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臺灣兒童於 1997 至 2007 年智能進步狀況 分析：弗林效應之探討

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摘要

本研究目的在探討臺灣兒童於近 10 年間智能進步狀況。根據 121 位 6 至 16 歲兒童在魏氏兒童智力量表第三與第四版本的表現，經對抗平衡法研究設計後發現，全量表智商之組平均相差 1.23 分。然而，由於此二版本在全量表智商之組成上只有五個共同分測驗，故研究者進一步分析此組兒童在組成魏氏兒童智力量表第三版全量表智商十個分測驗於 1997 至 2007 年之可能進步情況。結果發現，當將測驗內容控制為一致之情況下，臺灣兒童全量表智商間隔 10.5 年共進步 2.50 分，平均 1 年進步 0.24 智商分數。此結果比弗林效應假設每年進步 0.3 分略低，但與近年北歐已開發國家智力進步有減緩趨勢之發現相符合。此外，臺灣兒童近 10 年來在視覺符號快速比對搜尋以及非語文流體推理能力進步相對最多，但 10-16 歲青少年對社會知識規範之理解幾乎無進步，且 6-12 歲兒童在一般常識廣度的表現更是不進反退，此一現象值得重視與討論。

關鍵字：弗林效應、智力變化、魏氏兒童智力量表第三版、魏氏兒童智力量表第四版

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Increased IQ for Taiwanese Children from 1997 to 2007: Flynn Effect Investigated

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Abstract

The purpose of this study was to investigate the increase in IQ for Taiwanese children over the past 10 years. WISC-III and WISC-IV scores were collected following a counter-balanced design, based on a sample of 121 children aged 6 to 16 years old. The comparison between the WISC-IV and the WISC-III showed a mean difference of 1.23 FSIQ points. However, only five subtests were shared between WISC-III and WISC-IV full IQs. To partial out possible variations due to content differences, we estimated the increase in IQ based on the 10 core subtests of the WISC-III. Increased IQs over the intervening 10.5 years were 2.5 points, yielding an estimated growth of 0.24 IQ points per year. While America and other developing countries were still reporting an increased rate of 0.30 IQ points per year, increased IQ for Taiwanese children seemed slower than what the Flynn effect would have indicated. Current findings have matched recent reports from Scandinavian nations that the increase in IQ is slowing. Finally, Taiwanese children showed, comparatively, the largest gain on visual symbol search and nonverbal fluid reasoning abilities. However, Taiwanese children aged 10 to 16 showed no improvement in social and ethical reasoning, and those aged 6-12 showed a salient decline in the breadth of basic information. Possible hypotheses were discussed.

Keywords: Flynn effect, IQ change, WISC-III, WISC-IV