the questionnaire, confirming its reliability and validity, and producing the final version of the questionnaire: 「KICCE questionnaire for ECEC teachers' character」.

According to the results of 1,600 teacher test, the mean score in each factor domain of the measure was 3.25-4.04 by the 5 point scale. The teachers got the highest score from the domain of empathy and justice, but the lowest score from self-control and psychological health. This result implied there should be some supports for the teachers in terms of psychological well being, improving working environment, and stress control. We also emphasized the importance of character education for inservice teachers as well as college students and provided some ideas to enhance the education.

Estimation Study on children's (0-5 years) Education and Childcare Expenses II

Jinwha Lee Jin-A Park Ki-Won Park

The purposes of this study are to create basic statistical data by investigating young children's early childhood education and childcare expenses and to propose an improvement plan based on the survey results of young children's education and childcare expenses and on the opinion poll results on financial support policy. This study investigated young children's education and childcare expenses of 2,499 families from the total of 16 cities and provinces except Jeju island to estimate the cost per child and per family according to age group, and to analyze the determinants of education and childcare expenditures.

The education and childcare survey included the questions related to general characteristic of each family's children and provided detailed analysis across segments such as cost of education(kindergarten), cost of childcare, and parenting payment(including half-day programs). Specifically, costs of education were divided into cost of kindergarten, after school programs, specialized activities, and morning to night care. Costs of childcare were segmented into costs of childcare center, extracurricular activities, and time-extended childcare. The necessary expenses for half-day program were included when analysing the parenting payment(including half-day programs)recipients. In addition, we examined the costs spent on individual care, part-time institutions, home-school materials, culture center, and individual or group tutoring sessions.

The total expenses of education and childcare for young children aged 0-5 were estimated to be 3,875,600,000,000 won, and the determinants of expenditure were influenced by the size of the region, parent's working status, family income, and the number of children. Also the estimate cost using average monthly private education was expected to be 1,2192,000,000,000 won, and the estimated cost using annualized coefficient was expected to be 1,779,000,000,000 won. The determinants of private education were the types of government-support, age of young children and family income.

Other than expense surveys, parent opinion polls related to education and childcare showed that there was a high agreement on setting price ceilings on extracurricular

activities, and also showed relatively high levels of agreement that government financial support has contributed to reducing the cost of education and childcare. However, the increase in parenting payment did not increase with stay-at-home parenting intention.

Based on the survey result, we discussed the ways to alleviate the financial burden caused by young children's education and childcare expenses and to foster the efficiency of government's financial support policy. These are the followings: first, the necessity of supervisory organization's management after setting price ceilings on child education organization; second, the enhancement of the effectiveness of previously proposed policy such as childcare leave system and flexible work arrangements, and consistant development of child support policy tailored to each family; third, the necessity of introducing investigation system for the cost of young children's education and childcare at national level. Especially, policy studies are needed to look into the definition of 'private education'.

A Study on the Calculation of Childcare Expenses by Considering Regional Characteristics 2015

Mi-sun Yang Won-soon Park Dong-ha Lee

The purpose of this study is to review items that are additionally supported by cities and provinces as a special childcare policy other than the support provided by the central government and to estimate childcare required per child by setting up a calculation standard for childcare expenses by cities and provinces based on the above reviewed items.

Items supported as a special childcare policy project by cities and provinces, and counties and districts are as follows. First, most cities and provinces support the cost for improving the treatment and labor conditions for childcare teachers and staffs but the amount largely differed by cities and provinces which ranged from 20,000 KRW to 200,000 KRW per month. Other than this, cities and provinces provided the support on special allowances, transportation and meal allowances, overtime pay, holiday allowances, allowance for head teachers, other HR expenses for labor cost and etc. Second, Jeju was the only city that provided the support for expenses on textbooks and materials. Third, cities and provinces also provided the support on cooling/ heating expenses, expenses for the safety and insurance association, expenses on the safety insurance and spending on books as management and operating expenses.

