封面畫作介紹：
作者：蔡錫和
素材：水彩
尺寸：16 開
題目：心靈故鄉
創作理念：藝術其實是治療人生無常的美好良方，我在畫中呈現同中有異的視覺變化效果，增添觀賞者的欣賞樂趣與想像空間，也呈現寫意繪畫多元豐富的面貌及新感受……，電線桿代表光明、希望、溫暖，現在、過去、未來……永無止境

Editorial Assistant:

Introduction to the cover painting:
Author: Cai, Xi-He
Material: watercolor
Size: A4
Title: Spiritual Hometown
Creative philosophy: Art is a beautiful remedy for the impermanence of life. In the painting, I present the effect of similar but different visual changes, increasing the viewer's enjoyment and imagination. It also presents the diverse, rich appearance and new feelings of freehand painting. The utility poles represent brightness, hope, warmth, present, past, future... endless

16-2 目錄 （*Content*）

儒家倫理與華人教育觀：含攝易經智慧的自性修養之現代化開展

夏允中* 王智弘 嚴嘉琪

摘要

　　本期的專刊共有五篇文章，主要是針對符碧真（2025a）儒家倫理與華人教育觀：哲學反思、理論建構與實徵研究所提出的論文，進行三篇打靶論文，最後符碧真（2025b）進行回應，整個主軸圍繞在如何用西方的「形構之理」，說清楚儒家智慧的「存在之理」。符教授長期從事「華人教育觀」研究，多年學習黃光國教授所提出的多重哲學典範的知識論策略來進行研究工作，深刻了解泛文化研究與文化系統研究的差別，從泛文化研究「知其然，但不知其所以然」，走向含攝文化系統研究「知其然，且知其所以然」。從儒家倫理建構「修養的角色義務理論」，指出個人應不斷自我修養，善盡五倫對偶關係中的角色義務，以滿足重要他人的期待。社會大眾以個人努力盡其角色義務的程度，做為評斷其道德修養的標準。角色義務蘊含道德修養境界的提升，又與社會期許的縱向成就目標相連，故努力追求與達成成就目標即是「倫理」與「道德」的顯現。第二篇提出符教授為採用反思性主位取向研究法，有存在「文化膠囊」的偏見，這指謂的是它僅持單一文化觀點而對其他社會文化現象及知識的忽視所建構的理念，容易導致習慣以刻版化的印象來取代真實世界。文中建議反身性客位取向研究法來構建本土理論，較可能幫助研究者達到同時兼顧文化和社會內個體間差異以及跨文化間差異現象的雙重目標。第三篇相當認同符教授闡述的研究取向和基本觀點。但接著文中提出重要的提問，不同文明的文化系統與價值觀常彼此交流衝擊，未來不同的文化系統是否可能逐漸融合？或繼續維持差異？未來是否可能朝向某種特定價值觀發展？或是融合成為整合式文化系統？第四篇更提出「含攝文化理論」之文化如何決定？近似真理的有效性及理論解釋力如何判定？最後一篇由符教授來回覆上述三篇的提問，也提出如若能採取「文化異質化」與「文化雜揉化」，建構出同時適用於全人類文化社會共用的理論，也能說明文化間差異的現象。本文接著建議還要釐清「文化形態學」與「文化衍生學」的研究，「文化形態」是「由曾經存在之知識菁英等的全集所構成的」，它可以讓我們看到「社會－文化的交互作用」也就是「文化衍生」，所以，「文化型態學」的研究應當先於「文化衍生學」。這道理其實也十分簡單：例如易經是儒與道的道德形上學基礎，因此如果我們對易經的「文化型態」沒有全盤的理解，我們如何可能知道「它」在某一特定時空中的「演

變歷程」？因此接續介紹易經及其衍生的儒家與老子智慧的的「文化型態」內容。最後期待本期「儒」文與三位評論者之間的對話，能創造良性的學術對話，激盪出新的迴響，進一步開展含攝易經智慧的自性修養之社會科學研究。

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本期的專刊共有五篇文章，主要是針對符碧真（2025a）儒家倫理與華人教育觀：哲學反思、理論建構與實徵研究所提出的論文，進行三篇打靶論文，最後符碧真（2025b）進行回應，整個主軸圍繞在如何用西方的「形構之理」，說清楚儒家智慧的「存在之理」。本文也建議釐清「文化形態學」與「文化衍生學」的研究，「文化系統」是「由曾經存在之知識菁英等的全集所構成的」，它可以讓我們看到「社會－文化的交互作用」也就是「文化衍生」；最後因易經是儒與道的道德形上學基礎，因此接著介紹易經及其衍生的儒家與老子智慧的「文化型態」內容，可以開展含攝儒與道智慧的自性修養之社會科學開展。

壹、如何用西方的「形構之理」，說清楚儒家智慧的「存在之理」

一、儒家倫理與華人教育觀系列研究：採用黃光國教授所提出的多重哲學典範

已故黃光國教授（文後簡稱黃氏）常在公開場合說符碧真教授最認真跟他學習科學哲學，上過超過十次課程，主要講授多重哲學典範的知識論策略來進行研究工作。符碧真（2025a）所提出儒家倫理與華人教育觀：哲學反思、理論建構與實徵研究一文中，說明她採取後實證主義（post positivism）觀點，研究者猜測背後本體，只能「近似真理」，因此沒有「絕對真理」，採取 top-down 的方法，不斷提出問題，用理性思考進行猜測，根據理論推論假設，進而收集資料驗證假設，科學研究像是探照燈。反觀 bottom-up 的方法，以為收集到足夠水（資料），理論會如水桶中的水自然溢出。她的研究團隊採取 top-down 的演繹法，根據上述理論架構，推論假設，再收集資料，驗證假設的妥適性。然而，要將儒家社會學的學習解釋給國際學術界了解，頗為不易，而華人教育觀系列的研究者致力於此方向，自 2014 年起陸續獲得國際期刊刊登相關研究。值得注意的是，她認為她們提出的研究結果只是近似真理，因此也歡迎其他學者提出不同的理論架構來彼此競爭，看看誰的解釋力大。

符教授團隊是採取「文化系統觀」研究取向，亦即深究最早將此文化系統提出來的人，理解其整套觀點和想法。例如儒家的文化系統，就要回到孔子存在的年代，思考當年他是怎麼對社會闡述其理念的。後來的人對這個文化系統所作的解釋，是在某一個特殊的社會文化條件之下，對原來的文化系統解釋。符教授團隊不是採取泛文化向度研究取向，以西方主流心理學理論為核心，而後發展工具，測量跨越許多文化群體而在量度上有相等的心理構念。

符教授團隊儒家倫理與華人教育觀現代化是承襲黃氏在過去三十多年所發展科學進路：文化系統觀的多重哲學典範（Hwang, 2019），是要將華人文化傳統建構成西方學術標準的客觀知識，用來建構華人自主的社會科學。我們認為此模式已是非常成熟、具

體且可運行的。所謂科學進路的「文化系統」的研究取向，包含了「多重哲學典範」（Hwang, 2019）：建構實在論、結構主義和批判實在論。其中建構實在論區分「科學微世界」和「生活世界」；心理學的「結構主義」討論「人」獲得「知識」的途徑；批判實在論則在討論如何建構「含攝文化之理論」。最重要的是，如要分析文化的知識論策略，應以「人」或「結構主義」做為中心。

符教授團隊建構的理論與相關研究有兩大優點：第一是能夠說明中華文化和西方文化這兩大系統的根本差異。第二是可避免產生片面式或單看某幾個變項式的研究。進行的策略，是符教授團隊先完整的分析文化系統的原貌，然後以此為依據來引導，進行文化如何影響個體的研究。

二、葉光輝教授提出兩個重要的建議性批評與解方

葉光輝教授是非常傑出的研究者，他已經提出三項原創理論－「孝道雙元」、「雙元自主性」及「親子衝突歷程」模型，對本土心理學有極為重大貢獻。因此他建議：當建構研究概念或理論時，若能夠先將其所要應用的情境脈絡因素考慮進去，將會大大縮減理論觀點與實務應用之間的鴻溝或落差（葉光輝，2025）。

此篇打靶論文中，他提出兩個重要的建議性批評，第一是符教授採用反思性主位取向研究法會被批評其存在「文化膠囊」的偏見，這指的是它僅持單一文化觀點而對其他社會文化現象及知識的忽視所建構的理念，容易導致習慣以刻版化的印象來取代真實世界。文中建議，以反身性客位取向研究法來構建本土理論，較可能幫助研究者達到同時兼顧文化和社會內個體間差異以及跨文化間差異現象的雙重目標。

第二是採用文化系統取向來建構本土心理學理論較易陷入二元對立的思維窠臼，例如會慣用以東、西方文化系統對立、發現與發明理論建構訴求對立、權利本位與義務本位兩者對立、縱向成就與非縱向成就目標二元對立等，來思考所探討的研究問題以及解讀所觀察到的現象。不過目前的學術研究都是要先定義，一旦定義就容易產生出二元對立（如定義性別，產生出男女），有定義才能進行操作與測量。

葉教授提出二元空性作為二元對立的解方，指的是世間事物的存有並不受到對錯、好壞、優劣、東西方等二元對立屬性的約束。如果一個事物反映出這些二元對立的評價，其實只是映射出評價者或研究者的視角和框架立場，而接收者或互動者是可以擁有自己不同或獨特的視角和評價立場。他認為二元對立的評價或分類基本上是「無常的」、「非恆定的」。因此，二元對立的評價或分類結果並不是客觀存在的事實，而是受當事人主觀因素影響的相對性評價或分類結果。

葉教授所提的空性，應是對佛法空性的借用，《六祖壇經》說「世人妙性本空，無有一法可得；自性真空，亦復如是」，此空性若為佛教所說自性真空之自性，即是指金

剛心如來藏、第八識阿賴耶識的真如體性；其性本空，其體真實而如如不動。自性本空，是一種「不依賴任何事物的本質」，佛法所說的空性本我，並不是一般我們所說以五蘊所代表的世間法的自我，而是指「自性」或是「真我」，是外於世間一切法、不依賴任何事物而獨立常存的一種本質。簡單來說，「自性」就是「不依他而有」，而「緣起」所生的世間事物就是「依他而有」（觀待對比），依於有真實而如如的法界實相如來藏所以才有諸世間事物等法相的「緣起」。

雖然在一般人的直觀上，「自我」當然是存在的，但那其實是透過「觀待對比」而存在；但依佛教的觀點，五蘊身心皆是緣生之法，無有自性，終歸壞滅，故云緣生性空；而要生起諸法，背後則須依於能令一切萬法藉緣出生、具緣起作用的實相法如來藏，因實相法如來藏含藏一切法的種子，故說世間一切法其自性皆歸於如來藏本妙真如性。因此「五蘊我」的「自性」是不存在的，因為「五蘊我」的出生、存在、運作，本身必須要透過「依他而有」，即如《解深密經》所言：「云何諸法依他起相？為一切法緣生自性」〈一切法相品〉「此由依他緣力故有，非自然有」〈無自性相品〉。意即「五蘊我」是藉因緣而生，是在五蘊：色、受、想、行、識運作下所顯示，「五蘊我」內容包羅萬象可以在比對諸多心理的關係中理解存在，卻是無常斷滅而無自性。葉教授認為二元對立的評價或分類基本上亦是「無常的」、「非恆定的」，是依於意識形態而會變動生滅的之「空相」，類似《心經》所說：「照見五蘊皆空」，五蘊有斷滅的「空相」而沒有「本空的自性」，這是佛法中所說的世俗諦。但是「自性本空」是勝義諦，是指絕對真實如如的第八識真如心體性，是指真我的「空性」。

而研究者若能修習佛法正義，體證真實本心「空性」的第八識如來藏－阿賴耶識，則能勝解具「空相」的「五蘊我」其實是從具「空性」的「金剛心如來藏」「真我」之所出生，並在此基礎上進一步勝解《心經》所說「色不異空，空不異色；色即是空，空即是色。受想行識，亦復如是。」而知五蘊「妄心的法相是無常的，終歸於空無，所以叫做『空相』。真心的法相也是『空』，但是祂的法相雖然是空，可是祂有真實體性，所以不叫『空相』，祂叫做『空性』…真心與妄心兩種心，都是『空』的法相，所以合在一起而說『是諸法「空相」』」《心經密意》（平實導師，2003，242 頁），而從此等「空」的法相中，照見中道的真實義，更能進一步體解「絕待」、「相待」等甚深道理。

本土心理學研究為了要能消解東、西方文化系統的對立，透過建構含攝文化理論的知識論策略（Epistemological strategy for constructing culture-inclusive theories）」（黃光國，2018；Hwang, 2019）與「本土社會科學創造詮釋學」（王智弘，2023；王智弘等，2024）而加以會通，確實不能執於一端。就像《金剛經》所說「凡所有相，皆是虛妄，若見諸相非相，即見如來」。佛法修行明心見性的殊勝與中道觀行的勝妙，如此可見一斑。研究者若能從中得到啟發，可望使本土社會科學更上一層樓。

三、華人教育觀的研究需要援引科學哲學的觀念嗎？不同文明的文化系統的問題

陳舜文副教授是中生代優秀的本土心理學者，他認識符教授接近二十年，同屬一個研究團隊有多次的合作。因此不意外的，他相當認同符教授闡述的研究取向和基本觀點。

他在文中提出重要的提問，西方社會與儒家社會具有不同的基本價值觀，是因根源於不同的文化思想傳統？若是如此，也許不需援引科學哲學的觀念，直接分析或比較東西文化系統基本價值觀之差異即可（陳舜文，2025）。不過符教授是為了這篇打靶論文援引科學哲學的觀念是說明她的知識論策略與她一系列研究的關係。

接著他也提出一些重要的問題：不同文明的文化系統與價值觀常彼此交流衝擊，未來不同的文化系統是否可能逐漸融合？或繼續維持差異？未來是否可能朝向某種特定價值觀發展？或是融合成為整合式文化系統？

四、兩重要問題：如何決定與判定「含攝文化理論」與近似真理

馮丰儀教授是教育學背景的學者，提出兩個重要的問題（馮丰儀，2025）。第一個問題是「含攝文化理論」之文化如何決定？這問題中包含了為何選擇闡述華人教育觀時選擇從修養角色義務論，而非其他的儒家教育思想？儒家文化圈（如台、港、日、韓、新加坡、大陸）或東亞國家的華人？選擇儒家文化為基底的依據為何？研究概念切入視角如何選擇？

第二問題是近似真理的有效性及理論解釋力如何判別？這問題中包含了有無客觀的標準？另一種解釋？

五、採取「文化異質化」與「文化雜揉化」：科學的進步

符碧真（2025b）回應「含攝文化理論」之文化如何決定？因為選擇「修養的角色義務論」，則與儒家文化密切相關。回應兼顧理論普同性與文化特定性的可能走向為何？她提出「文化異質化」與「文化雜揉化」。「文化異質化」係指全球文化（西方文化）融入當地文化的過程。在地文化因為全球化之故，會經歷不斷地轉型與再發明。儘管在地文化很難不受全球化因素的影響，但是在地文化的核心概念仍保存完整無缺或不受影響，僅周邊表面受到直接影響。「文化異質化」指儒家傳統觀念與西方文化撞擊後，可能融合形成新的觀點。如建構果能夠採取「文化異質化」與「文化雜揉化」，建構出同時適用於全人類文化社會共用的理論，也能說明文化間差異的現象。她接著提出科學的

目的在於解決問題。在任何領域，前後相繼產生的兩個理論，僅有當後一個理論比前一個理論更能有效的解決問題，後一個理論取代前一個理論時，才能說是進步的。

　　華人本土「文化系統」取向，可以涵蓋以下四種涵蓋理論與應用的一系列「四部曲」研究（夏允中，2020）：1.先建儒釋道系列理論：形式性（universal）的（硬核）理論，以儒釋道思想做主體，並吸納西洋社會科學的菁華，「中學為體，西學為用」，重塑華人的學術傳統，將具有「普遍性」的儒釋道文化遺產建構成形式性的理論，適用全人類（普世性）的理論；2.以儒釋道修養觀（含自性神、天與鬼神與關係論）來建構實質性（substantial）的系列（硬核）理論；3.如此來引領各種片面性與分析式的實徵研究來支持理論的論點；4.發展並擴展應用層面與出版相關書籍。

　　我們認為符教授團隊幾乎完成上述四個步驟，實屬非常難得的學術成就；但目前只差出版相關書籍把其團隊的研究成果進行有系統的說明，如此定會對學術與實務有極大的貢獻。

六、分析二元論的「文化形態學」與文化系統觀的知識論策略

　　回應如何用西方的「形構之理」，說清楚儒家智慧的「存在之理」，本文建議還要特別注意 Archer（1988, 1995）所主張的「分析二元論」（analytic dualism）：從事文化分析的時候，必須要能區分「文化系統」（cultural system）和「社會－文化的交互作用」（social-cultural interaction）。前者是「由曾經存在之知識菁英的全集所構成的」，它可以讓我們看到「文化形態學」（morphostasis）；後者則是後來的學者在某些社會條件下對「文化系統」的詮釋，它只能說是「文化衍生學」（morphogenesis），Acher 的分析二元論堅持：「文化型態學」的研究應當先於「文化衍生學」， 再因為如果「一個研究主題，各自表述」，其實只是在探討「此研究主題」的「文化衍生學」，所以會眾說紛紜，導致莫衷一是，這怎麼可能掌握「此一研究主題」的文化型態學呢？並落入向上熔接的謬誤（fallacy of upwards conflation）。反之當研究者過於重視文化系統之結構，而忽略社會－文化互動層面，漠視行動者的自主性，可能產生向下熔接的謬誤（fallacy of downwards conflation），所以他的研究進路係先分析文化系統層面的經典文本，再接續進行社會－文化互動的實徵研究。

　　黃氏（Hwang, 2019）以「文化形態學」為核心概念，提出文化系統觀的知識論策略，採用有普世性（universal）與形式性（formal）的自我理論來分析具有文化特殊性的傳統智慧，呈現「一種心智」下的「不同心態」（one mind, many mentalities; universalism without uniformity）（Shweder et al., 1998, p. 871），來建構「含攝文化的心理學理論」。其中，文化系統觀是指這個策略最主要可避免產生片面式或只單看某幾個變項式的研究，這個策略要先完整的分析各個文化系統的原貌，並以最原始的經典為主進行分析，是屬於文

化型態學，因為後續演變與延伸的文化根源都是以此為主，所以分析了主要的文化，就可以含攝後來的文化。後續的研究者可以此作為新的科學研究綱領（scientific research programmes）的理論硬核（hard core）（Lakatos, 1968），再建構衍生或修改理論，並進行下一步的實徵研究。例如可使用自我曼陀羅模型（Mandala Model of Self）（Hwang, 2011; Shiah, 2020）即是具有普遍性與形式性的自我理論，非常適合用來分析各種文化中的「自我」，並有後續實徵研究支持此模型的理論假設（Shiah & Hwang, 2019）。對於從「自我」到「自性」的發展，已經有學者提出種種延伸理論，例如夏允中與張峻嘉（2018）則基於自我曼陀羅模型分別分析儒釋道匯合傳統而提出了儒家三層次修養之自我曼陀羅模型、佛家三層次修養曼陀羅模型（夏允中等，2018）、英文版佛家修養曼陀羅模型：無我理論（Nonself Theory）（Shiah, 2016）、以《易經》為基礎的內在朝向式多層次立體自我曼陀羅模型（徐進等，2019）及英文版《易經》為基礎的君子修養模型（Jun-zi Self-cultivation Model）（Xu et al., 2022）。

貳、易經的「文化型態」內容：含攝易經智慧的自性修養之現代化開展

因易經是儒與道的道德形上學基礎，接著以下簡要介紹以「文化形態學」與文化系統觀所建構的易經及其衍生的儒家與老子智慧的「文化型態」（理論硬核）內容，可用來進行實徵研究，或產生衍生與修改理論，來開展一條含攝儒與道智慧的自性修養之社會科學的康莊大道。

一、《易經》的「文化型態」內容

依據《易經》而提出的〈內在朝向式多層立體自我曼陀羅模型：天人合一理論〉（徐進等，2019），來說明個體如何從自我到天人合一我的修養歷程。其中，以《易經》為基礎的內在朝向式多層立體自我曼陀羅一共有四層次的概念模型，其道家修養的策略包含：「正視現實、居正持中、坦然接納、順其自然」等次第策略。由下往上，第一層：「自我的八種典型表現及其六十四種境遇」，意旨自我對於情境進行個人意義的解讀，顯示生命歷程的多種可能性；第二層：《易經》的自我曼陀羅模型為基礎，加以融入道家《易經》的思維來重新詮釋作為君子的個人修養之策略；第三層：提升至「統一對立的自我」，此時自我已不具實質存在，曼陀羅僅剩兩股相互拉鋸的拉力，象徵陰陽元素兩者之間的對立力量，是一種包容和消解內外在環境衝突的狀態；第四層：至高到「天人合一我」，為模型的最核心內層，以一個點象徵著個體處於沒有分別心的融入體現，達到最高層次的圓滿和諧狀態，亦為道家文化智慧裡最終的生命意義展現。經由《易經》的文化智慧實踐與修煉，來克服自我的慾望，能夠坦然接納外在緊張的拉扯，將統一對

立的自我轉變為「天人合一我」的狀態。同樣地，人們藉由覺知到此狀態便不再受到欲望的牽引拉扯而感到擺盪不安，進而達到持續的身心和諧、圓滿的心理社會均衡狀態。

　　接著 Xu 等（2022）在黃光國教授的指導下以文化系統觀策略，提出英文版含攝易經智慧的 Jun-zi Self-Cultivation Model，可以用來解釋儒家文化下的社會行為、增進心理健康與用來發展含攝儒道文化的心理治療學派。

二、儒家的「文化型態」內容

　　儒家的文化智慧分析部分，以文化系統觀策略，依據儒家經典而提出的〈儒家三層次修養之自我曼陀羅模型〉（夏允中、張峻嘉，2017），定義出「自性修養」的三層次，由下到上的次序，分別稱之為庶人、士大夫以及聖王修養之曼陀羅模型。個體透過三層次的修煉，吸收「智勇」與「仁德」的文化智慧，格物而修身並能時時刻刻反求諸己，進而達到「至誠、至善、至聖」的博大深厚的境界，展現君子存於世上的整體生命意義觀。

三、老子的「文化型態」內容

　　夏允中等（2024）文化系統觀策略，分析老子經典並建構「老子之四層次自我曼陀羅模型之自然我理論」，此理論包含從「自我」到「自然我」德性修養歷程的四個層次：人法地，地法天，天法道，道法自然。自然我的定義包含有反思智慧、行動與體驗的三個構念：反思自然的道理，採取清靜寡欲無私的修養，達到本真無為的自我狀態。

參、結語

　　最後期待本期「儒」文與三位評論者之間的對話，能創造良性的學術對話，激盪出新的迴響，進一步開展含攝易經智慧的自性修養之社會科學研究。

參考文獻

王智弘（2023）。本土諮商心理學與本土社會科學的可能研究路徑與研究方法論。**本土諮商心理學學刊，14**（4），vi-xxxvii。

王智弘、嚴嘉琪、夏允中（2024）。中西會通之道：本土社會科學與新儒家的共同志業。**本土諮商心理學刊，15**（3），vi-vii。

平實導師（2003）。**心經密意：心經與解脫道、佛菩提道、祖師公案之關係與密意**。正智出版社。

夏允中（2020）。本土化學術研究與發表的最大障礙：邏輯實證論的禍害與解決之道。**本土諮商心理學學刊，11**（1），xii-xxxi。

夏允中、張峻嘉（2018）。以濂溪學說談朝向建構華人自主的修養心理學理論：儒家自主與修養曼陀羅自我模型。載於張京華（主編），**周敦頤研究：周敦頤誕辰 1000 周年慶典國際學術研討會論文集**（ISBN：9787520330176）（262–280 頁）。中國社會科學出版社。

夏允中、臧蘊涵、曾貝露、陳復（2024）。從自我到返璞歸真：含攝老子思想的自然我理論。**中華本土社會科學期刊，5**，89-126。

徐進、林俊德、張靈聰、夏允中（2019）。建構以易經為基礎的內在朝向式多層立體自我曼陀羅模型：天人合一理論。**本土心理學研究，51**，277-318。https://doi.org/10.30213/JCISS.202412_(5).0006

符碧真（2025a）。儒家倫理與華人教育觀：哲學反思、理論建構與實徵研究。**本土諮商心理學學刊，16**（2），1-78。

符碧真（2025b）。儒家倫理與華人教育觀：哲學反思、理論建構與實徵研究之總回應文。**本土諮商心理學學刊，16**（2），142-158。

陳舜文（2025）。華人教育觀的「縱向目標」與科學理論的「硬核」。**本土諮商心理學學刊，16**（2），105-129。

馮丰儀（2025）。回應〈儒家倫理與華人教育觀：哲學反思、理論建構與實徵研究〉。**本土諮商心理學學刊，16**（2），130-141。

黃光國（2018）。**社會科學的理路**（第四版思源版）。心理。

葉光輝（2025）。建構本土心理學理論後設思維的省思。**本土諮商心理學學刊，16**（2），79-104。

Archer, M. S. (1988). *Culture and agency: The place of culture in social theory*. Cambridge University Press.

Archer, M. S. (1995). *Realist social theory: The morphogenetic approach*. Cambridge University Press.

Hwang, K.-K. (2011). The Mandala Model of Self. *Psychological Studies, 56*(4), 329-334. https://doi.org/10.1007/s12646-011-0110-1

Hwang, K.-K. (2019). *Culture-inclusive theories: An epistemological strategy*. Cambridge University Press. https://doi.org/10.1017/9781108759885.

Lakatos, I. (1968). Criticism and the methodology of scientific research programmes. *Proceedings of the Aristotelian Society, 69*(1), 149-186.

Shiah, Y.-J. (2016). From self to nonself: The Nonself Theory. *Frontiers in Psychology, 7*, 124. https://doi.org/10.3389/fpsyg.2016.00124

Shiah, Y.-J. (2020). Cultural heritages and mental health: Towards the self-nature and its implications for psychotherapy. *Journal of Psychiatry & Mental Disorders, 51*, 1-6.

Shiah, Y.-J. (2021). *Foundations of Chinese psychotherapies: Towards self-enlightenment*. International Publishing.

Shiah, Y.-J., & Hwang, K.-K. (2019). Socialized reflexivity and self-exertion: Mandala Model of Self and its role in mental health. *Asian Journal of Social Psychology, 22*, 47-58. https://doi.org/10.1111/ajsp.12344.

Shweder, R. A., Goodnow, J., Hatano, G., LeVine, R., Markus, H., & Miller, P. (1998). The cultural psychology of development: One mind, many mentalities. In W. Damon (Ed.), *Handbook of child psychology (Vol. 1): Theoretical models of human development.* John Wiley & Sons.

Xu, J., Chang, N.-S., Hsu, Y.-F., & Shiah, Y.-J. (2022). Comments on previous psychological Tai-Chi models: Jun-zi Self-Cultivation Model. *Frontiers in Psychology.* https://www.frontiersin.org/journals/psychology/articles/10.3389/fpsyg.2022.871274/full

Confucian Ethics and Chinese Views on Education: The Modern Development of Self-Cultivation Incorporating the Wisdom of the I-Ching

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Abstract

This special issue comprises five articles, primarily centered around Professor Bih-Jen Fwu's work (Fwu, 2025a), Confucian Ethics and Chinese Views on Education: Philosophical Reflection, Theoretical Construction, and Empirical Research. Three of the articles serve as critical commentaries on Fwu's work, followed by a response from Fwu (2025b). The central theme revolves around how to articulate the Confucian wisdom of "the logic of being" using the Western framework of "the logic of construction." Professor Fwu has long engaged in research on the "Chinese conception of education," building on Professor Kwang-Kuo Hwang's epistemological strategy of multiple philosophical paradigms. She has deeply understood the distinction between pancultural and cultural system approaches in cross-cultural research—moving from pancultural studies that "know what is," but not "why it is so," to cultural system studies that both "know what is" and "understand why it is so." By constructing a "theory of role obligations in self-cultivation" based on Confucian ethics, Fu posits that individuals should constantly engage in self-cultivation and fulfill their role obligations in the five cardinal relationships to meet the expectations of significant others. The public evaluates one's moral cultivation based on the degree to which one fulfills these obligations. Role obligations are closely tied to moral development and are aligned with society's expectations for vertical achievement goals. Thus, the pursuit and realization of such goals becomes an embodiment of both "ethics" and "morality." The second article critiques Fu's use of a reflective emic approach, arguing that it may fall into the trap of "cultural encapsulation"—a bias that arises when a theory is constructed solely from a single cultural perspective, overlooking other sociocultural phenomena and forms of knowledge, which can lead to stereotyped interpretations of the real world. The author proposes a reflexive etic approach as more suitable for constructing indigenous theories, as it can better address both intra-cultural individual differences and cross-cultural variations. The third article strongly agrees with Fwu's research approach and

fundamental perspectives but raises critical questions: as different cultural systems and values from various civilizations continuously interact and clash, is it possible that these systems may eventually merge? Will cultural differences persist, or could they evolve toward a dominant set of values or an integrated cultural system? The fourth article raises further questions about the "Culture-Inclusive Theory," such as: How is a culture determined? How is the validity of near-truth and the explanatory power of a theory assessed? The final article presents Professor Fu's response to the previous three critiques. In addition, Fu suggests that adopting the notions of "cultural heterogenization" and "cultural hybridization" may help construct theories that are simultaneously applicable to shared human cultural and social experiences, while also explaining inter-cultural differences. She further recommends clarifying the research distinctions between "cultural morphostasis" and "cultural morphogenesis." Cultural morphostasis refers to "the complete body of knowledge once held by intellectual elites," which allows us to perceive the "interaction between society and culture," i.e., cultural derivation. Therefore, research in "cultural morphostasis" should precede that in "cultural morphogenesis." This principle is straightforward: for example, the I-Ching (Book of Changes) serves as a metaphysical moral foundation for both Confucianism and Daoism. If we do not fully understand the cultural morphology of the I-Ching, how can we comprehend its "evolutionary process" within specific historical and social contexts? Hence, the article proceeds to introduce the cultural morphostasis of the I-Ching and the derived wisdom traditions of Confucius and Lao Tzu. Ultimately, this issue aspires to foster a fruitful academic dialogue between Confucian thought and the three reviewers, sparking new intellectual resonance and paving the way for further development in social science research on self-cultivation that integrates the wisdom of the I-Ching.

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This special issue comprises five articles, primarily focused on Bih-Jen Fwu's work(Fwu, 2025a) , Confucian Ethics and the Chinese Conception of Education: Philosophical Reflections, Theoretical Construction, and Empirical Research. Three of the articles serve as critical commentaries, followed by Bih-Jen Fwu's response(Fwu, 2025b) . The central theme explores how to articulate the Confucian wisdom of the "logic of being" through the Western "logic of construction." This issue also proposes the need to clarify the distinction between "cultural morphostasis" and "cultural morphogenesis." A "cultural system" is understood as the total body of knowledge historically held by intellectual elites, which allows us to observe the dynamic interplay between society and culture—namely, "cultural derivation." Given that the I-Ching (Book of Changes) serves as the metaphysical moral foundation of both Confucianism and Daoism, the issue proceeds to introduce the cultural morphostasis of the I-Ching and the derived wisdom traditions of Confucius and Lao Tzu. This lays the groundwork for developing a social science approach to self-cultivation that integrates the inclusive wisdom of Confucian and Daoist traditions.

I. Explaining the Confucian "Logic of Being" through the Western "Logic of Construction"

1. The Series on Confucian Ethics and the Chinese Conception of Education: Adopting Professor Kwang-Kuo Hwang's Multiparadigmatic Approach

The late Professor Kwang-Kuo Hwang (hereafter referred to as Hwang) often remarked in public that Professor Bih-Jen Fwu was the most diligent among his students in studying the philosophy of science. She attended more than ten of his courses, which primarily focused on applying his epistemological strategy of multiple philosophical paradigms to research. In her 2025 article (Fwu, 2025a), Confucian Ethics and the Chinese Conception of Education: Philosophical Reflections, Theoretical Construction, and Empirical Research, Fwu explains that she adopts a post-positivist perspective, which holds that researchers can only approximate the underlying reality—there is no "absolute truth." This perspective emphasizes a top-down approach: researchers generate questions, use rational thinking to make conjectures, deduce hypotheses from theoretical frameworks, and then collect empirical data to test these hypotheses. Scientific research, in this view, is akin to a searchlight that probes the unknown. In contrast, the bottom-up approach assumes that gathering sufficient data will naturally lead to theory formation, like water overflowing from a full bucket. Fwu's research team adopts the

top-down deductive method: based on the theoretical framework, they derive hypotheses and then collect data to test their validity. However, explaining Confucian sociological concepts to the international academic community remains a considerable challenge. Nonetheless, researchers involved in the "Chinese conception of education" series have been committed to this endeavor, and since 2014, their related studies have gradually been published in international journals. Notably, Fwu emphasizes that the research findings should be understood as approximations of truth. As such, she welcomes alternative theoretical frameworks from other scholars to engage in scholarly competition—so that the explanatory power of different models can be compared.

Professor Fwu's research team adopts a cultural system perspective, which involves a deep investigation into the original thinkers who established a given cultural system, aiming to fully understand their worldview and conceptual foundations. For instance, to study the Confucian cultural system, one must return to the historical context of Confucius himself and consider how he articulated his ideas within the society of his time. Interpretations of the Confucian system made by later generations are seen as reinterpretations shaped by specific socio-cultural conditions, rather than direct representations of the original system. In contrast to pancultural research approaches, which typically center on mainstream Western psychological theories and then develop instruments intended to measure psychologically equivalent constructs across diverse cultural groups, Fwu's team does not take such a path. Instead, they prioritize grounding their theoretical development in the indigenous cultural context, allowing the internal logic of that system to guide their framework and analysis.

Professor Fwu's team approaches the modernization of Confucian ethics and the Chinese conception of education by building upon the scientific pathway developed over the past three decades by Hwang (2019), specifically his cultural system theory grounded in multiple philosophical paradigms. The aim is to transform the Chinese cultural tradition into objective knowledge that meets Western academic standards, thereby contributing to the construction of an autonomous Chinese social science. In our view, this model is already mature, concrete, and operationalizable. This scientific approach, known as the cultural system perspective, incorporates multiple philosophical paradigms (Hwang, 2019): namely, constructive realism, structuralism, and critical realism. Constructive realism distinguishes between the scientific microworld and the lifeworld, acknowledging the interpretive nature of scientific theorizing. Structuralism, within the context of psychology, examines the ways in which individuals acquire knowledge. Critical realism addresses how inclusive, culturally grounded theories can

be constructed. Most importantly, when analyzing the epistemological strategies of a culture, it is essential to place either the person or structuralism at the center of inquiry.

The theoretical framework and related research developed by Professor Fwu's team offer two major advantages. First, it effectively explains the fundamental differences between Chinese and Western cultural systems. Second, it avoids the limitations of reductionist approaches or research that focuses only on a few isolated variables. Their research strategy begins with a comprehensive analysis of the original structure of the cultural system, which then serves as the foundation for guiding investigations into how culture influences individuals. This culturally grounded approach ensures both depth and contextual relevance in psychological and educational research.

2. Professor Kuang-Hui Yeh's Two Key Constructive Critiques and Suggestions

Professor Kuang-Hui Yeh is an outstanding scholar who has made significant contributions to indigenous psychology through the development of three original theories: The Dual Filial Piety Model, the Dual Autonomy Model, and the Parent–Child Conflict Process Model. In his commentary, Professor Yeh offers an important suggestion: when constructing research concepts or theoretical frameworks, researchers should first consider the contextual factors of the intended application setting. Doing so can greatly reduce the gap between theoretical perspectives and practical implementation (Yeh, 2025).

In his critique, Professor Yeh presents two key constructive criticisms. First, he notes that Professor Fwu's use of a reflexive emic (insider) approach may invite criticism for embodying what is referred to as a "cultural capsule" bias—that is, the tendency to adopt a single cultural perspective while overlooking other sociocultural phenomena and systems of knowledge. This may lead to replacing complex realities with stereotypical representations of culture. As a solution, Professor Yeh suggests employing a reflexive etic (outsider) approach, which is more likely to help researchers simultaneously address intra-cultural individual differences and cross-cultural variation, thereby achieving a more balanced and integrative understanding.

Second, he points out that the cultural system approach, while valuable for constructing indigenous psychological theories, may easily fall into the trap of binary thinking. For example, it may rely too heavily on dichotomies such as Eastern vs. Western cultural systems, discovery vs. invention in theory construction, rights-based vs. duty-based perspectives, or vertical vs. non-vertical achievement goals. Such binary frameworks can limit the interpretation of research questions and findings. However, Yeh acknowledges that academic research necessarily begins

with definition, and definitions often inherently produce binary categories (e.g., defining gender typically results in a male/female binary). Clear definitions remain essential for conceptual operationalization and measurement in empirical research.

Professor Yeh proposes the concept of binary emptiness as a solution, arguing that the existence of phenomena in the world should not be constrained by binary oppositions, such as right versus wrong, good versus bad, superior versus inferior, or East versus West. When a phenomenon is interpreted through such binary evaluations, it reflects the evaluator's or researcher's perspective and framework, rather than any inherent quality of the phenomenon itself. The recipient or interacting subject may possess their own distinct or unique viewpoint and evaluative stance. Yeh emphasizes that binary judgments or classifications are fundamentally impermanent and non-fixed. Therefore, the resulting evaluations or classifications based on binary thinking do not represent objective facts, but rather relative outcomes shaped by the subjective perspectives of those involved.

The emptiness mentioned by Professor Yeh should be borrowed from the emptiness of Buddhism. The "*Platform Sutra of the Sixth Patriarch*" says, "The wonderful nature of the world is originally empty, and there is nothing to be obtained; the self-nature is empty, and it is also like this." If this emptiness is the self-nature of "self-nature is empty" in Buddhism, it refers to the true nature of the *Vajra Heart Tathāgata-garbha* or the eighth consciousness *Ālí yé shí (ālayavijñāna)*; its nature is originally empty, its body is real and be unmovable like the absolute truth. The self-nature is empty, which is a kind of "essence that does not depend on anything." The emptiness of the self mentioned in Buddhism is not the self defined by worldly law symbolized by the five aggregates, but refers to the "self-nature" or "true self," which is an essence that is independent of all worldly laws and does not rely on anything. In simple terms, "self-nature" means "not depending on others," and worldly things born from "dependent origination" are "dependent on others" (observation and comparison). The "dependent origination" of worldly things and other dharmas is based on the real and unchanging Dharma Realm *Tathāgata-garbha*.

Although in the intuition of ordinary people, the "self" certainly exists, it actually exists through "observation and comparison"; but from the Buddhist point of view, the five aggregates of the physical body are dependently originated and empty, without self-nature, and will eventually perish. Only when they return to the Tathagata storehouse will they have their self-nature. Therefore, the "self" of the five aggregates does not exist because the existence of the "self" itself must be through "dependence on others," just as the "*Saṃdhinirmocana Sūtra*" said: "How do all dharmas depend on others? Because all dharmas have self-nature due to causes

and conditions" ("All dharmas" chapter) "This exists because of the power of dependence on others, not naturally" ("No self-nature" chapter). This means that the "self" is born from causes and conditions and emerges under the operation of the *pañca-skandha* (five aggregates): *rūpa*(form), *vedanā*(feeling), *saṃjñā* (preception), *saṃskāra*(volition, mental formations), and *vijñāna*(consciousness). The five aggregates of "self" are all-encompassing and exist in relation to many psychological interactions. Professor Yeh believes that binary oppositional evaluations or classifications are also fundamentally "impermanent" and "non-constant", and are "empty aspects" that change and disappear depending on ideology, similar to what is said in the Heart Sutra: "Seeing that the five aggregates are empty." The five aggregates have the "empty characteristics" of extinction but no "self-nature of emptiness," which is the conventional truth in Buddhism. However, "self-nature is empty" is the ultimate truth, which refers to the absolutely real and unchanging nature of the eighth consciousness, and refers to the "emptiness" of the true self.

If researchers practice the righteousness of Buddhism and realize the true original mind and the eighth consciousness, *Vajra Heart Tathāgata-garbha—Ālí yé shí (ālayavijñāna)*, they can understand that the "empty" "five aggregates" self is actually the product of the "empty" "*Vajra Heart Tathāgata-garbha*"—"true self." On this basis, they can further understand the *Heart Sūtras*: " Form is not different from emptiness, emptiness is not different from form; form is emptiness, emptiness is form; the same is true of feeling, perception, mental formations and consciousness." Understanding the five aggregates, "the dharma of the false mind is impermanent and ultimately returns to nothingness, so it is called 'empty apperrance'. The dharma of the true mind is also 'empty', but although its dharma is empty, it has a real reality, so it is not called 'empty characteristics'. It is called 'emptiness'... The true mind and the false mind are both dharma-natures of 'emptiness', so together they are said to be 'all dharmas are 'empty characteristics'" (*The Secret Meanings of the Heart Sūtras*, Venerable Xiao Pingshi, 2003, p. 242). From these dharmas of emptiness, the true meaning of the Middle Way is revealed , and can further understand the profound principles of "absoluteness" (no comparison or opposition) and "relativity" (comparison or opposition is possible).

Indigenous psychology research aims to dissolve the opposition between Eastern and Western cultural systems through the epistemological strategy for constructing culture-inclusive theories. (Hwang, 2018, 2019) and the creative hermeneutics of indigenous social sciences (Wang, 2023; Wang et al., 2024). It is truly not feasible to favor one side. As the *Diamond Sūtras* states, "All characteristics are false. If you see all characteristics as non-characteristics, you will see the Tathagata." This offers a glimpse into the extraordinary benefits

of Buddhist practice for enlightening the mind, perceiving the nature, and embracing the middle way. If researchers draw inspiration from this, indigenous social sciences could potentially reach a higher level.

3. Is It Necessary to Invoke Philosophy of Science in Research on Chinese Educational Views? Issues Concerning Cultural Systems of Different Civilizations

Associate Professor Shun-Wen Chen, a prominent mid-career scholar in indigenous psychology, has known Professor Fwu for nearly two decades and has collaborated with her extensively within the same research team. Unsurprisingly, he strongly affirms the research orientation and foundational perspectives articulated by Professor Fwu.

In his commentary, Chen raises a critical question: Do the differing fundamental values between Western societies and Confucian societies stem from distinct cultural and intellectual traditions? If so, it may not be necessary to invoke concepts from the philosophy of science. Rather, a direct analysis or comparison of the basic value differences between Eastern and Western cultural systems may suffice (Chen, 2025). However, Professor Fwu's invocation of concepts from the philosophy of science in her target article serves a specific purpose: to explicate her epistemological strategy and to clarify how this strategy connects with her broader series of studies.

He then raised some important questions: The cultural systems and values of different civilizations often interact and influence each other. Will various cultural systems gradually merge in the future? Or will they continue to maintain their differences? Will they develop toward a common set of values? Or will they merge into an integrated cultural system?

4. Two Critical Questions: How to Determine "Culturally Inclusive Theories" and Approximate Truth

Professor Feng-Yi Feng, a scholar with a background in education, raises two important questions (Feng, 2025). The first question concerns: How is the "culture" embedded in a Culture-Inclusive Theory determined? This question involves several layers, such as: Why was the cultivation-based role-obligation framework chosen to elaborate the Chinese view of education, instead of other streams of Confucian educational thought? Which groups are included in the so-called Confucian cultural sphere—Taiwan, Hong Kong, Japan, Korea, Singapore, Mainland China, or other East Asian Chinese communities? On what basis is

Confucian culture adopted as the theoretical foundation? How are the research concepts and perspectives of analysis selected?

The second question addresses: How can we assess the validity of "approximate truth" and the explanatory power of a theory? This includes concerns such as: Is there any objective standard for evaluation? Are there alternative interpretations?

5. Adopting "Cultural Heterogenization" and "Cultural Hybridization": The Advancement of Science

In her response, Fwu (2025b) addresses the question of how to determine the "culture" embedded in a culturally inclusive theory. She explains that the choice of the cultivation-based role-obligation framework is deeply tied to Confucian cultural traditions. As for how to simultaneously account for both theoretical universality and cultural specificity, she proposes the concepts of "cultural heterogenization" and "cultural hybridization." Cultural heterogenization refers to the process through which global culture (predominantly Western culture) becomes integrated with local cultures. As a result of globalization, local cultures continuously transform and reinvent themselves. Although it is difficult for local cultures to remain unaffected by globalization, their core concepts can still be preserved intact, with only superficial elements being directly influenced. Cultural heterogenization also implies that when traditional Confucian ideas encounter Western cultural forces, the resulting interaction can give rise to new synthesized perspectives. If theory construction can adopt both cultural heterogenization and cultural hybridization, it may be possible to build theories that are both universally applicable across human societies and capable of explaining cross-cultural differences. Fwu further states that the aim of science is to solve problems. In any given field, one theory can be considered a scientific advancement over another only if it offers more effective solutions to problems. Thus, the replacement of an earlier theory by a later one signifies scientific progress only when the latter demonstrates superior problem-solving capacity.

The indigenous Chinese "cultural system" approach can encompass a four-part research trajectory integrating both theory and application, as proposed by Shiah (2020a). This "research tetralogy" includes: First, constructing a series of formal (universal) theories based on Confucianism, Buddhism, and Daoism. These are "hard-core" theoretical frameworks that take traditional Chinese thought as their foundation while integrating the strengths of Western social sciences—"Chinese learning as essence, Western learning as application." This step aims to

reshape the Chinese scholarly tradition by transforming the universally valuable heritage of Confucian-Buddhist-Daoist culture into formal theories applicable to all humanity. Second, using the moral cultivation views found in Confucianism, Buddhism, and Daoism—including notions of self-natured divinity, Heaven/ghost/gods, and social relations —to construct substantial (contextualized) "hard-core" theories. Third, guiding empirical studies, especially those of an analytic or partial nature, to support and validate the core theoretical claims proposed in the previous steps. Fourth, developing and expanding the applied dimensions of these theories, including the publication of relevant books to disseminate research findings and theoretical frameworks.

We believe that Professor Fwu's research team has nearly completed all four stages of this model—a truly rare and commendable academic achievement. What remains is the systematic publication of books to present the team's body of work in an integrated manner. Doing so would no doubt make a significant contribution to both academic scholarship and practical applications.

6. Analyzing Analytic Dualism and the Epistemological Strategy of the Cultural System Perspective

In response to the question of how to articulate the "logic of existence" in Confucian wisdom using the Western "logic of formation", this article suggests that particular attention should be paid to Margaret Archer's (1988, 1995) concept of analytic dualism. When conducting cultural analysis, it is essential to distinguish between the "cultural system" and "social-cultural interaction." The cultural system refers to "the totality of ideas articulated by historically existing intellectual elites." It enables us to identify and analyze what Archer calls "morphostasis", the structural continuity of cultural forms. In contrast, social-cultural interaction refers to subsequent interpretations or adaptations of this system under specific socio-historical conditions—what Archer terms "morphogenesis." Archer insists that the study of cultural morphostasis must precede investigations of morphogenesis. If a research topic is explored solely through multiple personal interpretations (i.e., each scholar articulates it differently), the inquiry remains within the realm of morphogenesis, resulting in fragmented and often contradictory understandings. This approach risks falling into the fallacy of upwards conflation, where cultural phenomena are explained purely through individual or social processes without grounding in the structured cultural system itself. Conversely, if researchers focus too much on the structure of the cultural system while ignoring the agency of actors and

social-cultural interaction, they risk the fallacy of downwards conflation, which suppresses individual agency in favor of deterministic structures. Thus, Archer advocates for a methodological strategy that first analyzes the cultural system, particularly through canonical texts and classical thought, and only then proceeds to examine social-cultural interaction through empirical research. This dual-layered approach helps maintain epistemological clarity and avoids conflation errors in cultural analysis.

Hwang (2019), centering on the concept of "cultural morphostasis", proposed an epistemological strategy grounded in a cultural system perspective. This strategy employs the universal and formal self theory to analyze the culturally specific dimensions of traditional wisdom. It reflects the idea of "one mind, many mentalities", or "universalism without uniformity" (Shweder et al., 1998, p. 871), aiming to construct inclusive cultural psychological theories. he cultural system perspective emphasizes that such a strategy can effectively avoid fragmented or reductionist research that focuses solely on isolated variables. The approach begins with a comprehensive analysis of the original form of each cultural system, using classical texts as the primary foundation. This process aligns with the notion of cultural morphostasis, as subsequent cultural developments and derivations are rooted in these original traditions. Hence, by analyzing the core culture, one can inclusively encompass later cultural forms. Researchers may adopt this approach as the "hard core" of a scientific research program (Lakatos, 1968), upon which derivative or modified theories can be developed and further empirical studies conducted. For example, the Mandala Model of Self (Hwang, 2011; Shiah, 2020), which possesses both universality and formality, serves as a suitable framework for analyzing the concept of "self" across various cultural contexts. Subsequent empirical studies (Shiah & Hwang, 2019) have supported the theoretical assumptions of this model. Building on the evolution from "self" to "true self" (or "self-nature"), scholars have proposed several extended theories: Shiah and Chang (2018) applied the Mandala Model of Self to Confucian, Buddhist, and Daoist traditions, proposing: the Three-level Mandala Model of Confucian Self-cultivation, the Three-level Buddhist Mandala Model, and Shiah (2016) proposed the Nonself Theory as the English version of the Buddhist self-cultivation model. Xu et al. (2019) developed the Internally-Oriented Multilevel Stereoscopic Mandala Model of Self based on the I Ching. Xu et al. (2022) further proposed the Jun-zi Self-cultivation Model (also based on the I-Ching) in its English version. These developments collectively illustrate a growing body of theoretical and empirical research rooted in an inclusive and culturally grounded scientific strategy.

