

Students' Recognition and Awareness toward Their Surrounding Green Spaces in Japan

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Introduction

In highly populated urban areas, city planners propose sustainable landscape planning but sometimes ignore residents, eliminating their sense of place. Finding low-costs methods to seek public input are the key to solving this issue. Recent studies have examined the influence of nature images on landscape preference (Ribe 2002; Van den Berg & Koole 2006; Pratiwi et al. 2014). In one study, Japanese and Indonesian students exhibited distinct landscape preferences in a natural landscape image experiment that used 25 photographs of lakes, rivers, wetlands, and forest landscapes; meanwhile, their landscape exoticism was depicted in 48 photographs of various landscape types (Pratiwi et al. 2014). They also studied the components of forest landscape images using the Landscape Image Sketching Technique (LIST) method. Kim et al. (2017) reinforced that idea that the perceptions and preferences of residents towards urban green spaces in Ichikawa city differ depending on diverse types of land use patterns. Investigating the perceptions of diverse students of their surrounding green spaces facilitated an understanding of these perceptions, which influence differences in preference regarding green spaces and nature. The purpose of this research was to clarify the significant differences in perceiving green spaces, to identify the factors in perceiving green spaces and nature, and to identify the attributes that influence students' perceptions.

Study Methods

The research was conducted in three stages: questionnaire survey, analysis, and recommendation. The sampling method applied in this research was a non-random sampling technique (purposive sampling) using students who had studied the basics of Environmental Science, because educational history has a significant influence on environmental attitudes (Takayama 2013). The sample size in this study was 67 undergraduate students in the Faculty of Horticulture, Chiba University. Friedman test was applied to examine the significant difference of perception level towards green spaces, factor analysis was applied to identify factors in perceiving green spaces and nature, and a Chi-square test was applied to identify students' perception-influencing attributes.

Results and Considerations

The results showed a significant difference of perception levels towards green spaces in each variable. The highest perception level in each benefit, constraint, and interest of urban space respectively was "It makes a beautiful city," "I worried about conflict with the owner," and "I cherish nature in the city." There were three factors in perceiving benefits of green spaces, namely "green spaces with a social function," "green spaces with an ecological function," and "green spaces with an aesthetic function." There were only two factors in perceiving the constraints of green spaces: green spaces that pose physical problems for users and green spaces that are characterized by design and maintenance problems. There were three factors in perceiving interest in green spaces and nature: 1) deep green spaces and nature recognition and awareness; 2) moderate green spaces and nature recognition and awareness; and 3) low nature recognition and awareness. The attributes influencing their perception are "the availability of green spaces near their living areas," "sex," "occupation," and "length of stay."

With public participation, people are actively involved in urban green space planning and design processes; therefore, there will be a greater sense of public spirit, as well as improved social connections, user satisfaction, financial savings, and a better maintained environment. This conclusion could be useful as guidance for urban green space planning, for the purpose of creating livable cities.

Keywords: landscape perception, public participation, urban green space