Childcare expenses required per child by region was calculated by reflecting each city and province's budget for the special childcare policy based on childcare expenses required per child in nationwide childcare centers that accommodate average 77 persons. The amount by cities and provinces ranged between 957,200 to 1,031,300 KRW for 0 year-olds, 664,500 to 709,500 KRW for 1 year-olds, 520,000 to 558,000 KRW for 2 year-olds, 379,100 to 403,000 KRW for 3 year-olds, 333,200 to 355,100 KRW for 4 year-olds and above. Out of 17 cities and provinces, Sejong City's public expenditure on childcare per child by age was the highest. This is attributable to the fact that Sejong City provided more support on labor costs and meals and snack costs for childcare staffs compared to other regions.

Each city and province develops their own special policy project and accordingly supports child care centers by taking into account their financial condition or characteristics of their community, but supported items or the amount largely differed by regions. It is necessary to provide common support for items such as the cost for improving the treatment and labor conditions for childcare staffs or unify similar supporting items, develop guidelines to reduce differences in supporting amount by cities and provinces and adjust the childcare expense support per child to a similar level.

Estimating the Standard Cost of Kindergarten Education in 2015

Eum-young Choi Hyo-mi Choi Jeong-min Kim

This study has its purpose in calculating standard childhood education expenses by utilizing every possible statistics and data on expenses at the current point in the time of 2015. As methodology, the study analyzed related literature review, specialist meetings, survey research(among the directors of 151 public kindergartens and 110 private kindergartens).

Standard childhood education expenses was composed of 'standard labor cost', 'standard education activity expenses', and 'standard common operation expenses'; when standard childhood education expenses was calculated according to a standard kindergarten model, nationwide total standard childhood education expenses, adding up both public and private kindergartens', was 3,467,113,526,000 won. When standard childhood education expenses per one child was calculated based on the forementioned finding, standard childhood education expenses per one child was 5,557,000 won per year(463,000 won per month). It was annually 5,648,000 won per child(monthly 470,000 won) in case of public kindergarten and annually 5,524,000 won per child(monthly 460,000 won) in case of private kindergarten.

Based on the outcomes, this study proposed for early childhood education funding policy: the necessity for improvement in the method of the standard cost, the necessity for improvement in kindergarten's financial matters, and etc.

Individualized Child Care Support Plans (I)

Current Status of the Supporting Programs for Children with Special Needs and Plans for Further Improvements Mekyung Kwon Hyomi Choi Jieun Choi Keonhee Kim

This study was conducted as the first part of a five-year-long "Individualized Child Care Supporting Improvement Plans for Children of Vulnerable Class" project that aims to examine the current state of the vulnerable class and the challenges they face regarding child care supports. In a society dominated by non-disabled people, parents of children with disabilities and their parenting situations must be considered in planning and implementing any care-related policy.

In the field of early childhood education and care, there has been rapid changes such as the enforcement of Nuri Curriculum and many policy-related movements on the subject of care-education integration. In the time of significant changes, this study aims to explore and examine the present child care support at homes and education services for children with special needs. This study intends to provide an overarching support plan that includes family services and highly qualified education · care for children with disabilities. In order to do so, literature review was conducted on the registration status of children with special needs, their current education - care services, governmental supports, relevant laws and policies. Related research in the national and international field were analyzed as well. In this study, a survey was conducted on 1,500 participants who were either teacher, parent, or the head of 500 education · care institutions for children with special needs. To gain understandings of the services and parenting those children received, individual interviews or focus group interviews were completed on 45 participants among the total respondents. As outcomes, the ongoing support offered by varying institutions were examined and the needs were studied in-depth with exploring parenting issues and needs as well. Through the expert opinion survey, this study also organized important points for consideration in the implementation of education · care integration plan, and addressed the issue of primary school entrance (and delay) for the children with disabilities.

