

Understanding the healing function of urban forests in Germany and in Korea

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Status of forest recreation in Korea: Factors and conditions

After the post-war Industrial Development in Europe in the second half of the twentieth century, “Green” was used to refer to quality of life (Küster, 1999: 331), and since then forests and green areas have played an important role in Europe, ensuring the mental and physical health of its citizens.

In contrast, Korea has also experienced rapid industrial development after WWII; however, interest in the natural environment has only recently started increasing. The first recreational forest was designated in 1988, and has been followed by, to date, 145 such areas (Korea Forest Service, 2011: 374). Koreans work approximately 160% more than Germans (2,316 hours/year as opposed to 1,433 hours/year), and they have limited and rare experiences of nature and recreational activities (OECD, 2009: 272). To satisfy the general public’s high demand, these recreation programmes were planned and distributed nationally, rather than locally. While having certain time benefits, this has failed to highlight the individuality and uniqueness of different areas. Korea’s urban forest amounts to about 1,102 ha, accounting for 17% of the total forested area; moreover, 44% of urban land area is classified as urban forest, but the actual area that citizens can use is only 2.3% (7m²/person) of urban land area. These forests have poor accessibility, meaning the local citizens have fewer chances to experience nature.

Latest issue of forest recreation: Healing – raising issues

In Germany, forests’ healing properties are considered to be part of their many-faceted role in maintaining health, rather than being recognized as having a special medical function. However, in Korea, forest healing is recognized as an innovative concept, and studies on the effects of the forest from medical viewpoints – clinical pathological effects, including forests’ to depression, stress, hormones, skin diseases, and learning capabilities – are currently in progress.

This study aims to apply a comparative analysis of the contrasting awareness of the healing function of forest recreation patterns in urban forests in Korea and Germany.

Individual interviews: Materials and methods

In total, 16 urban forests in Berlin, Hannover, and Freiburg were selected to be surveyed in Germany, and 9 urban forests in Daegu, Daejeon, and Seoul were selected in Korea. A face-to-face survey method was used. A total of 458 interviewees – 154 in Germany and 304 in Korea – were selected. 23 research questions were developed in the following categories:

1. forest recreational behavior;
2. satisfaction with urban forests; and
3. the healing function of urban forests. The Likert five-point scale was used.

A survey of the awareness of the healing function of forests: Results and interpretation

Urban forest recreational behavior

In Germany, 57% of respondents who visited city forests answered that it took them 15 minutes to reach the forest, and 62% answered that they rode a bike or walked to the forest. Regarding accessibility, 65% of respondents indicated a high level of frequency of visits to forests.

In contrast, for 29% of respondents in Korea, it took 15 minutes to reach the urban forests. In particular, 13% answered “I need more than 1 hour,” and 50% answered that they drove to visit forests. Half of the visitors went to the forest less than 4 times a year, revealing a wide difference in the way urban dwellers in the two countries experience forests.

Regarding motives for the visit and which activities were undertaken, general recreation and “going out” accounted for two-thirds of visitors in Korea, but Germany showed diverse motives and activities, including, forest environmental education, sports and wildlife, walking with companion animals, learning, experiencing nature, meditation, and taking a break during office hours.

Nature experience and satisfaction

In Germany, only 18% of respondents answered that it was possible to experience nature in urban forests, and 47% answered they recognized urban forests as a created green space, not nature. In South Korea, 76% of respondents answered they were satisfied with their nature experience in urban forests, and 30% of them were “very” satisfied. As for the recreational function of urban forests, 86% of respondents in Germany and 73% in Korea were positive.

Although they were less satisfied with the recreational function and facilities of urban forests, Korean respondents were positive about the quality of their nature experience. Although they assessed the quality of nature experience in urban forests rather negatively, German respondents were, however, satisfied with their recreational function.

Awareness of the healing function of forests

Most visitors in Germany answered they were very confident of the healing function of forests (95%) and 92% of German visitors were positive about the physical healing effects of forests. 77% felt sure about the healing function

Table 1. A survey of the awareness of the healing function and nature based recreation in Korea and in Germany

Research Categories		S. Korea			Germany		
Character of Visitors	Visit Frequency	1~4	1 times/week 4 times/year	29% 48%	1~4	1 times/week 4 times/year	65% 12%
	Stay time	1~2 3~4	hours hours	50% 46%	1~2 3~4	hours hours	55% 26%
	Transportation	Walking Bicycle Public Automobile	transportation	19% 3% 28% 50%	Walking Bicycle Public Automobile	transportation	34% 28% 13% 25%
	Required time to reach	5 < < 1	15 min. 30 min. 1 hour	6% 23% 42% 13%	5 < < 1	15 min. 30 min. 1 hour	19% 38% 39% 4%
	Motivation, Activities	Relaxation, Family, Sport	Hiking children	64% 13% 8%	Relaxation, Hiking Sport Family, children	fresh air	28% 13% 10% 9%
	Visit type	Family Alone		50% 12%	Family Alone		53% 40%
	Sex	Female		53%	Female		50%
	Age	30~49		50%	20~39		52%
Evaluation of Urban Forests*	Recreational Activity	1.97			1.53		
	Recreational facilities	2.36			1.75		
	Management	2.24			1.54		
	Nature Experience	2.02			2.14		
Awareness of Healing function*	Healing function	1.72			1.14		
	Healing function of urban forest	2.51			1.94		
	Psychological healing	1.68			1.16		
	Physiological healing	1.90			1.33		

*These 2 categories were surveyed using a 5-point Likert scale, No. 1 indicates a very positive answer

of urban forests.

Although many Korean respondents were sure about the healing function of forests (81%) and their relation to physical healing (79%), only 56% of them agreed that urban forests also served a healing function, indicating a relatively low awareness.

Results: Interpretation

The findings from the Korean survey indicate a low awareness about the healing function of urban forests, despite their high awareness about 1) motivations for recreation; 2) demand for recreational facilities; and 3) forest healing in general. This low awareness is likely due to the insufficient nature experience of Koreans, because of their long working hours and the poor accessibility of urban forests.

In contrast, in Germany, with diversified recreational activities and motivations for forest recreation, the visitors experience superior accessibility, leading to high recognition

of the satisfaction to be achieved from forest recreation, and the healing function of forests.

The survey shows a close correlation between the healing function of forests and the satisfaction that is to be gained from forest recreation, so these two factors cannot be considered separately. Therefore, to improve satisfaction from forest recreation, a study enabling visitors to have more and more meaningful nature experiences, by improving the accessibility of forests, is required.