

Regional Employment, Childcare Context, and Reproductive Behavior using Multilevel Modeling

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This study examines how the regional employment environment and childcare context affect individual reproductive behavior using multilevel modeling. Individual level data is sourced from the 14th National Fertility Survey and is combined with regional level data for female (aged 20-39 years) employment rate, childcare coverage rate, potential accessibility of childcare rate, and public and private childcare facility ratio. I prepare two regional sizes: the regional block level and the prefecture level. I analyze the determinants of the timing of the second births.

The results of the multilevel analyses suggest that regional level female employment and potential accessibility of childcare rate are positively related to the timing of the second birth at the regional block level. In the prefecture level, regional level childcare coverage rate is positively related, but female employment does not appear. In all models, random effects (between regions) and low intra-correlation coefficients are detected. Therefore, such models must be estimated by considering variations among regions.