Major findings and suggestions are as following: as for institution-wide improvement plans, the enhancing of individualized support within the Nuri Curriculum for children with special needs is suggested. Secondly, special education schools should offer specialized services for disabled children, considering their unique needs. Additional suggestions include providing teachers' support systems with setting

up special education classes in private kindergartens. In child care centers and kindergartens where there are no early childhood special education teachers, provision of itinerant consultants for supporting general early childhood education teachers is recommended. Thirdly, creating a special education teacher pool at a local government level, and fourthly, the improvement of teachers' working conditions and the stabilizing the pool of permanent educators are proposed. Lastly, the standardization of support services and programs for children with special needs at Child Care Support Centers are also needed.

In the aspect of family support, we suggest establishing programs that support siblings of children with special needs, offering one-stop service network, promoting communication of information among families, and launching parent-to-parent programs through which more experienced parents can mentor novice parents.

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[Plans for Further Safe Childcare Education Environments*]

1. Improvement Measures and Current Safety Management Status of Kindergarten and Childcare Centers

Namhee Do Yunjin Lee A-ra Cho Eun Young Park

By receiving free universal childcare, young children get to stay longer in childcare centers and kindergarten. These places have become the center of daily lives of young children, directing affecting them. In this respect, this study is a research of the safety management and education of childcare centers and kindergarten. Although there are a variety of safety policies and manuals due to the field having different standards and a variety of information from different sources, there are many difficulties in managing safety regulation and education, engendering a need for in-depth examination.

Therefore, this study examines the current status of the safety of institutions based on the direction of policy on safety regulation made by childcare centers and kindergartens and, based on this, to provide policy measures to create a safe space for infants and toddlers and to improve a safe environment of daycare centers and kindergarten.

Literature review was conducted to review the laws and systems related to the analysis of the current conditions of safety accidents in kindergartens and daycare centers, collection of exceptional safety practices overseas, meetings and consultations of experts, and policy forums were held and performed. Furthermore, we conducted a survey focused on one thousand directors and parents from kindergarten and daycare center across the country.

The average number of indoor accidents was 1.09, and the place where accidents occurred most frequently was classroom/nursery room(67.6%), the most common type of accident was bruising(64.2%). Areas where outdoor accidents occurred most frequently were playground facilities(59.9%), while of those play facilities most accidents occurred on the slide(22.3%), all cases in which an outdoor attendant usually was not present. The primary causes of indoor and outdoor accidents were 'the self-nature of the child', and 'the carelessness of the child.'

Directors, regarding indoor safety, responded that the most difficult task was the protection and supervision of infants and toddlers(34.9%), they also felt difficulties in

^{*} This is the 1st year study of joint projects of National Research Council for Economics, Humanities and Social Sciences.

maintaining and managing facilities due to frequent legislation amendments(25.2%), lack of an exclusive workforce(16.3%), and lacking professional expertise(7.0%) in order. In regards to outdoor safety regulation as well, the protection and supervision of children(43.2%) was the most difficult task while managing play facilities and toys(20.3%), and child, instructor, and parent safety education(3.5%) followed next in order.

Institutions operating school transportation vehicles were 56.6%, more common than institutions not operating school transportation vehicles. Most commonly, The reason for operating school transportation vehicles was "the preference of parents," and the reason for not operating was "not enough demand." When considering the rate of accidents occurring near the institutions, it was estimated that the safety of the surrounding environments of institutions was somewhat secure, the recognition of the areas surrounding institutions was "dangerous" (very dangerous + dangerous) was high.

While the most necessary aids needed for the safety regulation of the institutions were requests regarding the additional funding for facilities (50%), the most needed aid for institution safety education was offering target-customized education (43.9%), and 31.7% stated that aid for experienced-based education was the most important.

Based on the results of this study, policy recommondations of this research are as follows: 1) unifying and maintaining important safety regulation standards between childcare support facilities and equipment, 2) the formation of a management system that shares adequate workload amongst professional organizations/communities for the purpose of continuous safety regulation, 3) the offering of regular education for children and staff for the human environment management must be established.

In addition, a unified evaluation system and legislation for the creation and maintenance of a safe environment must be established, and we propose a systematically operated "Safety Center" should be established and managed.