II. The "Cultural Pattern" of the Yijing: A Modern Development of Self-Cultivation Integrating Yijing Wisdom

As the I-Ching serves as the metaphysical and moral foundation for both Confucianism and Daoism, the following section introduces the "cultural pattern" (theoretical hard core) of the I-Ching, and the derived Confucian and Daoist wisdom through the lens of cultural morphostasis and the cultural system framework. This theoretical construct can serve as a foundation for empirical research, as well as for generating and modifying theories, thereby paving a new social scientific path of self-cultivation that incorporates Confucian and Daoist insights.

1. The Cultural Pattern of the I-Ching

Drawing from the Yijing, Xu et al. (2019) proposed the Inward-Oriented Multilayered Stereoscopic Self Mandala Model: The Theory of Unity Between Heaven and Humanity, which illustrates the process of self-cultivation from the ego-self toward the ultimate realization of harmony between heaven and humanity. Based on the I-Ching, this multilayered mandala model consists of four conceptual levels, embodying Daoist self-cultivation strategies such as "facing reality squarely," "maintaining balance and centrality," "accepting with equanimity," and "following the natural course." From bottom to top, the four levels are: The Eight Typical Expressions of the Self and Sixty-Four Situational Encounters – This level describes how the self interprets situational meanings and reflects the myriad possibilities of one's life path. Self-Cultivation Strategies of the Junzi (Exemplary Person) – This level integrates the Yijing-based mandala with Daoist perspectives to reinterpret strategies of personal cultivation characteristic of the Confucian Jun-zi. The Unified and Oppositional Self – At this stage, the self no longer holds a fixed identity. The mandala is now sustained by opposing tensions that symbolize the dynamic interaction of yin and yang, representing a state in which internal and external conflicts are reconciled. The Heaven-Humanity Integrated Self – The model's innermost core symbolizes the ultimate state of undifferentiated unity, in which the individual fully embodies the Dao, attaining the highest harmony and wholeness. This level reflects the Daoist vision of life's ultimate purpose. Through the cultivation and practice of I-Ching wisdom, individuals can transcend egoistic desires, calmly endure external tensions, and transform the oppositional self into the Heaven-Humanity Integrated Self. Attaining awareness of this state frees

individuals from the fluctuations caused by desire, fostering sustained inner harmony and psychosocial equilibrium.

Following this, Xu et al. (2022), under the guidance of Professor Kwang-Kuo Hwang, developed the Jun-zi Self-Cultivation Model, an English-language theoretical framework rooted in the I-Ching and Confucian wisdom, using the cultural system approach. This model can be applied to explain social behaviors in Confucian cultural contexts, enhance psychological well-being, and serve as a foundation for the development of psychotherapy schools that integrate Confucian and Daoist traditions.

2. The "Cultural Pattern" of Confucianism

The Confucian cultural pattern is analyzed using the cultural system framework, drawing on classical Confucian texts. Based on this, Hsia Yung-Chung and Chang Chun-Chia (2017) proposed the Three-Level Confucian Self-Cultivation Mandala Model, which defines three progressive stages of self-cultivation from bottom to top: the commoner (shùrén), the scholar-official (shìdàfū), and the sage-king (shèngwáng).

Through cultivation at these three levels, individuals absorb the cultural wisdom of wisdom and courage (zhì-yǒng) and benevolence and virtue (rén-dé). This process involves the investigation of things, cultivation of the self, and constant introspection. Ultimately, the individual aspires to the profound realms of utmost sincerity (zhìchéng), utmost goodness (zhìshàn), and supreme sageliness (zhìshèng), thereby realizing the Confucian junzi's vision of a meaningful and integrated life in the world.

3. The "Cultural Pattern" of Laozi

Applying the cultural system framework, Shiah et al. (2024) analyzed the classical text of Lao Tzu and proposed the Four-Level Mandala Model of the Natural Self: A Theory of Daoist Self-Cultivation. This model outlines four progressive stages in the moral and spiritual cultivation from the ego-self to the "natural self": Humans follow the Earth, The Earth follows Heaven, Heaven follows the Dao, and The Dao follows Nature, The "natural self" is conceptualized through three core dimensions: Reflective wisdom – understanding and contemplating the principles of nature and the Dao; Action and experience – practicing self-cultivation through simplicity, reduced desire, and selflessness; Authentic non-action (無為) –

attaining a state of true being that is uncontrived and aligned with nature. This model articulates a Daoist path of ethical transformation toward an unforced, harmonious, and authentic existence.

III. Conclusion

We hope that this issue's contribution on Confucian wisdom and the dialogue among the three commentators will stimulate a productive academic exchange, sparking new insights and paving the way for further development of *social scientific research on self-cultivation grounded in Yijing and broader Chinese wisdom traditions.

Reference

Archer, M. S. (1988). *Culture and agency: The place of culture in social theory*. Cambridge University Press.

Archer, M. S. (1995). *Realist social theory: The morphogenetic approach*. Cambridge University Press.

Chen, S.-W. (2025). The Vertical Goal in the Chinese Views on Education and the Hard Core of Scientific Theory. Jour*nal of Indigenous Counseling Psychology, 16*(2), 105-129. (in Chinese)

Feng, F.-I. (2025). A response to " Confucian Ethics and Chinese Views on Education: Philosophical Reflection, Theoretical Construction, and Empirical Research" Jour*nal of Indigenous Counseling Psychology, 16*(2), 130-141. (in Chinese)

Fwu, B.-J. (2025a). Confucian ethics and the Chinese conception of education: Philosophical reflections, theoretical construction, and empirical research. *Journal of Indigenous Counseling Psychology, 16*(2), 1-78. (in Chinese)

Fwu, B.-J. (2025b). A response to the comments on "Confucian Ethics and Chinese Views on Education: Philosophical Reflection, Theoretical Construction, and Empirical Research". *Journal of Indigenous Counseling Psychology, 16*(2),142-158. (in Chinese)

Hwang, K.-K. (2011). The Mandala Model of Self. *Psychological Studies, 56*(4), 329-334. https://doi.org/10.1007/s12646-011-0110-1

Hwang, K.-K. (2018). *Theoretical approaches of social sciences* (4th ed./ Siyuan ed.). Psychological Publishing. (in Chinese)

Hwang, K.-K. (2019). *Culture-inclusive theories: An epistemological strategy*. Cambridge University Press. https://doi.org/10.1017/9781108759885.

Lakatos, I. (1968). Criticism and the methodology of scientific research programmes. *Proceedings of the Aristotelian Society, 69*(1), 149-186.

Shiah, Y.-J. (2016). From self to nonself: The Nonself Theory. *Frontiers in Psychology, 7*, 124. https://doi.org/10.3389/fpsyg.2016.00124

Shiah, Y.-J. (2020). Cultural heritages and mental health: Towards the self-nature and its implications for psychotherapy. *Journal of Psychiatry & Mental Disorders, 51*, 1-6.

Shiah, Y.-J. (2020). The major obstacle for the indigenized social sciences academic research publications and prospects: Problems for logical positivism and its solution. *Journal of Indigenous Counseling Psychology, 11*(1), xii-xxxi. (in Chinese)

Shiah, Y.-J. (2021). *Foundations of Chinese psychotherapies: Towards self-enlightenment*. International Publishing.

Shiah, Y.-J., & Chang, C.-C. (2018). From the Lian-Xi school towards to construct Chinese autonomous social science of self-cultivation psychology: Confucian self and self-cultivation Mandala Model of Self. In Z.-H. Chang (Ed.), *The research of Zhou Dun-Yi: The Zhou Dun-Yi's 1000 anniversary conference proceeding* (pp. 262–280). China Social Sciences Press. (in Chinese)

Shiah, Y.-J., & Hwang, K.-K. (2019). Socialized reflexivity and self-exertion: Mandala Model of Self and its role in mental health. *Asian Journal of Social Psychology, 22*, 47-58. https://doi.org/10.1111/ajsp.12344.

Shiah, Y.-J., Tsang, Y.-H., Tseng, B.-L., & Chen, F. (2024). From self to original nature: The Lao Tzu's philosophy inclusive Natural Self Theory. *Journal of Chinese Indigenous Social Science, 5,* 89-126. https://doi.org/10.30213/JCISS.202412_(5).0006 (in Chinese)

Shweder, R. A., Goodnow, J., Hatano, G., LeVine, R., Markus, H., & Miller, P. (1998). The cultural psychology of development: One mind, many mentalities. In W. Damon (Ed.), *Handbook of child psychology (Vol. 1): Theoretical models of human development.* John Wiley & Sons.

Venerable Xiao Pinshi. (2003). *The secret meanings of the Heart Sutra*. True Wisdom. (in Chinese)

Wang, C.-H. (2023). Possible research paths and methodology for Indigenous Counseling Psychology and Indigenous Social Sciences. *Journal of Indigenous Counseling Psychology, 14*(4), vi-xxxvii. (in Chinese)

Wang, C.-H., Yan, J.-C., & Shiah, Y.-J. (2024a). The integration of Chinese culture and the West: The common ambition of indigenous social sciences and Contemporary Neo-

Confucianism. *Journal of Indigenous Counseling Psychology, 15*(3), vi-vii. (in Chinese)

Xu, J., Chang, N.-S., Hsu, Y.-F., & Shiah, Y.-J. (2022). Comments on previous psychological Tai-Chi models: Jun-zi Self-Cultivation Model. *Frontiers in Psychology.*https://www.frontiersin.org/journals/psychology/articles/10.3389/fpsyg.2022.871274/full

Xu, J., Lin, J.-D., Zhang, L.-C., & Shiah, Y.-J. (2019). Constructing an inward multilayer-stereo Mandala Model of Self based on the Book of Changes: The Unity of Self and Nature Theory. *Indigenous Psychological Research in Chinese, 51*, 277-318. https://doi.org/10.6254/IPRCS.201906_(51).0006 (in Chinese)

Yeh, K.-H. (2025). Reflections on metacognition in constructing indigenous psychological theory. *Journal of Indigenous Counseling Psychology, 16*(2),79-104. (in Chinese)

儒家倫理與華人教育觀：哲學反思、理論建構與實徵研究

符碧真*

摘要

筆者在師資培育過程中，師資生常抱怨理論與實務的斷裂。主因之一是引用西方理論時，未考慮文化差異。儒家文化圈國家在國際學術評比表現優異，但實徵研究顯示西方理論無法完整解釋東亞學生學習。筆者遂深耕「華人教育觀」研究，經歷哲學反思、理論建構、實徵研究的過程。在哲學反思上，體會絕對真理與近似真理的不同，從發現的研究走向發明的研究；了解科學研究綱領的硬核與保護帶，遂增加輔助假設，以保護硬核；領悟泛文化研究與文化系統研究的差別，從泛文化研究「知其然，但不知其所以然」，走向文化系統研究「知其然，且知其所以然」。從儒家倫理建構「修養的角色義務理論」，指出個人應不斷自我修養，善盡五倫對偶關係中的角色義務，以滿足重要他人的期待。社會大眾以個人努力盡其角色義務的程度，做為評斷其道德修養的標準。角色義務蘊含道德修養境界的提升，又與社會期許的縱向成就目標相連，故努力追求與達成成就目標即是「倫理」與「道德」的顯現。系列實徵研究發現，在縱向目標下：（1）努力的道德性價值說明天道酬勤；（2）失敗者陷入兩難困境：努力則難過，不努力則無道德形象；（3）失敗者產生該繼續堅持的愧疚感與要放棄的絕望感，進退維谷；（4）建立 B3A 模式，說明失敗時反求諸己的心理機制；（5）西方成就動機四象限模式須加上儒家倫理的概念方可解釋我國學生樣態；（6）多數教師同時給學生西方及東方回饋，導致學生陷入是否該繼續努力的兩難困境。研究啟示是：從文化系統研究理解在縱向目標失敗後，學生心理健康欠佳恐是多種兩難困境所致，建議以多元小型金字塔解決單一巨型金字塔的困境。最後，建議研究者從研究缺口找到問題意識，以文化系統進行發明的研究，區辨普同性與文化特殊性的現象。期盼更多學者投入華人教育觀這個尚待開發的園地，為理論與實務的斷裂找出解決之道。

壹、前言

　　筆者在師資培育中心服務，在培育師資的過程中，師資生常常抱怨理論與實務落差大，甚而提出「理論無用論」，讓筆者頗感困擾。茲舉兩個例子說明。第一，師資生到中學試教，學生表現出老師期待的行為時，給學生糖果作為增強物，沒想到學生說『好幼稚喔』，師資生應用課堂所學的增強原則，卻未達到預期的效果（符碧真、黃源河，2016），頗感失望。另一個例子，學生數學表現欠佳時，美國老師安慰說：「沒關係，不是每個人對數學都很擅長」（Rattan et al., 2012），但是台灣老師卻常安慰說「沒關係，盡力就好，繼續加油」（Fwu et al., 2022）。這兩個例子凸顯課堂所學與教學實務現場不一樣，呼應了「數學教師培育跨國比較研究」（Teacher Education and Development Study in Mathematics）的研究結果，在參與的十五個國家中，我國中小學教師認為大學所學與中小學教學現場的契合度（coherence），分居倒數第三及第二名（Hsieh et al., 2010），可以為證。

　　筆者嘗試從以下兩個角度探討前述結果。第一，「技術理性知識論」（epistemology of technical rationality）（*Schön*, 1983；1995）長期主導師資培育的模式，導致理論與實務之間的鴻溝。這種師資培育模式先由學者以嚴謹的科學方法與程序，發展出教育理論。接著大學將這些理論切割成各門學科，例如教育哲學、教育心理學、教學理論等，傳遞給師資生。而後，師資生將所學理論到教學現場去實踐。事實上，理論是在其他因素控制的情況下，建立變項與變項之間純淨的關係，但現實狀況並不純淨，變因太多，以致變項之間的關係常不如預期，於是產生理論與實務的落差（符碧真、黃源河，2016）。上述第一個實例，對於高社經背景地區的學生而言，糖果或許不稀奇，稱讚可能比糖果是更妥適的增強物。因此，增強原則仍然適用，只是師資生未能區辨情境脈絡的特殊性，造成理論與實務之間的鴻溝。

　　其次，Henrich 等（2010）指出世界頂尖期刊發表的心理學的研究，96%的樣本來自於西方（**W**estern）、受過教育（**E**ducated）、工業化（**I**ndustrial）、富裕（**R**ich）、民主（**D**emocratic）社會的樣本，但是奠基於這些「怪異樣本」（**WEIRD**）的人口，只佔全世界人口數的 12%。Raffaelli 等（2013）亦指出，絕大多數青少年居住在「開發中國家」的「多數世界」（majority world），但是大多數青少年理論卻來自於「西方工業國」的「少數世界」（minority world）。這些學者均指出，西方社會建構的理論能否解釋非西方國家的現象令人懷疑。上述第二個實例，美國與我國老師對學業表現欠佳者的安慰方式有很大的不同，顯見引用「西方工業化國家」「怪異樣本」發展出來的研究結果到我國，便會面臨東西文化差異帶來的鴻溝。

　　綜上，我國師資生到教學現場，會面臨雙重鴻溝（如圖 1 從 A→D）。首先是東、西方文化差異，西方理論未必全然適用於我國。因此國內學術界直接引用西方理論到我

國文化土壤，便會帶來第一道鴻溝（如圖 1 從 A→B），接著是「技術理性知識論」師資培育模式，帶來理論與實務落差的第二道鴻溝（如圖 1 從 B→D）。雙重鴻溝使得師資生感覺大學所學的教育理論無用。

圖 1

引進西方理論到我國教學現場的雙重鴻溝

西方文化　　　　　　　　　　　　　　　我國文化

西方教育理論（A）　第一道鴻溝 →　引進西方教育理論（B）

單一鴻溝　　雙重鴻溝　　第二道鴻溝

教學實務（C）　　　　　　　教學實務（D）
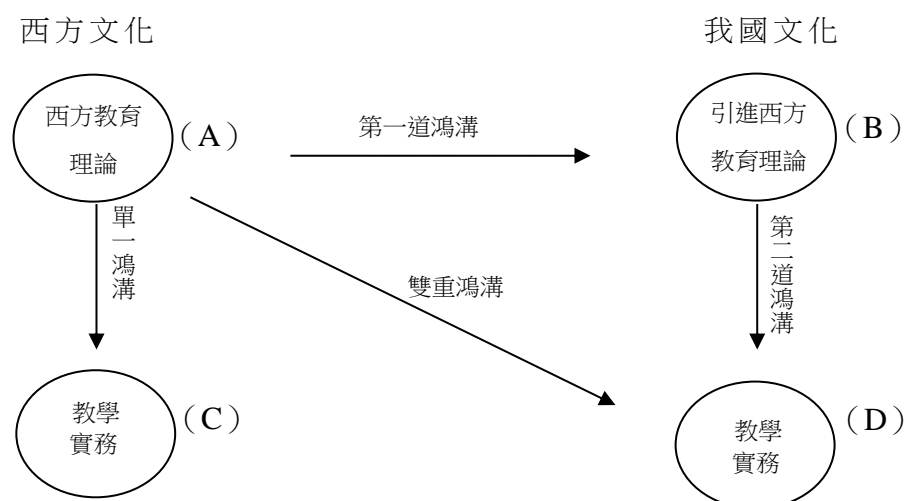
註：資料來源：取自「實地學習：銜接師資培育理論與實務的藥方？」，符碧真、黃源河，2016，**教育科學研究期刊，61**（2），66 頁。

　　本文旨在探討第一道鴻溝。以西方「怪異樣本」發展出來的研究典範，盲目移植到非西方國家，對瞭解非西方人們的心態常是不相干、不契合的（黃光國，2009a）。科學哲學家 Popper（1972）指出，當理論與觀察現象不一致時，即是異例（anomalies）。一個理論如果遭遇太多異例，科學家就應提出暫時性的理論或解決方案（tentative solutions），消弭理論與觀察現象之間的不一致。儒家文化圈國家（Confucian-heritage cultures）如台、港、日、韓、新加坡、大陸，屢屢在國際學術評比 TIMSS 與 PISA 表現優異，但香港學者 Hau 和 Ho（2010）在 *Oxford handbook of Chinese psychology* 回顧華人社會學生學習動機與成就表現，指出許多實徵研究結果發現，西方理論無法完整地解釋亞洲國家學生的表現與學習行為。鑑於此，筆者自 2004 年參與「教育部追求卓越研究計劃—華人本土心理學研究」，發現許多西方理論無法解釋華人社會的現象。帶著這樣的觀察，嗣後科技部專題計畫遂深耕「華人教育觀」研究，試圖建構儒家文化脈絡下的理論，解釋我國的教育現象、解決我們自己的教育問題，以減少理論與實務的斷裂。筆者經歷過「哲學反思、理論建構、實徵研究」的歷程，以下分別說明。

貳、科學哲學的啟發

　　筆者曾上過多次黃光國教授開過的科學哲學的課程，每次都有不同的體會與啟發，提供筆者研究的養分，茲舉舉大者，說明如下。

一、　絕對真理 vs. 近似真理

　　黃老師是筆者華人教育觀研究的啟蒙老師。記得第一次將研究成果跟黃老師分享時，黃老師說這是"naïve positivism"（素樸實證主義）的研究取向。當時筆者不知道這是褒？還是貶？隨著聽課與討論，漸漸體會「發現」與「發明」的差異。「發現」的研究，其科學哲學是實證主義（positivism），相信上帝創造大自然運作的法則是唯一真理。學者的工作就是努力發現「唯一真理」，採取 bottom up 的方法，就像水桶，以為收集到足夠資料，理論會自然溢出。這種研究取向由證據說話，學者不需要動腦，無法顯現學者的創造力與主體性。相對地，「發明」的研究，其科學哲學是後實證主義（post positivism），係指本體不確知，相信「近似真理」，沒有「絕對真理」。每位學者都可以發揮創造力，提出近似真理，彼此競爭誰的解釋力大。科學研究像是探照燈，由學者說話，採取 top down 的方法，不斷提出問題，用理性思考進行猜測，根據理論推論假設，進而收集資料驗證假設，這樣能把理論的光投向未來，以彰顯學者的主體性（Popper, 1972）。

表 1

發現 vs. 發明之差異

	發現	發明
科學哲學	實證主義	後實證主義
對真理的看法	上帝創造大自然運作的法則是唯一真理。	本體不確知，只有近似真理，無絕對真理。
創造力需求	研究者努力發現唯一真理，真理不會因人而異，無法顯現個人的創造力。	每位研究者都可發揮創造力，提出近似真理，彼此競爭，看誰的解釋力大。
研究方法	bottom up 歸納法，像水桶，收集足夠資料，理論自然溢出。證據會說話，學者不需動腦。	top-down 演繹法，像探照燈，根據理論推論假設後，再收集資料。學者說話，證據不會說話。
研究結果解釋	對研究結果，猜測背後原因。 發現	研究結果驗證推論的妥適性。 發明
研究者主體性	無主體性。	根據理論推論假設，挑戰既有理論，有主體性。

註：資料來源：部分資料取自黃光國，2001，9-11 頁；黃光國，2009b

（一）發現的研究

筆者與同僚早期的研究以師資培育為主軸，屬於「發現」的研究。文獻顯示，英語系國家如美、英、澳，長久以來面臨教師社會地位低落、難以招募素質高的老師、新任老師五年內的流失率頗高等問題。相對地，我國教師社會地位較高（Fwu & Wang, 2002a）、能招募高素質的師資生（Fwu & Wang, 2002b; Wang & Fwu, 2007）、教師的流失率低（Wang & Fwu, 2014）。筆者採用問卷調查、深度訪談等 bottom up 的歸納法，了解師資生想當老師的動機，以及當上老師後，是否會轉換跑道等，相信收集到足夠的資料，證據會說話，便能找出真理。針對研究結果，筆者僅能從歷史文化、政府政策等角度，猜測背後可能的原因，但欠缺驗證的機制。事實上，這樣的研究誰都可以做，結果可能大同小異，無法彰顯出研究者的創造力與主體性。

（二）發明的研究

了解「發現」與「發明」的差異後，筆者試圖轉向「發明」的研究。鑒於東亞學生多次在國際學術評比如 TIMSS 及 PISA 表現優異，但西方理論卻無法完整地解釋，筆者遂與教育領域的王秀槐教授、心理學領域的危芷芬、陳舜文教授，組成研究團隊，進行「華人教育觀」的研究。Chen 等（2009）從華人文化的特性，提出「華人成就目標的理論架構」，指出華人在建構成就目標時，除了考慮西方理論重視的自身興趣外（個人目標），還會考量儒家文化強調重要他人的期許（縱向目標）。這樣的理論架構不但挑戰西方既有的理論，也展現出研究者的創造力與主體性。研究群採取 top-down 的演繹法，根據上述理論架構，推論假設，再收集資料，驗證假設的妥適性。這樣的研究是由學者說話。然要將儒家社會學生的學習解釋給國際學術界了解，頗為不易。十年磨一劍，華人教育觀系列研究自 2014 年起陸續獲得刊登。值得注意的是，研究群提出的研究結果只是近似真理，歡迎其他學者提出不同的理論架構，彼此競爭近似真理，看看誰的解釋力大。

二、 科學研究綱領的硬核與保護帶

Lakatos 提出的「科學研究綱領」，對筆者有相當的啟發。該綱領以「硬核」（hard core）為其基礎理論，無法驗證，是一組具有啟發力的形而上理論或預設，不容改變、不容反駁的。保護帶（protective belt）是學者為了保護其硬核，所提出的「輔助假設」。如果硬核受到反駁，整個研究綱領就會崩塌瓦解。為了保護硬核，增加輔助假設的先行條件，使得研究者只能挑戰保護帶（黃光國，2001，p. 189）。茲以道德觀為例，加以說明硬核。Dworkin（1978）將道德信念（moral beliefs）分成「權利為本」（rights-based）與「義務為本」（duty-based）兩類。「權利為本」強調權利是人類行為道德正確的基本

理由，「義務為本」強調義務是人類行為道德正確的基本理由。Dworkin 又指出，所有的文化都包括個人權利、個人義務、社會目標三者，但是在不同文化，三者的優先次序各不相同，因此各個文化的「硬核」不同如下所述。西方與儒家社會的硬核不同，如果學者全盤移植西方理論到我國社會，未考慮兩者「硬核」的差異，不但對瞭解我國社會人們的心態常是不相干、不契合的，恐怕也只是學術的自我殖民。

（一）西方個人主義下的硬核

西方社會的硬核包括：生命的來源是上帝，以及個人權利。西方基督教的宗教傳統預設世界是由上帝所創造的，上帝依據自己的形象創造了人類，因此個人生命的來源是上帝。既然人們都是依據上帝的形象所創造，人人生而平等（*All men are created equal*），所以每個人都有獲得相同機會的權利，是Dumont（1985）所稱的「平等人觀」。基於這個預設，「自我」有其邊界，應該受到保護，成為西方個人主義的特色。「個人」是社會群體中行動的自主單位，社會是個人的集合體。「個人權利」重於個人義務及社會目標（Bedford & Hwang, 2003）。例如「生命、自由、財產」是人類不可剝奪的天賦人權，不因任何人事物而變動，具有「普遍性」與「永久性」。其次，基於「自主的倫理」（*ethics of autonomy*），個人有權利根據自己的意志、價值、渴望，自己做主，而非受制於他人外力。個人在選擇目標及達成目標的方法上有最大的自由，這是發展個人興趣的最佳方法。自由是個人主義社會的重要成分，因為個人需要以自己的方式，自由發展個人的天份與潛能（Bedford & Hwang, 2003）。綜上，這些權利的特點是：（1）在「個人層次」上談；（2）權利是人人平等，權利享有的正當性具有普遍性（universality），不會因為任何條件有所變動。

（二）儒家社會關係主義下的硬核

儒家社會的硬核包括：生命來源是父母，以及個人的角色義務。儒家社會的道德系統以「角色倫理」（role *ethics*）為主軸，這可溯及儒家文化傳統。《孝經·開宗明義》：「身體髮膚，受之父母，不敢毀傷，孝之始也」，指出個人的生命來源是父母，親子之間有尊卑的關係。其次，儒家社會強調關係主義（relationalism）（黃光國，2009a），「個人義務」與「社會目標」優先於「個人權利」。在關係主義的脈絡下，人自出生即置身於各種人際關係的網絡之中，與網絡中「對偶關係」（dyad relationship）的「重要他人」（significant others）建立緊密關係（Hwang, 2000, 2001）。同時針對各個特定的對偶關係，人們應符合重要他人對自己角色期待，不斷地自我修養，善盡自己的角色義務。傳統儒家是以「道德」的高低作為評比人的階序，人們要努力自我改進與修養品德，朝向「士希賢，賢希聖」的目標邁進，此類似Dumont（1985）所稱的「階序人觀」1。

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1 Dumont的階序人觀係指印度的種姓制度，依潔淨程度將人分成不同等級。

例如在父子的對偶關係中，須「父慈子孝」，即父母的角色義務是慈愛，子女的角色義務是孝順。在君臣的對偶關係中，須「君仁臣忠」，即君王的角色義務是仁厚，臣子的角色義務是效忠。顯見父、子、君、臣不同角色，義務各不相同，都要不斷地自我修養，盡到自己的角色義務。這些義務的特點是：（1）在「人際關係」上談，而非個人層次上談；（2）針對特定關係對象以及尊卑地位，角色義務有不同，不具普遍性，而是具有特殊性（particularity）。

三、 泛文化研究 vs. 文化系統研究

Hwang（2014）提出「泛文化向度」（pan-cultural dimensions）及「文化系統觀」（cultural system）兩種研究取向。對非西方學者而言，了解兩種研究取向的差異頗為重要。泛文化向度研究取向以西方主流心理學理論為核心，而後發展工具，測量跨越許多文化群體而在量度上有相等的心理構念。例如 Hofstede（2011）的文化維度理論（cultural dimensions theory）作為跨文化比較的架構，包括六個向度。最廣為引用的向度是個人主義（individualism）／集體主義（collectivism），英語系國家如英、美、澳在這個向度上屬高分群，相反地，香港、塞爾維亞、馬來西亞、葡萄牙為低分群，被視為集體主義。這種取向雖然能累積許多瑣碎的實徵研究成果，卻使得非西方文化的面貌模糊，喪失其文化的可辨認性（cultural identity）（Hwang, 2014）。「文化系統觀」研究取向則是指最早把這個系統提出來的人，他的整套觀點和想法。例如儒家的文化系統，就要回到孔子當年是怎麼闡述的。後來的人對這個文化系統所作的解釋，是在某一個特殊的社會文化條件之下，對原來的文化系統解釋。

（一）泛文化的研究取向

筆者參加 2023 年在香港舉辦亞洲社會心理學會，大會主題演講之一 "Cultural Defaults in the Time of the Coronavirus: Lessons for the Future"，主講人為 Stanford 大學的 Hazel Markus 及 Jeanne Tsai，以及 Kyoto 大學的 Yukiko Uchida。他們以「獨立我」（Independence）vs.「相依我」（Interdependence）二元對立的概念，研究新冠疫情期間戴口罩行為的差異，結果發現傾向獨立我的美國人不願意戴口罩，而傾向相依我的亞洲人願意戴口罩。這樣的研究顯示 WEIRD 樣本者為「獨立我」，其特徵清楚、明顯。反之，與 WEIRD 不同者皆被歸類為「相依我」，其特徵則較為模糊。可惜的是，這種泛文化研究取向只是說明兩種不同研究對象，在戴口罩意願的差異（what），但未進一步解釋為何傾向相依我的亞洲人願意戴口罩（why）。換言之，這種研究取向去脈絡化（decontextualize），對亞洲人願意戴口罩「只知其然，卻不知其所以然」。

（二）文化系統的研究取向

筆者在前述同一個研討會發表論文，從儒家倫理的角度探討角色義務與權利的關係。研究結果指出，比起未盡義務的父母，盡到照顧、養育子女義務的父母，有較高的權利要求子女選擇父母希望的學系就讀，凸顯盡到角色義務者，方能享有權利（Fwu et al., 2023）。會中西方學者回饋表示，這個現象隱含著華人社會的青少年不像西方青少年般的獨立自主，要聽父母的決定，比較不是獨立我，而是相依我。事實上，WEIRD 與 Non-WEIRD 採取的知識論（或稱認知論）不同。因此，WEIRD 以其知識架構看待 Non-WEIRD 的現象，會覺得很奇怪；同樣地，Non-WEIRD 以其知識架構看待 WEIRD 的現象亦會覺得很奇怪。Hwang（2014）提出文化系統的研究取向，建議從文化系統的角度進一步探討為什麼會有某種現象。鑑於此，Non-WEIRD 研究者或可先從前人跨文化比較的結果切入，找出與 WEIRD 樣本不同的現象，而後以文化系統觀，例如用儒家倫理觀，解釋儒家社會為何會有與西方不同的現象。如此一來，對於研究結果「不但知其然，也知其所以然」。

參、理論的建構

實徵研究結果要放在理論的脈絡下，才能彰顯其意義。筆者採取「文化系統觀」，從儒家的文化系統建構「修養的角色義務理論」（role obligation theory of self-cultivation），以解釋後續的系列實徵研究。以下先說明儒家文化系統，再說明修養的角色義務理論，為下一節的「華人教育觀」奠定基礎。

一、 儒家文化系統

人在社會中面臨五種基本的人際關係，即夫婦、父子、兄弟、君臣、朋友關係，稱為五倫。其中父子、夫婦、兄弟為家人的關係，君臣、朋友為家庭外的關係。其他的人際關係會以「擬家人」的關係呈現。例如古代百姓對州、縣的官員，尊稱為「父母官」，現今對縣市首長的稱呼亦然。家人有父母兄弟姐妹，為了匹配這些稱謂，從師父衍生出師母、師兄、師弟、師姐、師妹；朋友的父母，稱為伯父、伯母；密友稱為情同兄弟或親如姊妹；同學之間，高年級者稱為學長、學姊，低年級者稱為學弟、學妹。

先秦儒家的「庶人倫理」強調「相對倫理」，是人人皆須遵守的人際倫理規範。個人依自己的名與分，發自內心、自然地去實踐「禮」的規範，盡自己的義務（楊祖漢，2019），也就是《論語·顏淵》所言「君君，臣臣，父父，子子」。孟子延伸君臣、父子的人倫關係，《孟子·滕文公上》提出君臣、父子、夫婦、兄弟、朋友等的五倫對偶說，即「父子有親、君臣有義、夫婦有別、長幼有序、朋友有信」。此五倫明確規範各種對

偶關係應有的行為準則，即父子之間要相互親愛，君臣之間要有禮義，夫婦之間要內外有別，兄弟之間要有尊卑之序，朋友之間彼此要有誠信，以期「合宜」地相處。《禮記·禮運篇》說：「父慈子孝，兄良弟弟，夫義婦聽，長惠幼順，君仁臣忠，十者謂之人義」。「相對倫理」基於「仁」與「禮」，「父、兄、夫、長、君」等地位較尊者會發自內心，很自然地不斷地修養自己，先善盡「慈、良、義、惠、仁」等的角色義務，而「子、弟、婦、幼、臣」等地位較卑者為回報較尊者，也會很自然地竭盡心力修養自己，善盡「孝、悌、聽、順、忠」等的角色義務（黃光國，2009a）。如果未善盡角色義務，便會愧對重要他人。

由於重要他人的期待會不斷提升，永無止境，因此個人應不斷地修養自己，盡其角色義務，以臻至善（self-perfection）（Chan, 2014）。這呼應了《禮記·大學》：「湯之，《盤銘》曰：苟日新，日日新，又日新」，意指在行為上要不斷去惡從善，在道德修養上要不斷進步，精益求精，每天都是一個新的自我。同時也呼應了《禮記·中庸》：「射有似乎君子，失諸正鵠，反求諸其身」。《孟子離婁上》：「行有不得者，皆反求諸己，其身正而天歸之」。《孟子·公孫丑上》：「射者正己而後發，發而不中，不怨勝己者，反求諸己而已矣。」皆是指人們如有缺失或不足，不要去怪罪或埋怨他人，而要反求諸己，抱持著「天行健，君子以自強不息」的精神，不斷自我修養，自我改善，才能日臻完善。

二、修養的角色義務理論

筆者等從前述儒家文化系統，建構「修養的角色義務理論」（role obligation theory of self-cultivation）（Fwu et al., 2021, 2022）。人自出生即置身於五倫關係中，應善盡各種對偶關係中的角色義務，以滿足重要他人的期待。社會大眾會以個人努力盡其角色義務的程度，做為評斷個人德行的重要標準，且德行能夠彰顯個人的道德修養。簡言之，其中的推論是「努力追求重要他人期待的目標→善盡角色義務→彰顯個人德行→增進內在道德修養」（符碧真等，2021）。從個人層次來看，個人愈努力善盡角色義務，愈能彰顯自身的德行以及道德修養。愈盡到角色義務者，愈能獲得高道德評價（morally upright），也愈符合庶人倫理（ethically correct），愈對得起自己及重要他人，愈感到心安理得，最終達到心理社會均衡的狀態（psychosocial homeostasis）。行有不得，反求諸己。未盡角色義務者，獲得的道德評價低，也會覺得愧對自己及重要他人，無法達到心理社會均衡的狀態（符碧真等，2021）。另從社會層次來看，如果每個人在對偶關係中都扮演適當角色，盡到該角色的義務，便能維持人際關係的和諧，建立和諧的社會。

五倫關係中，最重要的是一輩子無法切割，有血緣的親子關係。「父慈、子孝」是親子雙方各應履行的角色義務（Hwang, 1999, 2012）。父母視子女為生命的延續和未來

的希望，盡其「慈愛」的角色義務，竭盡心力提供最佳的資源，照顧與教養子女，幫助他們達到社會期許的目標。另一方面「養不教，父之過」，父母藉由獎懲的社會化過程，督促子女盡其角色義務，以達到社會期許的目標。子女為回報父母的犧牲與付出，盡其「孝順」的角色義務，努力追求社會期許的目標，「揚名聲，顯父母」，以滿足父母的期望。在東亞社會或儒家文化圈中，子女努力追求社會期許的目標，常是為了善盡其在親子倫理關係中孝順的角色義務，如此可彰顯個人的德行，並增進個人的內在道德修養。如果行有不得，則需反求諸己，是否已善盡角色義務。如果未善盡角色義務，便會覺得愧對自己與父母。因為角色義務蘊含道德修養境界的提升，又與社會（父母）期許的成就目標相連，故努力追求與達成成就目標即是「倫理」與「道德」的顯現。

三、 修養的角色義務理論在成就目標的適用範圍

筆者與研究群將儒家社會追求的成就目標，分成「縱向目標」（vertical goal）與「非縱向目標」（non-vertical goal）兩種（Fwu et al., 2016, 2017b）。「縱向目標」係指是社會期許的目標，個人在縱向「成就金字塔」（achievement pyramid）上努力往上攀爬，以滿足父母的期待，光耀門楣（Chen et al., 2009）為其主要的成就動機。這個概念類似古代學子從通過縣、府、院的「秀才」，到各省的「舉人」，再到京師的「貢士」，最後通過皇帝的親試，成為「進士」，往上層層爬升，取得功名，任官職，光宗耀祖。放在現今的脈絡下，縱向目標像是在學業獲得好成績、考上好學校、找到好工作、獲得好名聲等社會期許的目標。相反地，非縱向目標的社會期許較低，類似西方社會「自主的倫理」，根據個人自主的內在動機所追求的目標，像是在運動、才藝等領域的發展等。與非縱向目標相比，縱向目標具有父母期望高、社會重要性高、義務性高、同儕競爭強、自我選擇性低的特點（Fwu et al., 2016, 2017b），具有文化特殊性。探討華人教育觀時，如果直接將西方根據自主內在動機的理論應用到儒家社會，未能區辨這兩種成就目標，則難窺華人學生學習的全貌。

筆者認為「修養的角色義務理論」僅適用於縱向目標，而不適用於非縱向目標。這是基於前述拉卡托斯「科學研究綱領」中「硬核」的概念。「修養的角色義務理論」是筆者系列研究的硬核，為了保護「硬核」，遂增加成就目標類型的輔助假設，僅適用於縱向目標。例如子女努力用功讀書，追求縱向成就目標，是善盡自己孝順的角色義務，一方面彰顯個人的德行，提升自己的道德修養，另一方面符合倫理規範，無愧於己與父母，心安理得，達到心理社會均衡的狀態。倘若行有不得，例如學業表現欠佳時，則應反求諸己，是否已經盡到努力用功讀書的角色義務。如果未盡己，則會感到愧對自己及父母，力求自我改善。值得注意的是，父母對縱向目標的標準會不斷提高，力求好還要

更好，因此子女即使暫時達標，仍然必須不斷地修養自己，更上層樓，不得停歇。相對地，追求非縱向目標則較少角色義務的約束，也較與道德修養及愧疚感無關。

肆、華人教育觀

為便於說明下一節實徵研究的結果，本節先說明西方教育觀，再說明華人教育觀。藉由對比兩者的差異，彰顯華人教育觀的特殊性。

一、西方教育觀

（一）教育的意涵

西方社會強調個人的生命來源是上帝。英文"gift"一詞有「禮物」與「天份」兩種意思，隱含著造物者「上帝」賜予每個人的「禮物」，就是他的「天份」。英文"education"教育一詞是由拉丁文名詞 educare 蛻變而來。而 educare 又出於動詞 educere，由 e 和 ducere 兩字組成。e 在拉丁文中的意義為「出」，ducere 為「引」的意思，教育就是要將上天賜予個人的天份引出來，使其天份得以充分發揮。這呼應了 Covington（1992, 1996, 1998, 2000）「自我價值成就動機理論」（self-worth theory of achievement motivation），指出個人的價值（human value）等同於個人達成目標的能力（ability to achieve），而了解自我價值最主要的方式，就是瞭解自己能力的高低。個人可能在學術領域較有天份，也可能在藝術領域較有天份，沒有主副之別。不論在哪個領域，教育的過程都在鼓勵個人朝向其有潛力的方向發展，隱含西方社會較能接受多元發展的價值。

（二）能力本質觀與能力歸因

在此脈絡下，Dweck 和 Leggett（1988）提出「內隱理論」（implicit theory），指出人們對個人特質（trait or quality）（包括智力或能力）的可變或不可變，分成本質觀（entity theory）與增進觀（incremental theory）兩種。本質觀相信人們特質不可變，但增進觀相信人們特質可變，可透過努力改變個人特質，隱含著努力是個手段，因此具有工具性價值（instrumental value）。Weiner（1986）「歸因理論」（attribution theory），以內/外在、穩定/不穩定、可控制/不可控制等三面向，將成敗歸因分成能力、努力、運氣、工作難度等。能力屬於內在/穩定/不可控制的因素，努力屬於內在/不穩定/可控制的因素，兩者互斥。跨文化研究顯示，在內隱理論方面，西方人傾向採取「能力本質觀」（entity theory of intelligence），認為個人的能力是不可變的（Dweck, 1999）；在歸因理論方面，指出美國人傾向採取能力模式（ability model）（Stevenson & Stigler, 1992），將學業成敗歸諸於能力，而能力屬於內在/穩定/無法控制的因素。

（三）自我增進、能力與努力互補關係

鑒於西方人傾向認為能力是天生的，無法改變，因此家長在養育子女的過程中，教師在教育學生的過程中，鼓勵個人朝向有天份、有能力的方向發展，就會有優異的表現，強化了能力本質觀。人們傾向對成功者，稱讚其天份、能力，目的在幫助孩童在自己擅長的領域「自我增進」（self-enhancement）（Kitayama et al., 1997），以提升其自尊或自我概念，建立其自信心。西方觀點認為稱讚一個人聰明、能力好（praise ability），就是稱讚人（praise person），是對當事人的恭維。相對地，稱讚一個人很努力（praise effort），視同稱讚努力的過程（praise process）（Dweck, 1999, 2000; Kamins & Dweck, 1999; Mueller & Dweck, 1998），但這種稱讚隱含著他不夠聰明、能力欠佳的意思，不是稱讚人。Folmer 等學者（2008）從發展心理學的角度，檢視 5-15 歲學童面對失敗時，對能力與努力關係的看法。結果發現，兩者之間的關係，由幼童時的正相關轉變為高年級時的負相關，且此轉折頗為穩定。幼童將能力與努力兩者混在一起，解釋成為聰明的小孩會用功。年紀較長的學童則認為兩者是相反的概念，認為能力高者不需要太多的努力，即可獲得高成就；要很努力才能得到高成就者，隱含著不夠聰明、能力欠佳。因此對較長的學童而言，稱讚努力，非但不是恭維，反而可能是種諷刺或挖苦。

（四）心智導向

呼應前述西方人重視天分的認知能力，Li（2012）在其「學習的文化基礎：東方與西方」一書中指出，西方社會認為學習是心智導向（mind-oriented），旨在學習外在世界的知識（understand the world）。學習過程中，大腦的心智活動包括：主動參與（active engagement）、探索與探究（exploration/inquiry）、批判思考（critical thinking）、溝通表達（self-expression/communication）。「主動參與」係指學生要主動參與學習的過程，包括閱讀、找資料、實驗、撰寫報告、參訪等；「探索/探究」係指學生要找出研究問題，進而動腦、動手實際去探索，找出解決問題的方法；「批判思考」係指學生不只是追求知識，更要對獲得的知識抱持批判、懷疑的態度，追求真理。經由主動參與、探究與批判思考過程所獲得的結果，有賴口語或書面溝通表達出來。

（五）努力的道德性

儘管西方社會重視認知能力，但也有重視努力的傳統，主要是受到基督新教「上帝預選說」（predestination）的影響。「上帝預選說」主張上帝決定哪些人會上天堂，哪些人會下地獄。個人是不是上帝的選民，早在出生前就已經由上帝預先選定，個人無從左右自己的命運。個人唯一能做的事，就是日以繼夜地勤奮工作，累積財富，以及過著克勤克儉的生活來「榮耀上帝」，以證明自己是上帝的選民，獲得救贖（Weber,

2001）。時至今日，基督新教的「工作倫理」（Protestant work ethic）強調透過辛勤工作及節儉，獲得財富與成功，是個人的義務與責任，因此具有道德性的價值（moral worth）（Weiner, 1994）。在非宗教的世俗世界（secular world），努力不懈的勞動被視為一種美德，這種信念在歐陸及北美頗為盛行（Weber et al., 2002）。

二、華人教育觀

學者用「泛文化的研究取向」，以西方理論為基礎，將非西方社會學生的學習與表現套在西方理論的架構下，進行跨文化比較研究。例如跨文化比較研究顯示，在內隱理論方面，東亞學生傾向採取「能力增進觀」（incremental theory of intelligence），認為個人能力是可變的，可以透過努力而改變（Dweck et al., 1995）；在歸因理論方面，東亞學生傾向採取努力模式（effort model），將學業成敗歸諸於努力（Stevenson & Stigler, 1992）努力屬於內在／不穩定／可控制的因素。但是如果以「儒家的文化系統觀」來看這些結果，則會有不同的解釋。

（一）教育的意涵

華人社會對教育的意涵與西方不同。「教」的甲骨文字形為 𥘗，左上原作兩個「乂」，代表運算或卦符，左下是一個頭大身體小的小孩形象，右邊是一隻手拿著棍棒的形象。簡言之，就是大人拿著棍棒教小孩學運算。古代嚴師出高徒很生動地表現在「教」的字形上。「育」的甲骨文字形為 𠫓 ，上方是女性，下方是小孩的形象，意指女性產子。許慎《說文解字》：「教，上所施，下所效也；育，養子使作善也」。「教」意指學識處於高位的先知者傳授知識技能，學識處於低位的蒙昧者學習模仿，以獲得知識技能；另一方面輩份高者表現出良好的行為，輩份低者模仿、效法。「育」意指養育子女或培育年輕人做好事或成為善良的人。足見西方教育強調引出上帝賦予學習者的潛能，與心智有關；華人教育強調學習知識與培養學習者的善行，顯示除了知識之外，也與品德密切相關。

（二）義務觀與盡己歸因

前述Dweck和Leggett（1988）的內隱理論，聚焦於個人「質變的可能性」（the possibility of changing trait），但從儒家「修養的角色義務理論」來看，在社會期許的縱向目標如學業表現，「質變不但可能」，而且「質變是個人的義務」（the obligation of changing trait）。因此，儒家社會的自我不是固定不變的。相反地，自我不但可以改變（possible），而且一定要變（obligatory），更要不斷地自我修養朝至善的方向改變（the ultimate good），永無止境（Fwu et al., 2021）。簡言之，這種內隱理論的義務觀

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有三個層次：第一，改變是可能的；第二，要朝好的、善的方向改變；第三，個人有義務要不斷地修養自己，往好的、善的方向改變。義務觀中「改變的可能性」，呼應Heine等（2001）的研究結果，東亞社會傾向持能力可以改變的增進觀，亦即義務觀中涵蓋了西方內隱理論的「增進觀」。至於義務觀中「個人有義務要不斷地修養自己，往好的、善的方向改變」，則凸顯了儒家文化的特殊性。

　　在歸因理論方面，儒家社會強調「行有不得，反求諸己」。努力追求縱向目標是個人應盡的角色義務。對學生而言，學業表現欠佳時，應反躬自省是否已經善盡努力用功讀書的角色義務，因此對於能力與努力的性質，與西方看法不同。雖然西方與東亞人都視能力為內在因素，但是在穩定性與可控制性這兩個面向上，東西有別。東亞人對能力的性質常要視情況而定。有些時候，我們會說「沒有數學細胞」，意指能力是內在/穩定/不可控制的因素；有些時候，我們會說「能力是可以培養的」，意指能力是內在/不穩定/可控制的因素。至於努力，因為前述的義務觀，以及「天行健，君子以自強不息」的信念，指出人們應該要效法天地運行的道理，無時無刻都要努力不懈。不論任何狀況，努力都是一定要的（Li, 2012），因此是內在/穩定/可控制的因素，與西方歸屬於內在/不穩定/可控制的因素不同。

（三）自我改進、能力與努力的正向關聯

　　儒家社會認為人們如果無法達完美的境地，要反求諸己，目的在於幫助孩童在自己的弱項或不足之處，不斷地「自我改善」（self-improvement）（Kitayama et al., 1997），期待自己一天比一天好，以臻完善（self-perfection）。語言文字是文化的載體，文化傳統鑲嵌在常用的成語當中，例如「勤能補拙」、「人一能之，己百之；人十能之，己千之」、「一勤天下無難事」等，在在都鼓勵人們可以藉由努力彌補能力的不足。華人傾向認為能力與努力兩者是正相關（Hong, 2001）。Salili和Hau（1994, p. 233）的實徵研究亦指出，華人學生視能力與努力是正向關聯，愈努力者能力愈高，能力愈高者必定很努力，背後的思維都是努力是獲得成功的好方法。努力使愚者「勤能補拙」，使智者「精益求精，更上層樓」，因此努力是改善能力的方法（means），呈現出努力的「工具性價值」（instrumental value）。這與西方視努力與能力是互斥的，並不相同。

（四）美德導向

　　從前述《說文解字》對「教育」的解釋，可知華人教育除了學習知識之外，也追求善，與品德密切相關。這呼應Li（2012）在其書中指出，華人對於學習不只是追求外在知識，更強調品德修養，是美德導向（virtue-oriented）。學習過程中包括以下特徵：認真、勤奮、專注、刻苦、恆心。「認真」（earnestness）係指將學習視為正經事，嚴肅地看待學習，例如「業精於勤，荒於嬉」。「勤奮」（diligence）係指努力不懈的學習

