

# **Spatial Clustering Patterns of Children in Single-Mother Households in Japan<sup>1</sup>**

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## **Abstract**

We examine spatial clustering patterns of children living in single-mother households in Japan, where poverty risk among these children is extremely high. Our analysis employs spatial panel data at the municipal level in 2000 and 2010. The Global and Local Moran's I statistics reveal significant spatial clustering of children in single-mother households. The spatial clusters of these children are located mostly in Hokkaido and western Japan. The spatial clustering patterns of children under the ages of 6 and 18 are similar, but the older children under age 18 are more spatially clustered. Moreover, from 2000 to 2010, the spatial clustering intensified for children under 18, whereas it weakened for children under 6. The results of spatial fixed-effects models indicate that the proportions of children in single-mother households are high in areas with low income, high out-migration rate, and low availability of childcare centers. The results of this study can help identify the areas that need policy attention.

Key words: children in single-mother households, spatial clustering patterns, spatial statistics, spatial panel data models, Japan

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