



## Abstract

# Determinants for Satisfaction of Child Care and Neighborhood Facilities in the Capital Metropolitan Region, South Korea

In some cases, children's playgrounds are taken to children's playgrounds in nearby apartment complexes because they do not have a playground nearby, but the lack of childcare facilities such as playgrounds is occurring in residential areas other than new towns and residential areas, and there are not many researchers who listen carefully, and complaining about the shortage or problem of children's playgrounds in apartment complexes is a problem for childcare facilities.

The main content of the study is the literature study on childcare, convenience facilities linked to childcare, and factors related to satisfaction, the original use of the Quasi-Experimental test method, the sampling of population proportions in the Seoul-Incheon-Gyeonggi metropolitan area, mobile questionnaire surveys, pre-processing of survey and collected data, estimation and determinant analysis of satisfaction-related statistical models for childcare facilities, and suggestions on the creation of the post-birth child care facilities.

In this study, the first was to check whether there are differences in the types of housing such as apartments, villas and multi-family homes, and the second was to analyze whether there are spatial factors

related to outdoor activities as well as non-public factors, and thirdly, whether childcare families are affected by the proximity of libraries, cultural facilities, parks, sports facilities, hospitals, etc. linked to childcare or new facilities.

The determinants of child care satisfaction analyzed through this study were divided into spatial and non-public factors. Non-public factors are the level of teachers, learning methods and play support, indoor space, health cleanliness, meals, outdoor space expansion, and back and forth, and spatial factors have been identified as spatial factors such as cultural facilities, children's parks and playgrounds, children's personal safety facilities, parking lots and emergency bells, outdoor learning opportunities, and libraries, and the proximity to childcare facilities. In addition, there was a pattern of increasing dissatisfaction with cultural facilities and neighborhood parks located at a long distance, and it was interpreted as less opportunities for outdoor study or inconvenient transportation to the neighborhood park after Corona 19. They are willing to move even if the time to reach the children's park or playground is long, but if the time to reach the neighborhood park exceeds about 20 minutes, the willingness to move decreases.

The results of the analysis showed that the increased outdoor activities of children promoted child care satisfaction. Convenience facilities linked to childcare showed the effect of promoting outdoor activities, and the association was confirmed that the burden of childcare increased by COVID19 was reduced as the child care facilities approached. It was also inferred that the number of outdoor study sessions will increase as some childcare facilities get closer to the residential area, and the number of outdoor study sessions will increase as well as childcare facilities, the higher the number of outdoor study sessions will be.

In this study, it emphasized that childcare convenience facilities, which were overlooked in the survey of childcare conditions, are very important for outdoor activities of children, and the proposition that proximity to childcare facilities can be linked to activities that accumulate diverse capital such as culture and leisure that can strengthen the musculoskeletal structure of children and the potential for creativity suggests new policy directions for urban planning and snow crabs.

In response to the high childcare burden caused by COVID19, the distance of Euclidean to childcare facilities such as children's parks, playgrounds and neighborhood parks tended to increase. The closer we get to childcare-linked transportation facilities such as child protection zones and safety emergency bells, the higher the level of childcare satisfaction. In addition, due to the proximity to childcare facilities, the number of outdoor study sessions has increased since COVID19, and the satisfaction of childcare has been high.

Although concerns about children's health and safety are of interest under the circumstances of COVID19, many say that adequate places or childcare facilities are insufficient for outdoor activities, so the closer the children's park, the lower the child care satisfaction, and the lower the children's convenience facilities such as children's parks. In particular, in the context of COVID19 Pandemics, the more opportunities there are for outdoor learning, the higher the child care satisfaction.

The problem of quantitative inadequacies in the convenience facilities linked to childcare is serious, as seen in the research as a type of housing. There are both quantitative and qualitative problems of childcare facilities for apartment dwellers. For residents other than apartments, the primary problem with childcare facilities is the quantitative of childcare convenience. As it is common for apartment

residents to express their opinions through the association, it is true that various issues related to childcare facilities are raised, and the problem of raising the quality of childcare facilities along with the quantitative deficiency of convenience facilities linked to childcare is faced.

In general, it seems clear that there is widespread dissatisfaction with childcare among apartment residents, the absolute lack of childcare facilities, and the quality problems of childcare facilities. The primary problem for apartment dwellers is the lack of quantity of childcare facilities compared to the child population, and the problem is that convenience facilities linked to childcare are not easily accessible.

However, it is necessary to seek improvement in childcare satisfaction or improvement in childcare convenience facilities, focusing on the fact that villas and multi-generation residents expressed their intention that there is a relatively lack of child care facilities compared to apartment residents, as well as low quality satisfaction in childcare-linked amenities.

**Key Word**

Healthcare Facility, Secondary prediction to Satisfaction, Machine learning, Random Forest