[Plans for Further Safe Childcare Education Environments]

2. A Study on the Construction of Space Environment for Improving Safety in Child Care Center and Kindergarten

Sang Ho Kim Eun Hee Kim Jeong Ha Im

Recent child safety-accidents occurring indoor and outdoor due to the errors in the stage of building design or construction have become more serious with the carelessness of the victims. In the absence of detailed safety-standard in the design phase for the child care center and kindergarten, safety accidents will occur routinely, and thus it is urgent to develop the counter measures.

In this regard, this study aimed to establish the guideline for early planning stage in order to build a safe space environment of child care center and kindergarten. To derive the guideline, first, this paper explored and compared domestic and foreign standards on the current legal system relating to those facilities. The domestic legal system largely consists of infant care law and education law, which regulate general safety requirements including location requirement, safety standards for each room, facilities for emergency disaster, indoor environment standard etc, but not rendering detailed regulations. On the other hand, 'Child Care Center Design Guide' from U.S. or 'Education Act' from U.K. prescribe detailed facility standards not only in aspects of areal function, building installations, space elements, but also in health and safety welfare aspects. In addition, the child care center and infant school in Japan are built and maintained through both children's welfare law and school education law, which contain design and inspection guidelines providing details for safe space environment.

Then, it analysed the status and cause of accidents occurring child care centers and kindergartens in Korea. According to the advanced research on current status of safety accidents in child care center and kindergarten, inside spaces, including infant room, classroom, playroom, and outside space such as playground were the dominant space where safety accidents happened. Moreover, it was revealed that injury by crashing and falling down because of the defects on installations and finishing material was the predominant type of accident.

On the basis of the analysis, the criteria for field survey was created, and ten child care centers and six kindergartens were selected and surveyed in order to figure out the current condition and problems in terms of space safety. Although each facility was established in different type and size, there were common problems from

building design of windows or stairs to space plan which could impact on hygienic management or efficient child care.

Lastly, the guideline for safe space construction of child care center and kindergarten was presented, considering current status of legal and operation system. The guide is composed of two chapter; general provisions and safety standard. The first chapter contains the aim, the subject of application, the definition of terms and reference laws. The next chapter provides safety requirements which should be complied in a facility planning stage. The safety standards available to apply commonly to both child care center and kindergarten are suggested on the preferential basis, and each special factors are presented additionally as separate guidelines.

[Plans for Further Safe Childcare Education Environments]

3. Policies for Securing the Safety of Transport Environment and School Buses

Changhwan Mo Takyoung Kim

In spite of the implementation of government's various policies, the recent increase of traffic accidents of school buses for young children has become a social issue on the safety of school buses and has raised the urgent necessity of additional measures of government to reduce traffic accidents of them.

It is necessary for government not only to provide safe school bus services for young children, but also to prepare urban design measures, such as creating a safe walking environment around a child care center, a kindergarten, and a private institute, for building a physical transport environment for safety. It is also necessary to recreate the traffic safety training and education program for young children, school bus drivers, operators of children education facilities since it is not systematically and effectively provided.

The purpose of this study is to recommend policies for creating safe transport environment and providing safe school bus services for young children. In addition, it aims to effectively change the system of traffic safety training and education system for young children, school bus drivers, and administrators of children education facilities.

To improve the traffic safety of young children, it has recommend government to implement measures, such as a new licence for school bus drivers, a joint use system of school buses, a new act for school bus management, which may reduce the limits of the school bus regulations enacted in 2014.

This study also recommends three measures, such as cracking down on illegal parking by using a CCTV for crime prevention within school zones, cracking down on speeding by using the CCTV and securing a safe walking route for young children within school zones, to improve the effectiveness of school zones.

It also suggests measures, such as making an amendment of construction decree by introducing a parking space standard of children education facilities for children who get on and off school buses and by securing walking routes inside and outside children education facilities, to improve the safety of transport environment.

Most importantly, it has proposed several measures to improve the effectiveness of training and education system for young children, school bus drivers, teachers, and administrators of the education facilities. In addition, it also recommends an extensive promotion to let the general public have intense attention to the safety of young children.