過程，會帶來「勤能補拙」、「熟能生巧」、「精益求精」的結果。「專注」（concentration）係指學習過程中要全神貫注，心無旁騖，例如「潛心學習」、「兩耳不聞窗外事，一心只讀聖賢書」。「刻苦」（endurance of hardship）係指學習是作為人應盡的義務，因此需要經歷苦澀的過程，例如「懸梁刺骨」、「不經一番寒徹骨，哪得梅花撲鼻香」。「恆心」（perseverance）係指學習過程中不論發生什麼事，都要移除障礙，例如「精誠所至，金石為開」，「愚公移山」。這些學習過程的特質，都與品德修養有關，故被稱為「學習的美德」（learning virtues），與西方強調心智導向不同。

（五）努力的道德性

在華人社會中，學生在任何情況下都應努力用功，而努力用功讀好書通常被認為是盡孝道，善盡對父母的角色義務（Tao & Hong, 2014），可彰顯個人的德行，進而提升內在的道德修養。儒家社會理想的人就是要成為「品學兼優」的好學生，「品優」先於「學優」。學校教育強調「德智體群美五育均衡發展」，「德育」為五育之首，先於「智育」，足見品德先於知識學問。學生在學習過程中，不論智愚都須努力用功（品優），才能讀好書（學優），逐步達到品學兼優的理想境界。盡到角色義務，不會愧對父母的養育之恩。反之，如果未盡到角色義務，不但欠缺道德形象，而且愧對父母。這呼應了荀子勸學篇指出，「學惡乎始？惡乎終？曰：其數則始乎誦經，終乎讀禮；其義則始乎為士，終乎為聖人。真積力久則入。學至乎沒而後止也。故學數有終，若其義則不可須臾舍也。為之人也，舍之禽獸也」。顯示「努力好學」始能彰顯人類獨有的品德仁義，成其為「人」，反之則與「禽獸」無異，顯示努力本身就是目的（ends），具有「道德性價值」（moral value）。值得注意的是，東西方社會均強調努力的道德性價值，但西方源自於基督新教的工作倫理，與儒家社會的源頭不同。

其次，「學如逆水行舟，不進則退」、「業精於勤，荒於嬉」，都表示聰明者若不孜孜不倦，努力學習，終將導致「小時了了，大未必佳」。倘若不經努力，僅靠天分成功者，是不勞而獲，只是「小聰明」。努力表示當事人認真、負責任、盡本分，因此稱讚一個人「努力」，就是稱讚當事人具有「美德及道德形象」，因此「稱讚努力」與「稱讚人」兩者合而為一。這與西方稱讚一個人很努力，隱含著能力欠佳的反諷不同。此外，鑑於努力的「道德性」及「工具性」價值，家長在養育子女及教師在教育學生的過程中，常是對成功者稱讚努力，表示對當事人的肯定，反而較少稱讚能力好、天份高，以避免學生自恃小聰明而偷懶懈怠，這點也與西方對於成功者稱讚其天分與能力不同。

伍、實徵研究

科學研究問題的來源有三：（1）理論與觀察或實驗結果不一致；（2）理論系統內部發生相互矛盾；（3）兩個不同理論之間的相互衝突（黃光國，2001，p.140）。筆者等的研究問題主要來自於理論與現象不一致，或是跨文化研究顯示東西方不一樣的現象。系列實徵研究結果分以下五部分說明，並將研究結果要放在「修養的角色義務理論」的脈絡下，以彰顯其意義。

一、成敗：目標類型與努力程度對道德形象（**moral**）與獎懲行為（**behavioral**）的影響

　　跨文化實徵研究指出，北美學生傾向將成敗歸因於能力，東亞學生則歸因於努力（Stevenson & Stigler, 1992）。筆者等的研究問題是：為何東亞學生重視努力？在青少年社會化過程中，成人（父母及師長）是否透過獎懲傳遞了努力的文化信念？研究結果發現，比起非縱向目標，在縱向目標成功時，努力者比不努力者更具有認真、負責的正面道德形象，也獲得更多的讚許。失敗時，在縱向目標上不努力者具有最差的道德形象，也受到最多的責備（Fwu et al., 2016）。此外，成人及青少年都認同：在縱向目標上，愈努力者愈具有道德形象，愈有道德形象者愈會受到獎勵（努力者→高道德形象→獲獎勵）。顯見在青少年社會化的過程中，成人傳遞「天道酬勤」及「一分耕耘，一分收獲」的文化信念，青少年接收到這些信念，並內化成自己的信念（Fwu et al., 2014）。

　　兩篇研究彰顯華人教育觀的特點有三：（1）西方「自我決定論」（self-determination theory）指出，只要是根據自己興趣與內在動機選擇的目標，都一樣重要，沒有主、從之別。不論哪種目標，失敗者較少受到責備，成功者獲得較多的讚許（Hamilton, et al., 1988, 1990; Lourengo, 1994），成功時的獎勵重「結果」。儒家社會目標類型與努力程度會影響獎懲。修養的角色義務理論放在縱向目標時，則能彰顯其意義。在縱向目標上，成人給予學生獎懲時，不只看「成敗」的結果，還考慮「努力」的過程，兼顧「結果」與「過程」，顯見縱向目標的文化特殊性；（2）Dweck（1999, 2000）的增進觀指出，努力可以增加能力，意指努力具有工具性價值。儒家社會勤能補的信念，近似努力的工具性價值，但是在縱向目標上，努力還有很強的「道德性價值」，因此努力成功者因「天道酬勤」而受到讚賞，但不努力成功者因「不勞而獲」而較少受到稱讚；（3）Weiner（1986）歸因理論指出，能力為不可控制的因素，努力為可控的因素，兩者互斥。據此，學者（Dweck, 1999, 2000; Kamins & Dweck, 1999; Mueller & Dweck, 1998）指出，稱讚「聰明」是「對人的稱讚」（person praise），稱讚「努力」是「對過程的稱讚」（process praise），兩者互斥。但儒家社會在縱向目標上，稱讚個人「努力」，也是稱讚「人」，因此對「過程」稱讚與「對人」稱讚兩者合一，並不互斥。

二、失敗：目標類型與努力程度對道德形象（**moral**）與難過情緒（**emotional**）的影響

Covington 與其同僚（Covington,1984; Covington & Omelich, 1979）依據「自我價值的成就動機理論」（self-worth theory of achievement motivation）發現，美國學生失敗時，努力可以避免受到教師責罰，但努力卻失敗，顯現出自己能力太差，有損自我價值，因此努力是把雙面刃。筆者等的研究問題是：在強調努力的儒家社會，努力是否也是把雙面刃？儒家文化系統有無一套心理機制，可舒緩負面的結果？研究結果發現，在縱向目標失敗時，努力是把雙面刃：努力失敗會很難過（feeling bad），不努力失敗則欠缺道德形象（being bad），於是陷入努力也不是，不努力也不是的兩難困境。此雙面刃在縱向目標明顯大於非縱向目標（Fwu et al., 2017b）。此外，在縱向目標上，儒家文化系統「盡己」的信念，有助於減少失敗帶來的難過情緒。「行有不得，反求諸己」後，如果覺得自己已經竭盡心力對父母盡孝時，會減少難過的負面情緒（Fwu et al., 2017a）。

這兩篇研究顯示，在西方與儒家社會，努力都是把雙面刃，但意涵不同，尤其是修養的角色義務理論放在縱向目標時，更能彰顯四點意義：（1）西方的雙面刃源自於能力不足，有損自我價值，我國的雙面刃源自於在縱向目標上努力不夠，顯示出未盡到自己的角色義務，有損道德形象；（2）根據基督新教，努力符合工作倫理，因此教師不會處罰努力的學生。另一方面學生認為努力失敗者表示能力不足。西方的雙面刃是努力雖可避免教師懲罰，但卻顯現出自己能力不足，造成「師生間信念的衝突」（inter-personal conflict）。我國努力者雖具有道德形象，但會因努力未帶來好結果，而產生難過情緒，造成「自我內在的衝突」（intra-personal conflict）。努力失敗會很難過，不努力失敗則欠缺道德形象，於是陷入努力也不是，不努力也不是的兩難困境；（3）努力是把雙面刃在西方沒有領域的差別，但在我國則是在縱向目標明顯大於非縱向目標，顯現縱向目標的文化特殊性；（4）在縱向目標上，努力雖是把「劍」（sword）的雙面刃，但反求諸己後覺得已「對父母盡己」，可舒緩負面的難過情緒，「盡己」發揮了「盾」（shield）的自我保護作用。

三、縱向目標失敗後持續努力（**behavioral**）的心理歷程與兩難困境

Heine 等（2001）及 Zhang 與 Cross（2011）發現，西方社會學生成功時會繼續堅持，但是東亞學生失敗時會持續努力。筆者等的研究問題是：東亞學生在學業失敗後，持續努力的心理歷程為何？Schmidt 與 Weiner（1988）為解釋人類行為的心理機制，提出 3A model（attribution→affection→ action），即認知影響情意，進而影響行為。鑒於儒家社會重視「努力」及「行有不得，反求諸己」的文化信念，筆者等根據努力的「工具性價值」與「道德性價值」，發展出「努力進步觀」與「努力義務觀」信念，並提出 B-3A model（belief→attribution→ affection→ action），說明失敗後反求諸己的反思歷程。研究

結果發現，持努力義務觀者，反求諸己後，未盡到角色義務時，會產生愧對父母及愧對自己的負面情緒。為跳脫負面情緒，遂激發持續努力的動力，追求學業成功（Fwu et al., 2018）。另一篇論文發現，學生在學業失敗後，同時產生兩種負面情緒，一種是觸動（activating）的情緒如愧疚感，另一種是非觸動（deactivating）的情緒如絕望感。因為學業是縱向目標，觸動的愧疚感使得學生繼續努力追求成功，以跳脫負面情緒，非觸動的絕望感使得學生喪失鬥志，因此陷在進退維谷的兩難情境（Fwu et al., 2021）。

這兩篇研究顯示華人教育觀的六項特點：（1）廣為學者引用的 Dweck（1999, 2000）「能力本質觀」，在模型中不具任何預測力，但從修養的角色義務理論衍伸的「努力進步觀」與「努力義務觀」卻具預測力，且循不同路徑影響持續努力。這凸顯套用西方理論難以解釋東亞學生的學習，但從儒家文化系統發展出的信念則有助於解釋現象；（2）西方與儒家社會對「反思」（self-reflection）的重點不同，西方強調批判思考、問題解決等「認知」面向（Dewey, 1933; Schön, 1995），儒家社會則強調反求諸己，反省是否對自己盡己與對父母盡孝的「道德」面向；（3）西方學者難以理解愧疚感（indebtedness），建議筆者以罪惡感（guilt）取代，但是兩者截然不同。罪惡感係指「做了不該做的事」，例如偷竊後產生罪惡感，但是愧疚感係指「沒做該做的事」，例如努力用功讀書是子女應盡的角色義務，如果沒有「盡己」，就會產生愧疚感；（4）一般而言，負面情緒常讓人喪失鬥志，而放棄努力。Pekrun 及其同僚（2006; Pekrun & Stephens, 2010）將負面情緒分成觸動及非觸動兩種，但鮮少研究指出兩種負面情緒同時發生。我國學生學業失敗後，同時產生非觸動的負面情緒如絕望感，以及觸動的負面情緒如愧疚感，造成兩難情況；（5）愧疚感分成愧對父母及愧對自己兩種，由於縱向目標源自於父母期待，故先產生愧對父母的感受。個人唯有將愧對父母的感受內化為愧對自己時，才會有繼續努力的動力；（6）儒家文化圈學生心理幸福感（psychological well-being）低於西方國家（Lee, 2009; Liu et al., 2017; Morony et al., 2013; Stankov, 2013），可能的原因不只是失敗帶來的負面情緒如難過，更可能是愧疚感激發努力的推力與絕望感阻礙努力的拉力，兩股力量的拉扯產生進退維谷的兩難困境所致。

四、 Covington 成就動機四象限模式在儒家社會的重新檢視

Covington（1991）基於自我價值理論（self-worth theory）提出「成就動機四象限模式」（The quadripolar model of achievement motivation），以「希望成功」（hope for success）與「害怕失敗」（fear of failure）兩個要素，將學生分成四類：高希望成功及高害怕失敗的過勞者（overstrivers）、高希望成功及低害怕失敗的樂天者（optimists）、低希望成功及高害怕失敗的自我保護者（self-protectors）、低希望成功及低害怕失敗的接受失敗者（failure acceptors）。其中過勞者與自我保護者因怕失敗，而產生逃避行為與負面情緒。

筆者等的研究問題是：這樣的分類是否適用於儒家社會？各類學生的行為與情緒有何不同？首先，研究結果發現，Covington 將害怕失敗視為單一因素，但基於修養的角色義務理論，「害怕失敗」有兩個因素，一是自己，如「怕愧對自己」；二是重要他人，如「怕愧對父母」；其次，學生分成六類，前述的四類僅佔 50%的樣本，新增相對應的儒家型過勞者與儒家型自我保護者兩類佔 50%的樣本；第三，過勞者與自我保護者兩類確實焦慮感較高，但是有 50%的儒家型的過勞者及 44%的儒家型的自我保護者的心理健康頗佳；最後，儒家型過勞者（佔 30%）的比例高於過勞者（佔 23%），且冒險意願略高，儒家型自我保護者（佔 20%）的比例高於自我保護者（佔 13%），且冒險願意明顯較高（Li et al., 2023）。

　　該篇研究凸顯出儒家社會的三項特點：（1）在西方個人主義的脈絡下，「害怕失敗」被視為單一因素，但從修養的角色義務理論來看，「害怕失敗」則有「自己」與「重要他人」兩個因素，彰顯儒家文化的特殊性；（2）Covington 的四象限模式僅能解釋近半數的學生，卻無法解釋另外一半的學生類別，顯見盲目移植到非西方國家，對瞭解非西方人們的心態常是不相干、不契合的；（3）國際學術評比指出東亞學生比西方學生害怕失敗，尤其是台灣是參與評比的七十多個國家中，最害怕失敗的國家（OECD, 2019），東亞學生也比西方學生的心理健康欠佳（Lee, 2009; Liu et al., 2017; Morony et al., 2013; Stankov, 2013）。但是儒家型過勞者與儒家型自我保護者的心理健康與冒險意願都比過勞者、自我保護者為佳。如果未引用修養的角色義務理論，將儒家型過勞者與儒家型自我保護者從過勞者與自我保護者區分出來，則很難看出東亞學生的全貌。

五、 教師回饋對學生學習動機的影響

　　Rattan 等（2012）的研究指出，美國頂尖大學大一新生在第一次微積分考試表現欠佳時，持「本質觀」的教師常會給予「沒關係，不是每個人對數學都很擅長」能力為本的安慰回饋，沒想到學生解讀為教師認為自己「沒有數學天分」，而放棄在理工領域發展的機會，影響美國國力，令教育界憂心忡忡。筆者等的研究問題是：在儒家社會，學生在數學上表現欠佳時，教師會給甚麼回饋？學生接收到回饋後，對學習動機產生甚麼影響？首先，研究結果發現，持「本質觀」的教師會給西方式「能力為本」（ability-based）的安慰回饋，如「沒關係，不一定每個人都擅長數學」，持「義務觀」的教師會給東方式「義務為本」（duty-based）的安慰回饋，如「沒關係，學習態度比結果重要」或勸告回饋如「一分耕耘，一分收穫，繼續加油」；其次，學生接收到西方安慰回饋時，傾向放棄；接收到東方安慰回饋或勸告回饋時，傾向繼續努力；第三， 40%的教師傾向給東方安慰與勸告回饋，60%的教師傾向同時給西方安慰、東方安慰與勸告回饋（Fwu et al.,

2022）。顯見如果僅以西方的「本質觀」為思考架構，不足以完全解釋儒家社會教師回饋與學生學習動機的現象。

這篇研究有四項特點：（1）東、西方持本質觀者都給能力為本的教師回饋，沒有文化差異（culture-free），但是持義務觀者會給義務為本的教師回饋，彰顯文化特殊性（culture-bound），呼應修養的角色義務理論；（2）能力為本的回饋，學生解讀為自己能力欠佳，而能力非自己能夠掌控，故對未來不抱希望，放棄數理科；義務為本的回饋，學生解讀為自己尚未盡己，而盡己與否是自己能夠掌控，故對未來的成功仍抱有希望，凸顯教師宜慎重回饋，以避免帶來負面效果；（3）東方安慰與西方安慰都在降低學生的壓力，但是都有利弊。東方安慰雖能激勵學生克服難關，在國際學術評比表現優異，也培養豐沛的理工人才，卻也造成努力仍表現欠佳者的心理健康不如國際同儕；西方安慰雖減少學生投入理工領域，卻能培養非理工各領域的人才；（4）60%教師同時給西方安慰、東方安慰與勸告回饋三種回饋，西方安慰回饋促使學生放棄，東方安慰與東方勸告回饋促使學生繼續堅持，導致學生陷入放棄與繼續堅持的兩難困境。

陸、研究結果的啟示

一、 從文化系統解釋研究結果

實徵研究結果要放在理論的脈絡下，才能彰顯其意義。筆者投稿國際期刊時，西方學者很自然地會以西方既有理論架構去理解。但是一旦用西方理論去解釋非西方的現象，就會陷入西方理論的框架，使得研究結果變了調。例如在儒家社會，未盡到角色義務時，會產生「愧疚感」（indebtedness），審查者希望筆者改以他們較易理解的「罪惡感」（guilt）取代。然而一旦改為罪惡感，就要放在基督教文化系統來解釋。天主教和基督教中的告解（confession），係指教徒做了不該做的事後，例如偷竊、殺人，而產生「罪惡感」。教徒為了自己的過錯，單獨向神父表示懺悔之心，而神父便代表天主，赦免其過錯。然而「愧疚感」則不然，係指子女沒盡到角色義務時，例如沒有努力用功好書，就會覺得愧對父母，因此要放在儒家文化系統下，才能凸顯其意義。簡言之，罪惡感係指「做了不該做的事」，而愧疚感是「沒做該做的事」，兩者截然不同。如果非西方學者沒有意識到兩個文化系統的不同，逕行使用西方理論的概念，不但扭曲了研究結果的解釋，也不知不覺地被西方學術殖民，喪失了文化的主體性。同樣道理，近年來國內教育改革常引進西方作法，未考慮我國的文化土壤，也就難怪導致水土不服，而遭詬病。

二、 兩難困境帶來心理健康問題

跨文化比較研究指出，儒家文化圈學生的心理幸福感低於西方國家（Lee, 2009; Liu et al., 2017; Morony et al., 2013; Stankov, 2013）。筆者等的研究發現，學生心理健康欠佳可能是源自於在縱向目標失敗情境下，陷入兩難困境所致。不努力失敗者者欠缺道德形象，努力失敗者產生難過的情緒，於是陷入努力也不是，不努力也不是的兩難困境。其次，失敗時，一方面產生對未來成功的絕望感，導致想要放棄，另一方面產生愧疚感，想要繼續堅持，也陷入進退維谷的兩難困境。再者，60%教師在學生表現欠佳時，傾向同時給予西方安慰、東方安慰與東方勸告的回饋。西方安慰回饋使得學生傾向放棄努力，東方安慰、東方勸告回饋使得學生傾向繼續努力。學生同時收到西方與東方回饋時，也會面對該放棄，還是該堅持的兩難。或謂學生心理健康欠佳，可能是因失敗後的挫折所致，但是儒家社會學生常面對正向與反方向兩股力量的拉鋸，造成的衝突，讓學生進也不是，退也不是的兩難困境，恐怕是影響心理健康的原因之一。

三、 以多元小型金字塔解決單一巨型金字塔的困境

筆者等上述系列研究顯示，縱向目標的文化特殊性使得我國學生努力在「單一」縱向巨型成就金字塔上攀爬，以盡其角色義務，卻陷入學習的兩難困境。既然儒家社會傾向在成就金字塔上攀爬，順勢的解決之道或可建構「多元」小型成就金字塔，讓學生在不同類型的金字塔上攀爬，達到適性揚才的理想。多元金字塔的概念可延伸至大學教師升等與大學類型。若學術論文為教師升等的唯一指標，教師便在「學術論文」的單一巨型金字塔上攀爬，會陷入像學生學習同樣的困境。建立多元升等類型的金字塔，讓教師找出自己最佳定位，選擇最適合的金字塔類型升等。筆者發表「另類學術—教與學的學術」（符碧真，2013）一文，即是教師多元升等的管道之一，與目前教育部推動教師多元升等及教學實踐研究計畫的理念不謀而合。同理，若國際一流研究型大學為大學辦學的唯一目標，則各大學在單一大學排名金字塔上攀爬，亦會陷入同樣困境。建立多元大學類型金字塔，讓各大學找出自己最佳定位，選擇最適合的金字塔往上攀爬。如此一來，學生、教師可在不同類型的金字塔上發揮長才，大學亦可在不同類型的金字塔上培養各種人才。

柒、對研究者的建議

回首來時路，筆者不揣淺陋，對研究者提出以下建議，或可少走一些冤枉路。

一、 從研究缺口找到問題意識

要縮短前述引用西方理論到我國教學實務現場的第一道鴻溝，學者扮演重要角色。現今各大學對教師評估及升等的要求，希冀將研究結果向 SCI、SSCI 國際期刊投稿，以接受國際學術界的檢驗，深陷「ii 叫」的困境。國際學術期刊審查，首重原創性（originality）與獨特性（uniqueness）。儒家文化圈國家學生每每在 TIMSS 及 PISA 等國際學術評比表現優異，引發學術界的好奇，但因西方學者難以掌握儒家文化的精髓，以致隔靴搔癢，甚或有不當的解讀。許多跨文化實徵研究結果顯示，東亞學生的學習與表現與西方既有理論不完全符合。亞洲儒家文化圈國家的學者並未從這些實徵資料的累積中，發展出有關的理論模式，將實徵研究結果放在理論脈絡中加以解釋，彰顯這些研究結果的意義與價值，殊為可惜。這個研究缺口（research gap）為國內學者從事原創性與獨特性的研究開啟了一扇窗，有助於國際期刊的學術發表，也能在國際上爭取到話語權，成為西方社會了解華人世界理論與實務的最佳窗口。

然要從何切入，找出問題意識呢？或可從兩個角度切入：第一，藉由跨文化的研究結果，找出東西方的差異，進而探討為何（why）東亞國家學生會有不同結果，以及心理機制為何（how），以呈現文化的主體性。例如跨文化研究發現，在內隱理論上，西方學生本質觀，但是東亞學生傾向增進觀；在歸因理論上，西方傾向採取能力模式，但是東亞社會傾向採取努力模式。研究者或可進一步從儒家文化系統的「修養角色義務理論」，指出東亞學生的信念不只是增進觀，而是義務觀；失敗不只是歸因於努力，而是盡己與否；第二，前述指出，研究問題的來源有三，筆者等的系列研究多源自於理論與現象的不一致（異例），大都採取以下三段論述，找到研究問題。大前提係指眾所周知的理論或研究結果；小前提係指與大前提不一致的現象；研究問題可能包括：有哪些不一樣的結果（what），為何會有不一致的現象（why），以及是透過甚麼樣的心理機制運作的（how）。例如西方既有研究顯示，成功者會受到稱讚，屬於結果論（大前提），但在我國非結果論（小前提）。研究問題是甚麼樣的情況會稱讚成功者（what），從修養的角色義務理論推論為什麼會稱讚（why），以及心理機制為何（how）。針對研究問題，結果發現，努力成功者受到稱讚，不努力成功者則否（what），主要是因盡到角色義務的道德形象為關鍵（why）。其中的心理機制是：學生盡到努力用功讀書的角色義務，具有道德形象，天道酬勤，會受到稱讚，但是未盡到角色義務成功者，欠缺道德形象，被視為小聰明，就不會受到稱讚，因此稱讚是過程與結果兼顧（how）。

二、 以文化系統進行發明的研究

泛文化向度的跨文化比較研究，常以西方理論為基礎，對比出西方與東亞學生的差異。而理論係指人類對自然、社會現象，按照已有的實證知識、經驗、事實、法則、認知以及經過驗證的假說，經由外推化（generalize）與演繹推理等等的方法，進行合乎邏

輯的推論性總結。在西方理論的架構下，可以以合乎邏輯的方式解釋西方學生學習的現象，東亞學生則被放置在西方理論框架下的相對位置，常與當地不契合、不相干。這樣的研究結果是「只知其然，卻不知其所以然」，難以彰顯學者的主體性。

鑑於此，建議以儒家社會的「硬核」及文化系統推論研究假設，驗證假設，進行「發明」的系列研究，達到「知其然，且知其所以然」，以彰顯學者的主體性。例如基於修養的角色義務理論的「硬核」，盡到角色義務者，道德修養愈高，獲得的道德評價高，不會產生愧疚感。據此推論在社會期許的縱向目標上，努力者對道德面（moral）、情緒面（emotional）、行為面（behavioral）上的影響，從事系列研究。但此「硬核」並不適用於所有類型的成就目標，加上輔助假設後，只有在社會期許的縱向目標下成立，在非縱向目標不成立，不去挑戰「硬核」。例如學業表現失敗時，不努力欠缺道德形象（道德面），努力失敗則會難過（情緒面），因此陷入兩難困境。但此兩難困境在非縱向目標則較不明顯。同樣道理，相較於繪畫的術科，學業成功時，努力比不努力者更具有道德形象（道德面），且獲得較多的稱讚（行為面）；學業失敗時，不努力比努力失敗者更不具備道德形象（道德面），且受到較多的責備（行為面）。學業失敗時，一方面未盡到角色義務，產生愧疚感（情緒面），為跳脫此負面情緒，會繼續努力（行為面），另一方面，產生絕望感（情緒面），而放棄努力（行為面），進而陷入繼續堅持或放棄的兩難。這些結果都顯示，如果未區分縱向目標與非縱向目標，則修養的角色義務理論就會崩塌瓦解。

三、區辨普同性與文化特殊性的現象

牛頓曾言「如果我能看得更遠，那是因為站在巨人的肩膀上」。所有的成就都是累積、循序漸進而來的，如果不奠基在前人的成就之上，就無法期待進步。非西方的學者從事研究時，不宜盲目地全盤西化，亦不宜全盤拒絕。相反地，學者宜站在巨人的肩膀上，探討在甚麼情況下是普同性的（culture-free）現象，在甚麼情況下具有文化特殊性（culture-bound），將更具意義與價值。鑑於西方人與非西方人因為都是「人」，生理結構相似，因此有普同性的現象；因各地文化不同，因此具有文化特殊性的現象。倘研究結果與西方既有理論相同時，顯示出普同性；倘研究結果不同，凸顯出特殊性。例如筆者等的研究指出，持 Dweck 內隱理論的本質觀者，會給表現欠佳的學生西方回饋，此結果與西方研究結果相同，具有普同性；持修養角色義務理論的義務觀者，會給學生東方安慰與勸告的回饋，具有文化特殊性。

拉卡托斯的精緻否證論指出，唯有當科學家提出的新理論能解釋舊理論先前的成功，或者新理論的內容包含了舊理論中不可反駁的部分時，舊理論才能受到否證（黃光國，2001，p.196）。倘若吾人能區辨出在甚麼情況下是普同性的（culture-free）現象，

在甚麼情況下有文化特殊性（culture-bound），產生的新理論不但能解釋舊理論先前的成功，也增加了新知識，代表著科學的進化。英國歷史學家湯恩比（Arnold J. Toynbee）預言，「十九世紀是英國人的世紀，二十世紀是美國人的世紀，二十一世紀將是華人的世紀」。在華人世界中，我國是同時受過西方教育洗禮，以及保有儒家文化底蘊最為完整的國家，具有中西匯通的優勢，提供國內學者建構新理論的養分。因此，我國學者最有機會建構出理論模型，既能解釋西方社會既有的現象，也能解釋儒家社會文化特殊性的現象（符碧真、黃源河，2016），引領科學的進化。

捌、結語

本文呈現筆者進行華人教育觀研究時，從哲學反思、理論建構、實徵研究的心路歷程。在學術上，期待研究結果能與西方理論對話，找出哪些現象不受文化影響，展現出普世性，哪些現象是受儒家文化影響，展現出文化特殊性，以增加此領域的新知識。在實務上，以證據為本（evidence-based）的研究結果提供教與學的指引，以減少「理論無用論」的抱怨，冀望對社會有所貢獻，筆者戲稱另類 SCI（social contribution index 社會貢獻指標）。本文期能拋磚引玉，引發更多學者投入華人教育觀這個尚待開發的園地，為理論與實務斷裂長久的沉痾，找出原因與解決問題的可行之道。

參考文獻

符碧真（2013）。另類學術：教與學的學術。**教育政策論壇，16**（1），69-101。
　　https://doi.org/10.3966/156082982013021601003

符碧真、陳舜文、危芷芬、王秀槐（2021）。華人的學業成就目標與儒家倫理觀：兼回應「台灣青少年是否認為努力與學業成就關乎道德？」一文。**中華心理學刊，63**（4），357-372。https://doi.org/10.6129/CJP.202112_63(4).0003

符碧真、黃源河（2016）。實地學習：銜接師資培育理論與實務的藥方？**教育科學研究期刊，61**（2），57-84。https://doi.org/10.6209/JORIES.2016.61(2).03

黃光國（2001）。**社會科學的理路**。心理。

黃光國（2009a）。**儒家關係主義：哲學反思、理論建構與實徵研究**。心理。

黃光國（2009b，2009 年 1 月 19 日）。**發明或發現，請先問問牛頓**。聯合報。
　　https://blog.udn.com/cc10/8599467

楊祖漢（2019）。仁（先秦儒學），載於王一奇（主編），**華文哲學百科**。
　　https://mephilosophy.ccu.edu.tw/entry.php?entry_name=仁（先秦儒學）

Bedford, O., & Hwang, K.-K. (2003). Guilt and shame in Chinese culture: A cross-cultural framework from the perspective of morality and identity. *Journal for the Theory of Social Behaviour, 33*(2), 127–144. https://doi.org/10.1111/1468-5914.00210

Chan, J. (2014). *Confucian perfectionism: A political philosophy for modern times.* Princeton University Press.

Chen, S.-W., Wang, H.-H., Wei, C.-F., Fwu, B.-J., & Hwang, K.-K. (2009). Taiwanese students' self-attributions for two types of achievement goals. *Journal of Social Psychology, 149*(2), 179–194. https://doi.org/10.3200/SOCP.149.2.179–194

Covington, M. (1984). The self-worth theory of achievement motivation: Findings and implications. *Elementary School Journal, 85*(1), 4–20. https://doi.org/10.1086/461388

Covington, M. V. (1992). *Making the grade: A guide for motivating young people.* Cambridge University Press. https://doi.org/10.1017/CBO9781139173582

Covington, M. V. (1998). *The will to learn: A self-worth perspective on motivation and school reform.* Cambridge University Press.

Covington, M. V. (2000). Goal theory, motivation, and school achievement: An integrative review. *Annual Review of Psychology, 51*, 171–200. https://doi.org/10.1146/annurev.psych.51.1.171

Covington, M. V. & Omelich, C. L. (1979). Effort: The double-edged sword in school achievement. *Journal of Educational Psychology, 71*(2), 169–182. https://doi.org/10.1037/0022-0663.71.2.169

Covington, M. V., & Omelich, C. L. (1991). Need achievement revisited: Verification of Atkinson's original model. In C. D. Spielberger, I. G. Sarason, Z. Kulcsar, & G. L. Van Heck (Eds.), *Stress and emotion: Anxiety, anger, and curiosity* (Vol. 14, pp. 85–105). Hemisphere.

Covington, M. V., & Teel, K. M. (1996). *Overcoming student failure: Changing motives and incentives for learning.* American Psychological Press. https://doi.org/0.1037/10193-000

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11,* 227–268. https://doi.org/10.1207/S15327965PLI1104_01

Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process*. D.C. Heath & Co Publishers.

Dumont, L. (1985). A modified view of our origin: The Christian beginnings of modern individualism. In M. Carrithers, S. Collins & S. Lukes (Eds.), *The category of the person: Anthropology, philosophy, history* (pp. 93–122). Cambridge University Press.

Dweck, C. S. (1999). Caution-praise can be dangerous. *American Educator, 23*(1), 4–9.

Dweck, C. S. (2000). *Self-theories: Their role in motivation, personality and development.* Psychology Press.

Dweck, C. S., Chiu, C., & Hong, Y. (1995). Implicit theories: Elaboration and extension of the model. *Psychological Inquiry, 6*(4), 322–333. https://doi.org/10.1207/s15327965pli0604_12

Dweck, C. S., & Leggett, E. L. (1988). A social cognitive approach to motivation and personality. *Psychological Review, 95*, 256–273. https://doi.org/10.1037/0033-295X.95.2.256

Dworkin, R. (1978). *Taking rights seriously.* Harvard University Press.

Folmer, A. S., Cole, D. A., Sigal, A. B., Benbow, L. D., Satterwhite, L. F., Swygert, K. E. & Ciesla, J. A. (2008). Age-related changes in children's understanding effort and ability: Implications for attribution theory and motivation. *Journal of Experimental Child Psychology, 99*(2), 114–134. https://doi.org/10.1016/j.jecp.2007.09.003

Fwu, B.-J., Chen, S.-W., Wei, C.-F., & Wang, H.-H. (2017a). The mediating role of self-exertion on the effects of effort on learning virtues and emotional distress in academic failure in a Confucian cultural context. *Frontiers in Psychology, 7: 2047.* https://doi/10.3389/fpsyg.2016.02047

Fwu, B.-J., Chen, S.-W., Wei, C.-F., & Wang, H.-H. (2018). I believe; therefore, I work harder: The significance of reflective thinking on effort-making in academic failure in a Confucian-heritage cultural context. *Thinking Skills and Creativity, 30*, 19–30. https://doi.org/10.1016/j.tsc.2018.01.004

Fwu, B.-J. & Wang, H.-H. (2002a). The social status of teachers in Taiwan. *Comparative Education, 38*(2), 211–224. https://doi.org/10.1080/03050060220140584

Fwu, B.-J. & Wang, H.-H. (2002b). From uniformity to diversification: Transformation of teacher education in pursuit of teacher quality in Taiwan from 1949 to 2000. *International Journal of Educational Development, 22*(2), 155–167. https://doi.org/10.1016/S0738-0593(01)00019-0

Fwu, B.-J., Wang, H.-H., Chen, S.-W., & Wei, C.-F. (2016). Effort counts and goals matter: The effects of effort and achievement goals on moral image, approval, and disapproval in a Chinese cultural context. In R. B. King & A. B. I. Bernardo (Eds.), *Psychology of Asian Learners: A festschrift in honor of David Watkins* (pp. 337–353). Springer Asia. https://doi.org/10.1007/978-981-287-576-1_21

Fwu, B.-J., Wang, H.-H., Chen, S.-W., & Wei, C.-F. (2017b). 'Feeling bad' or 'being bad?' The trapping effect of effort in academic failure in a Confucian cultural context. *Educational Psychology, 37*(4), 506–519. https://doi.org/10.1080/01443410.2016.1152355

Fwu, B.-J., Wei, C.-F., Chen, S.-W., & Wang, H.-H. (2021). To work hard or not? The conflicting effects of negative emotions on persistence after academic failure in a Confucian-heritage cultural context. In J. Chen & R. B. King (Eds.), *Emotions in learning, teaching, and leadership: Asian perspectives* (pp. 3–17). Routledge. https://doi.org/10.4324/9780429353581-1

Fwu, B.-J., Wei, C.-F., Chen, S.-W., & Wang, H.-H. (2014). Effort counts: The moral significance of effort in the patterns of credit assignment on math learning in the Confucian cultural context. *International Journal of Educational Development, 39*, 167–172. https://doi.org/10.1016/j.ijedudev.2014.07.010

Fwu, B.-J., Yang, T.-R., & Chen, Y.-K. (2023, July 12-15). *When rights meet duties: Asymmetry between duties and rights among different interpersonal relationships in a Confucian cultural context* (paper presentation). Asian Association of Social Psychology 15th Biennial conference. Hong Kong.

Fwu, B.-J., Yang, T.-R., Chen, Y.-K., & Chen, R. (2022). The impact of teacher feedback on students' decisions to stay on or change course after math failure in a Confucian cultural context. *Frontiers in Psychology,* 13:1046806. https://doi.org/10.3389/fpsyg.2022.1046806

Hamilton, V. L., Blumenfeld, P. C., Akoh, H. & Miura, K. (1990). Credit and blame among American and Japanese children: Normative, cultural, and individual differences. *Journal of Personality and Social Psychology, 59*(3), 442–451. https://doi.org/10.1037/0022-3514.59.3.442

Hamilton, V. L., Blumenfeld, P. C., & Kushler, R. H. (1988). A question of standard: Attributions of blame and credit for classroom acts. *Journal of Personality and Social Psychology, 54*(1), 34–48. https://doi.org/10.1037/0022-3514.54.1.34

Hau, K.-T. & Ho, I.-T. (2010). Chinese students' motivation and achievement. In M. H. Bond (Ed.), *Oxford handbook of Chinese psychology* (pp. 187–204). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199541850.013.0014

Heine, S. J., Kitayama, S., Lehman, D. R., Takata, T., Ide, E., Leung, C., & Matsumoto, H. (2001). Divergent consequences of success and failure in Japan and North America: An

investigation of self-improving motivations and malleable selves. *Journal of Personality and Social Psychology, 81,* 599–615. https://doi.org/10.1037/0022–3514.81.4.599

Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences, 33*, 61–83. https://doi.org/10.1017/S0140525X0999152X

Hong, Y.-Y. (2001). Chinese students' and teachers' inferences of effort and ability. In F. Salili, C. Y. Chiu & and Y. Y. Hong (Eds.), *Student motivation: The culture and context of learning* (pp. 105–120). Kluwer Academic/Plenum Publishers. https://doi.org/10.1007/978-1-4615-1273-8_6

Hsieh, F.-J., Wang, T.-Y., Hsieh, C.-J., Tang, S.-J., & Chao, G. (2010). *A milestone of an international study in Taiwan teacher education - An international comparison of Taiwan mathematics teacher preparation (Taiwan TEDS-2008).* Taipei, Taiwan, Department of Mathematics, National Taiwan Normal University.

Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. *Online Readings in Psychology and Culture, 2*(1). https://doi.org/10.9707/2307-0919.1014

Hwang, K.-K. (1999). Filial piety and loyalty: Two types of social identification in Confucianism. *Asian Journal of Social Psychology, 2*, 163–183. https://doi.org/10.1111/1467-839X.00031

Hwang, K.-K. (2000). Chinese relationalism: Theoretical construction and methodological considerations. *Journal for the Theory of Social Behavior, 30*(2), 155–178. https://doi.org/10.1111/1468-5914.00124

Hwang, K.-K. (2001). The deep structure of Confucianism: A social psychological approach. *Asian Philosophy, 11*(3), 179–204. https://doi.org/10.1080/09552360120116928

Hwang, K.-K. (2012). *Foundations of Chinese psychology: Confucian social relations.* Springer.

Hwang, K.-K. (2014). Cultural system vs. pan-cultural dimensions: Philosophical reflection on approaches for indigenous psychology. *Journal for the Theory of Social Behaviour, 45*(1), 2–25. https://doi.org/10.1111/jtsb.12051

Kamins, M. L., & Dweck, C. S. (1999). Person versus process praise and criticism: Implications for contingent self-worth and coping. *Developmental Psychology, 35*(3), 835–847. https://doi.org/10.1037/0012-1649.35.3.835

Kitayama, S., Markus, H. R., Matsumoto, H., & Norasakkunkit, V. (1997). Individual and collective processes in the construction of the self: Self-enhancement in the United States and self-criticism in Japan. *Journal of Personality and Social Psychology, 72*(6), 1245–1267. https://doi.org/10.1037/0022-3514.72.6.1245

Lee, J. (2009). Universals and specifics of math self-concept, math self-efficacy, and math anxiety across 41 PISA 2003 participating countries. *Learning and Individual Differences, 19*, 355–365. https://doi.org/10.1016/j.lindif.2008.10.009

Li, J. (2012). *Cultural foundations of learning*. Cambridge University Press. https://doi.org/10.1017/CBO9781139028400

Li, G.-Y., Fwu, B.-J., Yang, T.-R., & Chen, Y.-K. (2023) To approach or to avoid: The quadripolar model of achievement motivation revisited in a Confucian-heritage context. *Frontiers in Psychology, 13*:1046775. https://doi.org/10.3389/fpsyg.2022.1046775

Liu, C.-H., Chiu, Y.-H. C., & Chang, J.-H. (2017). Why do Easterners have lower well-being than Westerners? The role of others' approval contingencies of self-worth in the cross-cultural differences in subjective well-being. *Journal of Cross-Cultural Psychology, 48*(2), 217–224. https://doi.org/10.1177/0022022116677580

Lourengo, O. M. (1994). Portuguese children's judgments of moral, prosocial, and academic norms: duty of aspiration? *International Journal of Behavioral Development, 17*(2), 367–381. https://doi.org/10.1177/016502549401700208

Morony, S., Kleitman, S., Lee, Y. P., & Stankov, L. (2013). Predicting achievement: Confidence vs self-efficacy, anxiety, and self-concept in Confucian and European countries. *International Journal of Educational Research, 58*, 79–96. https://doi.org/10.1016/j.ijer.2012.11.002

Mueller, C. M., & Dweck, C. S. (1998). Praise for intelligence can undermine children's motivation and performance. *Journal of Personality and Social Psychology, 75*(1), 33–52. https://doi.org/10.1037/0022-3514.75.1.33

Organization for Economic Co-Operation and Development [OECD]. (2019). PISA 2018 results (volume III): *What school life means for students' lives*. PISA. OECD Publishing. https://doi.org/10.1787/acd78851-en.

Pekrun, R. (2006). The control-value theory of achievement emotions: Assumptions, corollaries, and implications for educational research and practice. *Educational Psychology Review, 18*(4), 315–341. https://doi.org/10.1007/s10648-006-9029-9

Pekrun, R., & Stephens, E. J. (2010). Achievement emotions: A control-value approach. *Social and Personality Psychology Compass, 4*(4), 238–255. https://doi.org/10.1111/j.1751-9004.2010.00259.x

Popper, K. K. (1972). *Objective knowledge: An evolutionary approach.* Oxford University Press.

Raffaelli, M., Lazarevic, V., Koller, S. H., Nsamenang, A. B., & Sharma, D. (2013). Introduction: Special issue on adolescents in the majority world. *Journal of Research on Adolescence, 23*(1), 1–8. https://doi.org/10.1111/jora.12000

Rattan, A., Good, C., & Dweck, C. S. (2012). "It's ok-not everyone can be good at math": Instructors with an entity theory comfort (and demotivate) students. *Journal of Experimental Social Psychology, 48,* 731–737. https://doi.org/10.1016/j.jesp.2011.12.012

Salili, F., & Hau, K.-T. (1994). The effect of teachers' evaluative feedback on Chinese students' perception of ability: A cultural and situational analysis. *Educational Studies, 20*(2), 223–236. https://doi.org/10.1080/0305569940200206

Schmidt, G., & Weiner, B. (1988). An attribution-affect-action theory of behavior: Replications of judgments of help-giving. *Personality and Social Psychology Bulletin, 14*(3), 610–621.

Schön, D. (1983). *The reflective practitioner: How professionals think in action*. Basic Books.

Schön, D. (1995). Knowing-in-action: The new scholarship requires a new epistemology. *Change, 27*(6), 26–34. https://doi.org/10.1080/00091383.1995.10544673

Stankov, L. (2013). Depression and life satisfaction among European and Confucian adolescents. *Psychological Assessment, 25*, 1220–1234. https://doi.org/10.1037/a0033794

Stevenson, H. W., & Stigler, J. W. (1992). *The learning gap: Why our schools are failing and what we can learn from Japanese and Chinese education*. Touchstone Books.

Tao, V., & Hong, Y.-Y. (2014). When academic achievement is an obligation: Perspectives from social-oriented achievement motivation. *Journal of Cross-Cultural Psychology, 45*, 110–136. https://doi.org/10.1177/0022022113490072

Wang, H.-H., & Fwu, B.-J. (2007). In pursuit of teacher quality in diversity: A study of the selection mechanisms of new secondary teacher education programs in Taiwan. *International Journal of Educational Development, 27*, 161–181. https://doi.org/10.1016/j.ijedudev.2006.07.003

Wang, H.-H., & Fwu, B.-J. (2014). Once hired, seldom gone: The deliberation process of beginning teachers in Taiwan in deciding to stay in teaching. *Teaching and Teacher Education, 37*, 108–118. https://doi.org/10.1016/j.tate.2013.10.004

Weber, M. (2001). *The Protestant ethic and the spirit of capitalism* (S. Kalberg, Ed.; S. Kalberg, Trans.; 1st ed.). Routledge. https://doi.org/10.4324/9781315063645

Weber, M., Baehr, P., & Wells, G. C. (Eds. & trans.) (2002). *The Protestant ethic and the "spirit" of capitalism and other writings*. Penguin Books.

Weiner, B. (1986). *An attributional theory of motivation and emotion*. Springer-Verlag.

Weiner, B. (1994). Ability versus effort revisited: The moral determinants of achievement evaluation and achievement as a moral system. *Educational Psychologist, 29*(3), 163–172. https://doi.org/10.1207/s15326985ep2903_5

Zhang, M., & Cross, S. E. (2011). Emotions in memories of success and failure: A cultural perspective. *Emotion, 11*(4), 866–880. https://doi.org/10.1037/a0024025

Confucian Ethics and Chinese Educational Perspectives:
Philosophical Reflection, Theoretical Construction, and Empirical Research

Bih-Jen Fwu

Abstract

During my career of preparing teachers, pre-service teachers often complain about the theory-practice divide. One of the main reasons is the introduction of Western theories to Confucian societies without considering cultural differences. East Asian students outperform their international counterparts on many international comparisons, such as TIMSS and PISA, but empirical studies have revealed that existing Western theories cannot fully explain these phenomena. Therefore, I have devoted myself to researching the Chinese view on education. This article describes my journey, including philosophical reflection, theoretical construction, and empirical research. Regarding philosophical reflection, I realize the fundamental differences between discovery derived from the only truth and invention originated from approximate truth, thus replacing discovery with invention research; understand the relationship between the hardcore and the protective belt, thus adding auxiliary hypotheses to protect the hardcore; distinguish the pan-cultural approach from the cultural system approach, therefore switching from know-what to know-why and know-how research. Based on Confucian ethics, our research group constructed the "role obligation theory of self-cultivation" (ROT), indicating that individuals should fulfill their role obligations to meet the expectations of significant others in the dyad of five cardinal interpersonal relationships. Duty fulfillment is an essential criterion for judging an individual's moral cultivation. Fulfilling obligation, on the one hand, is an indication of upgrading one's moral cultivation; on the other hand, it connects to social expectations; thus, those who fulfill their obligations are viewed as morally upright and ethically correct. As to empirical research, our research group found that in Confucian-heritage cultures such as Taiwan, (1) making an effort in academic domains has strong moral values, showing that heaven rewards hardworking students; (2) in the face of academic failure, students are trapped in a dilemma between feeling bad and being bad; (3) when encountering academic failure, students are in a predicament of feeling hopeless and indebted, putting them in an

awkward position of whether to persist or not; (4) building a "belief➔attribution➔affection➔action" (B3A) model to explain the psychological mechanism of how students reflect on their academic failure; (5) while the western quadripolar model can only explain 50 % of the sample, the addition of ROT can explain another 50%; (6) a majority of teachers tend to provide failing students with ability-based and duty-based feedback simultaneously, thus leading students at a loss. These results imply that empirical findings would be better understood from the cultural system; students' poor psychological well-being may relate to many dilemmas when facing academic failure; building multiple small achievement pyramids rather than one giant achievement pyramid may mitigate the predicaments. Finally, three suggestions are for scholars, including identifying research questions from research gaps between existing Western theories and local phenomena, conducting invention research from the perspective of cultural systems, and further distinguishing between culture-free and culture-specific phenomena in advancing psychological knowledge. Hopefully, more scholars will be involved in this field yet to be developed and find the solutions to the theory-practice divide.

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I. Introduction

The author works at a teacher education center. Throughout the process of training future educators, pre-service teachers frequently express concerns regarding the substantial gap between theory and practice, and some even propose the notion that "theory is useless," which has been quite troubling for the author. Here are two examples to illustrate this issue.

First, when pre-service teachers undertake teaching practicums in secondary schools, they occasionally offer students candy as a reinforcer for exhibiting behaviors that align with the teacher's expectations. However, students often respond by saying, "That's so childish!" Despite the pre-service teachers applying the reinforcement principles they learned in class, the outcomes did not align with their expectations (Fu & Huang, 2016), leaving them feeling quite disappointed.

Another example involves teachers' responses to students' poor performance in mathematics. American teachers tend to comfort students by saying, "It's okay, not everyone is good at math" (Rattan et al., 2012), whereas Taiwanese teachers often say, "It's okay, just do your best and keep working hard" (Fwu et al., 2022).

These two examples highlight the discrepancies between what is taught in class and what is encountered in real teaching situations. This observation aligns with the findings of the Teacher Education and Development Study in Mathematics, which compared teacher preparation across various countries. Among the fifteen participating nations, Taiwanese primary and secondary school teachers ranked third and second to last, respectively, in terms of the perceived coherence between their university education and the realities of teaching in schools (Hsieh et al., 2010). This serves as compelling evidence of the issue at hand.

