A study on building sustainable communities in high-rise and high-density apartments – Focused on living program

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ABSTRACT

The purpose of this study is to suggest a conceptual model for sustainable communities, considering sustainable development and placemaking perspectives of community building in Korean apartment complexes. This study then verifies the validity of the model as an action plan. Based on a review of literature at home and abroad, the model was conceptualized on the structure of living programs and physical and social settings for sustainable communities in Korean apartment complexes. The living program, which connects physical and social settings, consists of four action subjects: Activation of community spaces, activation of community programs, activation of participation, and activation of ecological living and design. This model demonstrates that a living program will increase resident satisfaction and result in a sustainable community. Three subjects out of the four suggested in the living program of the model were empirically tested based on previous research data. According to the correlation analysis between living programs and residential satisfaction, when residents are satisfied with community spaces, programs, and participation in the community, overall residential satisfaction rises. Accordingly, the living program of the conceptual model plays a meaningful role in developing sustainable communities in Korean apartment complexes.

1. Introduction

Sustainable development has been a paradigm in various fields, globally. In the residential environment field, worldwide experts adopted “The Habitat Agenda” of 1996 and outlined ten major issues of society, economy, and environment for sustainable residential development. Along with a global paradigm of sustainable development, sustainable community development has become a common goal and research topic in study of housing.[1–7]

Based on this global consensus, research on sustainable housing is being conducted in South Korea. While Korean studies have largely focused on economic and environmental aspects such as energy saving, resource allocation, planning of ecological environment, and pollution reduction, the social aspect of sustainability has not drawn enough attention in this research area. In South Korea, apartments represent urban housing in the course of rapid economic growth with industrialization and urbanization. However, “large-scale, high-rise, and high-density” uniform buildings have generated a series of social problems. Apartments have resulted in issues such as a disappearing sense of neighborhood or community and have sparked related research on how to revitalize communities in Korean housing culture. Previous studies have mainly examined the shared common space[8–13] and community programs[14–16] for healthy community activities. Other studies have emphasized the role of resident participation in activating communities[17–20].

In this situation, with ever-improving living standards and a growing awareness of healthy housing conditions, people increasingly began to demand healthy communities based on traditional residential culture[21]. The English Government (2003) defines a sustainable community in ‘Communities Plan (Sustainable Communities: Building for the future)’. Sustainable communities are defined as places where people want to live and work, now and in the future. They meet the diverse needs of existing and future residents, are sensitive to their environment, and contribute to a high quality of life. They are safe and inclusive, well planned, built and run and offer equality of opportunity and good services for all[1,2]. A sustainable community is a complementary combination of physical and social environments and is critical to socially sustainable development. Sustainable community is necessary in order to regenerate apartment communities in exceptional environments such as high-rise and high-density apartment complexes.

Therefore, the purpose of this study is to suggest a conceptual model of a sustainable community as an action plan for Korean