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以國中基本學力測驗成績探討班級規模效應

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摘要

班級規模對教學歷程和學習成果的影響向來在教育政策和教學研究文獻中備受矚目，但臺灣目前探討班級大小和學生學習成就之關係的實徵研究十分有限。本文之研究目的有三：一、探究臺灣地區國民中學階段班級規模與學生學習成就的關聯；二、探討如果班級規模效應存在，學校的屬性（公私立）會不會影響此種效應的大小；三、探討如果班級規模效應存在，學校的所屬城鄉的都市化程度會不會影響此種效應的大小？本研究以參加 2005 年國中基本學力測驗的 273,418 名應屆畢業國三學生為對象，透過線性階層模式（Hierarchical Linear Modeling, HLM）探討班級大小、學校屬性、學校所在地都市化程度等主要變項對於學生國中基測成績的影響。研究結果發現，臺灣地區的國中，班級規模愈大，成績顯著愈高，且此種現象在公立國中比私立國中明顯，此種現象在低都市化所在地的學校較中都市化和高都市化所在學校更為明顯。這些發現與歐美各國所發現的小班效應有明顯不同，本研究提出「成就排比模型」（achievement-sorting model）來解釋相關發現。

關鍵字：城鄉差異、班級規模、國中基本學力測驗

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Investigating the Class Size Effect in Junior High Schools through Students' Basic Competence Test Scores

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Abstract

Effects of class size on teaching progress and learning performance has been one of the most important research topics in the domains of educational policies and instructional research. However, in Taiwan, only limited numbers of empirical studies were conducted to investigate the relationship between class size and learning achievement. There are three objectives of this study. The first one is to investigate the effects of junior high school class size on students learning achievement in Taiwan. Secondly, if class size might influence students learning, this study aims to seek whether or not school characteristics (public or private) will intervene the effects. Finally, if class size might influence students learning, this research would also like to examine whether or not the degree of urbanization of schools will intervene the effects. The subjects of this study were 273,418 junior high schools graduates who participated in the Basic Competence Test in 2005. The Hierarchical Linear Modeling (HLM) was adopted to investigate the effects of class sizes, school characteristics, and school urbanization degree on students Basic Competence Test scores. The results show that

students in large classes had significantly higher scores than those in small classes. This phenomenon is more evident when the students study in public schools. Furthermore, the phenomenon is also more evident when schools are located in low urbanized districts. These findings differ from the results of previous studies conducted in western countries. Not only the findings can complement the references of related research fields, it will also provide an alternative thinking for scholars and policy makers to design curriculum for different class sizes.

Keywords: urbanization, class size effect, Basic Competence Test