The author seeks to explore the aforementioned results from two perspectives. First, the "epistemology of technical rationality" (Schön, 1983; 1995) has long dominated the model of teacher education, resulting in a gap between theory and practice. In this model, scholars initially develop educational theories through rigorous scientific methods and procedures. These theories are then categorized into various disciplines by universities, such as the philosophy of education, educational psychology, and instructional theory, and are subsequently delivered to pre-service teachers. Pre-service teachers are then expected to apply these theories in real teaching contexts.

In reality, theories are established by controlling for various factors to create clear relationships between variables. However, real-world situations are far from ideal, as numerous

variables are at play, resulting in relationships that often do not align with expectations. This discrepancy contributes to the gap between theory and practice (Fu & Huang, 2016).

In the first example above, for students from high socio-economic backgrounds, candy may not be perceived as special, and praise might serve as a more appropriate reinforcer than candy. Therefore, the principle of reinforcement remains applicable; it is just that the pre-service teacher failed to recognize the particularity of the situational context, which resulted in a disconnect between theory and practice.

Secondly, Henrich et al. (2010) pointed out that 96% of the samples in psychological studies published in leading international journals originate from Western, Educated, Industrialized, Rich, and Democratic (WEIRD) societies. However, populations represented by these WEIRD samples constitute only 12% of the global population. Raffaelli et al. (2013) further observed that the vast majority of adolescents live in the "majority world" of developing countries, while most adolescent theories originate from the "minority world" of Western industrialized nations. These scholars have raised concerns about whether theories constructed in Western contexts can adequately explain phenomena in non-Western countries.

In the second example above, there is a significant difference in how American and Taiwanese teachers comfort students with poor academic performance. This clearly demonstrates that applying research findings developed from "WEIRD" samples in Western industrialized countries to our country can result in a gap created by cultural differences between the East and the West.

In summary, when pre-service teachers in Taiwan enter the teaching profession, they encounter a dual gap (as illustrated in Figure 1 from points A to D). The first gap arises from the cultural differences between Eastern and Western contexts; Western educational theories may not be entirely applicable to our local environment. Consequently, when the domestic academic community directly applies these Western theories to Taiwan's cultural context, it creates the first gap (from A to B in Figure 1). Additionally, the "epistemology of technical rationality" model of teacher education contributes to a second gap between theory and practice (from B to D in Figure 1). This dual gap leads pre-service teachers to perceive the educational theories they learned at university as ineffective.

This article aims to explore the first gap in research. The research paradigms developed from Western "WEIRD samples," when blindly transplanted to non-Western countries, are often irrelevant and incompatible for understanding the mindset of non-Western people (Hwang, 2009a). The philosopher of science Karl Popper (1972) noted that when theories and observed phenomena are inconsistent, these discrepancies are referred to as anomalies. If a theory

Figure 1

The Dual Gap in the Introduction of Western Theories into Taiwan's Educational Practices
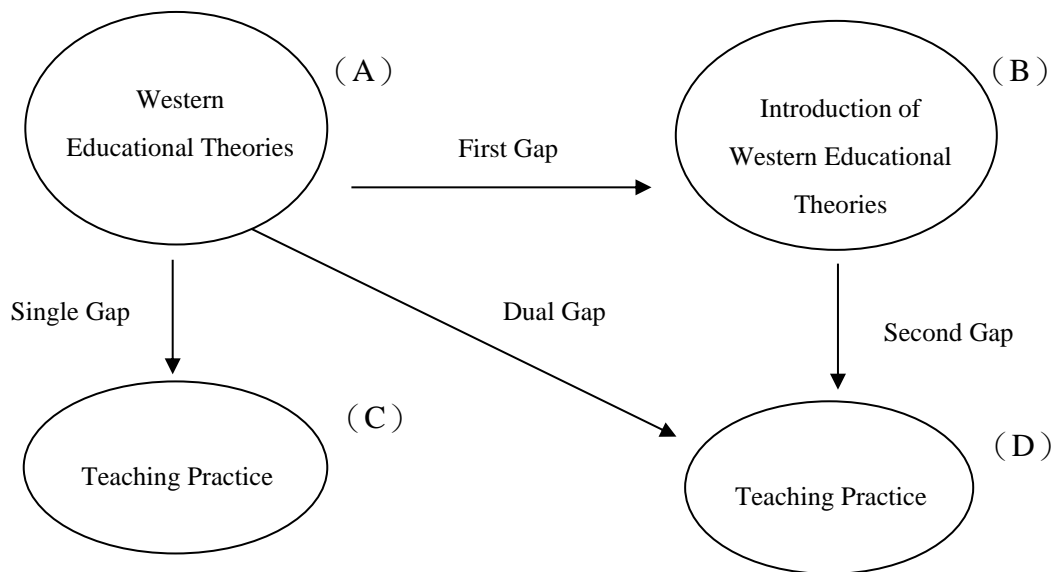
Note. Adapted from "Field-based experience: A solution for the theory-practice divide in teacher education?" by B.-J. Fwu, & Y.-R. Hwang, 2016, *Journal of Research in Education Sciences*, *61*(2), P. 66.

encounters a significant number of anomalies, scientists should propose tentative solutions to reconcile the inconsistencies between theory and observation.

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Countries within Confucian-heritage cultures—such as Taiwan, Hong Kong, Japan, South Korea, Singapore, and Mainland China—consistently perform well in international academic assessments like TIMSS and PISA. However, Hau and Ho (2010), in the Oxford Handbook of Chinese Psychology, reviewed students' learning motivation and achievement in Chinese societies and noted that many empirical research findings indicate that Western theories cannot fully explain the performance and learning behaviors of students in Asian countries.

In light of this, since 2004, I have participated in the "Ministry of Education's Pursuit of Excellence Research Project—Research on Indigenous Chinese Psychology." Through this experience, I have discovered that many Western theories fail to adequately explain phenomena within Chinese societies. Consequently, subsequent research projects funded by the National Science and Technology Council have focused on examining Chinese perspectives on education. The aim is to develop theories rooted in the Confucian cultural context that can elucidate Taiwan's educational phenomena and address our specific educational challenges, thereby bridging the gap between theory and practice.

I have engaged in a process of philosophical reflection, theoretical construction, and empirical research, which will be elaborated upon in detail below.

II. Inspiration from the Philosophy of Science

I have attended Professor Kwang-Kuo Hwang's courses on the philosophy of science multiple times. Each experience has provided me with unique insights and inspirations that have significantly enriched my research. Below are some of the most notable examples.

1. Absolute Truth vs. Approximate Truth

Professor Huang was the educator who introduced me to the study of Chinese views on education. I still remember the first time I presented my research findings to him. He described my approach as "naïve positivism." At that moment, I was uncertain whether this was intended as a compliment or a critique. Through attending classes and engaging in discussions, I gradually came to understand the difference between "discovery" and "invention." Research focused on "discovery" is rooted in the scientific philosophy of positivism, which believes that the laws governing the natural world, created by a higher power, represent absolute truth. The scholar's task is to strive to uncover this "absolute truth", using a bottom-up approach. It is like filling a bucket: by collecting sufficient data, one assumes that theory will naturally emerge.

This research approach allows the evidence to speak for itself, which may lead scholars to engage less critically with the material, ultimately failing to showcase their creativity and subjectivity. In contrast, research focused on "invention" is rooted in the scientific philosophy of post-positivism, which holds that the nature of reality is uncertain and believes in "approximate truth" rather than "absolute truth." Every scholar has the opportunity to exercise creativity and propose their own version of approximate truth, competing to determine whose

explanation is more compelling. Scientific research resembles a searchlight: scholars take the initiative and employ a top-down approach, consistently raising questions, making rational conjectures, and utilizing theories to deduce hypotheses, followed by collecting data to test these hypotheses. In this manner, the illumination of theory can shine into the future, emphasizing the scholar's subjectivity (Popper, 1972).

Table 1

The Difference Between Discovery and Invention

	Discovery	Invention
Philosophy of Science	Positivism	Post Positivism
Views on Truth	The laws by which God created and governs nature are the only truth.	The ontology is uncertain; there is only approximate truth, not absolute truth.
Creativity Requirements	Researchers strive to discover the one and only truth, which does not vary from person to person and cannot reflect individual creativity.	Every researcher can exercise creativity and propose an approximate truth. They compete with each other to determine whose explanation possesses greater explanatory power.
Research Methods	The bottom-up inductive method is like a bucket: by gathering sufficient data, the theory will naturally emerge. The evidence is self-evident, and scholars do not need to use their intellect.	The top-down deductive method is like a spotlight: hypotheses are formulated based on theory, and data is subsequently collected. Scholars articulate their findings; evidence does not speak for itself.
Interpretation of Research Results	To speculate about the underlying reasons behind the research results.	Research results are utilized to validate the accuracy of the inference.
Researcher Subjectivity	No subjectivity.	Hypotheses are inferred based on theory, challenging established theories and demonstrating subjectivity.

Note. Adapted from K. K. Hwang, 2001, *The logic of social science*, p. 9-11. Psychological Publishing Co. (in Chinese); "Invent or discover, but first ask Newton*,"* by K.-K. Hwang, 2009b, January 19, *United daily News*. https://blog.udn.com/cc10/8599467 (in Chinese)

(1) Research on Discovery

My early research, conducted in collaboration with my colleagues, primarily focused on teacher education and fell under the category of "research of discovery." Literature shows that English-speaking countries, such as the United States, the United Kingdom, and Australia, have long faced issues such as the low social status of teachers, challenges in recruiting high-quality educators, and a high attrition rate among new teachers within the first five years. In contrast, teachers in Taiwan enjoy a relatively high social status (Fwu & Wang, 2002a), making it feasible to recruit high-quality teacher candidates (Fwu & Wang, 2002b; Wang & Fwu, 2007), and the teacher attrition rate is low (Wang & Fwu, 2014).

I adopted bottom-up inductive methods, including questionnaire surveys and in-depth interviews, to explore teacher candidates' motivations for pursuing a career in education and to assess their willingness to consider changing careers after entering the profession. I believed that by gathering sufficient data, the evidence would reveal the truth on its own. While I could only speculate about the potential underlying reasons from perspectives such as historical culture and government policies, I lacked mechanisms for verification. In fact, this type of research can be conducted by anyone, and the results are likely to be similar, which makes it challenging to emphasize the researcher's creativity and subjectivity.

(2) Research on Inventions

After understanding the distinction between "discovery" and "invention," I shifted my focus toward researching invention. Noting that East Asian students consistently excel in international academic assessments such as TIMSS and PISA, yet recognizing that Western theories cannot fully explain these outcomes, I collaborated with Professor Hsiou-Huai Wang from the field of education, as well as Dr. Chih-Fen Wei and Professor Shun-Wen Chen from psychology, to form a research team dedicated to exploring Chinese perspectives on education. Chen et al. (2009), drawing on the characteristics of Chinese culture, proposed a framework of Chinese achievement goals, pointing out that when Chinese individuals construct achievement goals, they consider not only personal interests emphasized by Western theories (personal goals) but also the expectations of significant others highlighted in Confucian culture (vertical goals).

Such a theoretical framework not only challenges existing Western theories but also showcases the researcher's creativity and subjectivity. Our research group adopted a top-down deductive approach: based on the aforementioned theoretical framework, we formulated hypotheses and subsequently collected data to test their validity. In this type of research, it is the scholars who take the initiative to voice their perspectives. However, explaining the learning experiences of students in Confucian societies to the international academic community is by no means an easy task. After a decade of effort, a series of studies on Chinese views on education have gradually been published since 2014. It is important to note that the research findings presented by our group represent only an approximate truth. We encourage other scholars to propose alternative theoretical frameworks and engage in a discourse to determine which approximate truth offers greater explanatory power.

2. The Hard Core and Protective Belt of a Scientific Research Program

Lakatos's concept of the "scientific research program" has been profoundly inspiring to me. This program is based on a "hard core," which serves as its fundamental theory. The hard core is unverifiable and consists of a set of metaphysical or presupposed ideas that are both heuristic and irrefutable; it cannot be altered or disproven. The "protective belt" refers to the auxiliary hypotheses proposed by scholars to safeguard the hard core. If the hard core is refuted, the entire scientific research program collapses. To protect the hard core, researchers add antecedent conditions to the auxiliary hypotheses, ensuring that challenges can only be directed at the protective belt (Hwang, 2001, p. 189). To illustrate the concept of the hard core, let us consider moral views as an example. Dworkin (1978) categorizes moral beliefs into two types: rights-based and duty-based.

"Rights-based" emphasizes that rights are the fundamental basis for the moral correctness of human actions, while "duty-based" emphasizes that duties serve as the fundamental reason for the moral actions. Dworkin further points out that all cultures include personal rights, personal duties, and social goals; however, the priority assigned to each of these three elements varies across different cultures. Consequently, the "hard core" of each culture's scientific research program differs, as elaborated below. The hard core in Western societies contrasts with that in Confucian-heritage cultures. If scholars attempt to directly transplant Western theories into our society without considering the differences in the "hard core" between the two, their understanding of the mindsets within our society may often be irrelevant or incompatible. Such an approach risks devolving into a form of academic self-colonization.

(1) The Hard Core of Western Individualism

The hard core of Western societies include the belief that the source of life is God and the primacy of individual rights. The Western Christian religious tradition presupposes that the world was created by God, and that God created human beings in His own image. Consequently, the source of individual life is God. Since all people are created in the image of God, all individuals are considered equal, and everyone is entitled to equal opportunities—what Dumont (1985) refers to as the "ideology of the individual as equal." Based on this presupposition, the "self" possesses its own boundaries and should be protected, which is a defining characteristic of Western individualism. The "individual" is regarded as the autonomous unit of action within a social group, and society is perceived as a collection of individuals. "Individual rights" take precedence over individual duties and social objectives (Bedford & Hwang, 2003).

For example, "life, liberty, and property" are considered inalienable natural rights of human beings; they remain constant regardless of any individual or circumstance and possess both universality and permanence. Furthermore, based on the principle of "ethics of autonomy," individuals have the right to make their own decisions in accordance with their will, values, and desires, rather than being subjected to external forces or the control of others. Individuals enjoy the greatest freedom in selecting their goals and the means to achieve them, which is regarded as the most effective way to develop personal interests. Freedom is a crucial component of individualistic societies, as it allows individuals to develop their talents and potential freely and in their own unique ways (Bedford & Hwang, 2003). In summary, the characteristics of these rights are: (1) they are discussed at the individual level; (2) rights are equal for everyone, and their legitimacy is universal, meaning they do not change under any circumstances.

(2) The Hard Core of Relationalism in Confucian Societies

The hard core of Confucian societies emphasize that the source of life is one's parents and the individual's role-based duties. The moral framework of these societies is centered on "role ethics," which can be traced back to Confucian cultural traditions. As stated in the Classic of Filial Piety (Xiaojing): "One's body, hair, and skin are received from one's parents; one must not dare to harm them—this is the beginning of filial piety." This indicates that the source of an individual's life originates is their parents, and that there is a hierarchical relationship between parents and children.

Furthermore, Confucian societies emphasize relationalism (Hwang, 2009a), where "individual duties" and "social goals" take precedence over "individual rights." Within the framework of relationalism, individuals are situated in networks of interpersonal relationships from birth and develop close ties with "significant others" in various "dyad relationships" within these networks (Hwang, 2000, 2001).

At the same time, within each specific dyadic relationship, individuals are expected to conform to the role expectations of their significant others, continuously engaging in self-cultivation and fulfilling their role-based responsibilities. In traditional Confucianism, individuals are ranked according to their moral achievements; they are encouraged to constantly improve themselves and cultivate their character, striving toward the ideal that "scholars aspire to become virtuous, and the virtuous aspire to become sages," which is similar to what Dumont (1985) refers to as the "hierarchical view of persons." For example, in the dyadic relationship between father and son, the father's role duty is to be loving, while the son's role duty is to be filial ("the father should be kind, and the son should be filial"). In the relationship between ruler and subject, the ruler's role duty is to demonstrate benevolence, while the subject's role duty is to exhibit loyalty ("the ruler should be benevolent, and the subject should be loyal"). It is clear that the roles of father, son, ruler, and subject each carry distinct responsibilities, and all individuals are required to engage in continuous self-cultivation to fulfill their respective obligations.

The characteristics of these duties are as follows: (1) they are discussed at the level of interpersonal relationships rather than at the individual level; (2) role-based duties differ according to specific relational partners and hierarchical status, and therefore lack universality—instead, they are particular in nature (particularity).

3. Pan-Cultural Dimensions vs. Culture System Research

Hwang (2014) proposed two research orientations: "pan-cultural dimensions" and the "cultural system" perspective. For non-Western scholars, understanding the distinctions between these two research approaches is particularly important. The pan-cultural dimensions approach takes mainstream Western psychological theories and subsequently develops instruments to measure psychological constructs that are equivalent across various cultural groups. For instance, Hofstede's (2011) cultural dimensions theory serves as a framework for cross-cultural comparison and includes six dimensions.

The most widely cited dimension in cultural studies is individualism versus collectivism. English-speaking countries, such as the United States, the United Kingdom, and Australia, tend to score high on this dimension, indicating a preference for individualistic values. In contrast, countries like Hong Kong, Serbia, Malaysia, and Portugal score low and are classified as collectivist societies. While this approach can yield a large number of fragmented empirical research findings, it often obscures the unique characteristics of non-Western cultures and can lead to a loss of their cultural identity (Hwang, 2014). In contrast, the "cultural system" research orientation refers to the original set of perspectives and ideas proposed by the founder of a particular system. For instance, to fully understand the Confucian cultural system, one must return to how Confucius himself articulated these ideas. Subsequent interpretations of this cultural system are shaped by specific socio-cultural conditions and represent reinterpretations of the original cultural system.

(1) *The Pan-Cultural Research Orientation*

I attended the 2023 Asian Association of Social Psychology conference held in Hong Kong. One of the keynote speeches, titled "Cultural Defaults in the Time of the Coronavirus: Lessons for the Future," was delivered by Hazel Markus and Jeanne Tsai from Stanford University, along with Yukiko Uchida from Kyoto University. They used the dichotomy of the "independent self" versus the "interdependent self" to investigate differences in mask-wearing behavior during the COVID-19 pandemic. Their findings indicated that Americans, who typically embody an independent self, were less willing to wear masks, whereas Asians, who generally exhibit an interdependent self, were more willing to do so. This research demonstrates that participants from WEIRD (Western, Educated, Industrialized, Rich, and Democratic) samples are characterized by the "independent self," which has clear and distinct features. In contrast, individuals who differ from WEIRD samples are categorized as having an "interdependent self," but their characteristics remain relatively vague. Unfortunately, this pan-cultural research orientation only describes the difference in mask-wearing willingness between the two groups (what), but does not further explain why Asians with an interdependent self are more willing to wear masks (why). In other words, this research orientation decontextualizes the findings, providing insight into "what" Asians do (i.e., their willingness to wear masks) but failing to explain "why" they do so.

(2) *The Cultural System Research Orientation*

At the aforementioned conference, I presented a paper examining the relationship between role obligations and rights through the perspective of Confucian Ethics. The research findings indicated that parents who have fulfilled their obligations of caring for and raising their children possess a stronger claim to the right to request that their children choose the academic discipline preferred by the parents, compared to those who have not fulfilled these obligations. This underscores the principle that only individuals who have met their role obligations are entitled to corresponding rights (Fwu et al., 2023). During the conference, Western scholars remarked that this phenomenon suggests that adolescents in Chinese societies are less independent and autonomous than their Western counterparts, as they are expected to adhere to their parents' decisions. Consequently, they are characterized less by an "independent self" and more by an "interdependent self." In fact, the epistemologies (or cognitive frameworks) adopted by WEIRD (Western, Educated, Industrialized, Rich, and Democratic) and Non-WEIRD societies are fundamentally different.

Therefore, when WEIRD societies interpret Non-WEIRD phenomena through their own epistemological frameworks, they may perceive these phenomena as strange. Similarly, Non-WEIRD societies may find WEIRD phenomena puzzling when viewed through their own knowledge structures. Hwang (2014) proposed a cultural system research orientation, suggesting that researchers should further explore why certain phenomena occur from the perspective of cultural systems. In this context, Non-WEIRD researchers might begin by referencing previous cross-cultural comparative findings, identifying phenomena that differ from those observed in WEIRD samples. They can then use a cultural system perspective—such as Confucian Ethics—to explain why Confucian societies exhibit phenomena distinct from those of the West. In this way, research findings enable us not only to know "what" happens, but also to understand "why" it happens.

III. The Construction of Theory

Empirical research findings must be situated within a theoretical context to highlight their significance. I adopt a cultural system perspective and construct the "role obligation theory of self-cultivation" based on the Confucian cultural framework to explain a series of subsequent empirical studies. The following section will first introduce the Confucian cultural system, then elaborate on the Role Obligation Theory of Self-Cultivation, thereby laying the foundation for the next section on Chinese views on education.

1. Confucian Cultural System

In society, individuals encounter five fundamental types of interpersonal relationships: husband and wife, father and son, brothers, ruler and subject, and friends. Collectively, these are referred to as the "Five Cardinal Relationships" (Wu Lun). Among these, father and son, husband and wife, and brothers represent familial relationships, while ruler and subject, as well as friendships, exist outside the family unit. Other interpersonal relationships are often categorized as "quasi-family" relationships. For instance, in ancient times, common people respectfully referred to local officials as "parental officials," a tradition that continues today when addressing county or city leaders. Within a family, there are parents and siblings, and to match these titles, terms have been extended from "master" to derive "master's wife," "senior brother," "junior brother," "senior sister," and "junior sister"; friends' parents are called "uncle" and "aunt"; close friends are referred to as "brothers" or "sisters"; among classmates, senior students are called "senior schoolmates," and junior students are called "junior schoolmates."

The "commoner ethics" (shuren lunli) of pre-Qin Confucianism emphasizes "relative ethics," which are interpersonal ethical norms that individuals are expected to follow. According to their roles and statuses, individuals naturally and sincerely practice the norms of "li" (ritual propriety) and fulfill their duties (Yang Zuhan, 2019). This concept is reflected in the Analects, specifically in the "Yan Yuan" chapter: "Let the ruler be a ruler, the minister be a minister, the father be a father, and the son be a son." Mencius further extended the human relationships between ruler and subject, as well as father and son. In "Mencius, Teng Wen Gong I," he proposed the paired Five Cardinal Relationships: "Affection between father and son, righteousness between ruler and subject, distinction between husband and wife, order between elder and younger brothers, and trust between friends." These Five Relationships clearly specify the behavioral norms for each pair: mutual affection between father and son, propriety and righteousness between ruler and subject, appropriate distinction between husband and wife, order of seniority among brothers, and sincerity and trust between friends, all aiming for harmonious interactions.

In "The Book of Rites, Chapter on the Evolution of Rites," it is stated: "A father should be kind, a son filial, an elder brother gentle, a younger brother respectful, a husband righteous, a wife obedient, an elder benevolent, and a younger compliant, a ruler benevolent and a minister loyal—these ten qualities are referred to as human righteousness." "Relative ethics" are based on "ren" (benevolence) and "li" (ritual propriety). Individuals in higher status roles, such as

fathers, elder brothers, husbands, elders, and rulers, are expected to cultivate themselves and first fulfill their responsibilities of kindness, gentleness, righteousness, benevolence, and humanity. In turn, those in lower status roles, such as sons, younger brothers, wives, the young, and ministers, naturally strive to cultivate themselves and fulfill their obligations of filial piety, respect, obedience, compliance, and loyalty (Huang Guangguo, 2009a). If one fails to fulfill these role obligations, one may feel shame in the presence of significant others.

Because the expectations of significant others are constantly rising and never-ending, individuals should continuously cultivate themselves and fulfill their role obligations in the pursuit of self-perfection (Chan, 2014). This concept resonates with *The Great Learning* in the *Book of Rites*, which states: "As the inscription on the washbasin of Tang says: If you can renew yourself for one day, do so every day, and let there be daily renewal." This means that one should consistently eliminate negativity and strive for goodness in their behavior, make continuous progress in moral cultivation, and seek improvement—transforming into a new self each day.

It also resonates with passages from the Book of Rites, specifically the Doctrine of the Mean: "Archery is like the way of the gentleman. When he misses the mark, he turns and seeks the cause within himself." Similarly, Mencius, in Li Lou I, states: "If your actions do not achieve what you desire, always look for the cause within yourself. When your conduct is correct, Heaven will respond accordingly." Furthermore, in Mencius, Gong Sun Chou I, it is said: "An archer first rectifies himself before shooting. If he fails to hit the target, he does not resent those who surpass him; instead, he seeks the cause within himself." These passages convey the idea that when individuals encounter shortcomings or failures, they should refrain from blaming or resenting others and instead engage in self-reflection. By upholding the spirit of "As Heaven maintains vigor through movement, a gentleman should constantly strive for self-improvement," one should persist in self-cultivation and self-improvement to attain ever-greater perfection.

2.   The Theory of Role Obligations in Self-Cultivation

Based on the aforementioned Confucian cultural system, we have constructed the "role obligation theory of self-cultivation" (Fwu et al., 2021, 2022). From birth, individuals are situated within the Five Cardinal Relationships and are expected to fulfill the role obligations inherent in each dyadic relationship to meet the expectations of significant others. Society uses the extent to which an individual strives to fulfill these role obligations as a key standard for

judging personal virtue, which serves as a manifestation of one's moral self-cultivation. In summary, the underlying reasoning is as follows: "Striving to achieve the goals expected by significant others → fulfilling role obligations → demonstrating personal virtue → enhancing inner moral self-cultivation" (Fwu et al., 2021).

At the individual level, the more one strives to fulfill their role obligations, the more their virtue and moral self-cultivation are revealed. Individuals who fulfill their role obligations to a greater extent are perceived as more morally upright, more aligned with commoner ethics (ethically correct), feel at peace with themselves and their significant others, and ultimately achieve a state of psychosocial homeostasis. When one's actions fall short, self-reflection is necessary. Those who fail to fulfill their role obligations often receive lower moral evaluations and may feel they have disappointed themselves and their significant others, making it challenging to attain psychosocial homeostasis (Fwu et al., 2021).

At the societal level, if each individual fulfills their appropriate role and obligations within dyadic relationships, harmonious interpersonal relationships can be maintained, thereby establishing a harmonious society.

Among the Five Cardinal Relationships, the most significant and inseparable throughout one's life is the blood-related parent-child relationship. "Parental benevolence and filial piety" represent the respective role obligations that parents and children are expected to fulfill (Hwang, 1999, 2012). Parents perceive their children as extensions of their own lives and the hope for the future. Consequently, they fulfill their role obligation of "benevolence" by striving to provide the best resources, care, and education for their children, thereby helping them achieve the goals expected by society. On the other hand, "To raise without teaching is the fault of the father"; through the process of socialization that involves both rewards and punishments, parents supervise their children in fulfilling their role obligations to meet societal expectations.

Children, in return for their parents' sacrifices and dedication, fulfill their role obligation of "filial piety" by striving to achieve the goals expected by society, thereby "bringing honor to themselves and glory to their parents" to satisfy their parents' expectations. In East Asian societies, particularly within the Confucian cultural sphere, children's efforts to pursue socially expected goals are often motivated by the desire to fulfill the role obligation of filial piety in the parent-child ethical relationship. Through these efforts, they not only demonstrate personal virtue but also enhance their inner moral self-cultivation.

If an individual's actions do not yield the desired results, it is essential to reflect on whether they have genuinely fulfilled their role obligations. If one has not done so, one will feel ashamed before oneself and one's parents. Role obligations embody the elevation of moral self-

cultivation and are closely tied to the achievement goals expected by society (and parents), striving for and achieving these goals is a manifestation of both "ethics" and "morality."

3. The Applicability of Role Obligation Theory of Self-Cultivation to Achievement Goals

My research group and I have categorized the achievement goals pursued in Confucian societies into two types: "vertical goals" and "non-vertical goals" (Fwu et al., 2016, 2017b). "Vertical goals" refer to those that are socially expected; individuals strive to ascend the vertical "achievement pyramid" to fulfill parental expectations and bring honor to their families (Chen et al., 2009), which serves as the primary achievement motivation. This concept is similar to the traditional progression of scholars in ancient China—from passing the local, prefectural, and provincial exams (xiucai, juren), to becoming a "gongshi" in the capital, and finally passing the imperial examination to become a "jinshi," thereby achieving fame, securing official positions, and bringing glory to one's ancestors.

In today's context, vertical goals include socially expected achievements, such as obtaining good grades, being admitted to prestigious schools, securing good jobs, and building a positive reputation. In contrast, non-vertical goals are less subject to social expectations and align with the "ethics of autonomy" found in Western societies, where individuals pursue goals based on their own intrinsic motivation, such as developing skills in sports or the arts.

Compared to non-vertical goals, vertical goals are characterized by higher parental expectations, greater social importance, stronger sense of obligation, more intense peer competition, and a lower degree of personal choice (Fwu et al., 2016, 2017b), which makes them culture-bound. When examining Chinese views on education, if Western theories that focus solely on autonomous intrinsic motivation are directly applied to Confucian societies—without distinguishing between these two types of achievement goals—can hinder a comprehensive understanding of the learning experiences of Chinese students.

I contend that the Role Obligation Theory of Self-Cultivation applies only to vertical goals and not to non-vertical goals. This position is based on the previously discussed concept of the "hard core" in Lakatos's scientific research program. The Role Obligation Theory of Self-Cultivation serves as the "hard core" of my series of studies. In order to protect this hard core, an auxiliary hypothesis regarding the types of achievement goals: the theory applies only to vertical goals.

For instance, when children diligently study in pursuit of vertical goals, they fulfill their role obligation of filial piety. On one hand, this behavior demonstrates personal virtue and

enhances moral self-cultivation; on the other hand, it conforms to ethical norms, leaving them with a clear conscience both before themselves and their parents, thereby achieving a state of psychosocial equilibrium. If they fail to achieve their goals—such as performing poorly academically—they should reflect on themselves to determine whether they have truly fulfilled their role obligation to study diligently. If not, they may experience feelings of shame in relation to themselves and their parents, motivating them to strive for self-improvement.

It is worth noting that parents' expectations for vertical goals are constantly raised, always seeking better and better outcomes. Therefore, even if children temporarily meet these standards, they must continue to cultivate themselves and strive for further progress without pause. In contrast, the pursuit of non-vertical goals is less constrained by role obligations and is less related to moral self-cultivation or feelings of guilt.

IV. Chinese Views on Education

To facilitate the explanation of the empirical research in the following section, this section will first introduce Western perspectives on education, followed by an explanation of Chinese views on education. By contrasting the differences between the two, the unique characteristics of Chinese views on education can be emphasized.

1. Western Perspectives on Education

(1) The Meaning of Education

Western societies emphasize that the origin of individual life comes from God. The English word "gift" carries two meanings: "present" and "talent," implying that the Creator, God, bestows each person with a unique "gift," which represents their inherent "talent." The term "education" is derived from the Latin noun "educare," which in turn comes from the verb "educere," composed of "e" (meaning "out") and "ducere" (meaning "to lead"). Therefore, education involves drawing out the talents bestowed upon individuals by God, allowing their abilities to be fully realized.

This concept aligns with Covington's (1992, 1996, 1998, 2000) self-worth theory of achievement motivation, which proposes that human value is equivalent to one's ability to achieve goals. Understanding one's self-worth primarily involves understanding the level of one's abilities. Individuals may be more gifted in academic fields or the arts, with no inherent

hierarchy between the two. Regardless of the field, the educational process encourages individuals to develop in directions where they have potential, reflecting Western society's greater acceptance of the value of diverse development.

(2) **The Nature of Ability and Ability Attribution**

Within this context, Dweck and Leggett (1988) proposed the "implicit theory," which suggests that individuals' beliefs about the malleability or fixedness of personal traits (including intelligence or ability) can be categorized into two types: entity theory and incremental theory. Entity theory posits that personal traits are fixed and unchangeable, while incremental theory holds that personal traits are malleable and can be changed through effort. This implies that effort serves as a means and thus possesses instrumental value.

Weiner's (1986) "attribution theory" categorizes attributions for success and failure into four factors: ability, effort, luck, and task difficulty. This classification is based on three dimensions: internal/external, stable/unstable, and controllable/uncontrollable. Ability is considered an internal, stable, and uncontrollable factor, while effort is seen as an internal, unstable, and controllable factor; these two factors are mutually exclusive.

Cross-cultural studies have demonstrated that, regarding implicit theories, individuals from Western cultures often adopt the entity theory of intelligence, believing that individual ability is fixed (Dweck, 1999). In the context of attribution theory, research indicates that Americans tend to favor the ability model (Stevenson & Stigler, 1992), attributing academic success or failure to ability, which is perceived as an internal, stable, and uncontrollable factor.

(3) **Self-Enhancement, and the Complementary Relationship between Ability and Effort**

Given that Westerners tend to believe ability is innate and unchangeable, parents in child-rearing and teachers in education frequently encourage individuals to develop their talents in areas where they show talent or ability, expecting outstanding performance and thereby reinforcing the entity theory of ability. People tend to praise the talent and abilities of successful individuals with the intention of helping children achieve self-enhancement in areas where they excel (Kitayama et al., 1997), thereby boosting their self-esteem or self-concept and building their self-confidence. From a Western perspective, praising someone for being intelligent or capable (praise ability) is seen as praising the person, serving as a compliment to the individual. In contrast, praising someone for their effort (praise effort) is perceived as praising the process

(Dweck, 1999, 2000; Kamins & Dweck, 1999; Mueller & Dweck, 1998). However, such praise implicitly suggests that the individual is not intelligent enough or lacks ability, and therefore is not considered a genuine compliment.

From a developmental psychology perspective, Folmer and colleagues (2008) investigated how children aged 5 to 15 perceive the relationship between ability and effort when facing failure. The results indicated that this relationship between the two shifts from positive in early childhood to negative in the upper grades, and this transition is quite stable. Young children tend to conflate ability and effort, interpreting that intelligent children are also diligent. In contrast, older children begin to see the two as opposing concepts, believing that those with high ability can achieve success with little effort, while those who must exert significant effort to attain high performance are often perceived as less intelligent or less capable. Therefore, for older children, praising effort is not only seen as lacking in sincerity but may even be interpreted as sarcasm or criticism.

(4) Mindset Orientation

In response to the aforementioned Western emphasis on innate cognitive abilities, Li (2012), in her book "Cultural Foundations of Learning: East and West," points out that Western societies view learning as mind-oriented, with the goal of understanding the external world. Throughout the learning process, the brain's mental activities encompass active engagement, exploration and inquiry, critical thinking, and self-expression/communication.

"Active engagement" refers to students' proactive participation in the learning process, which includes activities such as reading, researching information, conducting experiments, writing reports, and participating in field visits. "Exploration/inquiry" emphasizes that students should identify research questions and then use both their minds and hands to explore and solve problems. "Critical thinking" indicates that students should not only pursue knowledge but also maintain a critical and questioning attitude toward the knowledge they acquire in their pursuit of truth. The outcomes derived from active engagement, exploration, and critical thinking must be effectively communicated through oral or written means.

(5) The Morality of Effort

Although Western societies place a high value on cognitive abilities, there is also a tradition of valuing effort, primarily influenced by the Protestant doctrine of "predestination." This doctrine of predestination asserts that God determines who will ascend to heaven and who will descend to hell. Whether an individual is among God's chosen has already been predetermined by God before birth, leaving individuals with no control over their own fate. The only course of action available to a person is to work diligently day and night, accumulate wealth, and lead a frugal and industrious life to "glorify God, to prove themselves as one of God's chosen and attain salvation (Weber, 2001).

To this day, the Protestant work ethic emphasizes that obtaining wealth and success through hard work and thrift is a personal duty and responsibility, thus endowing it with moral worth (Weiner, 1994). In the secular world, persistent hard work is regarded as a virtue, and this belief is prevalent in both continental Europe and North America (Weber et al., 2002).

2. Chinese Views on Education

Scholars have adopted a "pan-cultural research approach," utilizing Western theories as a foundation to place the learning and performance of students from non-Western societies within the framework of Western theories for cross-cultural comparative studies. For instance, research in cross-cultural comparisons has demonstrated that, in terms of implicit theories, East Asian students tend to embrace the "incremental theory of intelligence," believing that individual abilities are malleable and can be changed through effort (Dweck et al., 1995). In terms of attribution theory, East Asian students tend to adopt the effort model, attributing academic success or failure to their level of effort (Stevenson & Stigler, 1992). In this context, effort is considered an internal, unstable, and controllable factor.

However, if these results are viewed from the perspective of the "Confucian cultural system," alternative interpretations may arise.

(1) The Meaning of Education

The meaning of education in Chinese society differs from that in the West. The oracle bone script for "教" 教 originally consisted of two "爻" symbols on the upper left, which represent calculation or divination; a figure of a child with a large head and a small body on the lower left; and, on the right, an image of a hand holding a stick. In short, it illustrates an adult

using a stick to teach a child how to calculate. The ancient idea that "strict teachers produce outstanding students" is vividly reflected in the character "教."

The oracle bone script for "育" 育 shows a woman above and a child below, symbolizing the act of childbirth. Xu Shen's "Shuowen Jiezi" explains: "教, what is practiced by those above, is followed by those below; 育, to raise children so that they do good. "教" refers to a knowledgeable individual in a higher position who imparts knowledge and skills, while the less knowledgeable imitate and learn to acquire knowledge and skills. It also means that elders set a positive example for juniors to imitate and follow. "育" means raising children or nurturing young individuals to perform good deeds or become virtuous individuals.

This demonstrates that Western education emphasizes drawing out the potential endowed to learners by God, which is related to the mind, whereas Chinese education prioritizes the acquisition of knowledge and the cultivation of virtuous behavior. This indicates that, in addition to knowledge, Chinese education is also closely linked to moral character.

(2) Sense of Obligation and Self-Exertion Attribution

The aforementioned implicit theory proposed by Dweck and Leggett (1988) emphasizes the "possibility of changing trait" at the individual level. However, from the perspective of Confucian "role-obligation theory of self-cultivation," especially regarding vertical goals shaped by social expectations—such as academic achievement, "changing trait is not only possible," but also "an obligation of the individual." Therefore, the self in Confucian society is neither fixed nor immutable. On the contrary, the self is not only capable of change (possible) but is also required to change (obligatory) and must continuously cultivate itself toward the ultimate good, without end (Fwu et al., 2021).

In summary, this obligation-oriented implicit theory includes three levels: First, change is possible; Second, change should be toward goodness or virtuous direction; Third, individuals have an obligation to continuously cultivate themselves, moving toward goodness or virtuous direction.

The "possibility of change" within this obligation-oriented perspective resonates with the findings of Heine et al. (2001), which indicate that East Asian societies tend to hold an incremental view of ability. This suggests that the obligation-oriented perspective includes the "incremental theory" of Western implicit theories. Furthermore, the idea that "individuals have the obligation to continuously cultivate themselves toward a good or virtuous direction," this highlights the uniqueness of Confucian culture.

In the context of attribution theory, Confucian societies emphasize the idea that "when one's actions do not yield the desired results, one should turn inward and examine oneself." Diligently striving toward vertical goals is considered an individual's role obligation. For students, when academic performance is unsatisfactory, they are expected to engage in self-reflection to determine whether they have genuinely fulfilled their role obligation of working hard and studying diligently. Therefore, the understanding of ability and effort is understood differently compared to Western perspectives.

Although both Westerners and East Asians regard ability as an internal factor, there are differences in terms of stability and controllability. For East Asians, the perception of ability often varies depending on the context. At times, individuals may express, "I don't have a math gene," which implies that ability is perceived as an internal, stable, and uncontrollable factor. Conversely, they might say, "Ability can be developed," indicating that ability is seen as an internal, unstable, and controllable factor.

As for effort, due to the previously mentioned sense of obligation and the belief in "as Heaven maintains vigor through movement, a gentleman should constantly strive for self-improvement," people are expected to emulate the principles of nature and consistently exert effort at all times. Regardless of the circumstances, effort is always necessary (Li, 2012). Therefore, effort is perceived as an internal, stable, and controllable factor, which differs from the Western perspective that categorizes effort as internal, unstable, and controllable.

(3) The Positive Relationship among Self-Improvement, Ability, and Effort

Confucian societies hold the belief that when individuals are unable to attain a state of perfection, they should engage in self-reflection. The purpose is to help children continuously pursue "self-improvement" (Kitayama et al., 1997) in areas where they are weak or lacking, with the expectation that they will become better each day, ultimately achieving "self-perfection." Language is a vehicle for culture, and cultural traditions are embedded in commonly used idioms. For instance, phrases such as "diligence can make up for a lack of talent," "if others can do it once, I will do it a hundred times; if others can do it ten times, I will do it a thousand times," and "with diligence, nothing in the world is difficult" all encourage individuals to compensate for insufficient ability through hard work. Chinese people tend to believe that ability and effort are positively correlated (Hong, 2001). Empirical research by Salili and Hau (1994, p. 233) also indicates that Chinese students perceive ability and effort as

positively related: the more effort one puts in, the higher one's ability; those with higher ability must have worked very hard. The underlying belief is that effort is a good way to achieve success. Effort allows those with less natural ability to "make up for their shortcomings through diligence," while those with more ability can "strive for excellence and reach new heights." Therefore, effort is seen as a means to improve ability, demonstrating its "instrumental value." This perspective is different from the Western view, which often sees effort and ability as mutually exclusive.

(4) Virtue-Oriented

From the aforementioned explanation of "education" in the Shuowen Jiezi, it is clear that Chinese education not only involves the acquisition of knowledge but also pursues goodness and is closely related to moral character. This perspective aligns with Li (2012), who pointed out that for the Chinese, learning is not merely about acquiring external knowledge; it places a stronger emphasis on moral cultivation and is fundamentally virtue-oriented. The process of learning includes the following characteristics: earnestness, diligence, concentration, resilience in the face of hardship, and perseverance.

Earnestness refers to treating learning as a serious matter and approaching it with a solemn attitude, as in the saying, "Excellence comes from diligence, while neglect leads to decline." Diligence refers to an unremitting effort in the learning process, resulting in outcomes such as "diligence can compensate for a lack of talent," "practice makes perfect," and "striving for excellence." Concentration means being fully attentive during learning, free from distractions, as in "immersed in study," or "paying no attention to anything outside the window, focusing only on the classics." Endurance of hardship signifies that learning is a duty one must fulfill, which requires enduring hardships, as in "tying one's hair to a beam and stabbing one's thigh to stay awake," or "without enduring the bitter cold, how can the plum blossom smell so sweet?" Perseverance means that, regardless of the obstacles that may arise during the learning process, one must overcome them, as demonstrated by the adage "sincerity can move even metal and stone," or "the foolish old man moves the mountain."

All of these traits in the learning process are associated with moral cultivation and are therefore called "learning virtues." This contrasts with the Western emphasis on a mind-oriented approach.

(5) The Morality of Effort

In Chinese society, students are expected to work hard and study diligently under all circumstances. This diligence and commitment to academic excellence are commonly regarded as expressions of filial piety and the fulfillment of one's obligations toward their parents (Tao & Hong, 2014). Such dedication not only demonstrates personal virtue but also enhances one's inner moral cultivation. The ideal individual in Confucian society is a student who excels in both character and academics, with "moral excellence" taking precedence over "academic excellence." School education emphasizes the balanced development of five domains—morality, intellect, physical fitness, social skills, and aesthetics—with moral education placed first, ahead of intellectual education, highlighting the priority of character over knowledge.

During the learning process, students, regardless of their intelligence, are expected to work hard (moral excellence) to achieve academic success (academic excellence), thereby gradually striving to excel in both character and knowledge. By fulfilling their role obligations, students do not feel ashamed toward their parents' upbringing. Conversely, failing to meet these obligations not only reflects a lack of moral character but also brings shame to their parents. This echoes Xunzi's assertion in his "Encouragement to Learning" essay: "Where does learning begin and where does it end? In practice, it begins with reciting the classics and ends with studying rituals; in principle, it begins with becoming a scholar and ends with becoming a sage. With true accumulation and perseverance, one can enter the way. Learning only ends at death. Thus, the practice of learning may have an end, but its meaning cannot be neglected even for a moment. To pursue it is to be human; to abandon it is to be like an animal." This shows that only through diligent learning can one embody the unique human virtues of benevolence and righteousness, thus becoming truly human; otherwise, one is no different from animals. This demonstrates that effort itself is an end, possessing moral value.

It is worth noting that while both Eastern and Western societies emphasize the moral value of effort, the Western perspective originates from the Protestant work ethic, whereas the Confucian tradition has a different foundation.

Secondly, sayings such as "Learning is like rowing upstream; not to advance is to fall back" and "Mastery is achieved through diligence, while neglect leads to failure" suggest that even intelligent individuals, if they do not study diligently and persistently, will ultimately become "promising in youth but disappointing in adulthood." Those who succeed solely through talent without effort are considered regarded to have gained something without working for it— this is merely "small cleverness." Effort demonstrates that a person is serious,

responsible, and fulfills their obligations. Therefore, to praise someone for being "hardworking" is to praise their virtue and moral character; in this way, "praising effort" and "praising the person" become one and the same. This perspective contrasts with the Western context, where praising someone for their hard work can sometimes imply a lack of ability.

Moreover, considering the moral and instrumental value of effort, parents in raising children and teachers in educating students often praise successful individuals for their hard work as a form of affirmation. They seldom praise innate ability or talent to prevent students from becoming complacent and lazy due to overconfidence in their intelligence. This approach also contrasts with the Western practice of praising the talents and abilities of successful individuals.

V. Empirical Research

There are three primary sources of scientific research problems: (1) inconsistencies between theory and observational or experimental results; (2) internal contradictions within a theoretical system; and (3) conflicts between two different theories (Hwang, 2001, p. 140). The research problems addressed by my colleagues and me primarily arise from inconsistencies between theory and observed phenomena, as well as from cross-cultural studies that reveal differing phenomena between Eastern and Western contexts. The findings from this series of empirical research are explained in five sections. These results are discussed within the framework of the role obligation theory of self-cultivation, in order to highlight their significance.

1. Success and Failure: The Effects of Goal Type and Effort Level on Moral Image and Reward/Punishment Behavior

Cross-cultural empirical research has demonstrated that North American students tend to attribute success and failure to ability, while East Asian students attribute them to effort (Stevenson & Stigler, 1992). The research question posed by my colleagues and me is: Why do East Asian students place such a strong emphasis on effort? During the socialization process of adolescents, do adults (parents and teachers) transmit cultural beliefs about effort through rewards and punishments?

The research findings indicate that, compared to non-vertical goals, when succeeding in vertical goals, those who make effort are perceived as having a more positive moral image of

being conscientious and responsible than those who do not make effort, and they also receive more praise. In the case of failure, individuals who do not make an effort toward vertical goals are seen as having the worst moral image and receive the most blame (Fwu et al., 2016).

Furthermore, both adults and adolescents agree that, for vertical goals, the more effort one puts in, the more favorable one's moral image becomes; and the more favorable one's moral image, the higher the likelihood of receiving rewards (Effort → High Moral Image → Reward). It is evident that during the socialization process of adolescents, adults transmit cultural beliefs such as "Heaven rewards the diligent" and "You reap what you sow." Adolescents receive these beliefs and internalize them as their own (Fwu et al., 2014).

These two studies highlight three distinctive aspects of Chinese views on education: (1) Western self-determination theory suggests that as long as goals are chosen based on personal interests and intrinsic motivation, all goals hold equal importance, with no hierarchy among them. Regardless of the type of goal, failures receive less blame, while successes receive greater praise, with rewards for success focusing mainly on "outcomes" (Hamilton et al., 1988, 1990; Lourengo, 1994). In Confucian societies, however, both the type of goal and the level of effort influence reward and punishments. When the role obligation theory of self-cultivation is applied to vertical goals, its significance becomes evident. For vertical goals, adults consider not only the "outcome" but also the "process" of effort when rewarding or punishing students, thereby valuing both results and processes. This demonstrates the culture-bound nature of vertical goals. (2) Dweck's (1999, 2000) incremental theory points out that effort can enhance ability, indicating that effort has instrumental value. The Confucian belief that "diligence compensates for lack of ability" is similar to this instrumental value of effort. However, for vertical goals in Confucian societies, effort also carries strong "moral value." Therefore, those who achieve success through effort are praised for "Heaven rewards the diligent," while those who attain success without effort receive less praise due to "gains without labor." (3) Weiner's (1986) attribution theory suggests that ability is an uncontrollable factor, while effort is a controllable factor, and the two are mutually exclusive. Based on this foundation, scholars (Dweck, 1999, 2000; Kamins & Dweck, 1999; Mueller & Dweck, 1998) have argued that praising "intelligence" is "person praise," while praising "effort" is "process praise," and the two are mutually exclusive. However, in Confucian societies, when it comes to vertical goals, praising an individual's "effort" is also a form of "person praise." Therefore, process praise and person praise are integrated and not mutually exclusive.

2. Failure: The Effects of Goal Type and Effort Level on Moral Image and Emotional Distress

Covington and colleagues (Covington, 1984; Covington & Omelich, 1979), based on the self-worth theory of achievement motivation, found that for American students, exerting effort in the face of failure can help avoid punishment from teachers. However, if a student tries hard but still fails, it may indicate a lack of ability, thereby damaging their self-worth—rendering effort a double-edged sword. Our research question is: In Confucian societies that emphasize effort, is effort also a double-edged sword? Does the Confucian cultural system have a psychological mechanism to alleviate negative outcomes?

The research findings indicate that, in the context of failure associated with vertical goals, effort is indeed a double-edged sword: failing despite exerting effort leads to feeling bad (emotional distress), while failing without effort results in a loss of moral image (being bad). This creates a dilemma where both making an effort and not making an effort have negative consequences. The double-edged sword effect is much more pronounced for vertical goals than for non-vertical goals (Fwu et al., 2017b).

