臺灣鄉鎮市區因子對於青少女生育率的影響

The Effects of Township-level Characteristics on Teenage Birth Rates in Taiwan: A Longitudinal Study

中文摘要

本研究主要想探討的重點有三點：第一、想知道臺灣地區從 1980 年開始到 2005 年爲止，359 個鄉鎮市區因子和青少女生育率的變化情形；第二、這些區域因子是如何影響到青少女生育率；第三、各個鄉鎮市區因子與青少女生育率的五年及十年改變率之間的關係。研究資料來源主要有三個，分別爲臺閩地區人口統計、縣市要覽以及戶口及住宅普查資料。研究樣本爲臺灣地區 359 個鄉鎮市區，從 1980 年開始到 2005 年，每五年爲一個單位，從縣市統計要覽等政府出版資料取得鄉鎮市區層級因子的測量，共計 2154 個樣本。研究中會使用雙變項分析、重複測量的多變項分析以及時間遲滯模式（Time-lagged Model）。

重要結果如下：一、在同年模式中，區域因子較差的地區，其青少女生育率越高，分別爲人口密度低、每萬人口醫師數低、高等教育人口百分比低、65 歲以上人口百分比高、原住民人口百分比高的地區，青少女生育率是越高的。二、區域因子影響青少女生育率有出現時間遲滯的情形，也就是說，在控制了當年青少女生育率後，區域的人口密度、65 歲以上人口百分比、原住民人口百分比、高等教育人口百分比這四個變項，可穩定預測五年及十年後的青少女生育率；而區域的離婚率則是要經一段時間才能影響青少女生育率，以十年的效果最大；遷徙率只有在五年及十年時間遲滯模式中有達到顯著；而每萬人口醫師數只有在同年度有顯著，沒有時間遲滯效應。三、都市化程度越低，青少女生育率越高。四、都市化程度爲修飾因子，不同都市化程度地區中，影響青少女生育率的因子不同。五、青少女生育率與 20-24 歲年齡別生育率相比，在離婚率部分有差異；在同年模式中，當區域離婚率增加，20-24 歲生育率降低，青少女生育率則無顯著；而在五年及十年時間遲滯模式中，區域的離婚率可預測五年及十年後的青少女生育率，20-24 歲生育率則無顯著。六、在生育率增加地區與生育率減少地區中，影響其改變率程度的因子是不同的。

討論及建議：從結果可以看出，影響到青少女生育率的因子，以社會結構層面的因子較爲明顯。未來政策制訂者應該要看每個影響因子背後所帶有的意義，除此之外，城鄉差異是解釋青少女生育率差異的重要因子，所以政策制訂者應該是要努力去達到地區發展機會的公平性，應要顧及居民的需求、偏好及負擔能力。

英文摘要

This study has two main purposes. First, this study explored the cross-sectional and longitudinal relationships between township-level factors and teenage birth rates from 1980 to 2005 in Taiwan. Second, the study examined the relationships between township-level factors and the 5- and the 10-year change rates of teenage births. The data came from Taiwan Demography, the City and County Statistics, and Census. The study used a pooled ecological study design with repeated measures of township-level characteristics every 5 years from 1980 to 2005 (N=2154). This study calculated spearman correlation coefficients and used multivariate analyses with repeated measurements, and used time-lagged models to analyze the data.

The findings of this study are as follows:

1.In the cross-sectional models, the townships with lower population density, a lower percentage of physicians, a lower level of college education, a higher percentage of elderly, and a higher percentage of aborigines were associated with higher teenage birth rates.

2.In the time-lagged models, after controlling current teenage birth rates, a lower population density, a lower level of college education, a higher elderly concentration, a higher percentage of aborigines predicted 5-year teenage birth rates. The same results were also found in the 10-year time-lagged models. The rates of divorced and residential mobility were significantly associated with teen birth rates in the 5-year and 10-year time-lagged models, but not in the cross-sectional models. The percentage of physicians was only significant in the cross-sectional models.

3.The townships with a lower level of urbanization had higher teenage birth rates than those with a higher level of urbanization. In addition, urbanization also served as a modifier in the relationships between township-level characteristics and teenage birth rates.

4.With regards to the change rates of teen births, in the townships where teenage birth rates were increasing within 5- and 10-year time spans, the predictive characteristics were different from the townships where teenage birth rates were decreasing within 5- and 10-year time spans.

These findings suggest that social structural characteristics have more significant effects on teenage birth rates than other characteristics. The policy makers should understand that socioeconomic characteristics of a place and rural-urban difference can be influential factors of teenage birth rates. The future policy should focus on improving regional equity and fulfilling regional needs.