Abstract

I look at cross-temporal changes in implementation of the "one-child" policy at the local community-level in nine Chinese provinces between 1989 and 2000 using longitudinal community data from the Chinese Health and Nutrition Survey and growth mixture model. The present research is based on the work by Short and Zhai (1998) that offered detailed descriptive account of the many aspects of the one-child policy at local level. I choose to focus on one particular aspect of the one-child policy: is second birth allowed if the first is a girl? Even though sibship sex composition was not part of the original one-child policy, it was added in many places soon after local policy makers realized that a policy that would force half of the families to lose their family names was unpopular and difficult to implement in a society with strong son preference such as China. In a sense, whether a second birth is allowed if the first is a girl has been and continues to be a result of comprise between practicality and ideal from the very beginning, thus is indicative of the policy change, revision, and implementation process in real world.

The combination of high quality longitudinal community-level data and dynamic statistical modeling technique makes it possible to systematically study the policy change *trajectory* instead of policy change indicator *per se* at specific time point. The first step is to estimate the trajectory of policy change. As described by Short and Zhai (1998), there does not seem to be a unanimous trend of tightening or loosening the policy. Instead, some communities seem to be tightening the one-child policy up while other communities seem to loosening the one-child policy gradually. The task becomes to identify subgroups with qualitatively different trajectories in policy changes while

estimating the trajectory within each subgroup. Recent development in growth mixture modeling methodology provides a good analytical tool for the job while taking into consideration of measurement error and missing data (Bauer and Curran 2004; Muthen 2001a; Muthen 2001b; Muthen 2004).

Preliminary result indicates four clear-cut subgroups with distinctive policy change trajectories: during 1989-2000, probability of allowing second birth remains largely constant in about 74% of all communities (low in 43% while high in 31%); the probability keeps increasing in 10% of all communities while keeps decreasing in 16% of all communities.

The second step is to explain results obtained from the previous step by relating subgroup membership and trajectory within each subgroup to other community-level factors, including economic composition, ethnic composition, urban/rural composition. I also assess the impact of the different local one-child policy on a wide array of individual-level outcomes such as fertility outcome, child health and well-being, and gender difference in child development.

Reference

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