In addition, regarding vertical goals, the Confucian belief in "doing one's utmost" helps reduce the emotional distress associated with failure. After self-reflection ("when things do not go as desired, one should examine oneself"), if one feels they have done their best to fulfill their filial duties to their parents, the negative emotions from failure are lessened (Fwu et al., 2017a).

These two studies demonstrate that, in both Western and Confucian societies, effort serves as a double-edged sword; however, the implications differ—especially when the role of obligation theory in self-cultivation is applied to vertical goals, which emphasizes four key points. (1) In the West, the double-edged nature of effort stems from a lack of ability, which damages self-worth. In contrast, within our society, the double-edged sword arises from insufficient effort toward vertical goals, indicating a failure to fulfill one's role obligations and resulting in a loss of moral image. (2) According to Protestantism, effort aligns with the work ethic, so teachers do not punish students who try hard. On the other hand, students often interpret failure, despite their efforts, as an indication of insufficient ability. In Western culture, this creates a double-edged sword: while effort may help students avoid punishment from teachers, it also reveals one's lack of ability, creating an "inter-personal conflict" between the beliefs of teachers and students. In our society, individuals who make an effort gain a positive moral image, but if their efforts do not bring good results, they may experience emotional distress, resulting in an "intra-personal conflict." Failing despite effort can lead to feeling bad,

while failing without effort results in a loss of moral image, creating a dilemma where both making an effort and not making an effort carry negative consequences. (3) In Western societies, the dual nature of effort is not limited to specific domains; however, it is much more pronounced for vertical goals compared to non-vertical goals, demonstrating the culture-bound nature of vertical goals. (4) For vertical goals, although effort can be a double-edged "sword," after self-reflection, if one feels they have "done their utmost" to fulfill their obligations to their parents, it can alleviate the negative emotional distress. The belief in "doing one's utmost" thus serves as a "shield" for self-protection.

3. The Psychological Process and Dilemma of Persisting in Effort (Behavioral) After Failing to Achieve a Vertical Goal

Heine et al. (2001) and Zhang and Cross (2011) found that, in Western societies, students tend to persist after experiencing success. In contrast, East Asian students tend to continue in their efforts after experiencing failure. Our research question is: What is the psychological process underlying the continued effort of East Asian students after academic failure?

Schmidt and Weiner (1988), in order to explain the psychological mechanisms of human behavior, proposed the 3A model (attribution → affection → action), which suggests that cognition influences emotion, which in turn influences behavior. Given that Confucian societies emphasize "effort" and the cultural belief of "when things do not go as desired, one should examine oneself," we developed two belief constructs based on the instrumental and moral value of effort: the "effort-progress belief" and the "effort-obligation belief." We further proposed the B-3A model (belief → attribution → affection → action) to explain the process of self-reflection following failure.

The results indicated that individuals who subscribe to the effort-obligation belief, after self-reflection, if they feel they have not fulfilled their role obligation, they experience negative emotions such as guilt toward their parents and themselves. In order to escape from these negative emotions, they are motivated to persist in their efforts and strive for academic success (Fwu et al., 2018).

Another study found that after academic failure, students experience two types of negative emotions simultaneously: activating emotions such as guilt, and deactivating emotions such as hopelessness. Because academics are considered a vertical goal, the activating emotion of guilt motivates students to continue striving for success in order to escape negative emotions, while

the deactivating emotion of hopelessness causes them to lose motivation. As a result, students are caught in a dilemma, torn between persistence and giving up (Fwu et al., 2021).

These two studies reveal six characteristics of Chinese views on education:(1) The widely cited "implicit theory of ability" proposed by Dweck (1999, 2000) lacks predictive power in our model. In contrast, the "effort-progress belief" and "effort-obligation belief" derived from the role obligation theory of self-cultivation do have predictive power and influence persistent effort through different pathways. This highlights the challenges of applying Western theories to explain East Asian students' learning, but beliefs developed from the Confucian cultural system can help explain these phenomena. (2) The focus of "self-reflection" differs between Western and Confucian societies. Western cultures emphasize cognitive aspects such as critical thinking and problem-solving (Dewey, 1933; Schön, 1995), while Confucian societies emphasize self-examination, reflecting on whether individuals have fulfilled their responsibilities and filial obligations to parents—the moral dimension. (3) Western scholars find it difficult to understand the concept of indebtedness, and have suggested using the term "guilt" instead. However, these two terms are fundamentally different. Guilt refers to "doing something one should not have done," such as feeling guilty after stealing. Indebtedness (愧疚感), on the other hand, refers to "not doing something one should have done," for example, diligent study is a child's role obligation; if one does not "do one's utmost," one feels indebted. (4) Generally, negative emotions tend to sap motivation and lead individuals to give up. Pekrun and colleagues (2006; Pekrun & Stephens, 2010) categorized negative emotions into activating and deactivating types; however, few studies have noted that both can occur simultaneously. After academic failure, Chinese students experience both deactivating negative emotions (such as hopelessness) and activating negative emotions (such as indebtedness), resulting in a dilemma. (5) Indebtedness can be categorized into two types: feeling indebted to one's parents and to oneself. Since vertical goals originate from parental expectations, feelings of indebtedness to parents typically arise first. It is only when these feelings are internalized as indebtedness to oneself that the motivation to persist begins to emerge. (6) Students in the Confucian cultural sphere experience lower psychological well-being than those in Western countries (Lee, 2009; Liu et al., 2017; Morony et al., 2013; Stankov, 2013). The possible reason is not only the negative emotions, such as sadness brought by failure, but also to the push of indebtedness that compels individuals to strive, alongside the pull of hopelessness that hinders effort. The tension between these two forces creates a dilemma, making it challenging for students to move forward or retreat.

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4. A Re-examination of Covington's Four-Quadrant Model of Achievement Motivation in Confucian Societies

Covington (1991), based on self-worth theory, proposed the quadripolar model of achievement motivation, which utilizes two dimensions—hope for success and fear of failure—to categorize students into four types: overstrivers (high hope for success, high fear of failure), optimists (high hope for success, low fear of failure), self-protectors (low hope for success, high fear of failure), and failure acceptors (low hope for success, low fear of failure). Among these categories, overstrivers and self-protectors often exhibit avoidance behaviors and experience negative emotions due to their fear of failure. Our research questions were: Is this classification applicable to Confucian societies? How do the behaviors and emotions of each type of student differ?

Our findings revealed that Covington treated fear of failure as a singular factor. However, based on the role obligation theory of self-cultivation, "fear of failure" actually consists of two factors: fear of disappointing oneself and the fear of letting important others (such as parents) down. Furthermore, students can be categorized into six types: the original four types accounted for only 50% of the sample, while two additional Confucian-specific types—Confucian overstrivers and Confucian self-protectors—accounted for the remaining 50%.

Third, while overstrivers and self-protectors indeed experienced elevated levels of anxiety, 50% of Confucian overstrivers and 44% of Confucian self-protectors reported good psychological well-being. Furthermore, the proportion of Confucian overstrivers (30%) exceeded that of overstrivers (23%), and their willingness to take risks was slightly higher. The proportion of Confucian self-protectors (20%) surpassed that of self-protectors (13%), with their willingness to take risks being significantly higher (Li et al., 2023).

This study highlights three characteristics of Confucian societies: (1) In the context of Western individualism, "fear of failure" is regarded as a singular factor. However, from the perspective of the role obligation theory of self-cultivation, "fear of failure" consists of two factors: fear of disappointing oneself and the fear of disappointing significant others, which underscores the distinctiveness of Confucian culture. (2) Covington's four-quadrant model can only explain about half of the student types, and fails to account for the other half. This demonstrates that the blind application of Western models to non-Western contexts is frequently irrelevant and incompatible with understanding the mindset of non-Western individuals. (3) International academic assessments have indicated that East Asian students experience a greater fear of failure than Western students, with Taiwan being the country most

afraid of failure among the more than seventy nations participating in the assessment (OECD, 2019). East Asian students also tend to have poorer psychological well-being compared to their Western counterparts (Lee, 2009; Liu et al., 2017; Morony et al., 2013; Stankov, 2013). However, Confucian overstrivers and Confucian self-protectors demonstrate better psychological well-being and a greater willingness to take risks than overstrivers and self-protectors. Without referencing the role obligation theory of self-cultivation to distinguish Confucian overstrivers and Confucian self-protectors from overstrivers and self-protectors, it would be challenging to fully capture the complexities of East Asian students.

5.   The Impact of Teacher Feedback on Student Learning Motivation

Rattan et al. (2012) found that when first-year students at top U.S. universities performed poorly on their initial calculus exam, instructors with an "entity theory" mindset often provided ability-based comforting feedback, such as, "It's okay, not everyone is good at math." Unexpectedly, students interpreted this as the teacher believing they "lacked mathematical talent," which led them to give up on pursuing opportunities in STEM fields. This phenomenon has raised concerns within the American education sector about its potential impact on national competitiveness. Our research questions were: In Confucian societies, what type of feedback do teachers provide when students struggle in mathematics? How does this feedback affect students' motivation to learn?

The research results indicated that teachers with an entity theory mindset provided Western-style, ability-based comforting feedback, such as, "It's okay, not everyone is good at math." In contrast, teachers with a duty-based mindset gave Eastern-style, duty-based comforting feedback, such as, "It's okay, your learning attitude is more important than the result," or gave advice-oriented feedback, such as, "You reap what you sow; keep working hard."

Secondly, when students received Western-style comforting feedback, they tended to give up; when they received Eastern-style comforting or advice-oriented feedback, they tended to persist and continue working hard. Third, 40% of teachers preferred to provide Eastern-style comforting and advice-oriented feedback, while 60% of teachers tended to give a combination of Western-style comforting, Eastern-style comforting, and advice-oriented feedback (Fwu et al., 2022).

These findings demonstrate that relying solely on the Western "entity theory" framework is insufficient to fully explain the phenomena of teacher feedback and student learning motivation in Confucian societies.

(1) Both Eastern and Western educators who hold an entity theory provide ability-based feedback, which demonstrates no cultural differences (culture-free). However, teachers with a duty-based mindset give duty-based feedback, emphasizing cultural particularity (culture-bound) and echoing the role obligation theory of self-cultivation. (2) Ability-based feedback leads students to interpret their poor performance as a lack of ability, which is perceived as beyond their control; as a result, they may lose hope for the future and may give up on STEM subjects. In contrast, duty-based feedback leads students to interpret their poor performance as a failure to do their best, which is within their control; therefore, they remain optimistic about future success. This underscores the importance of teachers providing feedback with caution to avoid negative effects. (3) Both Eastern and Western comforting feedback aim to reduce students' stress, but each approach has its advantages and disadvantages. Eastern-style comforting feedback can motivate students to overcome challenges and achieve outstanding results in international academic assessments, thereby cultivating a large pool of STEM talent. However, it may also harm the psychological well-being of those who continue to struggle despite their efforts. Western-style comforting feedback may reduce students' participation in STEM fields but helps cultivate talent in non-STEM domains. (4) Sixty percent of teachers provide all three types of feedback: Western-style comforting, Eastern-style comforting, and advice-oriented feedback. Western-style comforting feedback tends to encourage students to give up, while Eastern-style comforting and advice-oriented feedback promote persistence. This can create a dilemma for students, who may feel conflicted between giving up and continuing to strive.

6. Implications of the Research Findings

(1) Interpreting Research Findings from the Perspective of Cultural Systems

Empirical research findings must be interpreted within the context of theoretical frameworks to fully reveal their significance. When submitting papers to international journals, Western scholars naturally tend to interpret findings through the lens of established Western theoretical frameworks. However, interpreting non-Western phenomena solely through

Western theories can confine research results within a Western framework, thus distorting their true meaning.

For instance, in Confucian societies, when individuals fail to fulfill their role obligations, they experience a sense of "indebtedness." Reviewers often suggest that I replace this term with "guilt," which is more familiar to them. However, substituting "indebtedness" with "guilt" means the phenomenon must then be interpreted within the context of Christian cultural systems. In Catholicism and Christianity, confession refers to a believer feeling "guilt" after committing wrongful acts, such as theft or murder. The believer confesses privately to a priest, expressing remorse for their misdeeds, and the priest, acting as a representative of God, grants forgiveness.

In contrast, "indebtedness" in Confucian societies refers to the feeling experienced when individuals fail to meet their expected role obligations. For instance, children may feel indebted when they do not study diligently and believe they have disappointed their parents. This emotion can only be fully understood within the Confucian cultural framework. In simple terms, "guilt" refers to "having done something one should not have done," whereas "indebtedness" refers to "not having done something one should have done." The two concepts are fundamentally different.

If non-Western scholars are unaware of the differences between these cultural systems and uncritically adopt Western theoretical concepts, they risk distorting the interpretation of their research findings and, unknowingly, falling into academic colonialism, thereby losing their cultural subjectivity. Similarly, recent educational reforms in Taiwan have frequently imported Western practices without adequately considering the local cultural context, which has, unsurprisingly, led to challenges and criticism.

(2) Psychological Health Issues Arising from Dilemmas

Cross-cultural comparative studies have demonstrated that students in Confucian cultural societies report lower levels of psychological well-being than those in Western countries (Lee, 2009; Liu et al., 2017; Morony et al., 2013; Stankov, 2013). Our research indicates that the poor psychological health of these students may stem from the experience of being caught in dilemmas following their failure to achieve vertical goals. Students who fail without putting in effort are perceived as lacking moral character, while those who fail despite their hard work experience negative emotions. As a result, they find themselves in a dilemma where both exerting effort and not exerting effort appear problematic.

Furthermore, when students experience failure, they may simultaneously experience a sense of hopelessness regarding future success, which can lead to a desire to give up, alongside a sense of indebtedness that motivates them to persist. This creates a dilemma, as they feel trapped between wanting to withdraw and the desire to continue. In addition, our findings indicate that 60% of teachers tend to provide students with a combination of Western-style comforting feedback, Eastern-style comforting feedback, and Eastern-style exhortation when students perform poorly. Western-style comfort tends to encourage students to give up, while Eastern-style comfort and exhortation motivate them to keep trying. Consequently, when students receive both types of feedback, they face the dilemma of whether to persist or to surrender.

Some may argue that poor psychological health is simply the result of frustration following failure. However, students in Confucian societies often encounter conflicting pressures that pull them in opposing directions. This internal conflict—where moving forward or retreating both seem unviable—may be a significant factor influencing their psychological well-being.

(3) *Addressing the Dilemma of a Single Large Pyramid with Multiple Smaller Pyramids*

Our series of studies has demonstrated that the culture-bound nature of vertical goals leads students in our society to strive to climb a singular, large achievement pyramid to fulfill their role obligations. However, this often results in students becoming trapped in learning dilemmas. Given that Confucian societies tend to emphasize climbing the achievement pyramid, a feasible solution may be to construct multiple, smaller achievement pyramids. This approach would enable students to navigate various types of pyramids and achieve the ideal of cultivating their individual strengths.

The concept of multiple pyramids can also be extended to university faculty promotion and university typologies. If academic publications are the sole criterion for faculty advancement, educators are compelled to ascend a singular, large "academic publication" pyramid, resulting in dilemmas similar to those encountered by students. By establishing multiple types of promotion pyramids, teachers can better identify their optimal positioning and select the most appropriate pyramid for their advancement. My article, "Alternative Scholarship—The Scholarship of Teaching and Learning" (Fu, 2013), presents one such pathway for diversified faculty promotion, aligning with the Ministry of Education's current initiatives to foster multiple pathways for faculty advancement and the implementation of the Teaching Practice Research Program.

Similarly, if the sole objective of higher education institutions is to become world-class research universities, then all universities are compelled to climb the same singular ranking system, resulting in a similar dilemma. By establishing multiple types of university pyramids, each institution can identify its optimal position and select the most suitable pyramid to pursue. This approach allows students and faculty to develop their strengths on different types of pyramids, and universities to nurture a diverse range of talents within various types of pyramids.

VII. Recommendations

Upon reflecting on my academic journey, I would like to humbly offer the following suggestions to researchers, with the hope that these insights may help them avoid unnecessary detours.

1. Cultivating Problem Awareness by Addressing Research Gaps

To bridge the first major gap between the citation of Western theories and their application in local educational practices, scholars play a crucial role. Currently, universities require faculty members to submit their research findings to international journals indexed by SCI and SSCI for evaluation and promotion, with the hope that their work will be scrutinized by the global academic community, leading to the predicament of "publish or perish." International academic journals place the highest value on originality and uniqueness. Students from Confucian-heritage cultures often excel in international assessments such as TIMSS and PISA, which has aroused curiosity in the academic community. Nevertheless, due to the challenges Western scholars face in understanding the essence of Confucian culture, their interpretations often remain superficial or even inappropriate. Numerous cross-cultural empirical research findings have demonstrated that the learning and performance of East Asian students do not fully align with existing Western theories. Unfortunately, scholars in Asian Confucian-heritage cultures have not developed relevant theoretical models based on the accumulation of empirical data, nor have they contextualized empirical research findings within theoretical frameworks to highlight their significance and value. This represents a missed opportunity. This research gap presents an opportunity for domestic scholars to conduct original and unique research, which not only facilitates publication in international journals but also helps them gain a voice on the global stage, positioning them as the best bridge for the Western world to understand the theories and practices of the Chinese-speaking world.

But how can one identify and cultivate a sense of problem awareness? There are two potential approaches. First, by examining cross-cultural research findings, one can identify differences between Eastern and Western cultures and explore why students in East Asian countries exhibit different outcomes, as well as the underlying psychological mechanisms (how), thereby highlighting cultural subjectivity. For example, cross-cultural studies have found that, regarding implicit theories, Western students tend to hold an entity view, whereas East Asian students are more inclined toward an incremental view. In attribution theory, Western societies favor an ability model, while East Asian societies tend to embrace an effort model. Researchers may further propose, based on the "role obligation theory of self-cultivation" in the Confucian cultural system, that East Asian students' beliefs are not only incremental but also obligation-oriented; failure is attributed not only to a lack of effort but also to whether one has fulfilled one's duties.

Second, as previously mentioned, there are three primary sources of research questions. In our series of studies, most research questions have emerged from anomalies—cases where theoretical frameworks and empirical phenomena do not align. Typically, we follow a three-step approach to identify research questions: The major premise refers to widely accepted theories or research findings; the minor premise refers to phenomena that are inconsistent with the major premise; and the research questions may include: What are the different outcomes (what)? Why do such inconsistencies occur (why)? And through what psychological mechanisms do they operate (how)?

For instance, existing Western research indicates that individuals who achieve success are often praised, reflecting an outcome-based perspective (major premise). However, in our context, this perspective is not purely outcome-based (minor premise). Consequently, the research questions are as follows: Under what circumstances are successful individuals praised (what)? Why are they praised, as inferred from the role obligation theory of self-cultivation (why)? What are the underlying psychological mechanisms involved (how)?

Addressing these research questions, the findings indicate that only those who achieve success through effort are praised, while those who succeed without effort are not (what). The primary reason is the moral image associated with fulfilling one's role obligations (why). The psychological mechanism operates as follows: When students diligently fulfill their role obligation to study, they are perceived as possessing a moral character—reflecting the belief that "heaven rewards diligence"—and consequently receive praise. In contrast, individuals who attain success without fulfilling their role obligations are seen as lacking a moral image and are

perceived as merely clever, resulting in a lack of recognition. Therefore, in this context, praise takes both the process and the outcome into account (how).

2.   Research on Invention from the Perspective of Cultural Systems

Cross-cultural comparative studies with a pan-cultural orientation often rely on Western theories as their foundation to emphasize the differences between Western and East Asian students. A theory is a logical summary inferred by humans about natural and social phenomena, based on existing empirical knowledge, experience, facts, laws, cognition, and verified hypotheses, using methods such as generalization and deductive reasoning. Within the framework of Western theories, the learning phenomena of Western students can be logically explained; however, East Asian students are often positioned within this Western theoretical framework in a way that appears incompatible or irrelevant to their local context. As a result, such research only reveals "what is," but not "why it is so," making it challenging to highlight the subjectivity of the scholars involved.

In light of this, it is recommended to formulate and test research hypotheses based on the hard core of Confucian societies and their cultural systems, as well as to conduct a series of "invention"-oriented studies. This approach aims to achieve not only an understanding of "what is," but also "why it is so," thereby emphasizing the subjectivity of scholars. For instance, based on the hard core of the role obligation theory of self-cultivation, individuals who fulfill their role obligations and possess higher levels of moral cultivation receive more favorable moral evaluations and do not experience guilt. Accordingly, one can infer the influence of effort on moral, emotional, and behavioral aspects within the context of vertical goals shaped by social expectations, and conduct a series of studies based on this basis. However, this hard core does not apply to all types of achievement goals. When auxiliary hypotheses are added, it only holds true under vertical goals shaped by social expectations, but not under non-vertical goals, without challenging the hard core itself.

For instance, in the context of academic failure, a lack of effort leads to a diminished moral image (moral aspect), while putting in effort but still failing results in feelings of sadness (emotional aspect), thus creating a dilemma. This dilemma, however, is less apparent in non-vertical goals. Similarly, compared to practical skills such as drawing, in academic success, those who put in effort are perceived as possessing greater moral character (moral aspect) and receive more praise (behavioral aspect) than those who do not make an effort. In academic failure, those who did not try are seen as having less moral character (moral aspect) and receive

more blame (behavioral aspect) than those who attempted but failed. When students fail academically, on one hand, they feel guilty (emotional aspect) for not fulfilling their obligations and thus continue to put in effort (behavioral aspect) to escape this negative emotion; on the other hand, they may feel despair (emotional aspect) and give up trying (behavioral aspect), leading to a dilemma of whether to persist or to surrender. These findings indicate that if one does not distinguish between vertical and non-vertical goals, the role obligation theory of self-cultivation would collapse.

3.   Distinguishing Between Universal Phenomena and Culturally Specific Phenomena

Newton once stated, "If I have seen further, it is by standing on the shoulders of giants." All achievements are accumulated and progressive; without building upon the accomplishments of those before us, progress cannot be expected. When conducting research, non-Western scholars should neither blindly adopt Western approaches wholesale nor reject them entirely. Instead, scholars should stand on the shoulders of giants and investigate the conditions under which phenomena are universal (culture-free) and those under which they are culturally specific (culture-bound), as this approach is more meaningful and valuable.

Since both Westerners and non-Westerners are "human," sharing similar physiological structures, there are phenomena that can be considered culture-free. However, due to cultural differences across regions, there are also culture-bound phenomena. If research results are consistent with established Western theories, this indicates universality (culture-free); if research results differ, this highlights cultural specificity (culture-bound). For instance, our research indicates that individuals who hold Dweck's implicit theory of intelligence tend to provide Western-style feedback to students who perform poorly, which aligns with Western findings and thus demonstrates culture-free characteristics. In contrast, those who adhere to the role obligation theory of self-cultivation are more likely to offer students Eastern-style comfort and advice, reflecting culture-bound characteristics.

According to Lakatos's sophisticated falsificationism, an existing theory can only be considered falsified when a new theory proposed by scientists can explain the previous successes of the old theory or when the new theory incorporates the irrefutable core of the old theory (Huang, 2001, p. 196). If we can distinguish the circumstances under which phenomena are universal (culture-free) from those in which they are culturally specific (culture-bound), then the new theories we generate will not only be able to explain the previous successes of the old theories but also contribute new knowledge, thereby representing the evolution of science.

The British historian Arnold J. Toynbee predicted, "The nineteenth century was the century of the British, the twentieth century was the century of the Americans, and the twenty-first century will be the century of the Chinese." Among Chinese societies, Taiwan stands out as a nation that has both embraced Western education and preserved a rich Confucian cultural heritage. This unique advantage of integrating both Chinese and Western traditions provides fertile environment for domestic scholars to construct new theories. Therefore, Taiwanese scholars have the greatest opportunity to develop theoretical models that can explain both the phenomena observed in Western societies as well as those that are culture-bound to Confucian societies (Fu & Huang, 2016), thus leading the evolution of science.

VIII. Conclusion

This paper presents the author's intellectual journey in researching Chinese views on education, encompassing philosophical reflection, theoretical construction, and empirical research. Academically, it is anticipated that the research findings will engage in dialogue with Western theories, identifying phenomena that are not influenced by culture and thus demonstrate universality, as well as those shaped by Confucian culture that exhibit culture-bound characteristics. This approach aims to contribute new knowledge to the field. Practically, the evidence-based findings are intended to provide guidance for teaching and learning, reducing complaints about the "uselessness of theory," and, hopefully, making a meaningful contribution to society—a contribution the author humorously refers to as an alternative SCI (Social Contribution Index). It is hoped that this paper will serve as a catalyst to inspire more scholars to explore the relatively underdeveloped area of Chinese views on education, and to help identify the causes of, and solutions to, the longstanding disconnect between theory and practice.

Reference

Bedford, O., & Hwang, K.-K. (2003). Guilt and shame in Chinese culture: A cross-cultural framework from the perspective of morality and identity. *Journal for the Theory of Social Behaviour, 33*(2), 127–144. https://doi.org/10.1111/1468-5914.00210

Chan, J. (2014). *Confucian perfectionism: A political philosophy for modern times.* Princeton University Press.

Chen, S.-W., Wang, H.-H., Wei, C.-F., Fwu, B.-J., & Hwang, K.-K. (2009). Taiwanese students' self-attributions for two types of achievement goals. *Journal of Social Psychology, 149*(2), 179–194. https://doi.org/10.3200/SOCP.149.2.179–194

Covington, M. (1984). The self-worth theory of achievement motivation: Findings and implications. *Elementary School Journal, 85*(1), 4–20. https://doi.org/10.1086/461388

Covington, M. V. & Omelich, C. L. (1979). Effort: The double-edged sword in school achievement. *Journal of Educational Psychology, 71*(2), 169–182. https://doi.org/10.1037/0022-0663.71.2.169

Covington, M. V. (1992). *Making the grade: A guide for motivating young people.* Cambridge University Press. https://doi.org/10.1017/CBO9781139173582

Covington, M. V. (1998). *The will to learn: A self-worth perspective on motivation and school reform.* Cambridge University Press.

Covington, M. V. (2000). Goal theory, motivation, and school achievement: An integrative review. *Annual Review of Psychology, 51*, 171–200. https://doi.org/10.1146/annurev.psych.51.1.171

Covington, M. V., & Omelich, C. L. (1991). Need achievement revisited: Verification of Atkinson's original model. In C. D. Spielberger, I. G. Sarason, Z. Kulcsar, & G. L. Van Heck (Eds.), *Stress and emotion: Anxiety, anger, and curiosity* (Vol. 14, pp. 85–105). Hemisphere.

Covington, M. V., & Teel, K. M. (1996). *Overcoming student failure: Changing motives and incentives for learning.* American Psychological Press. https://doi.org/0.1037/10193-000

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11,* 227–268. https://doi.org/10.1207/S15327965PLI1104_01

Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process*. Heath & Co Publishers.

Dumont, L. (1985). A modified view of our origin: The Christian beginnings of modern individualism. In M. Carrithers, S. Collins & S. Lukes (Eds.), *The category of the person: Anthropology, philosophy, history* (pp. 93–122). Cambridge University Press.

Dweck, C. S. (1999). Caution-praise can be dangerous. *American Educator, 23*(1), 4–9.

Dweck, C. S. (2000). *Self-theories: Their role in motivation, personality and development.* Psychology Press.

Dweck, C. S., & Leggett, E. L. (1988). A social cognitive approach to motivation and personality. *Psychological Review, 95*, 256–273. https://doi.org/10.1037/0033-295X.95.2.256

Dweck, C. S., Chiu, C., & Hong, Y. (1995). Implicit theories: Elaboration and extension of the model. *Psychological Inquiry, 6*(4), 322–333. https://doi.org/10.1207/s15327965pli0604_12

Dworkin, R. (1978). *Taking rights seriously.* Harvard University Press.

Folmer, A. S., Cole, D. A., Sigal, A. B., Benbow, L. D., Satterwhite, L. F., Swygert, K. E. & Ciesla, J. A. (2008). Age-related changes in children's understanding effort and ability: Implications for attribution theory and motivation. *Journal of Experimental Child Psychology, 99*(2), 114–134. https://doi.org/10.1016/j.jecp.2007.09.003

Fwu, B.-J. & Wang, H.-H. (2002a). The social status of teachers in Taiwan. *Comparative Education, 38*(2), 211–224. https://doi.org/10.1080/03050060220140584

Fwu, B.-J. & Wang, H.-H. (2002b). From uniformity to diversification: Transformation of teacher education in pursuit of teacher quality in Taiwan from 1949 to 2000. *International Journal of Educational Development, 22*(2), 155–167. https://doi.org/10.1016/S0738-0593(01)00019-0

Fwu, B.-J. (2013). Alternative scholarship: Scholarship of teaching and learning. *Educational Policy Forum, 16*(1)，69-101. https://doi.org/10.3966/156082982013021601003(in Chinese)

Fwu, B.-J., & Hwang, Y.-R. (2016). Field-based experience: A solution for the theory-practice divide in teacher education? *Journal of Research in Education Sciences*, *61*(2), 57-84. doi:10.6209/JORIES.2016.61(2).03(in Chinese)

Fwu, B.-J., Chen, S.-W., Wei, C- F., & Wang, H.-H. (2017a). The mediating role of self-exertion on the effects of effort on learning virtues and emotional distress in academic failure in a Confucian cultural context. *Frontiers in Psychology, 7: 2047*. https://doi/10.3389/fpsyg.2016.02047

Fwu, B.-J., Chen, S.-W., Wei, C.-F., & Wang, H.-H. (2018). I believe; therefore, I work harder: The significance of reflective thinking on effort-making in academic failure in a Confucian-heritage cultural context. *Thinking Skills and Creativity, 30*, 19–30. https://doi.org/10.1016/j.tsc.2018.01.004

Fwu, B.-J., Chen, S.-W., Wei, C.-F., & Wang, H.-H. (2021). Chinese academic achievement goals and Confucian ethics: A response to "Do Taiwanese adolescents believe in the moral significance of effort and school performance?" *Chinese Journal of Psychology*, *63*(4), 357-372. https://doi.org/10.6129/CJP.202112_63(4).0003(in Chinese)

Fwu, B.-J., Wang, H.-H., Chen, S.-W., & Wei, C.-F. (2016). Effort counts and goals matter: The effects of effort and achievement goals on moral image, approval, and disapproval in a Chinese cultural context. In R. B. King & A. B. I. Bernardo (Eds.), *Psychology of Asian Learners: A festschrift in honor of David Watkins* (pp. 337–353). Springer Asia. https://doi.org/10.1007/978-981-287-576-1_21

Fwu, B.-J., Wang, H.-H., Chen, S.-W., & Wei, C.-F. (2017b). 'Feeling bad' or 'being bad?' The trapping effect of effort in academic failure in a Confucian cultural context. *Educational Psychology, 37*(4), 506–519. https://doi.org/10.1080/01443410.2016.1152355

Fwu, B.-J., Wei, C.-F., Chen, S.-W., & Wang, H.-H. (2014). Effort counts: The moral significance of effort in the patterns of credit assignment on math learning in the Confucian cultural context. *International Journal of Educational Development, 39*, 167–172. https://doi.org/10.1016/j.ijedudev.2014.07.010

Fwu, B.-J., Wei, C.-F., Chen, S.-W., & Wang, H.-H. (2021). To work hard or not? The conflicting effects of negative emotions on persistence after academic failure in a Confucian-heritage cultural context. In J. Chen & R. B. King (Eds.), *Emotions in learning, teaching, and leadership: Asian perspectives* (pp. 3–17). Routledge. https://doi.org/10.4324/9780429353581-1

Fwu, B.-J., Yang, T.-R., & Chen, Y.-K. (2023, July 12-15). *When rights meet duties: Asymmetry between duties and rights among different interpersonal relationships in a Confucian cultural context* (paper presentation). Asian Association of Social Psychology 15th Biennial conference. Hong Kong.

Fwu, B.-J., Yang, T.-R., Chen, Y.-K., & Chen, R. (2022). The impact of teacher feedback on students' decisions to stay on or change course after math failure in a Confucian cultural context. *Frontiers in Psychology,* 13:1046806. https://doi.org/10.3389/fpsyg.2022.1046806

Hamilton, V. L., Blumenfeld, P. C., & Kushler, R. H. (1988). A question of standard: Attributions of blame and credit for classroom acts. *Journal of Personality and Social Psychology, 54*(1), 34–48. https://doi.org/10.1037/0022-3514.54.1.34

Hamilton, V. L., Blumenfeld, P. C., Akoh, H. & Miura, K. (1990). Credit and blame among American and Japanese children: Normative, cultural, and individual differences. *Journal of Personality and Social Psychology, 59*(3), 442–451. https://doi.org/10.1037/0022-3514.59.3.442

Hau, K.-T. & Ho, I.-T. (2010). Chinese students' motivation and achievement. In M. H. Bond (Ed.), *Oxford handbook of Chinese psychology* (pp. 187–204). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199541850.013.0014

Heine, S. J., Kitayama, S., Lehman, D. R., Takata, T., Ide, E., Leung, C., & Matsumoto, H. (2001). Divergent consequences of success and failure in Japan and North America: An investigation of self-improving motivations and malleable selves. *Journal of Personality and Social Psychology, 81,* 599–615. https://doi.org/10.1037/0022–3514.81.4.599

Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences, 33*, 61–83. https://doi.org/10.1017/S0140525X0999152X

Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. *Online Readings in Psychology and Culture, 2*(1). https://doi.org/10.9707/2307-0919.1014

Hong, Y.-Y. (2001). Chinese students' and teachers' inferences of effort and ability. In F. Salili, C.-Y. Chiu & and Y.-Y. Hong (Eds.), *Student motivation: The culture and context of learning* (pp. 105–120). Kluwer Academic/Plenum Publishers. https://doi.org/10.1007/978-1-4615-1273-8_6

Hsieh, F.-J., Wang, T.-Y., Hsieh, C.-J., Tang, S.-J., & Chao, G. (2010). *A milestone of an international study in Taiwan teacher education - An international comparison of Taiwan mathematics teacher preparation (Taiwan TEDS-2008).* Taipei, Taiwan, Department of Mathematics, National Taiwan Normal University.

Hwang, K.-K. (1999). Filial piety and loyalty: Two types of social identification in Confucianism. *Asian Journal of Social Psychology, 2*, 163–183. https://doi.org/10.1111/1467-839X.00031

Hwang, K.-K. (2000). Chinese relationalism: Theoretical construction and methodological considerations. *Journal for the Theory of Social Behavior, 30*(2), 155–178. https://doi.org/10.1111/1468-5914.00124

Hwang, K.-K. (2001). The deep structure of Confucianism: A social psychological approach. *Asian Philosophy, 11*(3), 179–204. https://doi.org/10.1080/09552360120116928

Hwang, K.-K. (2001). *The logic of social science*. Psychological Publishing Co. (in Chinese).

Hwang, K.-K. (2009a). *Confucian relationalism: Philosophical reflection, theoretical construction, and empirical research*. Psychological Publishing Co. (in Chinese)

Hwang, K.-K. (2009b, January 19). *Invent or discover, but first ask Newton.* United daily News. https://blog.udn.com/cc10/8599467 (in Chinese)

Hwang, K.-K. (2012). *Foundations of Chinese psychology: Confucian social relations*. Springer.

Hwang, K.-K. (2014). Cultural system vs. pan-cultural dimensions: Philosophical reflection on approaches for indigenous psychology. *Journal for the Theory of Social Behaviour, 45*(1), 2–25. https://doi.org/10.1111/jtsb.12051

Kamins, M. L., & Dweck, C. S. (1999). Person versus process praise and criticism: Implications for contingent self-worth and coping. *Developmental Psychology, 35*(3), 835–847. https://doi.org/10.1037/0012-1649.35.3.835

Kitayama, S., Markus, H. R., Matsumoto, H., & Norasakkunkit, V. (1997). Individual and collective processes in the construction of the self: Self-enhancement in the United States and self-criticism in Japan. *Journal of Personality and Social Psychology, 72*(6), 1245–1267. https://doi.org/10.1037/0022-3514.72.6.1245

Lee, J. (2009). Universals and specifics of math self-concept, math self-efficacy, and math anxiety across 41 PISA 2003 participating countries. *Learning and Individual Differences, 19*, 355–365. https://doi.org/10.1016/j.lindif.2008.10.009

Li, G.-Y., Fwu, B.-J., Yang, T.-R. & Chen, Y.-K. (2023) To approach or to avoid: The quadripolar model of achievement motivation revisited in a Confucian-heritage context. *Frontiers in Psychology, 13*:1046775. https://doi.org/10.3389/fpsyg.2022.1046775

Li, J. (2012). *Cultural foundations of learning*. Cambridge University Press. https://doi.org/10.1017/CBO9781139028400

Liu, C.-H., Chiu, Y.-H. C., & Chang, J.-H. (2017). Why do Easterners have lower well-being than Westerners? The role of others' approval contingencies of self-worth in the cross-cultural differences in subjective well-being. *Journal of Cross-Cultural Psychology, 48*(2), 217–224. https://doi.org/10.1177/0022022116677580

Lourengo, O. M. (1994). Portuguese children's judgments of moral, prosocial, and academic norms: Duty of aspiration? *International Journal of Behavioral Development, 17*(2), 367–381. https://doi.org/10.1177/016502549401700208

Morony, S., Kleitman, S., Lee, Y.-P., & Stankov, L. (2013). Predicting achievement: Confidence vs self-efficacy, anxiety, and self-concept in Confucian and European countries. *International Journal of Educational Research, 58*, 79–96. https://doi.org/10.1016/j.ijer.2012.11.002

Mueller, C. M., & Dweck, C. S. (1998). Praise for intelligence can undermine children's motivation and performance. *Journal of Personality and Social Psychology, 75*(1), 33–52. https://doi.org/10.1037/0022-3514.75.1.33

Organization for Economic Co-Operation and Development [OECD]. (2019). PISA 2018
    results (volume III): *What school life means for students' lives*. PISA. OECD Publishing.
    https://doi.org/10.1787/acd78851-en.

Pekrun, R. (2006). The control-value theory of achievement emotions: Assumptions,
    corollaries, and implications for educational research and practice. *Educational
    Psychology Review, 18*(4), 315–341. https://doi.org/10.1007/s10648-006-9029-9

Pekrun, R., & Stephens, E. J. (2010). Achievement emotions: A control-value approach.
    Social and Personality Psychology Compass, 4(4), 238–255.
    https://doi.org/10.1111/j.1751-9004.2010.00259.x

Popper, K. K. (1972). *Objective knowledge: An evolutionary approach.* Oxford University
    Press.

Raffaelli, M., Lazarevic, V., Koller, S. H., Nsamenang, A. B., & Sharma, D. (2013).
    Introduction: Special issue on adolescents in the majority world. *Journal of Research on
    Adolescence, 23*(1), 1–8. https://doi.org/10.1111/jora.12000

Rattan, A., Good, C., & Dweck, C. S. (2012). "It's ok-not everyone can be good at math":
    Instructors with an entity theory comfort (and demotivate) students. *Journal of
    Experimental Social Psychology, 48,* 731–737.
    https://doi.org/10.1016/j.jesp.2011.12.012

Salili, F., & Hau, K. T. (1994). The effect of teachers' evaluative feedback on Chinese
    students' perception of ability: A cultural and situational analysis. *Educational Studies,
    20*(2), 223–236. https://doi.org/10.1080/0305569940200206

Schmidt, G., & Weiner, B. (1988). An attribution-affect-action theory of behavior:
    Replications of judgments of help-giving. *Personality and Social Psychology Bulletin,
    14*(3), 610–621.

Schön, D. (1983). *The reflective practitioner: How professionals think in action*. Basic Books.

Schön, D. (1995). Knowing-in-action: The new scholarship requires a new epistemology.
    Change, 27(6), 26–34. https://doi.org/10.1080/00091383.1995.10544673

Stankov, L. (2013). Depression and life satisfaction among European and Confucian
    adolescents. *Psychological Assessment, 25*, 1220–1234.
    https://doi.org/10.1037/a0033794

Stevenson, H. W., & Stigler, J. W. (1992). *The learning gap: Why our schools are failing and
    what we can learn from Japanese and Chinese education*. Touchstone Books.

Tao, V., & Hong, Y.-Y. (2014). When academic achievement is an obligation: Perspectives from social-oriented achievement motivation. *Journal of Cross-Cultural Psychology, 45*, 110–136. https://doi.org/10.1177/0022022113490072

Wang, H.-H. & Fwu, B.-J. (2007). In pursuit of teacher quality in diversity: A study of the selection mechanisms of new secondary teacher education programs in Taiwan. *International Journal of Educational Development, 27*, 161–181. https://doi.org/10.1016/j.ijedudev.2006.07.003

Wang, H.-H. & Fwu, B.-J. (2014). Once hired, seldom gone: The deliberation process of beginning teachers in Taiwan in deciding to stay in teaching. *Teaching and Teacher Education, 37*, 108–118. https://doi.org/10.1016/j.tate.2013.10.004

Weber, M. (2001). *The Protestant ethic and the spirit of capitalism* (S. Kalberg, Ed.; S. Kalberg, Trans.; 1st ed.). Routledge. https://doi.org/10.4324/9781315063645

Weber, M., Baehr, P., & Wells, G. C. (Eds. & trans.) (2002). *The Protestant ethic and the "spirit" of capitalism and other writings*. Penguin Books.

Weiner, B. (1986). *An attributional theory of motivation and emotion*. Springer-Verlag.

Weiner, B. (1994). Ability versus effort revisited: The moral determinants of achievement evaluation and achievement as a moral system. *Educational Psychologist, 29*(3), 163–172. https://doi.org/10.1207/s15326985ep2903_5

Yang, Z.-H. (2019). Ren (Pre-Qin Confucianism), in Wang Y.-Q. (Ed.), *Encyclopedia of Chinese philosophy*. (in Chinese)

Zhang, M., & Cross, S. E. (2011). Emotions in memories of success and failure: A cultural perspective. *Emotion, 11*(4), 866–880. https://doi.org/10.1037/a0024025

建構本土心理學理論後設思維的省思

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摘要

　　本文針對符碧真教授分享其轉換成為本土教育心理學研究者的心路歷程，並建構出相當值得教學實務參考理論的論述內容，閱讀後分別針對個人在（1）理論與實務的落差；（2）泛文化研究與文化系統研究取向差異，以及（3）反思性主位研究與反身性客位研究取向差異等三個關鍵議題，提出了自己衍生的想法，作為與符教授在本土心理學研究進路觀點上相互切磋的心得。文章最後更以「二元空性」觀點強調事物或現象本質的存在並不受到二元對立的限制，而是取決於評價者或研究者的主觀視角所框架，因此藉此文章希望鼓勵年輕的本土研究者對於主觀與客觀之間的複雜關係能進行深度省思，並期望本文有助於建立更開放、包容的學術生態與社會氛圍。

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作為華人師資培育專家及實務現場的指導者，符碧真教授透過多年系統化的研究及實務觀察心得，寫下這篇發人深省的靶子論文，足以讓讀者給予最大的肯定。此篇內容不僅敘說一位從事教育或教育心理學者改弦更張，轉換成為本土心理學研究者的漫漫心路歷程，更從自身探索過程中帶出了相當值得參考的智慧結晶，文章內容值得教育及師資培育相關研究者與實務工作者細細閱讀。

人類的行為大多數是文化或是生物遺傳與文化因素交互作用下的產物，既然如此，在研究或探討人類教學現場的行為時，能不把文化差異這因素考慮在內嗎？教學心理學作為一項應用學科，若不把文化差異因素考慮進去的理論拿來應用，能夠發揮理論所陳述的功效嗎？答案是顯而易見的，這也正是符教授願意投入多年的心血鍥而不捨地想矯正台灣教育現場教學困境的根本原因。

或許有人會說，學術理論與實務應用本來就存在著落差，當將理論運用到實務現場時本來就該因應現場情境脈絡變動而有所調整；既然有這樣的認識，那為何不在建構及發展教學心理學理論時，就根據理論將應用於特定社會文化脈絡下的特徵屬性考量進去，藉以建構適合該社會文化脈絡的教學心理學理論呢？這不僅能夠讓理論在實務現場發揮功效，更可帶來理論觀點的創新、並建立起自己學術的主體性，可謂一舉數得，何樂而不為？符教授正是身體力行實踐這項一舉數得樂事的學者，由從事本土教育心理學的研究與教學實務過程中，逐漸培養出自己研究與教學的「內在動機」，樂在其中。

除了針對於符教授陳述自己學術發展變化的心路歷程與經驗分享給予肯定外，以下想提出幾點個人閱讀文章後的心得藉用來和符教授彼此切磋討論。

壹、談理論與實務的落差

符教授在文章中說到，培育台灣師資的過程中，師資生常向她抱怨理論觀點與實務應用之間落差大，甚而提出「理論無用論」，讓她感到相當大的困擾。她個人認為產生落差的來源有兩大原因，其中之一是由於「技術理性知識論」（epistemology of technical rationality）長期主導台灣師資培育的理論建構模式所造成。由於這種理論建構過程是在控制其他因素的情況下，建立變項與變項之間純淨的關係，它明顯與實務現場變因太多的現實狀況大不相同；由於這些可能變因常被排除在理論建構的考慮範圍外，因而實際狀況受這些變因影響造成實務結果常不如理論所預期，自然產生理論觀點與實務應用之間的鴻溝。實際上，早有學者已注意到理論在實務應用上的這點困境，因此建議在研究概念或測量工具的發展與編製時，就提醒應事先注意到對於情境或範疇特定性（situation or domain specific）的考量，例如廣受教育心理學界採用的知覺自我效能感（perceived self-efficacy）（Bandura et al., 1999），就有發展出針對不同特定範疇所界定的自我效能感概念及與其對應的測量工具，以縮減理論觀點與實務應用之間的落差。另外，用來探

討某些個體在人際互動中經常抱持著負面預期，預期自己將會遭到互動他人的拒絕而產生預期性焦慮，進而導致該個體習慣將注意力關注在負面的互動線索，產生對於拒絕相關線索過度敏感，而常將模糊、曖昧訊息解讀為拒絕訊號、並在情緒及行為上過度反應的傾向；對於這種人際互動上的心態傾向在心理學上學者會使用「拒絕敏感性」（rejection sensitivity）（Downey et al., 2004）的概念來替代未針對任何應用情境所測量的「焦慮特質」作為研究預測變項。後續實徵研究結果也顯示：當運用拒絕敏感性概念在親密交往關係情境的研究時，它對於此關係最後是否會以分手告終的預測力，確實要比使用個體焦慮特質作為預測變項好很多（Downey & Feldman, 1996）。上述這些研究結果都一再顯示，當建構研究概念或理論時，若能夠先將概念或理論所要應用的情境脈絡因素考慮進去，將會大大縮減理論觀點與實務應用之間的鴻溝或落差。理論所提出的主張觀點，原本就常是取用統計上的眾數原則所歸納出來，對於少數偏離眾數原則個案的情況，本就無法兼顧並習慣將它們當作誤差來處理，應用時自然會有不足之處。換言之，理論與實務間常存有落差，這是很自然的正常現象，實在無須抱怨。若使用者對理論提出的通則主張觀點相當嫻熟，自然能夠舉一反三，針對理論欲應用的特定情境脈絡，採取彈性調整策略，將這些特殊情境因素自行納入考量，自可以大大縮小理論觀點與實務應用之間的落差。

再者，符教授提及落差的另一可能原因，是由於從「WEIRD（怪異的）」樣本所建構的理論要應用到非怪異的族群或文化社會人民身上，就會如符教授所言，它無可避免地要遭遇兩道鴻溝的轉化，因此應用這些由「怪異」樣本研究結果所建構的理論於另一群不同文化社會之人民的實務現場時，難免也會出現較大落差的情況。這一主張理由也正是絕大多數非主流學者所大聲疾呼，應該倡導發展自己本土的心理學理論以強化其應用效力的核心訴求。實際上，社會認知心理學研究取向者強調探究及分析人的行為問題時，當事人的性格系統（人的因素）及其身處的環境脈絡（環境因素）兩者會彼此交互作用而對人的行為表現產生影響（Bandura, 1986）。換言之，不單只是如符教授在第一項來源所提的屬於環境脈絡因素差異會影響個體的行為表現，導致實務現場觀察到的結果與理論預期有所不同外，被研究對象自身的性格系統差異也會導致個體在相同的實驗情境下表現出不同的行為，因而讓理論觀點的預測與實際結果有所落差。換言之，若肯定不同社會文化下個體的價值信念與行動目標存在著一定的差異，例如將判斷道德的信念（moral beliefs）區分成「權利本位」（rights-based）與「義務本位」（duty-based）兩類的差異（Dworkin, 1978），則由其所組織而成的性格系統自然有所差異，那麼接續受相同情境影響所表現出來的行為自然與其他社會文化下個體所表現出來的行為有所不同，當然也就不適合使用甲社會文化下樣本所建構的理論主張觀點來預測或詮釋乙社會文化下個體的行為表現了。更何況，若再將不同環境因素（也包括因生態環境不同或環境變遷的因素含括進來）與不同性格系統兩者交互作用影響所產生更複雜的動態變化考

慮進去，那恐怕非要自己創造新的理論觀點，才能更細膩地詮釋這些動態變化歷程的現象了。在此處，個人想表達的是，社會認知研究取向的指導原則對於想從事本土心理學的研究者來說，應該是一個很適合用來思考自己本土研究議題的入手途徑，非常值得有志於從事華人本土心理學的年輕者參考採用。

