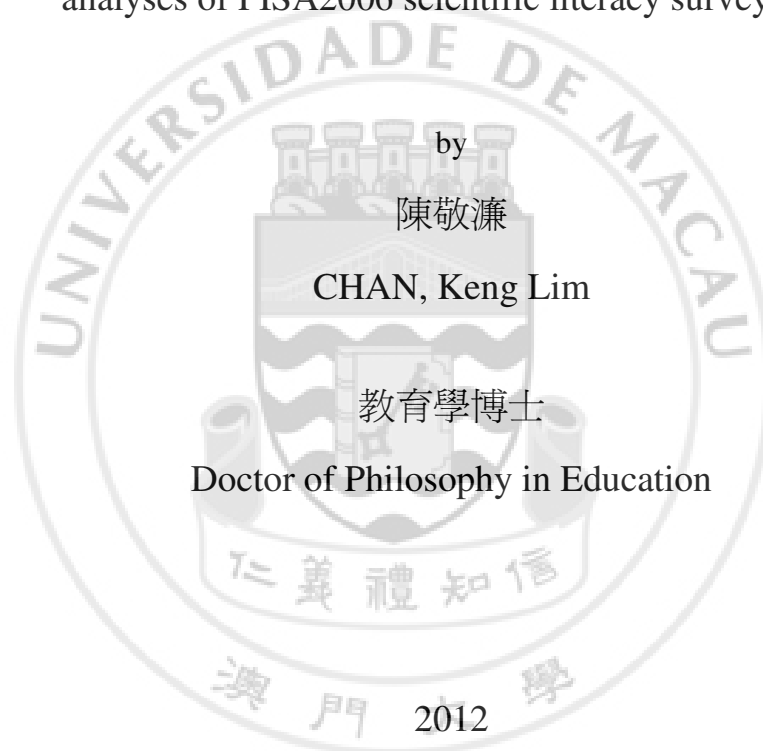


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A study of educational equity of Macao basic education through
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陳敬濂

CHAN, Keng Lim

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教育學院

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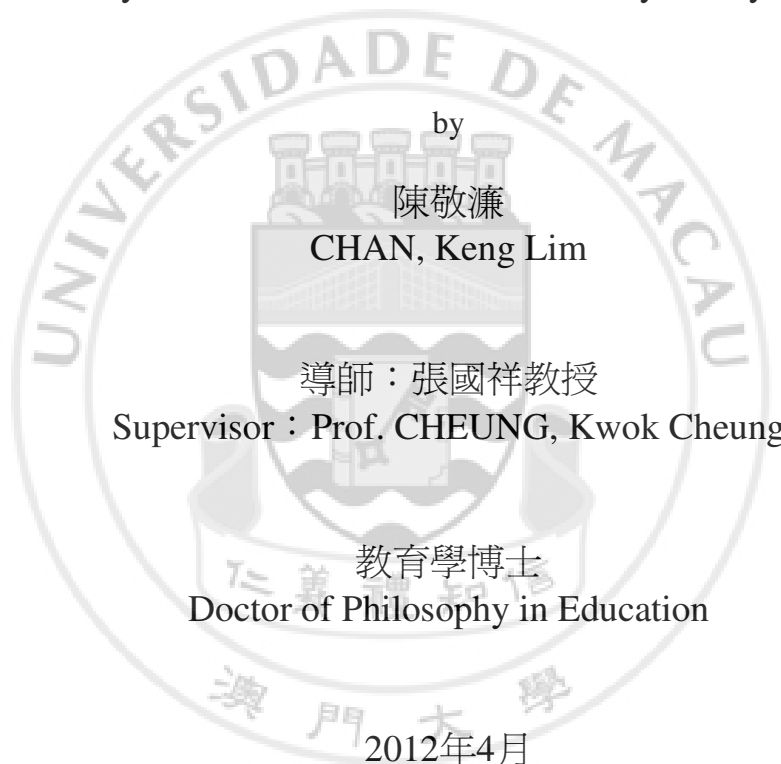
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陳敬濂

CHAN, Keng Lim

導師：張國祥教授

Supervisor : Prof. CHEUNG, Kwok Cheung

教育學博士

Doctor of Philosophy in Education

2012年4月

April 2012

教育學院

Faculty of Education

澳門大學

University of Macau

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CHAN, Keng Lim



Acknowledgment

First of all, I would like to thank God, for providing me the chance to study the PhD programme, which I have never thought of, and giving me strength and sending me angels to help me throughout these years.

To have this research successfully completed, I must give a big thank to Professor Cheung Kwok Cheung, who has been giving me continuous guidance and assistance throughout these years especially when I faced difficulties and frustration. Without Prof. Cheung, I would not have been able to work on the right track and get my research done.