Panel Study on Korean Children(PSKC) 2015

Jeong Rim Lee Gilsuk Kim Shinyeong Song YeJin Yi Jinmi Kim Soa Kim Sinkyung Kim

Panel Study on Korean Children (PSKC) 2015 is conducted to investigate the trajectory of Korean children's life since birth; the research is a continuous follow-up study that builds up the data to realize and comprehend the process of children's development and their upbringing environments. It aims to provide implications for the childcare policy design by identifying the characteristics of childrearing environment systems like those of parent, family, institution and child support policy. PSKC 2015 targets 1,620 households participated in surveys conducted in 2014. The followings are the key research outcomes.

First, 90.4% of panel households were nuclear families consisted of parents and children with average income of 450,970,000 won; additionally, 95.9% of fathers and 45.8% of mothers were either employed or managing both career and study.

Second, children's cognitive and language development were at its normal level, attaining over 3 points out of 5. Receptive and Expressive Vocabulary Test (REVT) showed that 77.7% of children had normal development. Children's perception of happiness marked 3.57 points out of 4 and the level of interactive play in the peer interaction was 3.08 points out of 4 in average, demonstrating a good development overall. The total average score of problematic behavior was 20.07 points with internalized problem of 6.80 points and externalized problem of 5.70 points; thus, the level of internalized behavioral problem was somewhat higher than the one of external behavior problem. Meanwhile, the problematic behavior appeared to differ in relation to the birth order and family income.

Third, the domestic childcare environment appeared to be in a good state, however, mother's linguistic and emotional reactivity towards a child appeared to be at a low level in comparison to other domain levels. Compared to the last year's research, mother's self-esteem and parent's marital satisfaction levels decreased. Additionally, interaction among family members differed in relation to mother's academic background and family income.

Fourth, it appeared that the percentage of extracurricular activities carried out within institutions increased in relation to the age of the child. After 3 years old, over 2/3 of

childcare support organizations implemented extracurricular activities.

Fifth, according to the outcome of opinion polls among mothers on the direction of governmental childcare support policy, they believed expanding both childcare support service and work and childrearing balance to be crucial.

A number of policy implications can be drawn from the results.

- 1) Support for Korean children's healthy growth and development: a concern for children with internalized and externalized problematic behavior is needed as well as a governmental support for children from low-income family to prevent them from having problematic behaviors. Additionally, socio-emotional development program must be provided.
- 2) Provision of healthy childrearing environment for Korean children: it is essential for mothers to react more sensitively to their children's responses. Furthermore, on account of the fact that the interaction between family members differs in relation to mother's educational background and household income status, support and care for children growing up in a low-income family are needed.
- 3) Childcare support service and policy: for young infants, in order to be well nurtured by their parents, young infants to be well nurtured by their parents, maternity and childcare leave the systems ought to be vitalized and governmental interest and support for specialized programs within childcare support institutions are necessary.

Panel Study on Korean Children(PSKC) 2008-2014 In-Depth Data Analysis Research

The aim of this research is to revitalize related academic fields and to provide implications for developing policies by suggesting more in-depth research contents and methodologies, using the Panel Study on Korean Children (PSKC) longitudinal data. This report is composed of three independent subjects: child's growth and development, nurturing environment, and health.

The first study explored following issues: the effect of private education experience in childhood on five year old's behavioral problem, the influence of maternal rearing behaviors, parenting stress, frequency of cultural infrastructure usage on child's social skill, longitudinal relationships among mother's parenting stress, parenting behavior and child's behavioral problem, and the influence factors on child's school readiness. The second research topic on child's nurturing environment dealt with exploration of predicting variables on maternal depressive symptoms and their risks as a consequence of growth of their children and the changes in parenting values of Korean parents with infants focused on the comparison with European Values Study. The third subject of study explored the effects of parents' perinatal socioeconomic status on occurrence of children's allergic disease.

By emphasizing essential issues that must be considered at a national level, the research of PSKC attempted to contribute to the formulation and implementation of policies that support children's healthy and sound growth and development.

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Published 2016 in Korea KICCE ©2016 KICCE

Editorial Designed by Seunglim D&C (82-2-2271-2581)

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