貳、泛文化研究與文化系統研究

　　符教授既然宣稱自己從事的是「文化系統研究」而不是「泛文化研究」，而且理論建構也明確地區分華人文化系統與西方文化系統所衍生出來的「華人教育觀」與「西方教育觀」理論的對比，則接續下來較適當的實徵研究設計，就會是跨文化比較研究，藉以凸顯各自文化系統教育觀點下的實徵結果，確實如所區分理論的主張觀點具有顯著的文化差異，以說服讀者接納認可自己所提出的文化系統教育觀的差異在現象界具體存在。但較為可惜的是，符教授自己的實徵研究鮮少使用跨文化比較的方式來驗證她自己提出的理論觀點，若符教授自己能從事系列的跨文化比較實徵研究，由自己嚴謹的跨文化研究設計及結果來支持自己經文化系統觀取向所提出的東西方教育觀理論主張論點，會是更具說服性的。例如，符教授主張西方及華人的教育觀都相當重視努力的道德性，但兩個文化下個體對於努力這一行為之心理功能闡述的背後意義及運作機制並不相同，就很值得由此衍生出跨文化對比的研究假設，並採用跨文化樣本的研究設計來檢驗自己提出來的假設主張；若假設預測能獲得重複驗證的實徵研究結果，則其理論觀點更具說服性。

　　實際上，符教授從事華人本土教育心理學研究師承的黃光國教授，在其自身從事本土心理學研究的過程中，向來都引述著名文化心理學家 Richard Shweder 的「理一分殊」（one mind many mentality）觀點，作為自己本土學術研究的最高指導原則：即「不同文化社會下人們心理運作現象所展現的差異，應該是同一種心智下的多種心態反映；因此建構理論時除了強調不同文化表層行為內涵的分殊性外，也應考量其心理機制的泛文化普同觀點」（One mind, many mentalities; universalism without uniformity）（Shweder et al., 1998, p. 871）。換言之，根據 Shweder 的「理一分殊」主張觀點，從事本土心理學或社會科學研究時，所謂的泛文化系統與文化系統研究取向，基本上是一體的兩面，彼此是相互整合的，而不是二元對立的，也沒有孰優孰劣之分。它們就像是我們看到華人使用筷子、美國人使用刀叉、印度人使用右手當工具來吃飯，雖然反映了飲食習慣上文化系統思維的差異，但其共同的核心根本都是為了要滿足飢餓的心理需求，此後者正是屬於全人類共同的基本心理需求。換言之，理論建構過程中，不論強調的是較偏形式結構深層層面、泛文化普同性的「硬核」式理論模型（例如黃光國教授的自我曼陀羅理論模型），或是偏具體行為內涵層面、強調文化差異性的「軟核」式理論模型（例如黃光國教授的

華人人情面子的權力遊戲模型），都能對人類提供有用的知識建構，兩者之間是可以相互並存的，甚至是可以整合的，並無所謂孰對孰錯、優劣之分（葉光輝，1998）。所以一個優秀的本土社會科學或心理學理論建構，它既要能夠說明文化系統差異所衍生的慣習行為差異的問題，也要能夠同時回答泛（或跨）文化共同心理運作機制的核心問題（葉光輝，2011；Yeh, 2023），兩者要能夠相互整合，而不是偏失於任一端。

參、反思性主位研究取向與反身性客位研究取向

　　不同文化社會之個體的心理與行為存在著差異雖是自明的事實，然而其心理與行為表現超越文化差異的普遍性卻又是各社會科學領域共同追求的目標。本土心理學研究者該如何看待及探究不同文化間表層行為的差異及其與深層心理運作歷程間的關係呢？「文化」為理解世界現象提供解釋框架，然而不同文化社會存有不同的認識論。各地文化的形成受到歷史、地理環境、語言、宗教和社會習俗等多種因素的影響，因此造成了差異性。例如，在印度牛被視為是神聖的動物，甚至有印度人認為牛糞能防輻射、牛尿能治百病，這是印度傳統文化觀念使然。儘管不同文化間有著獨特的語言、信仰、傳統、價值觀等特徵，但同時也存在一些人類心理與行為普遍共通的屬性。例如，所有的文化社會都有關於生死、婚姻、家庭、社會道德、人際關係等方面的規範和信仰；都有透過創造藝術、音樂、舞蹈、傳說故事等來表達和溝通的方式。這些共通點表明了人類的共同經驗和需求，促進了跨文化的交流和理解。因此，從事本土心理學研究時，在尊重和保持文化多樣性的同時，也應該關注不同文化間的共同性。

　　撇開西方主流心理學在知識支配的霸權不談，站在華人心理學知識分子的角度，會探問：學者為什麼需要構建本土心理學理論或進行本土心理學研究？這是因為現有的（尤其西方主流）理論和構念無法說明或解釋您觀察到或想要討論的本土心理與行為現象。研究者需要找出一種新的方式來描述或說明您想要討論的本土心理與行為現象，本土（新）理論或本土（新）構念是實現您需求的解決方案。所以心理及行為現象是現實的基礎，它需要被探索、反思和澄清，而不是以既有的理論和構念來直接套用，對於新現象的釐清及闡述才是需要建構新理論和新構念的前提。研究者如果不能捕捉存在於不同文化現象間的細微差異，就不會認為有創建新構念或理論來區分這些差異的必要性。然而闡述現象內容，至少可以有兩個切入點：一個是表面層次的現象，另一個是深層結構或機制層次的現象。若關注於表層現象，可找出文化間很多不同的現象差異，可以創造許多本土的心理構念和相應的理論來描述文化差異。它通常使用複數的 Indigenous Psychologies 來稱呼這種本土心理學；然而當關注的是深層機制層次的現象時，學者可能找不出文化差異，或者只能創建很少甚至只有普同的心理構念及相應的理論。這種情況下，還能將其命名為本土心理學（Indigenous Psychology）嗎？

「emic（主位）」和「etic（客位）」這兩個詞最早由語言學家肯尼斯派克（Kenneth Pike）在 20 世紀的 50 年代在人類學領域提出，用以描述研究人類行為和文化的兩種不同取向。主位取向研究法：指稱從被研究群體的社會內部來審視該社會成員的文化現象，使用對該文化成員有意義的內部概念、類別和意義進行探究。客位取向研究法：涉及從被研究群體的社會外部角度來分析及探究該社會文化，使用外來的類別和概念作為分析該社會文化現象的架構。底下介紹個人近期提出的反思性主位取向（reflective emic approach）與反身性客位取向（reflexive etic approach）兩種研究法（Yeh, 2023），用來做為與文化系統研究及泛文化研究相互對話的參考。反思性主位取向：指稱研究者經反思當前（或主流）心理學現有理論和構念，無法適當地解釋所研究（或本土）群體的文化心理與行為現象，因而重新建構新的理論或構念，以闡明所研究群體的特殊本土文化心理與行為現象。符教授提出的「修養的角色義務理論」（role obligation theory of self-cultivation）（Fwu, et al., 2021, 2022）就是一個反思性主位取向研究的例子。而達爾瑪（Daharma）是一個印度的研究主題（Bhangaokar, 2020），指的是印度文化佛法修行中獨特的概念。相對地，甘え（Amae）和超常偏見（Super-Ordinary Bias）則是日本文化社會中現象的概念，分別由土居健郎（Doi, 1992）和大橋龍太郎、山口祐樹（Ohashi & Yamaguchi, 2019）等提出。這些構念在各自社會的文化背景中形成，反映了各自文化獨特的價值觀念和行為模式。

反思性主位取向研究法雖然因對主流理論的局限進行反思而有其貢獻，但卻會被批評為存在「文化膠囊（cultural encapsulation）」的偏見（Wrenn, 1962），這指謂的是它僅持單一文化觀點而對其他社會文化現象及知識的忽視所建構的理念，容易導致習慣以刻板化的印象來取代真實世界。當一個本土理論忽視了該社會中個體間的差異，或者通過將自己隔離在本土觀點之內而拒絕與其他（例如主流）文化觀點對話時，這也會是另一種「文化膠囊」的偏見。反思性主位取向研究法的局限性在於這些理論模型只能解釋存在於各自文化社會中眾數的心理及行為現象，它只是一種文化特定性的（cultural-specific）理論模型。這一限制將降低該理論模型應用於其他社會文化時的外部或生態效度。此外，它也無法應對及解釋因社會變遷帶來該社會民眾心理及行為改變的問題，因為這些理論通常是基於傳統或過去歷史背景脈絡，而不是當前社會環境狀況所建構的，因而無法用來預測未來的心理及行為變化趨勢。

此外，當將一個文化特定的本土理論應用於解釋所觀察到多元文化間現象的差異時，該理論通常假定在同一文化的人民內存有共識，而與跨文化人民間存有差異。但是，文化是一個潛在的假設性概念，它並不是對實體直接觀察到的，而是研究者從其表現中推斷出來的。在任一個給定的社會中普遍存在豐富而複雜的意義、信仰、實踐、符號、規範和價值觀可用來展示該文化潛在的屬性與特徵。但是，它們仍然不是文化自身。這意味著特定社會文化下成員的信仰和價值觀並不是完全相同的，而是多樣化的。Fischer

and Schwartz（2011）的實徵研究就支持這一論點。他們分析了三組大數據集，包括在 67 個國家的 41,968 名參與者進行的施瓦茨價值觀調查（Schwartz Value Survey）、在 19 個歐洲國家的 42,359 名參與者進行的人像價值觀問卷（Portrait Values Questionnaire）調查，以及在 62 個國家中的 84,887 名參與者進行的世界價值觀調查（World Value Survey），每組大數據集都測量了不同類型的價值觀。這三組大數據集的所有實徵結果都顯示：在不同國家之間，價值觀的優先順序存在更多的共識而非差異，並反駁了文化決定個人信仰和價值觀的主張。換句話說，一個國家內或文化內的個體差異比跨文化間的差異更加突出。這些結果提醒我們，一個好的本土理論除了要能夠描述文化層次的差異外，還應該要能夠解釋個體層次的差異，特別是在個體間思想或動機方面的差異（Yeh, 2023）。

　　個人認為使用反身性客位取向研究法來構建本土理論，而不是反思性主位取向研究法，較可能幫助研究者達到同時兼顧文化和社會內個體間差異以及跨文化間差異現象的雙重目標。反身性客位取向研究法也是一種反思，但它是對自身文化現象與主流或他國文化現象之共同性的反思，並試圖提出一個可適用於全人類文化社會共用的新構念或理論，但也可用來說明文化間差異的現象。換言之，反身性客位取向研究法通過考慮如何將文化差異和個體差異整合到一個系統性的框架中，藉此來構建一個既能說明文化差異也能說明個體差異的本土理論。這也正是符合 Shweder「理一分殊」主張觀點的本土理論。

　　由於認識到反思性主位取向研究法的局限，個人早期建構的孝道雙元模型在其第二階段時期就以反身性客位取向研究法重新構思其理論觀點（Tsao & Yeh, 2019; Bedford & Yeh, 2021）。反身性客位取向研究法也涉及到對本土文化特殊性的考量，但更進一步地深入反思已建立的本土理論（或構念）與主流心理學中現有的理論（或構念）之間的相似性和差異性，並通過公平地將這些相似性和差異性整合到一個更周全的系統性框架中來對待它們，這是一種對於反思性主位取向研究法進行後設省思的應用。以孝道雙元模型為例，近期由於孝道議題逐漸隨全球高齡化趨勢而廣受西方學界關注，為了更清晰傳達華人孝道心理學的研究成果，孝道雙元模型持續從心理學角度強化孝道概念在個體運作層次上的意義，並以「脈絡化性格」變項角度重新界定華人孝道概念。所謂「從心理學角度進行概念化」，只是回歸心理學這門學科的本質與特色—即透過可反映個別差異的內在心理運作機制來說明或解釋個體孝道相關行為、現象的成因。這除了將孝道視為華人所重視的「文化規範或文化價值觀」，也能從「性格」概念的角度來理解孝道心理與行為運作層面的意涵與機制（曹惟純、葉光輝，2022）。由於反身性客位取向研究法聚焦於父母與子女互動關係背後的心理機制，也兼顧華人文化表層的心理與行為內容，所以具有應用於任何文化的潛力。因受限於篇幅因素考量，有關個體的雙元孝道信念及行為如何在以「脈絡化性格」變項視角重新界定後，可對應到親子代間互動心理基模的兩種結構本質，以及它如何滿足子代的兩大類的基本心理需求、可用以反映華人社會文

化近代變遷趨勢，以及如何應用孝道雙元模型進行跨文化比較研究，都可以從曹惟純、葉光輝（2022）文章的 246-257 頁中有較詳細的說明，有興趣的讀者可以自行找來參閱。

　　事實上，最近幾項實徵研究已將孝道雙元模型的應用擴展到了華人以外的文化社會。例如，Rózycka-Tran 等（2021）應用了波蘭語版本的雙元孝道量表（Polish version of the Dual Filial-Piety Scale），證明了該量表的因素結構在跨不同性別和學生／員工群體中是不變的，並且在孝道信念上如預期地存在著性別差異。這結果擴展了孝道雙元模型的跨文化效度到東歐，並提供了東西方差異範式的一個參考對比。而 Nainee 等（2021）則應用了馬來西亞語版的雙元孝道量表（Malay version of the Dual Filial-Piety Scale），闡明了育兒方式、孝道信念和生活滿意度之間的關係對馬來西亞青少年的影響。此外，Lim 等（2022）應用了英文版雙元孝道量表於亞裔和高加索裔美國人，展示了孝道雙元模型對照顧年邁父母主題在跨文化上的適用性，以及在個人主義社會中反映重要孝道差異的潛力。Zheng 等（2021）還將孝道雙元模型應用於道德心理學，研究了孝道與利他行為之間的關係受到同理心、道德認同、感恩和負債感的中介效應，以及中國和印尼兩國參與者在這些中介效應上不同的調節效果。Qiao 等（2021）研究了中國及伊斯蘭社會中在孝道與道德解離之間的關係，如何受到黑暗三性格（dark triad）的中介作用，以及這些作用機制的文化差異。所有這些實徵證據皆支持孝道雙元模型具有跨文化的應用性，突顯了雙元孝道概念及理論的普同性和文化特定性的雙重特徵屬性。

肆、結語

　　採用文化系統取向來建構本土心理學理論並無不好、也非不妥，但它較易陷入二元對立的思維窠臼，例如會慣用以東、西方文化系統對立、發現與發明理論建構訴求對立、權利本位與義務本位兩者對立、縱向成就與非縱向成就目標二元對立等等來思考所探討的研究問題以及解讀所觀察到的現象。人們經常將觀察到的現象事物分為對立的二元，諸如美與醜、好與壞、對與錯、東方與西方等。這種二元對立的思考方式在進行社會比較的架構中司空見慣，但身為研究者同時也需要省思其分類標準的制定來源是屬於偏人為的或是存有絕對客觀標準的？以縱向成就與非縱向成就目標的二元差異為例，重要他人或社會期許的成就目標一定會跟個人期望的成就目標存在差異嗎？難道父母對子女期許的成就目標就不能跟子女自己期許的成就目標相一致，都是運動、才藝等領域的發展，或是都是學業上獲得好成績、找到好工作嗎？所以對於縱向及非縱向成就目標的判定究竟是研究者自己主觀的認定，還是它們確實存在著絕對客觀的判定標準？若任何分類概念確實不存在著絕對客觀的判定標準，則為了更周延地理解事物現象，研究者可以採取「二元相對」的角度來思考研究問題。即從某一視角來看，該目標可能被評價為縱向目標，但轉換另一個視角，同一目標可能被歸為非縱向目標的這一端，端視研究情境

脈絡的框架意義來評估（例如如果我們可以特別選取親子雙方都對認同在學業上獲得好成績、找到好工作為共同成就目標，或都認同在運動、才藝等領域求發展為共同成就目標的樣本為研究對象）。這種相對性提醒我們，分類概念的二元對立結果通常只是人為的、是研究者自己主觀認定的，並非絕對的、可能與被研究者的觀點有落差，它也會受到外在情境脈絡條件因素的影響而變動其評價或分類結果，換言之，二元屬性彼此之間甚至是可以相互流動、交換的，即所謂如陰陽關係般相互辯證的。因此，研究者實在不需要太過受限於這些概念分類架構的局限。如果能採用如前面提及的社會認知研究取向的思維，即在從事本土心理學或社會科學研究議題時，應該能夠同時兼顧研究對象的性格系統（人的因素）及其身處的環境脈絡（環境因素）兩者會彼此交互作用，進而對人的行為表現產生複雜的影響，而且還會隨著時間演進，這些交互影響作用也會跟著產生動態的變化歷程，而不是如文化系統取向研究者，以屬於靜態觀、偏本質論的視角來看待研究議題，則學術研究發展將會是如歷程觀的演進過程，生生不息。更進一步思考，任何評價與分類都會受到環境脈絡的影響，因此基本上都是相對於的環境脈絡條件所做的評估與分類，因而非絕對、客觀的。這時候，「二元空性」的觀點顯得特別適用。所謂二元空性，指的是世間事物的存有並不受到對錯、好壞、優劣、東西方等二元對立屬性的約束。如果一個事物反映出這些二元對立的評價，其實只是映射出評價者或研究者的視角和框架立場，而接收者或互動者是可以擁有自己不同或獨特的視角和評價立場。所謂二元對立的評價與分類，基本上屬於「空性」存有的一環。這種「空性」存在於評價或分類主體的心態與心境之中。由於每個人都有不同的價值觀、文化背景、經歷等，對事物的看法也會因此而有不同看法，換言之，二元對立的評價或分類基本上是「無常的」、「非恆定的」。因此，二元對立的評價或分類結果並不是客觀存在的事實，而是受當事人主觀因素影響的相對性評價或分類結果。

最後，本文強調研究者應從更寬廣的視角度來看待二元對立的觀點，期使研究者能夠更靈活地來思考自己的研究議題、建構自己的本土理論。這種開放性的觀點有助於打破僵化的思考模式，促使研究者更寬容地接受多元的觀點。至於二元空性觀點強調事物或現象本質的存在並不受到二元對立的約束，而是取決於評價者或研究者的主觀視角。呼籲這種研究心態和心境的用意是一個深層次的省思，它反映了對於主觀與客觀之間複雜關係的深度省思。總的來說，本文訴求強調研究者在面對事物或現象時應更謹慎思考，並呼籲寬容地接納不同的理論觀點。這樣的呼籲是建議性的，有助於建立更開放、包容的學術生態與社會氛圍。

參考文獻

曹惟純、葉光輝（2022）。孝道心理學研究：從本土理論到全球應用。載於楊中芳（主編），**華人本土心理學三十年：本土研究取徑及理論**（233-270頁）。五南出版社。

葉光輝（1998）。一種、兩種還是多種道德：如何界定道德判準的判準。**本土心理學研究，9**，187-204。

葉光輝（2011）。談如何建構一個好的本土心理學理論。**本土心理學研究，36**，139-153

葉光輝（2020）。包容與整合：再談本土化研究的多重哲學典範。**本土諮商心理學學刊，11**（4），59-66。

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice Hall.

Bandura, A., Freeman, W. H., & Lightsey, R. (1999). Self-efficacy: The exercise of control. *Journal of Cognitive Psychotherapy, 13*(2), 158-166. https://doi.org/10.1891/0889-8391.13.2.158

Bedford, O., & Yeh, K. H. (2021). Evolution of the conceptualization of filial piety in the global context: From skin to skeleton. *Frontiers in Psychology, 12*: 570547. https://doi.org/10.3389/fpsyg.2021.570547

Bhangaokar, R. (2020). The development of communal and spiritual dutifulness in India: Upholding dharma, offering Seva. In L. A. Jensen (Ed.), *The Oxford handbook of moral development: An interdisciplinary perspective* (pp. 327-349). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780190676049.013.18

Doi, T. (1992). On the concept of amae. *Infant Mental Health Journal, 13*, 7-11. https://doi.org/10.1002/1097-0355(199221)13:1<7::AID-IMHJ2280130103>3.0.CO;2-E

Downey, G., Mougios, V., Ayduk, O., London, B. E., & Shoda, Y. (2004). Rejection sensitivity and the defensive motivational system: Insights from the startle response to rejection cues. *Psychological Science, 15*(10), 668-673. https://doi.org/10.1111/j.0956-7976.2004.00738.x

Dworkin, R. (1978). *Taking rights seriously*. Harvard University Press.

Fischer, R., & Schwartz, S. H. (2011). Whence differences in value priorities? Individual, cultural, or artifactual sources. *Journal of Cross-Cultural Psychology, 42*(7), 1127–1144. https://doi.org/10.1177/0022022110381429

Lim, A. J., Lau, C. Y. H., & Cheng, C.-Y. (2022). Applying the dual filial piety model in the United States: A comparison of filial piety between Asian Americans and Caucasian

Americans. *Frontiers in Psychology, 12*, 786609.
https://doi.org/10.3389/fpsyg.2021.786609

Nainee, S., Tan, S. A., Tan, C. S., Gan, S. W., & Tan, J. P. (2021). Asian "Guan" parenting and life satisfaction among adolescents in Malaysia: The mediating role of filial piety. *Frontiers in Psychology, 12*, 746540. https://doi.org/10.3389/fpsyg.2021.746540

Ohashi, M. M., & Yamaguchi, S. (2019). Super-ordinary bias among Japanese: Is it unique to Japanese culture? In K. H. Yeh (Ed.), Asian indigenous psychologies in the global context (pp. 169-193). Palgrave Studies in Indigenous Psychology. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-319-96232-0_8

Qiao, X., Lv, Y., Aldbyani, A., Guo, Q., Zhang, T., & Cai, M. (2021). Chaos may prevail without filial piety: A cross-cultural study on filial piety, the dark triad, and moral disengagement. *Frontiers in Psychology, 12*, 738128.
https://doi.org/10.3389/fpsyg.2021.738128

Rózycka-Tran, J., Jurek, P., Olech, M., & Dmochowski, T. (2021). A measurement invariance ˙investigation of the Polish version of the Dual Filial-Piety Scale (DFPS-PL): Student-employee and gender differences in filial beliefs. *Frontiers in Psychology, 12*, 713395. https://doi.org/10.3389/fpsyg.2021.713395

Shweder, R. A., Goodnow, J., Hatano, G., LeVine, R., Markus, H., & Miller, P. (1998). The cultural psychology of development: One mind, many mentalities. In W. Damon (Ed.), *Handbook of child psychology, Vol. 1*, (pp. 865–937). John Wiley & Sons.

Tsao, W. C., & Yeh, K. H. (2019). Indigenous implications and global applications of the dual filial piety model: A psychological re-conceptualization of 'Xiao'. In K.-H. Yeh (Ed.), *Asian indigenous psychologies in the global context* (pp. 195-219). Palgrave Studies in Indigenous Psychology. Palgrave Macmillan, Cham.
https://doi.org/10.1007/978-3-319-96232-0_9

Wrenn, C. G. (1962). The culturally encapsulated counselor. *Harvard Educational Review, 32*(4), 444-449.

Yeh, K.-H. (2023). Constructing indigenous psychological theories from a global perspective: Taking filial piety model as an example. *Review of General Psychology, 27*(3), 275–281. https://doi.org/10.1177/10892680231152191

Zheng, W., Guo, Q., Huang, T., Lu, J., & Xie, C. (2021). The prosocial outgrowth of filial beliefs in different cultures: A conditional mediation model Analysis. *Frontiers in Psychology, 12*, 748759. https://doi.org/10.3389/fpsyg.2021.748759

Reflections on Metacognition in Constructing Indigenous Psychological Theory

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Abstract

This essay examines Professor Fu Bi-zhen's account of her transformation into an indigenous educational psychologist and the development of an indigenous theoretical model that is valuable for teaching practices. Following her narrative, it delves into three pivotal themes: (1) the gap between theory and practice, (2) distinctions between pan-cultural and cultural systemic research, and (3) the contrast between reflective emic and reflexive etic approach. The personal insights of these three themes are presented as a basis for the dialogue with Professor Fu, fostering mutual exchanges on indigenous psychological research perspectives. The essay concludes, by emphasizing the concept of "binary vacuity" which asserts the essence of things or phenomena is not constrained by binary oppositions but rather depends on the subjective perspective of the evaluator or the researcher, it aims to encourage young researchers to deeply reflect on the complex relationship between subjectivity and objectivity, with the hope of fostering a more open, inclusive academic environment and societal atmosphere.

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As a Chinese teacher training expert and instructor in the field, Professor Bih-Jen Fwu wrote this thought-provoking paper based on years of systematic research and practical observation, warranting the highest affirmation from readers. This article not only describes the lengthy journey of a person involved in education or educational psychology who transitions to become an indigenous psychology researcher but also highlights the valuable insights gained from her own exploration process. The article's content merits careful reading by researchers and practitioners in education and teacher training

Most human behaviors are products of the interaction between cultural factors and biological genetic factors. When studying or exploring human behavior in educational settings, should we not consider cultural differences? As an applied discipline, can teaching psychology fulfill its purpose if it neglects cultural differences? The answer is clear, which is also the fundamental reason why Professor Fwu is dedicated to investing many years of hard work and persevering in addressing the challenges of on-site teaching in Taiwan's education system.

Some people may argue that there is a gap between academic theory and practical application. When applying theory in practical settings, it should be adapted to the changes in the context. Given this understanding, why not consider the distinctive attributes of the theory within specific social and cultural contexts when developing teaching psychology theory, in order to create a theory that fits the social and cultural environment? This approach will not only allow the theory to fulfill its role in practical scenarios but also introduce innovation to theoretical perspectives and establish one's own academic subjectivity. It can be said that it achieves multiple goals at once. Why not pursue this? Professor Fwu is a scholar who embraces this rewarding endeavor of achieving multiple goals simultaneously. Through his research and teaching practice in indigenous educational psychology, he has gradually fostered his own "intrinsic motivation" for research and teaching, and he finds joy in it.

Along with acknowledging Professor Fu's insights about his own academic journey and experiences, I would like to share a few of my personal reflections after reading the article and use them as a basis for discussion with Professor Fwu.

I. Discussing the Gap Between Theory and Practice

Professor Fwu stated in the article that during the training of teachers in Taiwan, teacher trainees often expressed concerns to her about the significant gap between theoretical viewpoints and practical applications, even suggesting that "theory is useless," which troubled her greatly. She personally believes that two main factors contribute to this gap. One factor is

that the "epistemology of technical rationality" has long dominated the theoretical construction model of teacher training in Taiwan. Since this theoretical construction process aims to establish a pure relationship between variables while controlling for other factors, it is markedly different from the actual situation, where numerous variables exist in the field. Because these potential variables are frequently excluded from consideration in theoretical construction, real-world outcomes are often influenced by them, leading to practical results that frequently do not align with theoretical expectations. This discrepancy naturally creates a gap between theoretical viewpoints and practical applications. In fact, some scholars have already recognized this dilemma in the practical application of theories. Therefore, it is recommended that when developing and compiling research concepts or measurement tools, one should consider the specifics of the situation or domain in advance. For instance, the idea of perceived self-efficacy (Bandura et al., 1999), commonly used in educational psychology, has developed a self-efficacy concept defined for different specific categories and corresponding measurement tools to bridge the gap between theoretical viewpoints and practical applications. Additionally, it explores how some individuals tend to hold negative expectations in interpersonal interactions, anticipating rejection from others and experiencing anticipatory anxiety. This, in turn, leads to a tendency to focus on negative interaction cues, becoming overly sensitive to signs of rejection, and often interpreting vague and ambiguous messages as signals of rejection, which results in emotional and behavioral overreactions. In addressing this mentality in interpersonal interactions, psychological scholars employ the concept of "rejection sensitivity" (Downey et al., 2004) instead of "anxiety traits," which are not applicable in specific contexts, as a predictive variable for research. Subsequent empirical research results also show that when the concept of rejection sensitivity is applied in studies of intimate relationship situations, its predictive power for whether a relationship will end in a breakup is significantly greater than using individual anxiety traits as a predictive variable (Downey & Feldman, 1996). The research findings repeatedly suggest that when constructing research concepts or theories, considering the contextual factors relevant to the applied concepts or theories can significantly narrow the gap between theoretical viewpoints and practical applications. The viewpoints proposed by the theory are often summarized by the majority principle in statistics. For the minority of cases that deviate from this principle, they cannot be accounted for and are treated as errors, leading to inherent shortcomings in the application. In other words, a gap often exists between theory and practice. This is a natural and normal phenomenon, and there is truly no need to complain. Suppose the user is quite familiar with the general viewpoints proposed by the theory. In that case, they will naturally be able to draw inferences from one example and adopt a flexible adjustment strategy

for the specific context in which the theory is to be applied. Taking these special contextual factors into account can significantly reduce the gap between theoretical viewpoints and practical applications.

Additionally, Professor Fwu mentioned another possible reason for the gap. When applying the theory derived from the "WEIRD" sample to non-WEIRD ethnic groups or culturally diverse individuals, as Professor Fwu stated, it will inevitably face two gaps. Thus, when utilizing theories developed from the research results of the "WEIRD" sample in the practical context of a different cultural group, a significant gap is unavoidable. This argument aligns with the primary concern of many non-mainstream scholars who advocate for the development of their own indigenous psychological theories to enhance their applicability. In fact, researchers in social cognitive psychology emphasize that when investigating and analyzing human behavioral issues, the personality system (human factors) of the individual involved and the environmental context (environmental factors) in which they exist interact and influence human behavior (Bandura, 1986). In other words, not only do the differences in environmental context factors mentioned by Professor Fwu in the first source affect individual behavior—leading to discrepancies between observed results and theoretical expectations—but also the variances in the personality systems of the subjects can cause individuals to behave differently within the same experimental setting, thus creating a gap between the predictions of theoretical viewpoints and the actual outcomes. To put it differently, if it is established that individuals from different social cultures have distinct differences in value beliefs and action goals, such as the distinction between moral beliefs categorized as "rights-based" and "duty-based" (Dworkin, 1978), then the personality systems they possess will also differ, leading to different behavioral expressions under identical circumstances compared to individuals from other social cultures. Naturally, it is inappropriate to apply the theoretical propositions developed from samples in social culture A to predict or interpret the behavior of individuals in social culture B. Moreover, considering the more complex dynamic changes caused by the interaction between various environmental factors (including those arising from different ecological contexts or environmental shifts) and different personality systems, we may need to formulate new theoretical perspectives to interpret these dynamic changes more effectively. Here, I wish to convey that the guiding principles of social cognitive research orientation should be a suitable avenue for researchers interested in engaging in indigenous psychology to contemplate their research topics, offering valuable insight for young scholars eager to explore Chinese indigenous psychology.

II. Pan-cultural research and cultural system research

Since Professor Fwu claims that she is engaged in "cultural system research" rather than "pan-cultural research," and the theoretical construction also clearly distinguishes the comparison between the "Chinese views on education" and the "Western education view" theory derived from the Chinese cultural system and the Western cultural system, the more appropriate empirical research design that follows would be a cross-cultural comparative study to highlight the empirical results under the educational viewpoints of each cultural system. Indeed, the advocated viewpoints of the theory have significant cultural differences, which should convince readers to acknowledge that the differences in the educational viewpoints of the cultural system she proposes exist in the phenomenal world. However, it is unfortunate that Professor Fwu's own empirical research rarely uses the cross-cultural comparison method to verify her theoretical viewpoints. If Professor Fwu could conduct a series of cross-cultural comparative empirical studies and utilize her own rigorous cross-cultural research design and results to support her theoretical claims regarding the Eastern and Western educational views proposed through the cultural system perspective, it would be more convincing. For example, Professor Fwu argues that both Western and Chinese educational views place great importance on the morality of effort; however, the meaning and operating mechanism behind the psychological function of effort behavior, as explained by individuals in the two cultures, differ. It would be worth deriving a cross-cultural comparative research hypothesis from this and employing a cross-cultural sample research design to test the hypothesis. If the hypothesis's predictions yield consistent empirical research results, then its theoretical viewpoint would be more convincing.

In fact, Professor Fwu's research on Chinese indigenous educational psychology was taught by Professor Kwang-Kuo Hwang. In his own research on indigenous psychology, Professor Hwang has consistently cited the "one mind, many mentalities" view of the famous cultural psychologist Richard Shweder as the highest guiding principle for his own indigenous academic research: that is, "the differences in people's psychological operation phenomena in different cultural societies should be the reflection of multiple mentalities under the same mind; therefore, when constructing theories, in addition to emphasizing the differences in the connotations of different cultural surface behaviors, the pan-cultural universal view of their psychological mechanisms should also be considered" (One mind, many mentalities; universalism without uniformity) (Shweder et al., 1998, p. 871). In other words, according to Shweder's "one mind, many mentalities" viewpoint, when conducting indigenous psychology

or social science research, the so-called pan-cultural system and cultural system research orientation are essentially two sides of the same coin, which are mutually integrated, not in binary opposition, and there is no distinction between superior and inferior. They are like the Chinese using chopsticks, Americans using knives and forks, and Indians using their right hands as tools to eat. Although these reflect the differences in cultural systems regarding eating habits, their common core is to satisfy the psychological needs of hunger, which are fundamental psychological needs for all humanity. In other words, in the process of theoretical construction, whether it is a "hard-core" theoretical model that emphasizes the deep level of formal structure and pan-cultural universality (such as Professor Kwang-Kuo Hwang's self-mandala theory model), or a "soft-core" theoretical model that stresses the specific behavioral connotation level and cultural differences (like Professor Kwang-Kuo Hwang's Chinese power game model of face and favor), both can provide valuable knowledge construction for humans. The two can coexist and even integrate, and there is no right or wrong, superior or inferior (Ye, 1998). Therefore, an excellent indigenous social science or psychology theory construction should be able to explain the problems of habitual behavioral differences derived from cultural system variations, and at the same time be able to answer the core questions of pan- (or cross-) cultural common psychological operating mechanism (Yeh, 2011, 2023). The two should integrate with each other rather than lean toward one end or the other.

III. Reflective Emic Research Orientation and Reflexive Etic Research Orientation

It is an evident fact that there are differences in the psychology and behavior of individuals across various cultural societies; however, the universality of their psychological and behavioral manifestations, despite these cultural differences, is a common goal pursued by all fields of social science. How should indigenous psychology researchers view and explore the differences in surface behaviors among diverse cultures and their relationship with underlying psychological processes? "Culture" provides an explanatory framework for understanding phenomena around the globe, but different cultural societies possess distinct epistemologies. The development of local cultures is influenced by numerous factors, including history, geographic environment, language, religion, and social customs, all of which contribute to these differences. For instance, in India, cows are considered sacred animals, and some Indians even believe that cow dung can prevent radiation and cow urine can cure all diseases. This belief is rooted in traditional Indian cultural concepts. Although different cultures possess unique characteristics—such as language, beliefs, traditions, and values—there are also universal

commonalities in human psychology and behavior. For example, all cultural societies have norms and beliefs regarding life and death, marriage, family, and social morality, among other aspects of life. They also share personal relationships; all have ways of expressing themselves through creation and communicating through various forms of art, music, dance, and legends. These commonalities reflect the shared experiences and needs of human beings, fostering cross-cultural communication and understanding. Therefore, when conducting indigenous psychology research that respects and maintains cultural diversity, we should also focus on the commonalities across different cultures.

Setting aside the hegemony of Western mainstream psychology in knowledge domination, from the perspective of Chinese psychology intellectuals, one would ask: Why do scholars need to construct indigenous psychology theories or conduct indigenous psychology research? This is because the existing (especially Western mainstream) theories and constructs cannot adequately explain or interpret the indigenous psychological and behavioral phenomena we observe or wish to discuss. Researchers must seek a new way to describe or explain the indigenous psychological and behavioral phenomena we want to analyze. Indigenous (new) theories or constructs offer solutions to meet these needs. Therefore, psychological and behavioral phenomena form the foundation of reality. They need to be explored, reflected upon, and clarified rather than directly applied to existing theories and constructs. The clarification and explanation of new phenomena are prerequisites for constructing new theories and constructs. If researchers fail to capture the subtle differences among various cultural phenomena, they may not see the necessity of creating new constructs or theories to differentiate these differences. However, there are at least two entry points for explaining the content of the phenomenon: one is the phenomenon at the surface level, and the other is at the deeper structural or mechanistic level. When we concentrate on surface phenomena, we may identify numerous differences between cultures and develop many indigenous psychological concepts and corresponding theories to describe these cultural variations. This is often referred to in the plural as Indigenous Psychologies; however, if we focus on phenomena at the deeper mechanism level, scholars may discover that cultural differences are less significant, or may only create a few, or even just a few common psychological concepts and corresponding theories. In this case, can it still be termed indigenous psychology?

The words "emic" and "etic" were first proposed by linguist Kenneth Pike in the field of anthropology in the 1950s to describe two different approaches to studying human behavior and culture. Emic approach: refers to examining the cultural phenomena of members of the society from the social interior of the group being studied, using internal concepts, categories,

and meanings that are meaningful to the members of the culture to explore. Etic approach: involves analyzing and exploring the social culture from the perspective of the social exterior of the group being studied, using external categories and concepts as the framework for analyzing the social and cultural phenomena. Below are two research methods that I recently proposed: the reflective emic approach and the reflexive etic approach (Yeh, 2023), which are used as references for dialogue with cultural system research and pan-cultural research. Reflective emic orientation: refers to researchers who, after reflecting that current (or mainstream) psychology's existing theories and construct cannot appropriately explain the cultural psychology and behavioral phenomena of the studied (or indigenous) group, therefore reconstruct new theories or constructs to explain the special indigenous cultural psychology and behavioral phenomena of the studied group. Professor Fwu's "role obligation theory of self-cultivation" (Fwu, et al., 2021, 2022) is an example of reflective subject orientation research. Daharma is an Indian research topic (Bhangaokar, 2020), referring to a unique concept in the practice of Buddhist teachings in Indian culture. In contrast, Amae and Super-Ordinary Bias are concepts of phenomena in Japanese cultural society, proposed by Doi Kenro (Doi, 1992) and Ohashi Ryutaro, Yamaguchi Yuki (Ohashi & Yamaguchi, 2019), respectively. These concepts are formed in the cultural context of their respective societies and reflect the unique values and behavioral patterns of each culture.

While the reflective subject-oriented research method contributes by examining the limitations of mainstream theories, it faces criticism for being biased due to "cultural encapsulation" (Wrenn, 1962). This term describes the notion that it offers only a single cultural perspective while neglecting other social and cultural phenomena and knowledge, which can lead to the tendency of substituting the real world with stereotyped impressions. When an indigenous theory overlooks the differences between individuals in society or refuses to engage with other cultural perspectives—including mainstream ones—by remaining confined to the indigenous viewpoint, it also exemplifies a bias of "cultural encapsulation." The reflective subject-oriented research method's limitation lies in the fact that these theoretical models can predominantly explain psychological and behavioral phenomena within their specific cultural contexts. Consequently, they represent culture-specific theoretical models. This limitation diminishes the external or ecological validity of the theoretical model when applied to different social cultures. Additionally, these theories struggle to address and explain the psychological and behavioral changes in a society resulting from social transformations, as they typically rely on traditional or historical contexts rather than contemporary social environments, making them inadequate for predicting future trends in psychological or behavioral changes.

Furthermore, when a culture-specific indigenous theory explains observed differences in multicultural phenomena, it usually assumes that there are commonalities among people of the same culture and differences among people of different cultures. However, culture remains an underlying hypothetical concept that is not directly observed for an entity but rather inferred by researchers from its manifestations. In any given society, rich and complex meanings, beliefs, practices, symbols, norms, and values can illustrate the underlying attributes and characteristics of the culture. However, these elements are still not the culture itself. This indicates that the beliefs and values of members of a particular social culture are not identical but rather diverse. Fischer and Schwartz (2011)'s empirical research supports this argument. They analyzed three large data sets, including the Schwartz Value Survey conducted on 41,968 participants in 67 countries, the Portrait Values Questionnaire survey with 42,359 participants in 19 European countries, and the World Value Survey involving 84,887 participants in 62 countries, each measuring different types of values. All empirical results from these three large data sets show that consensus in the priority of values between different countries is greater than the differences, refuting the claim that culture determines personal beliefs and values. In other words, individual differences within a country or culture are more prominent than cross-cultural differences. These results remind us that a good indigenous theory should be able to explain individual-level differences in addition to describing cultural-level differences, especially differences in individual thoughts or motivations (Yeh, 2023).

I believe that using a reflexive etic approach to construct indigenous theories, rather than a reflective emic approach, is more likely to help researchers achieve the dual goals of considering both individual differences within culture and society and cross-cultural differences. The reflexive etic approach is also a form of reflection, but it reflects on the commonalities between one's own cultural phenomena and mainstream or foreign cultural phenomena. It attempts to propose a new concept or theory that can be applied to all human cultural societies, while also explaining the phenomenon of cultural differences. In other words, the reflexive etic approach seeks to integrate cultural differences and individual differences into a systematic framework, thereby constructing an indigenous theory that can explain both cultural differences and individual differences. This theory also aligns with Shweder's " one mind, many mentalities."

Recognizing the limitations of the reflective emic approach, the dual filial piety model constructed by individuals in the early stage reconceptualized its theoretical viewpoints in the second stage through a reflexive etic approach (Bedford & Yeh, 2021; Tsao & Yeh, 2019). The reflexive etic approach also considers the particularity of local culture, but it goes a step further

by reflecting deeply on the similarities and differences between established indigenous theories (or constructs) and existing theories (or constructs) in mainstream psychology, integrating these similarities and differences into a more comprehensive systematic framework. This embodies an application of the reflective emic approach to meta-reflection. Taking the filial piety dual model as an example, the issue of filial piety has recently attracted wide attention from Western academic circles due to the global aging trend. To more clearly convey the research results of Chinese filial piety psychology, the filial piety dual model continues to emphasize the significance of the concept of filial piety at the individual operational level from a psychological perspective and redefines the concept of Chinese filial piety through the lens of the "contextualized personality" variable. The so-called "conceptualization from a psychological perspective" is simply a return to the essence and characteristics of psychology as a discipline— that is, to explain or interpret the causes of individual filial piety-related behaviors and phenomena through the internal psychological mechanisms that reflect individual differences. In addition to viewing filial piety as a "cultural norm or cultural value" that Chinese people hold dear, it can also illuminate the implications and mechanisms of filial piety at the psychological and behavioral operational levels through the lens of the concept of "personality" (Tsao & Yeh, 2023). The reflexive etic approach emphasizes the psychological mechanisms behind the interaction between parents and children, while also considering the psychological and behavioral content present in the surface of Chinese culture; thus, it has the potential for application to any culture. Due to space limitations, details on how individual dual filial piety beliefs and behaviors, once redefined through the "contextualized personality" variable perspective, can correspond to the two structural essences of the psychological archetype of parent-child interaction, how they can fulfill the two major basic psychological needs of offspring, and how they reflect modern trends in changes in Chinese social culture, as well as guidance on applying the filial piety dual model for cross-cultural comparative research, can be found in Tsao & Yeh's (2022) article, pages 246-257. Interested readers may refer to it independently.

In fact, several recent empirical studies have expanded the application of the dual filial piety model to cultures beyond the Chinese context. For example, Rózycka-Tran et al. (2021) utilized the Polish version of the Dual Filial-Piety Scale and demonstrated that the factor structure of the scale was invariant across genders and student/staff groups, confirming the anticipated gender differences in filial piety beliefs. This finding enhances the cross-cultural validity of the dual filial piety model in Eastern Europe, providing a comparative reference for the East-West difference paradigm. Nainee et al. (2021) employed the Malaysian version of the

Dual Filial-Piety Scale to explore the relationship between parenting style, filial piety beliefs, and life satisfaction among Malaysian adolescents. Additionally, Lim et al. (2022) utilized the English version of the Dual Filial Piety Scale with Asian and Caucasian Americans, illustrating the cross-cultural relevance of the dual filial piety model regarding caregiving for elderly parents and its potential to reveal significant filial piety differences in individualistic societies. Zheng et al. (2021) also applied the dual filial piety model within moral psychology, examining the relationship between filial piety and altruistic behavior, which was mediated by empathy, moral identity, gratitude, and a sense of indebtedness, while also analyzing the differing moderating effects of these mediators between Chinese and Indonesian participants. Qiao et al. (2021) investigated how the relationship between filial piety and moral disengagement in Chinese and Islamic societies was mediated by the dark triad, along with cultural differences in these mechanisms. All of this empirical evidence supports the cross-cultural applicability of the dual filial piety model, highlighting the dual characteristics of the concept and theory of dual filial piety: universality and cultural specificity.

IV. Conclusion

It is not inappropriate to use the cultural system orientation to construct an indigenous psychology theory; however, it is easy to fall into binary opposition thinking. For instance, people often tend to frame research problems and interpret observed phenomena in terms of the opposition between Eastern and Western cultural systems, the construction of discovery versus invention theories, rights-based versus obligation-based frameworks, and the binary distinction between vertical achievement and non-vertical achievement goals. Individuals frequently categorize observed phenomena into binary oppositions, such as beauty and ugliness, good and bad, right and wrong, East and West, and so on. This binary opposition approach is prevalent within the framework of social comparison, but as researchers, we must reflect on whether the criteria for classification are artificial or based on an entirely objective standard. Taking the binary distinction between vertical and non-vertical achievement goals as an example, can the achievement goals expected by significant others or society differ from those expected by individuals? Is it not possible for the achievement goals that parents expect of their children to align with the goals that the children set for themselves—such as development in sports and talents versus obtaining good grades in school and securing a good job? Thus, is the determination of longitudinal and non-longitudinal achievement goals a subjective choice made by the researcher, or is there truly an objective standard for such classifications? If there are no

absolutely objective criteria for any classification concept, researchers might approach the understanding of phenomena more comprehensively through a "binary relativity" perspective. From one perspective, a goal may be assessed as a longitudinal objective, while from another perspective, it may be classified as a non-longitudinal goal, depending on the significance of the research context (for instance, if we can specifically select samples where both parents and children agree that achieving good grades and finding a good job are common achievement goals, or both agree that pursuing development in sports and talents are common achievement goals to study). This relativity reminds us that the binary oppositions resulting from classification concepts are usually artificial and subjectively determined by the researchers themselves. They are not absolute and may differ from the views of the subjects. External contextual factors can also affect their evaluation or classification results. In other words, binary attributes can flow and exchange with each other; they are dialectical, like the relationship between yin and yang. Therefore, researchers should not be overly limited by the constraints of these conceptual classification frameworks. Suppose we can adopt the thinking of the social cognitive research orientation mentioned above. In that case, when engaging in indigenous psychology or social science research topics, we should consider the personality system (human factors) of the research object alongside its environmental context (environmental factors). The two will interact with each other, having a complex impact on people's behavioral performance and evolving over time. These interactive effects will produce a dynamic change process, rather than viewing the research topic from a static and essentialist perspective, as researchers with a cultural system orientation might. Thus, academic research development will resemble an evolutionary process, much like the process view, which continues indefinitely. Further consideration reveals that the environmental context will influence any evaluation and classification; thus, it is fundamentally an evaluation and classification made in relation to the conditions of that context and, therefore, not absolute or objective. At this time, the view of "binary vacuity" seems particularly applicable. The so-called binary vacuity refers to the fact that the existence of things in the world is not constrained by binary opposite attributes such as right or wrong, good or bad, superior or inferior, East or West. If a thing reflects these binary opposite evaluations, it actually only reflects the perspective and framework position of the evaluator or researcher, while the receiver or interactor can have his own unique perspective and evaluation position. The so-called binary opposite evaluation and classification is fundamentally a part of the existence of "vacuity." This "vacuity" exists in the mentality and state of mind of the evaluation or classification subject. Because everyone has different values, cultural backgrounds, experiences, etc., they will have varying views on things. In other words,

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binary opposite evaluation or classification is fundamentally "impermanent" and "non-constant." Therefore, binary oppositional evaluations or classifications are not objective facts but rather relative assessments or classifications influenced by the subjective factors of the parties involved.

Finally, this article emphasizes that researchers should approach the binary opposition viewpoint from a broader perspective, allowing them to think more flexibly about their research topics and develop their own indigenous theories. This open-minded approach helps to break rigid thinking patterns and encourages researchers to be more accepting of multiple viewpoints. Regarding the binary vacuity view, it stresses that the essence of things or phenomena is not limited by binary opposition but is instead shaped by the subjective perspective of the evaluator or researcher. The aim of advocating for this research mindset is to promote deep reflection on the complex interplay between subjectivity and objectivity. Overall, this article urges researchers to contemplate more carefully when examining things or phenomena and advocates for tolerance in accepting different theoretical perspectives. Such a call is thought-provoking and aids in fostering a more open and inclusive academic environment and social atmosphere.

Reference

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice Hall.

Bandura, A., Freeman, W. H., & Lightsey, R. (1999). Self-Efficacy: The Exercise of Control. *Journal of Cognitive Psychotherapy, 13*(2), 158-166. https://doi.org/10.1891/0889-8391.13.2.158

Bedford, O., & Yeh, K-H. (2021). Evolution of the conceptualization of filial piety in the global context: From skin to skeleton. *Frontiers in Psychology, 12*: 570547. https://doi.org/10.3389/fpsyg.2021.570547

Bhangaokar, R. (2020). The development of communal and spiritual dutifulness in India: Upholding dharma, offering Seva. In L. A. Jensen (Ed.), *The Oxford handbook of moral development: An interdisciplinary perspective* (pp. 327-349). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780190676049.013.18

Doi, T. (1992). On the concept of amae. *Infant Mental Health Journal, 13*, 7-11. https://doi.org/10.1002/1097-0355(199221)13:1<7::AID-IMHJ2280130103>3.0.CO;2-E

Downey, G., Mougios, V., Ayduk, O., London, B. E., & Shoda, Y. (2004). Rejection sensitivity and the defensive motivational system: Insights from the startle response to

rejection cues. *Psychological Science, 15*(10), 668-673. https://doi.org/10.1111/j.0956-7976.2004.00738.x

Dworkin, R. (1978). *Taking rights seriously*. Harvard University Press.