Moreover, I would like to thank Prof. Cheng Chun Wai and Dr. Sit Pou Seong for their guidance and inspiration during the research period, helping me to build up a solid academic foundation. In addition, I would also like to thank all the colleagues from the Macau-PISA Centre for providing me assistance and suggestions.

Last, but not least, I am very grateful to my parents who have been raising me up with unconditional love, and especially to my wife, Cindy, who has been giving me full support in taking care of our home and our baby son, Yanis, so that I can concentrate on my research.

摘要

PISA2006 國際報告顯示，澳門屬於教育公平的地區。然而，研究者從學校資源環境、學校家長選校考慮和學校收生政策三類因素，對澳門基礎教育的教育公平存疑。

研究者採用 PISA2006 科學素養調查學生、家長和學校數據，探索澳門基礎教育可能存在的教育不公平現象。首先應用階層線性模型(HLM)中介變項對以上三類可能影響澳門基礎教育公平的學校階層因素進行中介變項分析，以檢驗這三類因素能否中介學校 ESCS 對學校科學素養表現的影響；然後，透過結構方程模式(SEM)分析學生階層因素中的家庭及電腦教育資源對學生科學素養表現的影響。

研究發現有三：學校之間的科學素養表現存在差異；學校階層證實有兩項與學校家長選校考慮的完全中介變項；證明家庭及電腦教育資源透過科學和資訊通訊科技(ICT)自我效能感對學生科學素養產生影響。研究結果後有政策建議，進一步完善澳門基礎教育的教育公平。

關鍵詞：教育公平、社經文化地位、科學素養、學生能力國際評估計劃(PISA)

Abstract

In the PISA2006 International Report, Macao is considered one of the most equitable educational systems amongst the 57 participating economies. From the perspectives of: (1) school resources and environment, (2) parental school choice, and (3) school admission policies, the researcher of the present study has grave doubt about this finding.

Using student, school and parent data in PISA2006 Scientific Literacy Study, the present study seeks to uncover that there is inequity in Macao's basic education system. At the school level, through the use of Hierarchical Linear Modeling (HLM), variables pertaining to school resources and environment, parental school choice, and school admission policies are used to examine whether the variables mediate the effect of school ESCS on scientific literacy performance. At the student level, through employing Structural Equation Modeling (SEM), variables pertaining to family and computer education resources are used to examine how the resource variables affect scientific literacy performance.

There are altogether three key findings. First, there are substantial differences in scientific literacy performance amongst schools. Second, two variables pertaining to parental school choice are confirmed to mediate totally the effect of school ESCS on scientific literacy performance. Third, family and computer education resources are

found to affect scientific literacy performance via scientific efficacy and ICT (information and communication technology) efficacy of the students. The thesis ends by formulating policies that tie in well with the Macao schooling contexts for the betterment of equity in Macao's basic education system.

Keywords: educational equity, ESCS, scientific literacy, PISA



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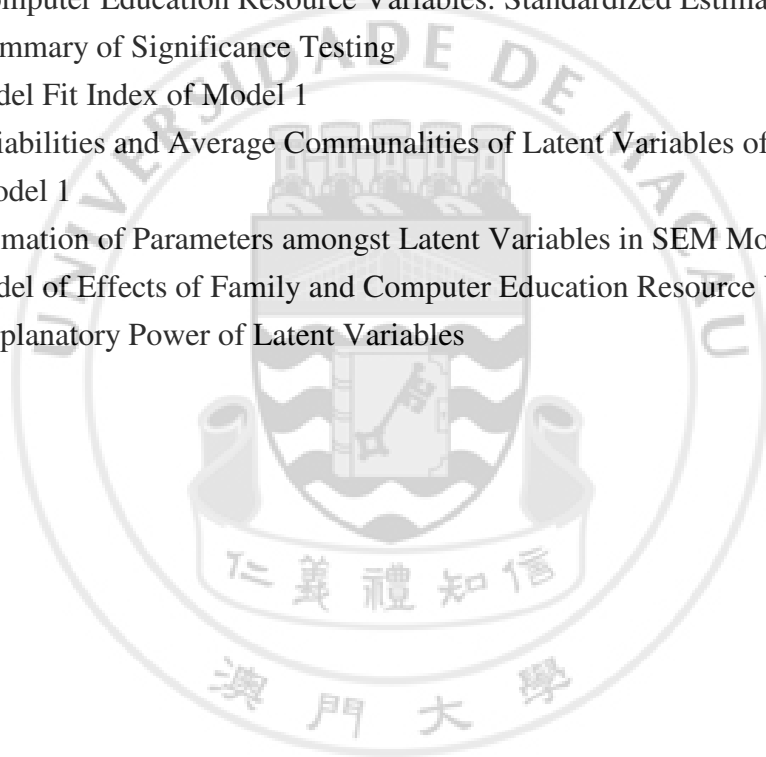
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