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Time Allocation and Life Satisfaction of Women in Japan

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# Time Allocation and Life Satisfaction of Women in Japan\*

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## Abstract

We explicitly modeled the relationship between time allocation and the life satisfaction of married working women and statistically analyzed it. We used two models: the time use model to investigate how women's time allocation to various activities in a day relates to their demographic and socioeconomic characteristics, and the life satisfaction model to investigate how women's life satisfaction relates to these characteristics. The covariance matrix of the combined model was then estimated by the Bayesian method using Markov chain Monte Carlo (MCMC) simulation. As the main estimation result, we found a negative correlation between housework time and life satisfaction. Additionally, the following results were obtained: effects on time allocation, such as the positive effects of women's income and educational background on commuting and working times, and those on life satisfaction, such as the positive effects of their educational background and spouse's income.

KEY WORDS: BAYESIAN STATISTICS, COMPOSITIONAL DATA, LIFE SATISFACTION, MARKOV CHAIN MONTE CARLO (MCMC), TIME ALLOCATION

JEL CLASSIFICATION: C11, C35, J22