Fischer, R., & Schwartz, S. H. (2011). Whence differences in value priorities? Individual, cultural, or artifactual sources. *Journal of Cross-Cultural Psychology, 42*(7), 1127–1144. https://doi.org/10.1177/0022022110381429

Lim, A. J., Lau, C. Y. H., & Cheng, C. Y. (2022). Applying the dual filial piety model in the United States: A comparison of filial piety between Asian Americans and Caucasian Americans. *Frontiers in Psychology, 12*, 786609. https://doi.org/10.3389/fpsyg.2021.786609

Nainee, S., Tan, S. A., Tan, C. S., Gan, S. W., & Tan, J. P. (2021). Asian "Guan" parenting and life satisfaction among adolescents in Malaysia: The mediating role of filial piety. *Frontiers in Psychology, 12*, 746540. https://doi.org/10.3389/fpsyg.2021.746540

Ohashi, M. M., & Yamaguchi, S. (2019). Super-ordinary bias among Japanese: Is it unique to Japanese culture? In K. H. Yeh (Ed.), *Asian indigenous psychologies in the global context* (pp. 169-193). Palgrave Studies in Indigenous Psychology. Palgrave Macmillan Cham. https://doi.org/10.1007/978-3-319-96232-0_8

Qiao, X., Lv, Y., Aldbyani, A., Guo, Q., Zhang, T., & Cai, M. (2021). Chaos may prevail without filial piety: A cross-cultural study on filial piety, the dark triad, and moral disengagement. *Frontiers in Psychology, 12*, 738128. https://doi.org/10.3389/fpsyg.2021.738128

Rózycka-Tran, J., Jurek, P., Olech, M., & Dmochowski, T. (2021). A measurement invariance ˙investigation of the Polish version of the Dual Filial-Piety Scale (DFPS-PL): Student-employee and gender differences in filial beliefs. *Frontiers in Psychology, 12*, 713395. https://doi.org/10.3389/fpsyg.2021.713395

Shweder, R. A., Goodnow, J., Hatano, G., LeVine, R., Markus, H., & Miller, P. (1998). The cultural psychology of development: One mind, many mentalities. In W. Damon (Ed.), *Handbook of child psychology, Vol. 1*, (pp. 865–937). John Wiley & Sons.

Tsao, W.-C., & Yeh, K.-H. (2019). Indigenous implications and global applications of the dual filial piety model: A psychological Re-conceptualization of 'Xiao'. In K.-H. Yeh (Ed.), *Asian indigenous psychologies in the global context* (pp. 195-219). Palgrave Studies in Indigenous Psychology. Palgrave Macmillan Cham. https://doi.org/10.1007/978-3-319-96232-0_9

Tsao, W.-C., & Yeh. K.-H. (2022). Research on filial piety psychology: From indigenous theory to global application. In C.-F. Yang & J.-H. Chang (Eds.), *Thirty years of Chinese indigenous psychology, Volume 1: Indigenous research approaches and theories*, (pp. 233-270). Wu-Nan Book Inc. (in Chinese)

Wrenn, C. G. (1962). The culturally encapsulated counselor. *Harvard Educational Review, 32*(4), 444-449.

Yeh, K.-H. (1998). One, two, or multiple moralities: How to define the criteria of moral standards. *Indigenous Psychological Research in Chinese Societies, 9*, 187-204. https://doi.org/10.6254/IPRCS.199806_(9).0005 (in Chinese)

Yeh, K.-H. (2011). On how to construct a good indigenous psychological theory. *Indigenous Psychological Research in Chinese Societies, 36*, 139-153. (in Chinese) https://doi.org/10.6254/2011.36.139

Yeh, K.-H. (2020). Inclusion and integration: Revisiting the multiple philosophical paradigms of indigenized research. *Journal of Indigenous Counseling Psychology, 11*(4), 59–66. http://jicp.heart.net.tw/article/JICP11-4-07.pdf (in Chinese)

Yeh, K.-H. (2023). Constructing indigenous psychological theories from a global perspective: Taking filial piety model as an example. *Review of General Psychology, 27*(3), 275–281. https://doi.org/10.1177/10892680231152191

Zheng, W., Guo, Q., Huang, T., Lu, J., & Xie, C. (2021). The prosocial outgrowth of filial beliefs in different cultures: A conditional mediation model analysis. *Frontiers in Psychology, 12*, 748759. https://doi.org/10.3389/fpsyg.2021.748759

華人教育觀的「縱向目標」與科學理論的「硬核」

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摘要

　　西方的教育或學習動機理論，多未能顧及東亞社會的文化價值觀或文化系統，因此難以理解本地人們之相關心理與行為。符教授所撰寫的靶子論文指出，盲目套用西方理論，很可能形成「雙重鴻溝」的問題，因此應採用文化心理學的研究取向，從哲學反思開始，進而建構適合的理論，據以進行實徵研究。本文相當認同符教授闡述的研究取向和基本觀點。針對該論文所提出的「修養的角色義務理論」，本文首先對於其中「縱向目標」此一關鍵概念，以及相關之「雙模式成就目標」理論架構，做些補充說明。接著，本文針對該論文提及的科學哲學論點和詮釋應用，提出一些疑問。最後，本文從實用主義的科學哲學觀，說明本土或文化心理學研究傳統可能遇到的困難議題與未來展望。

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近年來一些國際學者將東亞學生的學習成果視為「教育奇蹟」（educational miracle）（Liem & Tan, 2019）。這主要是因為數十年來，許多針對中小學生學業成就的跨國評量調查一再顯示，東亞社會（包括台灣、韓國、日本、香港、新加坡等）的學習成果，遙遙領先世界其他國家（Mullis et al., 2020; Organisation for Economic Co-operation and Development [OECD], 2023）。然而，相關研究也顯示，東亞地區學生對學業學習的興趣遠低於其他國家，而且對許多學生而言，學業學習甚至是主要的生活壓力來源（黃昱得，2014; Fwu et al., 2018; Lee & Larson, 2020; Lin & Huang, 2014; Mullis et al., 2020）。這種「高成就、低興趣」的現象，若從西方的教育心理或學習動機理論來看，與其說像是「奇蹟」，可能更像是某種不易理解的「悖論」（paradox）（Chen, 2023）。這主要是因為，既有的西方的教育或學習動機理論，多未能顧及東亞社會在教育和學習實踐上的文化價值觀或文化系統，因此難以理解何以會出現上述現象，更遑論能用以解決實際問題了。

　　當然，西方的社會科學研究者提出理論，若只是要解決其所處社會的問題，或許不一定需要考慮非西方社會的現實情況。實際上，過去西方心理學研究大多也只關心自身文化系統所發展出來研究典範，以及在其社會中的適用狀況（Henrich et al., 2010）。然而從本土或文化心理學的角度來看，本地社會科學研究者如果真誠地希望瞭解自身社會現象，或試圖解決相關問題，那麼勢必不能只是「素樸地」硬搬套用西方發展出來的理論或技術，而需要深究本地文化系統與社會狀況，並建構適切的理論，據以進行實徵研究。如此一來，才較可能具有自我理解與反思的研究意義，也較可能解決自身的問題。

　　由符碧真教授所撰寫的《儒家倫理與華人教育觀：哲學反思、理論建構與實徵研究》一文（以下簡稱「儒文」），內容相當豐富且具啟發性，展現了上述文化心理學重視的研究意義。符教授在該論文中，除了說明其提出的華人教育觀與相關理論概念，還分析了與華人文化系統之關聯，並且闡述其多年學思歷程，以及學術觀念上的重大轉變，彰顯了「十年磨一劍」的研究精神。

　　事實上，個人認識符教授接近二十年，也很榮幸曾與符教授多次合作研究。我們都受到黃光國教授之啟蒙與指導，個人也對符教授所提及的文化心理學研究立場相當贊同。本文將先簡要闡述我們共同認同的研究立場，然後將針對符教授提及的「縱向目標」以及「雙模式成就目標理論架構」（陳舜文，2022b; Chen, 2023; Chen et al., 2009），在理論概念上嘗試做些補充說明。接著，本文將針對符教授對其理論在知識論或科學哲學上的詮釋或說法，提出個人的一些疑惑。最後，本文將延伸討論文化心理學家在建構涵攝文化的理論時，必然會遇到的困難議題。

壹、文化心理學的基本觀點

「儒文」首先明確地指出，本地教育學者若採「技術理性知識論」，盲目搬用西方理論與技術，將可能出現「雙重鴻溝」的問題。其中第一道鴻溝是文化差異，亦即忽略不同文化系統之間的差異，不加思索地將「怪異的」（WEIRD）樣本所發展出來研究典範，套用至非西方社會。第二道鴻溝則是理論與應用之間的落差，亦即認為可將理論照本宣科地套用在實踐場域，未顧及現實。個人相當同意此分析觀點。而在這兩道鴻溝中，第一道鴻溝可能是更加關鍵的問題。因為如果某項理論或技術根本不適用於本地社會，那麼無論怎麼調整理論與應用之差距，大概至多達到「削足適履」之效。正如同就醫看病時，如果根本拿錯藥，那麼無論如何調整服藥方式和劑量，大概也很難痊癒，甚至可能吃出更多問題。

　　符教授在「儒文」中進一步表示，為了克服「雙重鴻溝」的難題，她曾花費十數年時間，從哲學反思開始，進而以文化心理學取向建構理論，然後進行實徵研究。借用科學哲學家 Kuhn（1962）的話，這經歷可以說是「典範轉移」（paradigm shift） 的歷程。個人十分有幸曾與符教授共同合作，也能深切體會研究典範轉移之辛苦。此外，個人也相當同意「儒文」中對於「文化系統觀」與「泛文化向度」兩類研究取向之對比與評論。

貳、雙模式成就目標理論架構

　　為了理解對於本地教育與學習之特殊現象，並分析華人教育觀之特色，符教授提出了「修養的角色義務理論」。此理論包含一項重要概念：縱向目標（vertical goal）。「儒文」中表示「如果未區分縱向目標與非縱向目標，則修養的角色義務理論就會崩塌瓦解」，顯然「縱向目標」之概念在「修養的角色義務理論」中至為關鍵。由於個人的許多研究，也是環繞著「縱向目標」與學習動機議題，故藉此機會進一步闡述相關之概念與理論架構，希望能作為補充。

　　「縱向目標」的概念原型出自陳舜文（2005）的論文研究，該論文對於既有西方成就動機理論進行批判回顧，進而針對本地人們的生活目標，提出了「華人成就動機」之概念架構。之後個人根據該架構進行了一系列研究，也與符老師等多次合作研究（陳舜文，2022b; Chen, 2023），並將相關概念之內涵整理成為「雙模式成就目標理論架構」（dual-mode theoretical framework of achievement goal）。

　　根據「雙模式成就目標理論架構」，人們在日常生活中所追求的成就目標包含兩大類型：「個人目標」（personal goal，可大致對應「儒文」中的「非縱向目標」）和「縱向目標」。這兩類成就目標的差異源自目標建構來源，而兩者在動機模式、社會心理功能、美德意涵、成敗歸因模式，以及牽涉的內隱信念等面向，皆有所不同（參見表 1）。

表 1

雙模式成就目標理論架構

	個人目標	縱向目標
建構來源	自發興趣	社會期許
動機模式	內在動機	角色義務
社會心理功能	維持正向自我概念	認同角色義務
美德意涵	不彰顯	彰顯
成敗歸因模式	自我抬升：	努力模式：
	失敗時外歸因	失敗時歸於努力因素
	成功時內歸因	
內隱信念	能力信念：	努力信念：
	能力實體觀 **或**	努力義務觀 **與**
	能力增進觀	努力進步觀

註：改自「Learning motivations and effort beliefs in Confucian cultural context: A dual-mode theoretical framework of achievement goal.」，S.-W. Chen，2023，*Frontiers in Psychology*, *14.*

　　所謂「個人目標」是指個體依據自發興趣所建構的成就目標。此類目標多是個體具內在動機，或認為自己能力擅長之領域。個體可自行選擇與界定此類目標的內容與標準，但人際關係內的重要他人（例如父母、師長等）對於個體是否追求此目標未有所期待，通常也未受到普遍社會價值所重視。相對地，「縱向目標」是個體因為自身擔任的社會角色（例如學生角色），而被期許達成之特定成就目標。這些社會期許通常是來自人際關係網絡中的重要他人。此類目標的內容和標準存在於社會普遍觀念之中，因此通常具有較高的社會價值，但個人不一定會對這些目標抱有內在興趣。在華人社會中，這些成就目標常被視為是個人應盡的角色義務，必須盡可能地努力為之。換言之，追求「個人目標」時主要依靠的動機形式是個體的內在興趣，而追求「縱向目標」的主要動機形式是個體對於自己擔負之角色義務的認同感。

　　根據「雙模式成就目標理論架構」，「個人目標」和「縱向目標」所牽涉的社會心理功能、美德意涵、成敗歸因模式以及內隱信念，都有所不同。首先，由於「個人目標」是奠基於個體的內在興趣與能力，因此在日常生活中，個體可藉由追求「個人目標」來維持正向自我概念（positive self-concept）。而為了維護或甚至增進正向自我概念，個體會傾向採取「自我抬升」（self-enhancement）的成敗歸因模式，亦即傾向將成功歸於內在因素，失敗歸於外在因素（Chen et al., 2009）。再者，如「儒文」所言，個人是否追

求或放棄「個人目標」，完全因自己的興趣與能力而定，不影響個體自身的美德或道德形象，也不會引發相關道德情緒，如愧疚感（Fwu et al., 2018）。

相較之下，「縱向目標」牽涉的心理與行為機制則有所不同。由於「縱向目標」的建構來源是社會期許，尤其是基於個體所擔任的角色義務，因此個體追求「縱向目標」時，主要的社會心理功能是內化與認同自身的社會角色義務（陳舜文、魏嘉瑩，2013）。在追求此類目標時，個體往往受到高度社會期許，也可能產生自我要求，因此歸因時傾向採「努力模式」（effort model），亦即將挫折或失敗歸於自身努力不足，以促使自己再加努力（Chen et al., 2009, 2019）。也因為「縱向目標」往往涉及個體擔負的角色義務，在華人社會中，努力追求此類目標可彰顯個體自身的美德。這正是「儒文」中指出華人追求「縱向目標」時的特殊社會心理機制：「努力追求重要他人期待的目標→善盡角色義務→彰顯個人德行→增進內在道德修養」。換言之，對於東亞地區的學生而言，學業目標常常即為其生活中重要的「縱向目標」。

此處有幾點值得特別說明。首先，從規範倫理學（normative ethics）來看，華人的道德觀較傾向「德行論」（virtue ethics）的立場，即重視個人內在品格與美德的養成，並且在道德事件中強調智慧或睿智的判斷（Ames, 2011; Angle & Slote, 2013）。然而，華人的美德信念也有其特殊性，包括對於角色義務與道德規範的反思與認同，以及朝向「至善」的實踐意願（Chan, 2014）。也就是說，「縱向目標」所涉及的「道德」，意涵，其實是指「德行」或「美德」，不同於重視後果的「效益論」（utilitarianism）或普遍主義式「義務論」（deontology）之倫理學立場的意義。

其次，「儒文」提及西方社會也有重視「努力」的傳統，這主要是受到基督新教「上帝預選說」（doctrine of predestination）的影響。基督新教強調「工作倫理」，認為透過辛勤工作及節儉，進而獲得財富與成功，具有「道德價值」（moral worth），因此努力工作是個人的義務。「預選說」信念恰恰顯示出西方文化與華人文化在「道德觀」上的主要差異。在西方文化傳統中，人們之所以認為努力具有道德價值，主要是源自「上帝與人」的關係。基於這樣的觀念而產生的「義務」概念，帶有普遍主義的意義。也就是說，此類「義務」與個人的社會角色無關，也與周遭重要他人的期許無關。相對地，華人社會受到儒家文化影響，強調的是個人生活在社會關係網中的「角色義務」，是具有關係脈絡意涵的義務觀，與基督新教倫理的普遍主義式道德觀相當不同（林端，2002；黃光國，2017）。若未能從文化系統的角度理解華人文化的道德觀，很可能便會誤解「儒文」之論述（符碧真等，2021）。

再者，正因為在華人社會中，「縱向目標」常被視為是個體必須盡力而為的角色義務，對於「努力」（而非能力）的信念，才是影響本地學生學習心理與行為的關鍵認知。更清楚地說，個體追求「縱向目標」過程中遇到挫敗時，若能再次奮力，不因氣餒而放棄，一方面會被認為是盡責的美德表現，另一方面也可能認為堅持不懈便可使自己有所

進步。如此一來，人們在追求「縱向目標」時，常會抱持兩類努力信念：「努力義務觀」（obligation-oriented belief about effort）和「努力進步觀」（improvement-oriented belief about effort）。針對學生而言，「努力義務觀」是指：相信努力用功是學生的義務。這是將「努力」視為目的，努力本身即是值得稱讚的美德；「努力進步觀」則是指：相信努力可以增進自身的學業能力。這是將「努力」視為可使人進步的手段。過去一系列研究顯示，此兩類努力信念可預測小學生、中學生與大學生的學業情緒、認知模式與行為反應（王冠樺、陳舜文，2020; Chen et al., 2019），也可預測中學教師對學生的教學態度（Chen et al, 2016）。

相較之下，個體在追求「個人目標」時（無論在東西方社會），對於相關領域之「能力」所抱持的信念，很可能會影響其行為模式。一般而言，對於個人目標相關領域愈抱持「能力增進觀」（即相信能力可以靠後天改變）（increasing theory about ability），則愈可能繼續追求相關個人目標；相對地，愈抱持「能力實體觀」（即相信能力是天生固定而難以改變）（entity theory about ability），則愈可能在失敗時放棄追求相關個人目標（Dweck, 2006）。此處須留意的是，「能力增進觀」和「能力實體觀」在概念和測量上是同一向度的兩端，此高則彼低；而「縱向目標」涉及的「努力義務觀」與「努力進步觀」在意涵上是不同的構念。

參、對於「硬核」之疑問

整體而言，個人對於「儒文」之大部分觀點都相當贊同，僅對文中有關科學哲學之論點與運用詮釋，感到有些困惑。「儒文」引用了科學哲學家 Lakatos（1970）提出的概念「科學研究綱領」（scientific research programmes），試圖闡述文化心理學與「修養的角色義務理論」之「硬核」（hard core，此詞在哲學上通常翻成「硬核」，而非「硬殼」，本文依照一般譯法）以及「保護帶」（protective belt）。Lakatos 的科學哲學觀是延伸自 Karl Popper 的「否證論」（falsificationism）。概括而言，Popper 反對科學的「實證主義」（positivism），認為科學家提出理論時，不應依賴不可靠的歸納法，而且實徵研究也不可能證實（confirm）或檢證（verify）理論命題。相反地，科學家必須依靠創造性思考，理性地構思可以被經驗觀察否證的理論。如果實徵研究結果與理論不符，應避免為了修改或維護理論，而提出特設的事後解釋（ad hoc explanation）。

然而，Popper 的「否證論」並不符合科學研究的實際運作方式，科學家遇到不符理論的結果，通常不會就因此拋棄理論。而且從科學史來看，有時堅信不符經驗現象的理論，甚至提出事後解釋，反而有助科學進展，例如「海王星的發現」即為科學史上的著名案例（Godfrey-Smith, 2003）。Lakatos（1970）為了解決 Popper「否證論」遇到的困難，以及回應「科學歷史主義」（Kuhn, 1962）的挑戰，提出了「精緻否證論」（sophisticated

falsificationism）。此理論認為科學研究典範具有歷史性，同典範的研究會形成「研究綱領」。再者，任何研究綱領都有不可改變的核心觀念，亦即「硬核」。在「硬核」之外，則是一些可稱為「保護帶」的輔助命題。如果遇到不符合理論的結果，該研究綱領的科學家應設法調整或修改「保護帶」，而非輕率改動「硬核」。舉例而言，牛頓物理學的「硬核」是萬有引力概念與三大運動定律，而其「保護帶」包括對宇宙結構的看法、數學工具的應用方式等。對於牛頓物理學的研究者而言，當遇到實徵觀察之異例時（例如發現天王星軌道異常），可以修改「保護帶」（改變對太陽系結構的看法），但不應任意更動「硬核」（仍相信萬有引力和運動定律是正確的）。綜言之，「精緻否證論」所謂的「研究綱領」是指具有歷史傳承的科學研究典範，「硬核」則是指特定研究綱領中不可輕易質疑的前提。

綜觀「儒文」的論述，似乎在兩個層次上使用了「研究綱領」的概念，其一是文化系統的層次，其二是心理學理論的層次。針對文化系統，「儒文」表示：「西方社會的硬殼包括：生命的來源是上帝，以及個人權利」以及「儒家社會的硬殼包括：生命來源是父母，以及個人的角色義務」。這樣的說法似乎是將「精緻否證論」科學哲學中關於「硬核」與「保護帶」的觀念，套用於文化價值的範疇。然而，文化價值觀涉及的是人們在「生活世界」中，安置自我或人我關係的思考與行動指引，科學理論則是科學家建構用來理解或預測現實的「微世界」。「文化價值觀」與「科學理論」兩者的性質、目的與建構來源皆不相同。若將科學哲學的觀點用來分析或詮釋文化系統，可能有範疇錯置的問題。不知「儒文」這裡是否其實只是要表達：西方社會與儒家社會具有不同的基本價值觀，根源於不同的文化思想傳統？若是如此，也許不需援引科學哲學的觀念，直接分析或比較東西文化系統基本價值觀之差異即可。

此外，「儒文」也將「研究綱領」的概念用於心理學理論的層次。文中表示：「基於前述拉卡托斯『科學研究綱領』中『硬殼』的概念。『修養的角色義務理論』是筆者系列研究的硬殼，為了保護『硬殼』，遂增加成就目標類型的輔助假設，僅適用於縱向目標」。這是運用科學哲學的觀點，詮釋特定科學理論的性質，並無範疇錯置的問題。但個人對此處「儒文」的說法仍有兩點疑問。一是在「精緻否證論」中，所謂「研究綱領」是指具有歷史意義的研究典範，「硬核」則是指研究綱領中不可輕易質疑或更改的觀念或前提。依照「儒文」的說法，似乎是指整套「修養的角色義務理論」都是「硬核」。也就是說，該理論包含的全部命題與概念，都是不可修改或質疑的前提。若是如此，該理論將會相當奇特。而或許這不是「儒文」欲表達的意思，只是文中說法過於模糊，令人不易理解。另一項疑問是，「儒文」明確表示：「如果未區分縱向目標與非縱向目標，則修養的角色義務理論就會崩塌瓦解」。如此一來，根據「精緻否證論」對於「硬核」的界定，「縱向目標」或「目標類型的區分」似乎才是該理論不可輕易更動的「硬核」，而非只是輔助假設或「保護帶」？

肆、文化心理學「研究傳統」的挑戰與展望

　　針對上述疑問，或許可以在知識論上換個想法。根據「實用主義」（pragmatism）的科學哲學觀（Laudan, 1978），科學研究的目的是為了解決問題。科學社群經過長期發展，可能逐漸形成具彈性的典範或「研究傳統」（research traditions）。「研究傳統」之概念與「研究綱領」的主要不同在於：只要能解決問題，研究傳統中的任何觀念或命題都可以修正調整，不一定非得區分「硬核」或「保護帶」。再者，「研究傳統」面對的問題可分為理論內部問題，以及理論的外部應用問題。理論內部問題包括：概念意義的清晰性、命題之間的邏輯一致性與相容程度等；外部應用問題則包括：理論對現象的解釋力、可解決實際問題的能力等。換言之，採納特定研究傳統的科學社群，一方面要設法解決理論的內部問題，另一方面也可思考如何增進解決外部問題的能力。

　　從這樣的觀點來看，若將本土或文化心理學整體視為當代心理學的一項「研究傳統」，此研究傳統最終要面對的即是「儒文」一開始提及的「雙重鴻溝」問題。要解決如此龐大的問題，並非一蹴可幾。文化心理學研究者往往必須「大處著眼、小處著手」，針對特定研究議題，局部地建構理論（陳舜文，2022a）。建構理論時，研究者可彈性地調整理論概念或命題，一方面探討如何將文化系統轉化或涵攝成為清晰的科學構念，以及增進論述的內部一致性；另一方面，也可思考如何提升理論對現象的解釋力，以及解決實際問題的能力。

　　值得一提的是，在建構理論解決問題的過程中，文化心理學研究者必然會遇到兩項需要深思的議題。其一是有關「文化相對主義」（cultural relativism）議題，另一項則是關於多元文化發展的議題。針對第一項議題，所謂「文化相對主義」的主張是：不同文化所重視的信念或價值系統並不具普同性，或甚至認為只能從特定文化系統內部的價值觀與標準出發，才能理解其中人們的心理現象或行為之意義（Boas, 1887）。文化心理學家需思考是否認同或採取「文化相對主義」的立場？如果採取極端的文化相對主義立場，或許可以建構較簡約的理論，但可能使得不同文化的研究成果與研究者之間交流困難；而如果認為本土或文化心理學研究可同時探討文化特殊性與人類普同性，那麼在構思理論或概念時，便需要相當謹慎周延（陳舜文，2022a）。另一方面，針對上述第二項議題，文化心理學家需思考的是：在全球溝通方便頻繁的今日，不同文明的文化系統與價值觀常彼此交流衝擊，未來不同的文化系統是否可能逐漸融合？或繼續維持差異（Nisbett, 2003）？更具體地說，台灣社會因歷史與社會因素，長期受到多元文化所影響，未來是否可能朝向某種特定價值觀發展？或是融合成為整合式文化系統？抑或形成獨立共存，但非融合的動態文化心智模式（Hong et al., 2000）？

這些議題都相當重要，但已超過本文主旨，無法在此詳細闡述，只能暫時打住，留待後續思考討論。無論如何，非常感謝本刊提供這次機會，使個人更加認識符教授對於華人教育觀的長期研究成果以及精彩的思考論述。本文雖對於「儒文」提出一些疑惑，但個人其實非常認同符教授的基本立場與觀點，只希望能拋磚引玉，弘揚本土心理學研究社群之思辨風氣，使相關研究能更加蓬勃發展。

參考文獻

王冠樺、陳舜文（2020）。父母努力信念對兒童學習投入之預測效果：以兒童知覺父母與自身努力信念為中介。**本土心理學研究，54**，63-111。

林端（2002）。全球化下的儒家倫理: 社會學觀點的考察。黃俊傑（主編），**傳統中華文化與現代價值的激盪與調融（一）**，89-133。喜瑪拉雅。

符碧真、陳舜文、危芷芬、王秀槐（2021）。華人的學業成就目標與儒家倫理觀：兼回應「台灣青少年是否認為努力與學業成就關乎道德？」一文。**中華心理學刊，63**（4），357-372。https://doi.org/10.6129/CJP.202112_63(4).0003

陳舜文（2005）。**華人的社會目標與成就動機：以台灣大學生為例**〔未發表之博士論文〕。國立台灣大學。

陳舜文（2022a）。本土心理學的研究理路。**本土諮商心理學學刊，13**（2），41-46。

陳舜文（2022b）。台灣學生的學習動機與努力信念：文化心理學的觀點。**本土諮商心理學學刊，13**（2），1-25。

陳舜文、魏嘉瑩（2013）。大學生學習動機之「雙因素模式」：學業認同與角色認同之功能。**中華心理學刊，55**（1），41-55。

黃光國（2017）。**儒家文化系統的主體辯證**。五南圖書公司。

黃昱得（2014）。青少年憂鬱情緒與多元風險因子：個別效果與累積效果的驗證。**中華心理衛生學刊，27**（3），327-355。

Ames, R. (2011). *Confucian role ethics: A vocabulary*. Chinese University Press.

Angle, S. C., & Slote, M. (Eds.) (2013). *Virtue ethics and Confucianism*. Routledge.

Boas, F. (1887). Museums of Ethnology and their classification. *Science, 9*(228), 588-589.

Chan, J. (2014). *Confucian perfectionism: A political philosophy for modern times.* Princeton University Press.

Chen, S.-W. (2023). Learning motivations and effort beliefs in Confucian cultural context: A dual-mode theoretical framework of achievement goal. *Frontiers in Psychology*, *14*:1058456. https://doi.org/10.3389/fpsyg.2023.1058456

Chen, S.-W., Fwu, B.-J., Wei, C.-F., & Wang, H.-H. (2016). High-school teachers' beliefs about effort and their attitudes toward struggling and smart students in a Confucian society. *Frontiers in Psychology*, *7*: 1366. https://doi.org/10.3389/fpsyg.2016.01366

Chen, S. W., Fwu, B. J., Wei, C. F., & Wang, H. H. (2019). Effort beliefs count: The predictive effects of effort beliefs on students' emotion, attribution, and behavior toward academic failure in a Confucian cultural context. In G. A. D. Liem & S. H. Tan (Eds.), *Asian education miracles: In search of sociocultural and psychological explanations* (pp. 207-221). Routledge.

Chen, S. W., Wang, H. H., Wei, C. F., Fwu, B. J., & Hwang, K. K. (2009). Taiwanese students' self-attributions for two types of achievement goals. *Journal of Social Psychology, 149*(2), 179-193.

Dweck, C. S. (2006). *Mindset: The new psychology of success.* Ballantine Books.

Godfrey-Smith, P. (2003*). Theory and Reality: An Introduction to the Philosophy of Science*. The University of Chicago Press.

Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences, 33*, 61–83. https://doi.org/10.1017/S0140525X0999152X

Hong, Y.-Y., Morris M. W., Chiu C.-Y., & Benet-Martínez, V. (2000). Multicultural minds: A dynamic constructivist approach to culture and cognition. *American Psychologist, 55*, 709–720.

Kuhn, T. S. (1962). *The structure of scientific revolutions*. University of Chicago Press: Chicago.

Lakatos, I. (1970). Falsification and the methodology of scientific research programmes. In I. Lakatos & A. Musgrave (Eds.), *Criticism and the growth of knowledge: Proceedings of the international Colloquium in the philosophy of Science, London, 1965* (pp. 91–196). Cambridge: Cambridge University Press.

Laudan, L (1978). *Progress and Its Problems: Towards a Theory of Scientific Growth.* University of California Press.

Lee, M., & Larson, R. (2000). The Korean 'examination hell': Long hours of studying, distress, and depression. *Journal of Youth and Adolescence, 29*(2), 249-271. https://doi.org/10.1023/A:1005160717081

Liem, G. A. D., & Tan, S. H. (Eds.). (2019). *Asian education miracles: In search of sociocultural and psychological explanations*. Routledge.

Lin, S.-H., & Huang, Y.-C. (2014). Life stress and academic burnout. *Active Learning in Higher Education, 15*(1), 77–90. https://doi.org/10.1177/1469787413514651

Mullis, I. V. S., Martin, M. O., Foy, P., Kelly, D. L., & Fishbein, B. (2020). *TIMSS 2019 International Results in Mathematics and Science.* https://timssandpirls.bc.edu/timss2019/international-results/

Nisbett, R. E. (2003). *The Geography of Thought: How Asians and Westerners think differently…. and why.* Oxford University Press.

Organisation for Economic Co-operation and Development. (2023). *PISA 2022 Results (Volume I): The State of Learning and Equity in Education.* PISA, OECD Publishing, Paris, https://doi.org/10.1787/53f23881-en

The Vertical Goal in the Chinese Views on Education and the Hard Core of Scientific Theory

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Abstract

Many Western educational and learning motivation theories fail to take into account the cultural values and systems of East Asian societies. As a result, they are unable to fully understand the related psychological and behavioral phenomena of "non-WEIRD" people. Professor Fwu's target article highlights this issue, pointing out the "double gaps" problem that arises from the blind application of Western theories. To address this, she advocates for adopting a cultural psychological research approach that begins with philosophical reflection, proceeds to construct appropriate theories, and then conducts empirical research accordingly. This paper endorses Fwu's fundamental research approach and viewpoints. Furthermore, this paper contributes by elaborating on the key concept of "vertical goal" within Fwu's theory and the associated "dual-mode theoretical framework of achievement goal". Subsequently, this paper raises some questions regarding the scientific philosophical arguments and their interpretative applications mentioned in that article. Finally, from a pragmatist philosophy of science perspective, the paper outlines potential challenges and future directions for indigenous or cultural psychology research traditions.

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In recent years, some international scholars have viewed the learning outcomes of East Asian students as an "educational miracle" (Liem & Tan, 2019). This is primarily because, for decades, numerous cross-national assessment surveys on the academic achievements of primary and secondary school students have repeatedly indicated that the learning outcomes of East Asian societies (including Taiwan, South Korea, Japan, Hong Kong, Singapore, etc.) are significantly ahead of those in other countries worldwide (Mullis et al., 2020; OECD, 2023). However, related studies also reveal that students in East Asia exhibit much less interest in academic learning compared to their peers in other countries, and for many of these students, academic learning is even a major source of life stress (Fwu et al., 2018; Huang Yude, 2014; Lee et al. & Larson, 2020; Lin & Huang, 2014; Mullis et al., 2020). This phenomenon of "high achievement and low interest" may resemble a perplexing "paradox" (Chen, 2023) rather than a "miracle" when viewed through the lens of Western educational psychology or learning motivation theory. This is mainly because existing Western educational or learning motivation theories have largely overlooked the cultural values or systems of East Asian society in education and learning practices. As a result, it is challenging to understand why this phenomenon occurs, let alone to address practical problems.

Of course, if Western social science researchers propose theories solely to address the problems of their own society, they may not need to consider the realities of non-Western societies. In fact, historically, much Western psychology research focused exclusively on the research paradigms developed by their own cultural system and their applicability within their society (Henrich et al., 2010). However, from the perspective of Indigenous or cultural psychology, if Indigenous social science researchers genuinely aim to understand their own social phenomena or address related problems, they must not just "naively" apply the theories or techniques developed in the West; they need to explore the local cultural system and social conditions and construct appropriate theories to conduct empirical research based on them. In this way, there is a greater likelihood of achieving research significance in self-understanding and reflection, as well as effectively addressing their own issues.

The article "Confucian Ethics and Chinese Views on Education: Philosophical Reflection, Theoretical Construction, and Empirical Research," written by Professor Bih-Jen Fwu (hereinafter referred to as the "Confucian article"), is quite rich and inspiring. It highlights the research significance of the aforementioned cultural psychology. In this paper, Professor Fwu not only explains the Chinese views on education and related theoretical concepts she proposed but also analyzes their relationship with the Chinese cultural system. She elaborates on her

many years of learning and reflection, as well as the major changes in academic concepts, demonstrating the research spirit of "ten years of hard work."

In fact, I have known Professor Fwu for nearly 20 years, and I am honored to have collaborated with her on numerous research projects. We were both enlightened and guided by Professor Kwang-Kuo Hwang, and I personally align with Professor Fwu's research position on cultural psychology. This article will first briefly outline our commonly agreed research position and then provide some additional explanations regarding the theoretical concepts of "vertical goals" and "Dual-mode theoretical framework of achievement goal" mentioned by Professor Fwu (Chen, 2022b; Chen, 2023; Chen et al., 2009). Next, this article will raise some personal doubts regarding Professor Fwu's interpretation or statements of her theory in epistemology or the philosophy of science. Finally, this article will extend the discussion to the challenging issues that cultural psychologists will inevitably face when constructing theories that include culture.

I. Basic Viewpoints of Cultural Psychology

The "Confucian article" first clearly pointed out that if local education scholars adopt "technical rationality epistemology" and blindly apply Western theories and technologies, there may be a "double gap" problem. The first gap is cultural differences, meaning that the differences between various cultural systems are ignored, leading to the blind application of research paradigms developed from "WEIRD" samples to non-Western societies. The second gap is the disparity between theory and application, which involves the assumption that theory can be directly applied to practical fields without considering real-world conditions. I personally agree with this analysis. Of these two gaps, the first may be the more critical issue. If a certain theory or technology is entirely inapplicable to the local society, then no matter how the gap between theory and application is adjusted, it can only result in the effect of "cutting the feet to fit the shoes." Just like when seeing a doctor; if you take the wrong medicine, then no matter how you adjust the method and dosage of taking the medicine, recovery will likely be difficult and may even lead to more problems.

Professor Fwu further stated in the "Confucian article" that to overcome the problem of the "double gap", she spent more than ten years, beginning with philosophical reflection, then constructing theories with a cultural psychology orientation, and finally conducting empirical research. Borrowing the words of scientific philosopher Kuhn (1962), this experience can be described as a process of "paradigm shift". I feel very fortunate to have worked with Professor

Fwu, which has given me a deep understanding of the hard work involved in studying paradigm shifts. Additionally, I strongly agree with the comparison and comments on the two research orientations of "cultural system view" and "pan-cultural dimension" in the "Confucian article."

II. Dual-Mode Achievement Goal Theory Framework

To understand the unique aspects of local education and learning, and to analyze the characteristics of Chinese views on education, Professor Fwu proposed the "role obligation theory of self-cultivation." This theory encompasses an essential concept: vertical goal. The "Confucian article" stated that "if vertical goals and non-vertical goals are not distinguished, the role obligation theory of cultivation will collapse and disintegrate." Clearly, the concept of "vertical goal" is vital in the "role obligation theory of cultivation." Since much of my personal research also revolves around the issues of "vertical goals" and learning motivation, I would like to take this opportunity to elaborate further on the related concepts and theoretical frameworks, hoping to provide additional insights.

The concept of "vertical goal" comes from Chen's (2005) research paper, which critically reviewed existing Western achievement motivation theory and proposed the conceptual framework of "Chinese achievement motivation" based on the life goals of local people. After that, I conducted a series of studies using this framework and collaborated with Professor Fwu and others on various studies (Chen, 2022b; Chen, 2023), organizing the connotations of related concepts into a "Dual-mode theoretical framework of achievement goal."

According to the "Dual-mode theoretical framework of achievement goal", the achievement goals that people pursue in their daily lives include two types: "personal goal" (which can roughly correspond to the "non-vertical goal" in the "Confucian article") and "vertical goal". The difference between these two types of achievement goals comes from the source of goal construction, and the two are different in terms of motivation mode, social psychological function, virtue connotation, success and failure attribution mode, and implicit beliefs involved (see Table 1).

The so-called "personal goals" refer to achievement goals that individuals construct based on their spontaneous interests. Such goals typically involve areas where individuals possess intrinsic motivation or believe they excel. Individuals can choose and define the content and standards of these goals themselves; however, significant others in interpersonal relationships (such as parents and teachers) do not have expectations regarding whether individuals pursue them, and they are generally not valued by broader social norms. In contrast, "vertical goals"

Table 1

Dual-Mode Theoretical Framework of Achievement Goal

	Personal goals	Vertical goals
Primary source of goal-construction	Autonomous interest	Social expectation
Motivation mode	Intrinsic motivation	Dutifulness
Functions of psychosocial adaptation	Maintenance of positive self-regard	Identification with role obligations
Manifestation of virtues	Insignificant	Significant
Self-attribution pattern	Self-enhancement: External attribution when failing; Internal attribution when successful	Effort model: Effort attribution when failing
Implicit beliefs	Ability beliefs: Entity or Incremental beliefs of ability	Effort beliefs: Obligation-oriented and Improvement-oriented beliefs about effort

Note: This table is modified from "Learning motivations and effort beliefs in Confucian cultural context: A dual-mode theoretical framework of achievement goal.", Chen, 2023, *Frontiers in Psychology.*

are specific achievement goals that individuals are expected to meet due to their social roles (such as student roles). These social expectations usually arise from essential others within their interpersonal network. The content and standards of such goals are embedded in the general societal framework, giving them high social value, even though individuals may not necessarily have intrinsic interest in these goals. In Chinese society, these achievement goals are often viewed as role obligations that individuals are expected to fulfill, and they must strive to achieve them to the best of their ability. In other words, the primary source of motivation for pursuing "personal goals" is the individual's intrinsic interest. In contrast, the primary source of motivation for pursuing "vertical goals" is the individual's sense of identity with their role obligations.

According to the "Dual-mode theoretical framework of achievement goal," the social psychological functions, virtue connotations, patterns of success and failure attribution, and implicit beliefs associated with "personal goals" and "vertical goals" differ significantly. First, because "personal goals" are grounded in an individual's intrinsic interests and abilities, individuals can maintain a positive self-concept by pursuing "personal goals" in their daily lives. To sustain or even enhance their positive self-concept, individuals tend to adopt a "self-

enhancement" pattern of success and failure attribution; that is, they typically attribute success to internal factors and failure to external factors (Chen et al., 2009). Furthermore, as noted in the "Confucian article," whether an individual pursues or abandons "personal goals" relies entirely on their own interests and abilities and does not impact the individual's virtues or moral image, nor does it elicit related moral emotions, such as guilt (Fwu et al., 2018).

In contrast, the psychological and behavioral mechanisms involved in "vertical goals" differ. Since the source of "vertical goals" is rooted in social expectations, particularly concerning individuals' role obligations, the primary social psychological function for individuals pursuing these goals is to internalize and identify their social role responsibilities (Chen & Wei, 2013). In striving for such goals, individuals often face high social expectations and may also impose self-requirements. Therefore, when making attributions, they tend to adopt the "effort model"—that is, they attribute setbacks or failures to their lack of effort, thereby motivating themselves to work harder (Chen et al., 2009, 2019). Additionally, because "vertical goals" frequently involve individuals' role obligations, pursuing these goals in Chinese society can emphasize the virtues of the individuals themselves. This reflects the unique social psychological mechanism highlighted in the "Confucian article" when Chinese people pursue "vertical goals": "Strive to pursue the goals expected by important others → fulfill role obligations → highlight personal virtues → enhance inner moral cultivation." In other words, for students in East Asia, academic goals often represent significant "vertical goals" in their lives.

There are several points worth mentioning here. First, from the perspective of normative ethics, the moral values of the Chinese people tend to align more closely with the position of "virtue ethics"; that is, they place significant importance on cultivating personal inner character and virtues, emphasizing wisdom or wise judgment in moral events (Ames, 2011; Angle & Slote, 2013). However, the virtue beliefs held by the Chinese people also possess distinct characteristics, including the reflection and acknowledgment of role obligations and moral norms, as well as a commitment to striving toward "perfection" (Chan, 2014). In other words, the "morality" associated with the "vertical goal" actually refers to "virtue" or "virtue," which differs from the ethical positions of "utilitarianism" or universalist "deontology" that emphasize consequences.

Secondly, the "Confucian article" noted that Western society also has a tradition of valuing "effort," which is mainly influenced by the Protestant "doctrine of predestination." Protestantism emphasizes the "work ethic," asserting that through hard work and thrift, wealth and success can be achieved, which holds "moral value." Therefore, working hard is seen as an

individual's obligation. The belief in the "doctrine of predestination" highlights the fundamental difference between Western culture and Chinese culture regarding "moral values." In the Western cultural tradition, the belief that effort possesses moral value primarily stems from the relationship between "God and man." The concept of "obligation" based on this understanding has universalistic implications. In other words, this kind of "obligation" is unrelated to the individual's social role or the expectations of significant others in their life. In contrast, Chinese society, influenced by Confucian culture, stresses the "role obligations" of individuals within a social network. This perspective on obligation carries relational implications, which markedly differ from the universalistic moral values of Protestant ethics (Hwang, 2017; Lin, 2002). If we fail to comprehend the moral values of Chinese culture from the view of the cultural system, we are likely to misinterpret the arguments made in the "Confucian article" (Fwu et al., 2021).

Moreover, in Chinese society, "vertical goals" are frequently viewed as the individual's obligation to give their best effort. Thus, the belief in "effort" (as opposed to ability) emerges as a fundamental cognition that shapes the learning psychology and behavior of local students.

To clarify, when an individual faces setbacks while pursuing "vertical goals," if they can try again and not give up due to discouragement, it is seen as a demonstration of the virtue of responsibility, and it is also believed that perseverance can lead to personal improvement. As a result, when pursuing "vertical goals," individuals often embrace two types of effort beliefs: "obligation-oriented belief about effort" and "improvement-oriented belief about effort." For students, the "obligation-oriented belief about effort" signifies a belief that hard work is a student's duty. This perspective regards "effort" as an admirable goal in itself, while the "improvement-oriented belief about effort" implies a belief that effort can enhance one's academic ability. Here, "effort" is seen as a means to achieve self-improvement. A number of previous studies have demonstrated that these two types of effort beliefs can predict the academic emotions, cognitive patterns, and behavioral responses of elementary school, middle school, and college students (Chen et al., 2019; Wang & Chen, 2020), as well as the teaching attitudes of middle school teachers toward their students (Chen et al., 2016).

In contrast, when individuals pursue "personal goals" (regardless of whether they are in the East or West), their beliefs about their "ability" in the relevant field are likely to affect their behavior patterns. Generally, the more one holds an "increasing theory about ability" (i.e., believing that ability can be changed by acquired experience) in the field related to personal goals, the more likely one is to continue pursuing those relevant personal goals. Conversely, the more one holds an "entity theory about ability" (i.e., believing that ability is fixed and difficult to change), the more likely one is to give up pursuing their relevant personal goals

when they fail (Dweck, 2006). It should be noted that "increasing theory about ability" and "entity theory about ability" are two ends of the same dimension in terms of concept and measurement, with one being high while the other is low; additionally, the "duty of effort" and "progress of effort" involved in "vertical goals" are different concepts in terms of connotation.

III. Questions About the "Hard Core"

Overall, I agree with most of the views in the "Confucian article." However, I am a bit confused about the arguments and interpretations related to the philosophy of science presented in the article. The "Confucian article" quotes the concept of "scientific research programmes" proposed by philosopher of science Lakatos (1970), aiming to explain the "hard core" (this term is typically translated as "hard core" in philosophy, not "hard shell," and this article follows the standard translation) and the "protective belt" of cultural psychology and the "role obligation theory of cultivation." Lakatos's philosophy of science builds on Karl Popper's "falsificationism." In essence, Popper opposes scientific "positivism" and argues that scientists should not rely on unreliable induction when formulating theories. He maintains that empirical research cannot confirm or verify theoretical propositions. Instead, scientists must depend on creative thinking to rationally develop theories that can be disproven by empirical observation. If the results of empirical research are inconsistent with the theory, ad hoc explanations should be avoided in order to modify or defend the theory.

However, Popper's "falsificationism" does not align with the actual practice of scientific research. Scientists typically do not abandon a theory when they face results that contradict it. Moreover, from a historical perspective, firmly believing in theories that do not align with empirical phenomena and even proposing post-hoc explanations can facilitate scientific progress. For instance, the "discovery of Neptune" is a well-known case in the history of science (Godfrey-Smith, 2003). To address the challenges posed by Popper's "falsificationism" and respond to the critique of "scientific historicism" (Kuhn, 1962), Lakatos (1970) introduced "sophisticated falsificationism." This theory posits that the paradigm of scientific research is historical, and research within the same paradigm will develop into a "research program." Furthermore, every research program has a non-negotiable core concept, referred to as a "hard core." Beyond the "hard core," there exist auxiliary propositions, termed "protection belts." When faced with results that contradict the theory, scientists within the research program should attempt to adjust or modify the "protection zone" instead of hastily altering the "hard core." For example, the "hard core" of Newtonian physics comprises the concepts of universal gravitation

and the three laws of motion, while its "protection zone" includes perspectives on the structure of the universe and the application of mathematical tools. For researchers in Newtonian physics, when they encounter anomalies in empirical observations (such as the discovery of irregularities in the orbit of Uranus), they can modify the "protection zone" (adjust their views on the structure of the solar system), but they should not arbitrarily change the "hard core" (maintain the belief that universal gravitation and the laws of motion are accurate). In summary, the so-called " scientific research programmes " of "sophisticated falsificationism" refers to a model of scientific research with historical roots, and the "hard core" denotes the premise that cannot be easily questioned within a specific research program.

In discussing the "Confucian article," it appears that the concept of "research program" is employed at two levels: one is the cultural system, and the other is psychological theory. Regarding the cultural system, the "Confucian article" stated: "The hard core of Western society includes: the source of life is God, and personal rights" and "The hard shell of Confucian society includes: the source of life is parents, and personal role obligations." Such a statement seems to apply the concepts of "hard core" and "protective belt" from the scientific philosophy of "sophisticated falsificationism" to the realm of cultural values. However, cultural values involve people's thinking and guiding actions about positioning themselves or their relationships within the "life world," whereas scientific theories form the "micro world" created by scientists to understand or predict reality. The nature, purpose, and construction sources of "cultural values" and "scientific theories" differ significantly. If scientific philosophy is applied to analyze or interpret cultural systems, there may be an issue of realm misplacement. I wonder if the "Confucian article" simply seeks to express that Western society and Confucian society possess different fundamental values, stemming from distinct cultural and ideological traditions. If that's the case, there may be no need to invoke concepts from scientific philosophy; a direct analysis or comparison of the differences in fundamental values between Eastern and Western cultural systems might suffice.

Additionally, the "Confucian article" applies the concept of "scientific research programmes" to the realm of psychological theory. The article states: "Based on the concept of "hard shell" in Lakatos's "scientific research programmes" mentioned above, the "role obligation theory of cultivation" is the hard shell of the author's series of research. In order to protect the "hard shell," the auxiliary hypothesis of the achievement goal type is added, which is only applicable to vertical goals." This approach uses the perspective of scientific philosophy to interpret the nature of a specific scientific theory, and there is no issue of realm misplacement. However, I still have two questions regarding the statement of the "Confucian article" here.

