아동친화도시 조성을 위한 공간개선방안 연구

Spatial Behavior Ressearch for Child-friendly Urban Design

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SUMMARY

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The purpose of this study is to develop a behavioral scenario of children attending elementary school in order to contribute to planning and designing a child – friendly city. To do this, we surveyed children about their route drawn on the map, the place visited, and the subjective evaluation of the path. The results of this study were to present the actual behavior of children in terms of time and space.

547 children belonging to 25 local children's centers were surveyed and 446 valid questionnaires were obtained. The children who were surveyed ranged from 1st to 6th grades. And children who lived in the area for more than 1 year and less than 3 years were the most frequent.

More than 50% of the children did not have a place to visit after school except for the local children's center, and 35.6% of the students visited only one place.

According to the results of the survey, children move an average of 510 meters on foot from home to school, and 677 meters on the way from school to the children's center, and 628 meters on the way from the child center to the home. The average distance is shown as a figure excluding the case of using a passenger car, a bus or a bicycle, but an average moving distance of 500 meters seen as a general walking limit as a whole. In the case of actual distance traveled, it can be seen that it takes place in the middle of another place, which is about 35% when moving to the child center and 23% when moving to the home appear.

The safety level is generally higher in the regular places such as home, school, and local child center, but the safety level is somewhat lower in the special places where the child selected to go. As for the attractiveness, it was found that the places that

were individually selected had the highest attractiveness, indicating that they were more interested in individual places than homes and schools. In a familiar regular place, such as a home, school, or community child center, the sense of safety is higher, while the attractiveness level is somewhat less, while it is not safe in some selected places, but rather attractive and interesting. A review of subjective ratings of attractiveness reveals that some of the places that are generally low but individually selected are particularly attractive and interesting, which means that there are certain unusual places that children prefer.

According to the subjective evaluation of the route, the safety of the route was evaluated to be safe when coming to and from the school and the local children's center, but it was evaluated that the safety was low when it was linked to other downtown areas. A review of the subjective ratings of the attractiveness of the path reveals that some of the ways to move to a somewhat low but individually selected location are particularly attractive and interesting, we believe that expectations are reflected at a significant level.

The average distance from the home or to the home was 536,03M and the standard deviation was 409,08M. The average distance from the school or to the school was calculated as 502,46M and the standard deviation was 357,24M. The average distance from home to school is 498,40M and the standard deviation is 298,88M. In general, the path lengths of children are shown to converge to 500M on the average. In the case of the standard deviation, the deviation is relatively small in the case of the school route and the deviation is the largest in the case of the route coming out from the house.

When we look at the distribution of the lengths of all the unit paths recorded by the children, the average is 513.22M and the standard deviation is 399.73M, which shows that the personal variation is considerably large. And we can see that it covers a wider area than the 500M of the pedestrian right that we usually assume. When we see the overall impact, we can conclude that we are collectively using a large area with a radius of 1,000M as a behavioral area, and this result can be regarded as a behavior area that is never smaller than that of the general public.

The results of the overall survey of children show that they are using more space than general assumptions and preferring to route selection rather than street evaluation. In addition, it was found that the average moving distance of one time reached 500M, which is equal to the walking distance and walking distance in general adults.

Therefore, in planning and designing urban space for children, it is not effective to limit the amount of walking for individual children to the right to walk or to the school. Rather, considering the planning and designing together with the general public, As shown in FIG.

In addition, it can be seen that when children are excluded from home and school, it is not common to visit more than two places, and the gap between the facilities that can be expected to visit after school and the accommodation capacity It is considered that planning and design should be done.

Keywords:

Child-friendly urban design, spatial behavior, walking route, walking distance, satisfaction level