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## Measuring Social Dimension of Sustainable Development in New Zealand Cities

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Abstract: During recent years, sustainable development has increasingly influenced urban policy, housing and planning in cities all over the world. Debates about sustainability no longer consider it solely as an environmental concern, but also incorporate social and economic dimensions. However, while a social dimension of sustainability is extensively accepted, the exact definition of the concept is still vague and unclear. This study is addressing this lack of specificity through a detailed exploration of social sustainability as the least studied pillar of sustainable development and sheds light on the debate over the definition of social sustainability through developing a measurement model of the constitutive dimensions of the concept. With this aim, a conceptual framework is developed based on the existing literature, determining seven main dimensions of the social sustainability concept namely: social interaction, safety and security, social equity, social participation, neighborhood satisfaction, housing satisfaction and sense of place. The validity and reliability of the model is then tested using exploratory and confirmatory factor analysis. In order to do so, five case study neighborhoods from Dunedin city with a range of urban forms and characters are investigated, to define social sustainability concept and its consisting dimensions from people's perspective. The findings of this study present a clear definition of social sustainability at neighborhood scale and highlight all different dimensions of the concept in the context of New Zealand cities. According to the results, among the investigated dimensions, neighborhood satisfaction and safety and security had the most influence on people's feeling of social sustainability in their neighborhood.

Keywords: social sustainability, factor analysis, neighborhood level, New Zealand cities

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