First, in the "sophisticated falsificationism," the so-called "scientific research programmes" refers to a research model with historical significance, and the "hard core" refers to the concepts or premises in the research program that cannot be easily questioned or changed. According to the statement of the "Confucian article," it seems that the entire set of "role obligation theory of cultivation" is considered "hard core." In other words, all the propositions and concepts included in the theory are premises that cannot be modified or questioned. If this is the case, the theory would be quite peculiar. Perhaps this is not what the "Confucian article" intended, but the wording in the article is too vague and difficult to grasp. Another question is that the "Confucian article" clearly states: "If the vertical goals and non-vertical goals are not distinguished, the role obligation theory of self-cultivation will collapse." Thus, according to the definition of "hard core" in the "refined falsification theory," the "vertical goals" or the "distinction of goal types" seem to represent the "hard core" of the theory that cannot be easily altered, rather than merely an auxiliary hypothesis or "protective belt."

IV. Challenges and Prospects of the "Research Tradition" of Cultural Psychology

In response to the questions posed above, we might consider shifting our perspective in terms of epistemology. According to the scientific philosophy of "pragmatism" (Laudan, 1978), the purpose of scientific research is to address problems. After a lengthy period of development, the scientific community may gradually establish a flexible paradigm or "research traditions." The primary distinction between the concepts of "research tradition" and " scientific research programmes " is that any concept or proposition within a research tradition can be revised and adjusted as long as it effectively resolves the problem, without the necessity of differentiating between "hard core" and "protective belt." Furthermore, the challenges faced by "research tradition" can be categorized into internal theoretical issues and external application issues of the theory. Internal theoretical issues encompass the clarity of conceptual meaning, logical consistency, and compatibility among propositions; external application issues involve the theory's explanatory power regarding phenomena and its capacity to address practical problems, etc. In other words, a scientific community adhering to a specific research tradition must, on one hand, strive to resolve the internal issues of the theory while, on the other hand, consider ways to enhance its ability to tackle external problems.

From this perspective, if we consider indigenous or cultural psychology as a "research tradition" within contemporary psychology, this tradition will ultimately encounter the "double gap" problem mentioned at the beginning of the "Confucian article." Solving such a significant

issue is a challenging task. Cultural psychology researchers often must "think big, start small," constructing theories locally for specific research topics (Chen, 2022a). In developing these theories, researchers can flexibly adapt theoretical concepts or propositions to suit their particular needs. On the one hand, they can examine how to translate or include cultural systems into clear scientific concepts to enhance the internal consistency of the discourse; on the other hand, they can also consider how to improve the theory's capacity to explain phenomena and address practical problems.

It is worth mentioning that in the process of constructing theories to solve problems, cultural psychology researchers will inevitably encounter two issues that need to be addressed. One is the issue of "cultural relativism," and the other is the issue of multicultural development. Regarding the first issue, the concept of "cultural relativism" posits that the beliefs or value systems upheld by different cultures are not universal or that the meaning of people's psychological phenomena or behaviors can only be understood within the context of a specific cultural system (Boas, 1887). Cultural psychologists need to consider whether to agree with or adopt the position of "cultural relativism." If an extreme cultural relativist position is taken, a simpler theory may be constructed; however, it may hinder the communication of research results between different cultures and researchers. Conversely, suppose it is believed that indigenous or cultural psychology research can explore both cultural specificity and human universality simultaneously. When conceiving theories or concepts, it is necessary to be very cautious and thoughtful (Chen, 2022a). On the other hand, regarding the second topic mentioned above, cultural psychologists need to reflect on the following: In today's world, where communication is both convenient and frequent, the cultural systems and values of different civilizations often interact and impact one another. Will different cultural systems gradually merge in the future? Or will they continue to uphold their differences (Nisbett, 2003)? More specifically, due to historical and social factors, Taiwanese society has long been influenced by multiple cultures. Will it evolve towards a certain set of values in the future? Or will it merge into an integrated cultural system? Or will it develop a dynamic cultural mental model that coexists independently without integration (Hong et al., 2000)?

These topics are very important, but they exceed the main purpose of this article and cannot be discussed in detail here. For now, I can only pause here and leave them for later reflection and discussion. Regardless, I am truly grateful to this Journal for providing this opportunity, which helps me better understand Professor Fwu's long-term research results and insightful thoughts on Chinese views on education. Although this article raises some doubts about the "Confucian article," I actually agree with Professor Fwu's basic position and views. I hope it

can serve as a starting point to foster a thinking atmosphere within the Indigenous psychology research community and allow related research to thrive.

Reference

Ames, R. (2011). *Confucian role ethics: A vocabulary*. Chinese University Press.

Angle, S. C., & Slote, M. (Eds.) (2013). *Virtue ethics and Confucianism*. Routledge.

Boas, F. (1887). Museums of ethnology and their classification. *Science, 9*(228), 588-589.

Chan, J. (2014). *Confucian perfectionism: A political philosophy for modern times.* Princeton University Press.

Chen, S.-W. (2005). *Chinese goals of achievement and motivations: The case of Taiwanese college students* [unpublished doctoral dissertation]. National Taiwan University. (in Chinese)

Chen, S.-W. (2022a). On the epistemology of indigenous psychology. *Journal of Indigenous Counseling Psychology, 13*(2), 41-46. (in Chinese)

Chen, S.-W. (2022b). The learning motivations and effort beliefs of Taiwanese students: From the perspective of cultural psychology. *Journal of Indigenous Counseling Psychology, 13*(2), 1-25. (in Chinese)

Chen, S.-W. (2023). Learning motivations and effort beliefs in Confucian cultural context: A dual-mode theoretical framework of achievement goal. *Frontiers in Psychology*, 14:1058456. https://doi.org/10.3389/fpsyg.2023.1058456

Chen, S.-W., & Wei, C.-Y. (2013). A two-factor model of learning motivation for Chinese undergraduates: On the function of academic identity and role identity. *Chinese Journal of Psychology, 55* (1), 41-55. (in Chinese)

Chen, S.-W., Fwu, B.-J., Wei, C.-F., & Wang, H.-H. (2016). High-school teachers' beliefs about effort and their attitudes toward struggling and smart students in a Confucian society. *Frontiers in Psychology*, *7*: 1366. https://doi.org/10.3389/fpsyg.2016.01366

Chen, S.-W., Fwu, B.-J., Wei, C.-F., & Wang, H.-H. (2019). Effort beliefs count: The predictive effects of effort beliefs on students' emotion, attribution, and behavior toward academic failure in a Confucian cultural context. In G. A. D. Liem & S. H. Tan (Eds.), *Asian education miracles: In search of sociocultural and psychological explanations* (pp. 207-221). Routledge.

Chen, S.-W., Wang, H.-H., Wei, C.-F., Fwu, B.-J., & Hwang, K.-K. (2009). Taiwanese students' self-attributions for two types of achievement goals. *Journal of Social Psychology, 149*(2), 179-193.

Dweck, C. S. (2006). *Mindset: The new psychology of success.* Ballantine Books.

Fwu, B.-J., Chen, S.-W., Wei, C.-F., & Wang, H.-H. (2018). I believe; therefore, I work harder: The significance of reflective thinking on effort-making in academic failure in a Confucian-heritage cultural context. *Thinking Skills and Creativity, 30*, 19–30. https://doi.org/10.1016/j.tsc.2018.01.004

Fwu, B.-J., Chen, S.-W., Wei, C.-F., & Wang, H.-H. (2021). Chinese academic achievement goals and Confucian ethics: A response to "Do Taiwanese adolescents believe in the moral significance of effort and school performance?" *Chinese Journal of Psychology, 63*(4), 357-372。https://doi.org/10.6129/CJP.202112_63(4).0003 (in Chinese)

Godfrey-Smith, P. (2003*). Theory and reality: An introduction to the philosophy of science.* The University of Chicago Press.

Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences, 33*, 61–83. https://doi.org/10.1017/S0140525X0999152X

Hong Y. Y., Morris M. W., Chiu C. Y., & Benet-Martínez, V. (2000). Multicultural minds: A dynamic constructivist approach to culture and cognition. *American Psychologist, 55*, 709–720.

Huang, Y.-T. (2014). Adolescent depressive mood and multiple risk factors: A test of individual and cumulative effects, *Formosa Journal of Mental Health, 27*(3), 327-355. (in Chinese)

Hwang, K.-K. (2017). *The inter-subjective dialectic of Confucian culture system.* Wu-Nan Book Inc. (in Chinese)

Kuhn, T. S. (1962). *The structure of scientific revolutions.* University of Chicago Press.

Lakatos, I. (1970). Falsification and the methodology of scientific research programmes. In I. Lakatos & A. Musgrave (Eds.), *Criticism and the growth of knowledge: Proceedings of the International Colloquium in the Philosophy of Science, London, 1965* (pp. 91–196). Cambridge University Press.

Laudan, L. (1978). *Progress and its problems: Towards a theory of scientific growth.* University of California Press.

Lee, M., & Larson, R. (2000). The Korean 'examination hell': Long hours of studying, distress, and depression. *Journal of Youth and Adolescence, 29*(2), 249-271. https://doi.org/10.1023/A:1005160717081

Liem, G. A. D., & Tan, S. H. (Eds.). (2019). *Asian education miracles: In search of sociocultural and psychological explanations*. Routledge.

Lin, D. (2002). Confucian ethics under globalization: A sociological perspective. In C.-C. Huang (Ed.), *The turmoil and integration of traditional Chinese culture and modern values* (I) (pp. 89-133). Himalaya. (in Chinese)

Lin, S.-H., & Huang, Y.-C. (2014). Life stress and academic burnout. *Active Learning in Higher Education, 15*(1), 77–90. https://doi.org/10.1177/1469787413514651

Mullis, I. V. S., Martin, M. O., Foy, P., Kelly, D. L., & Fishbein, B. (2020). *TIMSS 2019 International Results in Mathematics and Science.* https://timssandpirls.bc.edu/timss2019/international-results/

Nisbett, R. E. (2003). *The geography of thought: How Asians and Westerners think differently…. and why.* Oxford University Press.

Organisation for Economic Co-operation and Development. (2023). *PISA 2022 results (Volume I): The state of learning and equity in education.* PISA, OECD Publishing. https://doi.org/10.1787/53f23881-en

Wang, K.-H., & Chen, S.-W. (2020). The predictive effects of parents' beliefs about effort on their children's learning engagement: Two mediated models. *Indigenous Psychological Research in Chinese Societies, 54*, 63-111. (in Chinese)

回應〈儒家倫理與華人教育觀：哲學反思、理論建構與實徵研究〉

馮丰儀*

摘要

　　符教授在〈儒家倫理與華人教育觀：哲學反思、理論建構與實徵研究〉一文中分享深耕「華人教育觀」以解釋東亞學生學習現象的心路歷程與研究成果。針對其文章，本文就選擇「含攝文化理論」之文化、研究概念切入視角、近似真理的有效性及理論解釋力提問討論，並試著提出另一種對華人教育觀的解釋，與作者對話，以更理解作者的研究思維，並提供有志從事華人教育研究者參考。

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壹、 引言

　　長久以來，本土化一直是臺灣社會科學領域追求的目標，教育學術界仍是將西方理論擺在首位（黃騰，2009）。有關教育理論本土化，林秀珍（1999）指出有三項重點：研究者本身的文化自覺與專業能力的充實；我國社會文化與教育問題，作為研究取材與詮釋的基礎；對於國外重要的教育理論加以反省批判，以便適當的定位。本人有幸拜讀符碧真教授的大作，此篇文章分享了她長期深耕「華人教育觀」的心路歷程，她基於西方理論無法完整解釋東亞學生學習，從儒家文化系統建構適用解釋個人追求社會期許目標之修養角色義務理論，說明華人教育觀，以努力義務觀與努力增進觀為主軸，應用於一系列的實徵研究，探討東亞學生重視努力的理由、努力對其而言是否為雙面刃及舒緩負面結果的心理機制、學業失敗後持續努力的心理歷程與兩難困境、教師給予表現欠佳學生之回饋及對其學習動機之影響，以及檢視 Covington 成就動機模式在儒家社會的適用性等問題，累積了有系統的研究成果，並指陳與西方現象和理論的差異，突顯學術主體性，對我國追求本土化的教育研究貢獻良多，十年磨一劍的投入與展現的學術熱忱和堅持令人敬佩，也為後輩樹立了良好的研究典範。

貳、 回應

　　閱讀靶子論文，得以對符教授從事本土心理學研究的歷程，從哲學反思、理論建構至實徵研究有較詳細的理解，受益匪淺。藉由此撰寫回應文的機會，提出以下幾個問題請教符教授，期更對其研究思維能知其所以然，有更深入的學習，同時提供有志投入華人教育研究者參考。

一、「含攝文化理論」之文化如何決定？

　　鑑於西方心理學理論未必適用於解釋華人社會的現象，本土心理學須建構能說明特定文化中人類心態（mentalities in particular cultures）的「含攝文化的理論」，最終目標是以儒家文化為基底，吸納西方近代文明的菁華（黃光國，2014）。「含攝文化」的文化如何決定？符教授以儒家的修養角色義務論為基底發展華人教育觀，探究東亞學生的學習現象，然而儒家主義有關教育的主張頗多，為何選擇闡述華人教育觀時選擇從修養角色義務論，而非其他的儒家教育思想？其次，符教授文中似乎是將華人視為一個集合體，是儒家文化圈（如台、港、日、韓、新加坡、大陸）或東亞國家的華人？其選擇儒家文化為基底的依據為何？從多元文化系統的觀點來看，以台灣為例，台灣的文化含括了儒、道、釋等多樣的文化系統，台灣社會的價值觀可能是個體、環境與不同文化系統

交互作用的產物，文化具多樣性與複雜性。再者，文化是流動的概念，全球化及社會變遷影響下，華人的雙文化取向日益明顯，而上述黃光國教授主張亦指陳出文化的變動性必需納入理論建構的考量。另外，基於對西方心理學為國際研究的主流批判，採取律則式的解釋模式，以儒家文化統攝華人文化，雖有助建構華人特有的理論，與西方學術對話，然而同樣地探討華人心理學是否也會出現儒家文化成為主流，落入以儒家文化概括所有現象之狀況產生？

二、研究概念切入視角如何選擇？

　　華人教育觀為何選擇從孩子的視角來回推？而非由父母或者師長的角度來探討？研究概念切入視角如何選擇？從父母的教育觀去解釋孩子為什麼努力這件事情，有一個基本前提是父母的信念可以有效傳達給孩子，使願意接受並且落實。修養的角色義務理論，將子女努力追求父母的期許目標連結至倫理與道德，是為了盡孝的角色義務及增進道德修養，若反求諸己未盡到義務，便覺得愧對自己與父母。這個理論框架確實有助理解部分孩子為何努力學習的原因，不過其似乎也預設了孩子基於義務或者道德而自發努力學習的特定框架，可能忽略了孩子自發努力學習的其他因素，或者當前許多子女被迫努力學習的現象。從功績主義的角度看，有些華人子女努力追求社會期許的目標是因為相信可以出頭天，靠教育翻轉未來。其次，不管中西方都強調個體能依其社會角色盡到該盡的義務，如學生的角色就是要努力學習，也主張子女經由受教育的歷程接受或者內化父母師長強調的價值觀念，然而事實上子女有其主體性，不見得會全盤接受。再者，現今社會對於道德的看法可能與以往不同，盡到義務在現在可能被認知為盡本分，不見得會連結到與道德修養有關。子女知覺與父母所持的教育觀可能就會有所差距。

三、近似真理的有效性及理論解釋力如何判別？

　　符教授採後實證科學哲學，主張學者都可發揮創造力，提出針對東方學生學習的近似真理，彰顯其主體性。然而近似真理的有效性及理論解釋力如何判別？有無客觀的標準？她依據儒家理論推論出努力義務觀與增進觀的假設，進而收集資料驗證假設，以研究結果來驗證推論的妥適性。若理論是一種猜測的知識，每個研究者都在盡自己的努力對同樣的問題建構著近似真理，有沒有可能出現眾聲喧嘩的現象？當研究者在建構嘗試性的理論時，影響其對問題的理解與解方猜測絕對不是空穴來風，有可能受其個人的經驗、背景與對現象的觀察視角所影響，然若只重視研究者的主體性，忽略被研究對象的聲音，那麼可能導致研究者以自身文化觀點為「他人」發聲。楊國樞教授（1982）曾說：「人類的知識既不在真空中產生，也不在真空中應用，而是在特定的社會脈絡中衍發與

運作。」社會科學與自然科學不同在於社會是作為行動主體的個人互動組成的，人亦無法擺脫社會影響，那麼理論是否有必要透過觀察歸納與演繹等方法對身為行動主體的想法及社會現象進行理解而來呢？另外，理論的提供亦代表從特定的視角看待問題，尤其若化約成研究變項，亦可能忽略及無法反映真實現象的複雜性。

四、另一種解釋？

家庭主義下的華人支持與控制是一體兩面，傳統孝道觀念強調父母的權威及子女對父母的順從義務，現在台灣家庭形態、社會價值轉變，抑己順親與護親榮親的孝道觀念在民眾心中大符降低，有一半以上的父母與子女相處亦逐漸朝向類平輩，尤其是教育程度高的父母（林文瑛、王震武，1995；葉光輝，2009）。然而少子化的影響下，父母仍然擔心孩子未來。徐美雯、魏希聖（2015）研究發現六成的父母認為子女應該順從父母。許多父母以愛之名保護、限制，並強加個人特定價值觀於子女身上，剝奪其施展自由的權利（陳延興，2010）。林文瑛、王震武（1995）研究發現家訓傳統會影響父母的教育觀，尤其是嚴教觀、磨練觀、尊卑觀，父母在教育手法的選擇上大多為外控、他律的教育觀。兒童福利聯盟（2023）「2023 年臺灣兒少學習狀況調查報告」指出：台灣國高中生有近六成的兒少要課後補習，五成二的學生一週考試（含補習班考試）超過四天；近四成家長會拿課業與他人比較，超過五分之一的家長關心課業表現勝過其他生活裡的事；六成的兒少擔心成績跟不上同學；而近六成國高中生已出現學習疲勞（含中等及過量程度）狀況，與 2017 年相比，「因為課業壓力而有自我傷害或一死了之的念頭」之學生比例上升約 7%，此反映出為考試成績而讀書的學習文化仍然存在。

楊國樞（1982）指出華人想將事情做好以符合父母、老師等重要他人或團體標準，係為了獲得讚賞及避罰，維持人際和諧，使別人對自己有好印象。基此，倘若東亞學生的努力是因為想與父母維持和諧關係，避免衝突與責罰；而父母的教育觀可能隱含著磨練觀，傳遞孩子要有美好的未來就需努力追求縱向成就目標，吃得苦中苦方為人上人，給予大量的學習支持（如送補習班）使與他人競爭，搭配獎懲機制使孩子服從與努力。

參考文獻

兒童福利聯盟（2023）。**2023 年臺灣兒少學習狀況調查報告**。
　　https://www.children.org.tw/publication_research/research_report/2655
林文瑛、王震武（1995）。中國父母的教養觀：嚴教觀或打罵觀？**本土心理學研究，**
　　3，2-92。https://doi.org/10.6254/1995.3.2

林秀珍（1999）。教育理論本土化的省思。**教育研究集刊**，42，1-15。
　　https://doi.org/10.6910/BER.199901_(42).0001

徐美雯、魏希聖（2015）。華人文化教養信念、教養行為對青少年憂鬱及偏差行為之
　　影響。**家庭教育與諮商學刊**，**18**，35-63。

陳延興（2010）。為了誰的教育？學生作為教育主體之探討。**教育資料與研究雙月
　　刊**，**96**，71–94。

黃光國（2014）。論「含攝文化的積極心理學」。**台灣心理諮商季刊**，**6**（2），36-
　　47。

黃騰（2009）。教育研究本土化的再省思—困境與可能。**教育研究集刊**，**55**（3），1-
　　28。https://doi.org/10.6910/BER.200909_(55-3).0001

楊國樞（1982）。心理學研究的中國化：層次與方向。**中央研究院民族學研究所專
　　刊**，乙種之 10，153-187。

葉光輝（2009）。華人孝道雙元模型研究的回顧與前瞻。**本土心理學研究**，**32**，101-
　　148。https://doi.org/10.6254/2009.32.101

A Response to " Confucian Ethics and Chinese Views on Education: Philosophical Reflection, Theoretical Construction, and Empirical Research"

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Abstract

In her article "Confucian Ethics and Chinese views on Education: Philosophical Reflection, Theoretical Construction, and Empirical Research", Prof. Fwu shares her research journey and empirical research results on how she has been working on Chinese views on education in order to explain the phenomenon of student learning in East Asia. This response paper ask questions and discusses how to determine the culture of the "Culture Inclusive Theory", select perspectives for research concepts, and assess the validity of approximate truths and the explanatory power of theory. It also attempts to propose an alternative explanation of Chinese views on education, hoping to engage in dialogue with the author to better understand her research thinking and provide reference for aspiring researchers of Chinese education.

Keywords: Chinese views on education, Confucian ethics, role obligation theory

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I. Introduction

For a long time, localization has been the goal pursued in the field of social sciences in Taiwan, yet the educational academic community still prioritizes Western theories (Huang, 2009). Regarding the localization of educational theory, Lin (1999) identified three key points: the cultural awareness and professional abilities of researchers; the social culture and educational issues of our country as the foundation for research materials and interpretation; and the reflection and critique of significant foreign educational theories to properly place them.

I have the honor of reading Professor Bih-Jen Fwu's masterpiece. This article shares her extensive experience in the "Chinese Views on Education." Recognizing that Western theories cannot fully explain East Asian students' learning, she developed a theory of self-cultivation role obligations from the Confucian cultural system to articulate the Chinese Views on Education. Using the concepts of effort obligation and effort enhancement as the main framework, she applies it to a series of empirical studies that explore why East Asian students value effort, whether effort serves as a double-edged sword for them, the psychological mechanisms that alleviate negative consequences, the psychological processes and dilemmas of persisting after academic failure, the feedback provided by teachers to low-performing students and its impact on their learning motivation, and the applicability of Covington's achievement motivation model in Confucian society. She has amassed systematic research results and highlighted the differences with Western phenomena and theories, emphasizing academic subjectivity and making significant contributions to our country's pursuit of localized educational research. The investment of ten years in honing one's craft, along with the academic enthusiasm and persistence displayed, is admirable and sets a commendable research example for future generations.

II. Response

After reading the target paper, I gained a more detailed understanding of Professor Fwu's research on indigenous psychology, which encompasses philosophical reflection, theoretical construction, and empirical research. This has greatly benefited me. In writing this response, I would like to pose the following questions to Professor Fwu, with the hope of gaining a clearer understanding of her research thinking. This, in turn, will enable me to conduct a deeper study and serve as a reference for those interested in Chinese education research.

1. How is the Culture of " Culture Inclusive Theory" Determined?

Given that Western psychological theories may not be applicable in explaining phenomena in Chinese society, indigenous psychology must construct a "culture-inclusive theory" that clarifies the mentalities within specific cultures. The ultimate goal is to absorb the essence of Western modern civilization based on Confucian culture (Hwang, 2014). How is the culture of "inclusive culture" determined? Professor Fwu developed the Chinese views on education based on the Confucian theory of self-cultivation and obligation, exploring the learning phenomena of East Asian students. However, Confucianism presents numerous propositions on education. Why did she choose to start with the theory of self-cultivation and obligation when explaining the Chinese views on education, instead of from other Confucian educational thoughts? Secondly, Professor Fwu appears to regard the Chinese as a collective in her article, whether referring to those in the Confucian cultural circle (such as Taiwan, Hong Kong, Japan, South Korea, Singapore, and mainland China) or individuals in East Asian countries. What is the basis for choosing Confucian culture as the foundation? From the perspective of multicultural systems, taking Taiwan as an example, Taiwan's culture comprises various cultural systems, including Confucianism, Taoism, and Buddhism. The values of Taiwanese society may arise from the interaction between individuals, environments, and diverse cultural systems. Culture is diverse and complex. Furthermore, culture is a fluid concept. Under the influence of globalization and social change, the Chinese people's bicultural orientation is becoming increasingly evident. Professor Kwang-Kuo Hwang's proposition indicates that the variability of culture must be considered in theoretical construction. In addition, based on criticisms of Western psychology as the mainstream in international research, adopting a law-based interpretation model and using Confucian culture to govern Chinese culture will aid in constructing Chinese-specific theories and engaging in dialogue with Western academics. However, will Chinese psychology also see Confucian culture become the mainstream, risking the generalization of all phenomena with Confucian culture?

2. How Should One Choose the Research Concept Entry Perspective?

Why do Chinese views on education opt to focus on the perspective of children rather than exploring the viewpoints of parents or teachers? How should one choose the research concept entry standpoint? To explain why children work hard from the perspective of parental education, there is a fundamental premise that parents' beliefs can be effectively communicated

to children, making them willing to accept and implement those beliefs. The role obligation theory of self-cultivation connects children's efforts to meet their parents' expectations with ethics and morality, enabling them to fulfill their filial obligations and enhance their moral development. If they fail to meet these obligations, they may feel guilt towards themselves and their parents.

While this theoretical framework aids in understanding why some children study hard, it appears to assume a specific context in which children study diligently based on obligations or morality, potentially overlooking other factors that prompt children to study hard independently, or the current reality that many children are compelled to study intensely. From a meritocratic perspective, some Chinese children strive to achieve societal expectations because they believe that education can help them gain recognition and transform their futures. Moreover, both in China and the West, there is an emphasis on individuals fulfilling their obligations according to their social roles. For instance, students are expected to study diligently. It is also encouraged that children adopt or internalize the values emphasized by their parents and teachers throughout the educational process. However, in reality, children possess their own subjectivity and may not fully accept these values. Additionally, societal views on morality may have shifted from the past. Fulfilling obligations might now be seen as merely meeting one's duty, without a connection to moral development. Consequently, there may be a disconnect between children's perceptions and the educational beliefs held by their parents.

3. How Can We Evaluate the Validity of Approximate Truth and Theoretical Explanatory Power?

Professor Fwu adopts the philosophy of post-positivism in science and advocates that scholars can fully exercise their creativity to propose approximate truths that allow Eastern students to demonstrate their subjectivity. However, how can we evaluate the validity of approximate truth and theoretical explanatory power? Is there an objective standard? Based on Confucian theory, she deduced the hypothesis of the duty of effort and the promotion of progress, then collected data to verify the hypothesis, using the research results to confirm the appropriateness of the inference. If theory is a form of conjectural knowledge, and each researcher strives to construct an approximate truth for the same problem, could there be a phenomenon of many voices? When researchers construct tentative theories, the guesses that influence their understanding of the problem and the solution are certainly not baseless. They may be shaped by their personal experiences, backgrounds, and perspectives on the

phenomenon. However, if they focus solely on the subjectivity of the researcher while overlooking the voice of the research object, it may result in the researcher speaking for "others" using their own cultural perspectives. Professor Guo-Shu Yang (1982) once said: "Human knowledge is neither generated nor applied in a vacuum, but is derived and operated in a specific social context." The difference between social science and natural science is that society consists of individual interactions as acting subjects, and people cannot escape the influences of society. Therefore, is it necessary for theory to understand the thoughts and social phenomena of acting subjects through observation, induction, and deduction? Additionally, the provision of theory also implies examining the problem from a specific perspective; especially if it is reduced to research variables, it may overlook or fail to reflect the complexity of real phenomena.

4. Another Explanation?

Chinese support and control under familism are two sides of the same coin. The traditional concept of filial piety emphasizes the authority of parents and the obligation of children to obey them. As Taiwan's family structure and social values have evolved, the notions of self-restraint and obedience to parents, along with the ideals of protecting and honoring them, have significantly diminished in the hearts of the people. More than half of parents and children are increasingly interacting as peers, especially among parents with higher education levels (Yeh, 2009; Lin & Wang, 1995). However, influenced by the declining birth rate, parents remain anxious about their children's futures. Hsu and Wei (2015) found that 60% of parents believe children should obey their parents. Many parents protect, limit, and impose their specific values on their children in the name of love, depriving them of their freedom (Chen, 2010). Lin and Wang (1995) found that the tradition of family precepts affects parents' educational perspectives, particularly regarding strict education, discipline, and notions of respect and inferiority. Parents predominantly choose educational methods characterized by external control and heteronomy. Child Welfare League Foundation (2023) "2023 Taiwan Children and Adolescents Learning Status Survey Report" pointed out: Nearly 60% of Taiwan's junior and senior high school students require after-school tutoring, and 52% of students have exams (including cram school exams) more than four days a week; almost 40% of parents compare their children's homework with others, and over one-fifth of parents prioritize academic performance above other life aspects; 60% of children and adolescents are concerned that their grades will not match those of their classmates; and nearly 60% of junior and senior high school

students have already experienced learning fatigue (including moderate and excessive levels). Compared to 2017, the proportion of students who have "thoughts of self-harm or suicide due to academic pressure" has increased by about 7%, highlighting the ongoing prevalence of a learning culture centered around test scores.

Guo-Shu Yang (1982) pointed out that Chinese people strive to meet the expectations of parents, teachers, and other significant individuals or groups to earn praise and avoid punishment, maintain interpersonal harmony, and leave a positive impression on others. Based on this perspective, East Asian students may work hard to preserve a harmonious relationship with their parents and avoid conflicts and penalties. Additionally, parents' educational views often imply the concept of perseverance, emphasizing that children must work hard to achieve vertical goals for a promising future, and that only those who endure hardships can achieve success. They offer substantial learning support, such as enrolling their children in cram schools, to encourage competition with peers, and they implement reward and punishment mechanisms to ensure that children comply and put forth effort.

Reference

Chen, Y.-H. (2010). Education for whom? A discussion on students as subjects in education. *Bimonthly Journal of Educational Resources and Research, 96*, 71–94. (In Chinese)

Child Welfare League Foundation. (2023). *2023 survey report on the learning status of children and adolescents in Taiwan.* https://www.children.org.tw/publication_research/research_report/2655. (In Chinese)

Hsu, M.-W., & Wei, H.-S. (2015). The influence of Chinese cultural parenting beliefs and practices on adolescent depression and deviant behavior. *Journal of Family Education and Counseling, 18*, 35–63. (In Chinese)

Huang, T. (2009). Rethinking the predicaments and possibilities of the localization of educational research. *Bulletin of Educational Research, 55*(3), 1–28. https://doi.org/10.6910/BER.200909_(55-3).0001 (In Chinese)

Hwuang, K.-K. (2014). On culture-inclusive theories of positive psychology. *Taiwan Counseling Quarterly, 6*(2), 36–47. (In Chinese)

Lin, H.-C. (1999). Reflections on the indigenization of educational theory. *Bulletin of Educational Research, 42*, 1–15. https://doi.org/10.6910/BER.199901_(42).0001 (In Chinese)

Lin, W.-Y., & Wang, C.-W. (1995). Chinese parental beliefs on child discipline: Belief in strictness or physical punishment? *Indigenous Psychological Research in Chinese Societies, 3*, 2–92. https://doi.org/10.6254/1995.3.2 (In Chinese)

Yang, K.-S. (1982). The sinicization of scientific research: Levels and directions. *Special Publication of the Institute of Ethnology, Academia Sinica, Series B, 10*, 153–187. (In Chinese)

Yeh, K.-H. (2009). A review and prospect of the dual filial piety model in Chinese societies. *Indigenous Psychological Research in Chinese Societies, 32*, 101-148。 https://doi.org/10.6254/2009.32.101 (In Chinese)

儒家倫理與華人教育觀：哲學反思、理論建構與實徵研究之總回應文

符碧真*

摘要

筆者的「靶子論文」〈儒家倫理與華人教育觀：哲學反思、理論建構與實徵研究〉（簡稱「儒」文）：反思筆者研究十年磨一劍的學思歷程。三位學者各自從不同的角度，對筆者的「靶子論文」作出評論。本文係對三篇評論的總回應文，聚焦於以下三部分（一）「含攝文化理論」之文化如何決定？（二）兼顧理論普同性與文化特定性的可能走向為何？（三）科學進步如何判定？期待「儒」文與三位評論者之間的對話，能創造良性的學術對話，激盪出新的迴響，進一步活化在地社會科學研究的動力。

西元2000年臺大心理系執行教育部「華人本土心理學研究追求卓越計劃」時，筆者剛進臺大師資培育中心任教不久，有機會跨領域到心理系聆聽該項計畫的討論。一直非常欣賞該系師生的對話與論辯，期待真理愈辯愈明的氛圍，而心嚮往之。基於此，首先非常感謝葉光輝、陳舜文、馮丰儀三位教授對筆者的靶子論文進行打靶，筆者虛心受教。葉教授提點研究者建構理論及師資生使用理論解釋現象時，都應考慮情境或範疇的特定性（situation or domain specific），以及採取社會認知心理學研究取向，筆者獲益良多。陳教授在雙模式成就目標理論架構的補充說明，讓「儒」文更加清楚、完整；對「硬核」所提的疑問以及說明，幫助筆者釐清盲點。其次，三位教授的評論，讓筆者有機會對「儒家倫理與華人教育觀」（以下簡稱「儒」文）再次省思。本回應文聚焦於以下三部分（一）「含攝文化理論」之文化如何決定？（二）兼顧理論普同性與文化特定性的可能走向為何？（三）科學進步如何判定？以下分別說明。

一、「含攝文化理論」之文化如何決定？

　　馮教授提問為何選擇儒家文化為基底？為何選擇修養的角色義務理論解釋華人教育觀？筆者非心理系出身，對於華人教育觀的研究源自於在美國 UCLA 唸書時，聽見教授特別指出「臺灣學生在國際評比 TIMSS 表現很優秀」，當時便好奇，臺灣一個蕞爾小島的教育表現，如何引起太平洋彼岸學者的關注？教授的話在筆者心裡種下研究題目的種子。回臺任教後，日、韓、新加坡、香港、臺灣每每在 TIMSS（Trends in International Mathematics and Science Study）及 PISA（Programme for International Student Assessment）國際學術評比表現優異（OECD, 2023; von Davier et al., 2020）。西方學者想向東方取經，卻發現西方理論無法完整地解釋東亞學生的學習與表現。鑑於這些東亞國家共享「儒家文化傳統」（Confucian tradition）（On, 1996），因此觸發筆者從儒家文化為研究的切入點，試圖建構理論，解釋東亞學生的學習，以滿足心中的好奇心。

　　其次，綜觀中華文化中包括儒、釋、道、法、兵等各家學說，其中以儒家思想與學習最為有關，故從儒家文化切入。儒家學說的代表人物是孔子，儒家尊崇孔子為聖人，以四書五經為經典，其中提及許多與學習有關的句子，以下列舉一些經典的句子。例如《論語》：「學而時習之，不亦說乎？」、「學而不思則罔，思而不學則殆」、「不憤不啟，不悱不發；舉一隅不以三隅反，則不復也」。《孟子》：「得天下英才而教育之，三樂也」。《大學》：「苟日新，日日新，又日新」。《中庸》：「博學之，審問之，慎思之，明辨之，篤行之」。另在五經中，《尚書》：「學學半，教教半」。《詩經》：「高山仰止，景行行止」。《易經》：「天行健，君子以自強不息」。《禮記》：「玉不琢，不成器；人不學，不知道」。

至於為何選擇「修養的角色義務論」，則與儒家文化密切相關。相對於西方社會強調個人主義，儒家社會強調關係主義。Ames（2011）在其所著《Confucian Role Ethics: A Vocabulary》一書中指出，西方倫理學如效益論、義務論、德行論，著重個人自主與普遍性原則。如果用西方倫理學的架構解釋儒家思想，恐錯失其核心關鍵－「人際關係」。儒家思想的世界觀建立在關係、角色、人際和諧，自我並不是一個孤立的個體，而是存在於對偶關係的人際網絡之中（例如親子、夫婦、師生之間）。倫理行為來自於理解自己在這些關係中的位置，並履行相對應的角色義務與責任。儒家的角色倫理不強調普遍性的道德規範，而是以角色為本（role-based），即是針對特定關係對象涉及的角色進行判斷。例如父母的角色義務是「對子女慈愛」，子女的角色義務是「對父母盡孝」，父母與子女的角色義務不同，故不具有普遍性。儒家思想是以個人努力盡其角色義務的程度，做為評斷個人德行的重要標準，且德行能夠彰顯個人的道德修養（符碧真等，2021）。道德修養是一個動態的過程，個人隨著不同的人生階段，會扮演不同角色，需要不斷地自我修養，以履行不同的角色應盡的義務。換言之，德行並不是固定不變的，而是透過終身學習和反思逐漸修養而來，特別是在家庭和社區中。

對於實徵研究為何未研究家長與教師角度、未必與道德修養有關、子女知覺與父母所持教育觀可能有所差距等意見。筆者以「修養的角色義務論」為架構，Fwu 等（2014, 2017）的實徵研究顯示，愈努力於學業者，愈會被認為盡到角色義務，也愈被視為具備道德形象及學習美德。回顧筆者的實徵研究，不僅限於學生的角度。Fwu 等（2014）的研究包括教師、家長、學生樣本，指出父母及教師在社會化的過程中，傳遞了努力且成功者盡到角色義務，具有道德形象，故受到稱讚，而學生也內化了這些信念，故三者結果相同，信念一致。另外 Fwu 等（2022）年教師回饋的研究包括教師與學生的角度，筆者 2024 年的國科會計畫探討近年來親師關係緊張之際，教師與家長對管教的看法。簡言之，華人教育觀系列實徵研究涵蓋重要關係人，包括教師、家長、學生，視議題而定，而非僅侷限於學生角度。

二、兼顧理論普同性與文化特定性的可能走向為何？

筆者研究的初衷是為了解釋儒家文化圈學生的學習，故從儒家文化系統觀的角度出發。感謝三位教授對筆者從文化系統觀切入的提醒，葉教授建議筆者提出一個可適用於全人類文化社會共用的理論，也能說明文化間差異的現象；陳教授建議思考不同文化系統融合的可能性；馮教授建議將全球化及社會變遷影響華人雙文化取向納入考量。事實上，隨著科技、媒體的快速發展，全球化浪潮勢不可擋。Appadurai（1996）指出，「全球化」絕大多數是源自於「西方文化」。當西方文化遇上在地文化，Hassi及Storti（2012）指出可能產生以下三種場景。

（一）**「文化同質化」**（cultural homogenization）：係指各國貨物、服務、資本、科技或文化透過不斷地交流，進而產生同質性高的世界。因為「全球化」主要源自於「西方文化」，在地化文化受到外來的強勢文化或全球文化所影響，傾向採用西方歐美的社會組織與生活型態，創造出標準化（standardized）或普同（universal）的文化。最具代表性的全球文化就是麥當勞（McDonald's）。全球不同地區或國家，越來越多的人看同樣的娛樂節目、聽同樣的音樂、使用全球品牌的物品與服務、穿同樣的衣服，這就是全球文化。例如全球85%的網路源自美國公司，美國媒體、音樂充斥全世界各角落，因此「全球化」似乎變成了「美國化」。

（二）**「文化異質化」**（cultural heterogenization）：係指全球文化（西方文化）融入當地文化的過程。在地文化因為全球化之故，會經歷不斷地轉型與再發明。儘管在地文化很難不受全球化因素的影響，但是在地文化的核心概念仍保存完整無缺或不受影響，僅周邊表面受到直接影響。因此，文化異質化並未剷除在地文化。總之，外來文化位於在地文化的邊陲，使得全球文化與在地文化並列，同時存在。

（三）**「文化雜揉化」**（cultural hybridization）：係指隨著全球化的推進，產生「全球」與「在地」文化交融的現象，例如「全球在地化」、「在地全球化」皆為此概念的運用。文化雜揉化源自於全球化與在地化不斷混合的過程，產生新的、獨特的文化。文化雜揉化在不同地區發展出特殊的結果，反映出世界更趨多元化。全球在地化只有文化的表面要素混合，但根深蒂固的文化卻不容易混合與融合。例如只有文化的邊陲要素，例如佳餚、流行、逛街習慣、手工藝、娛樂等能跨越國家文化，但是根深蒂固的預設、文化與信念卻是與原有文化相連。

上述三種場景，「文化同質化」就像是過去研究以西方理論馬首是瞻，學者卻發現無法解釋非西方國家的現象。筆者反思後，未來研究可以有「文化異質化」與「文化雜揉化」兩個走向。在「文化異質化」方面，或可參考陳舜文與魏嘉瑩（2013）大學生學習動機之「雙因素模式」，彰顯全球文化與在地文化並列，同時存在。該文指出「學業認同」與「角色認同」分屬不同動機因素，並且透過不同心理機制影響學業投入行為。「學業認同」是指「個體對於自己的學業興趣與學業能力之瞭解與認同程度」；「角色認同」則是指「個體對於身為學生而具有之角色義務的認同程度」。第一項歷程稱為「學業認同影響歷程」。此歷程的路線是從「學業認同」到「學習滿意度」，再從「學習滿意度」到「學業投入」。亦即個體愈瞭解或認定自己的學業興趣與能力，則對學習經驗的整體滿意度愈高。接著，「學習滿意度」對「學業投入」具有顯著直接效果。這樣的研究結果呼應許多西方當代成就動機理論，強調學生的學習動機與其學習滿意感受，以及學生的學習滿意度、學業投入與學業表現之間彼此有所關聯。第二項歷程稱為「角色認同影響歷程」。此歷程是從「角色認同」到「學業投入」的顯著直接效果。亦即個體愈瞭解與認同身為學生的角色義務，便愈投入學習活動。換言之，本地學生很有可能對

於學業目標不感興趣，卻仍拼命努力，只為了盡到角色義務。在此基礎上，未來或可進一步從事跨文化比較研究，看看是否東西方社會都有「學業認同影響歷程」、「角色認同影響歷程」兩種歷程，只是東西方經歷這兩種歷程的學生比例有所差異？例如西方社會可能有較高比率的學生傾向「學業認同影響歷程」，而儒家社會可能有較高比率的學生傾向「角色認同影響歷程」。類似這樣的雙因素整合模式可同時適用於全人類文化社會共用的理論，也能說明文化間差異的現象，將是未來研究走向之一。同時雙因素模式中「學業認同」部分，補足了馮教授提及筆者可能忽略了學童自發學習的部分。

在「文化雜揉化」方面，儒家傳統觀念與西方文化撞擊後，可能融合形成新的觀點。茲以「內隱理論」為例，Dweck 和 Molden（2017）指出，在北美不論大人或小孩，持「本質觀」與「增進觀」者，各約佔 40%，另有 20% 未決定。Chiu 等（1997）跨文化比較研究顯示，美國學生傾向採取「本質觀」，認為個人特質如能力是固定、不可變的；東亞學生傾向採取「增進觀」，認為個人特質如能力是可變的，可以透過努力而改變。筆者在修養的角色義務理論下，提出「義務觀」，強調個人特質不但可變，且一定要變，要變得愈來愈好。筆者研究群 Yang 等（2025）探討我國大學生所持信念的種類與分佈，採用潛在類別分析（latent class analysis, LCA），結果發現：（1）持本質觀者佔 10.1%；（2）持增進觀者佔 20.1%；（3）同時持義務觀及增進觀者佔 41.8%；（4）同時持義務觀及本質觀者佔 28.0%。顯示在全球化的浪潮下，產生文化雜揉化，融合形成新的、獨特的信念。70%學生抱持與「義務觀」有關的信念，包括同時抱持義務觀與增進觀者為最大宗（佔 42%），同時抱持義務觀與本質觀者次之（佔 28%）。全球在地化的結果，70%學生的信念仍與原有文化「義務觀」相連。換言之，以內隱理論的「本質觀」與「增進觀」為框架，僅能解釋我國學生樣本的 30%，另有 70%的學生無法解釋。在「文化雜揉化」下，產生新的「同時持義務觀與增進觀者」、「同時持義務觀與本質觀者」。前者義務觀與增進觀兩者都強調個人特質可變，兩者並不衝突，但是後者一方面認為個人特質無法改變，另一方面又認為要變，且要變得愈來愈好，導致矛盾的心態。尤其值得注意的是，「同時持義務觀與本質觀者」的信念衝突，陷入兩難困境，心理不健康處於嚴重程度的比例是四類學生中最高的（佔 21.7%）。「文化雜揉化」化後，形成的新類別，如果能進行跨文化研究，亦可能發展出同時適用於全人類文化社會共用的理論，也能說明文化間差異的現象，將是未來研究走向之二。

三、科學進步如何判定？

馮教授提及近似真理的有效性及理論的解釋力如何判別？不同的科學哲學家對於科學進步有不同的判準。Karl Popper 指出，所有的理論接近真理的程度沒有區別。因為程度是個相對概念，如果以「逼真度」來衡量理論接近真理的程度，則「逼真度」只適

用於兩個理論之間的相互比較，而不適合對單一理論作評價。例如 T2 理論比 T1 理論能做出更精確的判斷、說明更多事實、更詳盡地描述事實，或是 T2 通過 T1 無法通過的檢驗等，則 T2 比 T1 有更高的逼真度。然一個理論難免會碰到無法說明的事實、無法通過的檢驗，但是只要 T2 比 T1 能說明更多的事實，即使被某些事實證明為偽，仍必須考量其逼真度，T2 仍然可以說是比 T1 理論更為進步（黃光國，2001，150-151 頁）。另外，Larry Laudan 從實用主義的角度，認為科學的目的在於解決問題。在任何領域，前後相繼產生的兩個理論，僅有當後一個理論比前一個理論更能有效的解決問題，後一個理論取代前一個理論時，才能說是進步的（黃光國，2001，222 頁）。

筆者華人教育觀研究，原先聚焦於解決西方理論無法完整地解釋儒家文化圈學生學習與表現的問題。經由三位教授的提點，如果能夠採取「文化異質化」與「文化雜揉化」，建構出同時適用於全人類文化社會共用的理論，也能說明文化間差異的現象。同時，藉由跨文化比較實徵研究，如果能夠獲得支持，應該會比原先「儒」文華人教育觀建構的理論，能說明更多事實，解釋更多的現象，更能有效地解決問題。如此一來，後來發展出來的理論便是比先前的理論更為強大、更具有說服力（powerful）。

四、結語

回首來時路，筆者踏入本土心理學的研究領域，是鑒於師資培育過程中，引進西方理論到教學現場，師資生抱怨理論無用，而想要解決這個問題。呼應本文開頭，三位學者的評論提供筆者成長的養分，也讓筆者反思未來研究走向。這個過程不僅適用於本土心理學，也可擴大適用於本土社會科學。筆者期待「儒」文與三位評論者間的對話，能創造良性學術對話的空間，激盪出新的迴響，進一步活化本土社會科學研究的動力。

參考文獻

符碧真、陳舜文、危芷芬、王秀槐（2021）。華人的學業成就目標與儒家倫理觀：兼回應「台灣青少年是否認為努力與學業成就關乎道德？」一文。**中華心理學刊，63**（4），357-372。https://doi.org/10.6129/CJP.202112_63(4).0003

陳舜文、魏嘉瑩（2013）。大學生學習動機之「雙因素模式」：學業認同與角色認同之功能。**中華心理學刊，55**（1），41-55。https://doi.org/10.6129/CJP.20120717

黃光國（2001）。**社會科學的理路**。心理。

Ames, R. (2011). *Confucian role ethics: A vocabulary*. Chinese University Press. doi: 10.1007/s11712-012-9297-7.

Appadurai, A. (1996). Modernity at large: *Cultural dimensions of modernity*. University of Minnesota Press.

Chiu, C. Y., Dweck, C. S., Tong, J. Y. Y., & Fu, J. H. Y. (1997). Implicit theories and conceptions of morality. *Journal of Personality and Social Psychology, 73*, 923-940.

Dweck, C. S., & Molden, D. C. (2017). Their impact on competence motivation and acquisition. In A. J. Elliot, C. S. Dweck, & D. S., Yeager (Eds.). *Handbook of competence and motivation: Theory and application* (pp. 135–154). Guilford Press.

Fwu, B.-J., Chen S.-W., Wei, C.-F., & Wang, H.-H. (2017) .The mediating role of self-exertion on the effects of effort on learning virtues and emotional distress in academic failure in a Confucian context. *Frontiers in Psychology. 7*: 2047. doi: 10.3389/fpsyg.2016.02047

Fwu, B.-J., Wei, C.-F., Chen, S.-W., & Wang, H.-H. (2014). Effort counts: The moral significance of effort in the patterns of credit assignment on math learning in the Confucian cultural context. *International Journal of Educational Development, 39*, 167-172. https://doi.org/10.1016/j.ijedudev.2014.07.010

Fwu, B.-J., Yang, T.-R., Chen, Y.-K., & Chen, R. (2022). The impact of teacher feedback on students' decisions to stay on or change course after math failure in a Confucian cultural context. *Frontiers in Psychology, 13*: 1046806. https://doi.org/10.3389/fpsyg.2022.1046806

Hassi, A., & Storti, G. (2012). Globalization and culture: The three H scenarios. In *Globalization - Approaches to diversity.* IntechOpen.

On, L.-W. (1996). The culture context for Chinese learners: Conceptions of learning in the Confucian tradition. In D. A. Watkins & J. B. Biggs (Eds.), *The Chinese learner: Cultural, psychological and contextual influences* (pp. 25–41). Hong Kong University Press.

Organisation for Economic Co-operation and Development. (2023). *PISA 2022 Results (Volume I): The state of learning and equity in education.* PISA, OECD Publishing. https://doi.org/10.1787/53f23881-en

von Davier, M., Kennedy, A., Reynolds, K., Fishbein, B., Khorramdel, L., Aldrich, C., Bookbinder, A., Bezirhan, U., & Yin, L. (2024). *TIMSS 2023 international results in mathematics and science*. Boston College, TIMSS & PIRLS International Study Center. https://doi.org/10.6017/lse.tpisc.timss.rs6460

Yang, T.-R., Chen, Y.- K., & Fwu, B.-J. (2025, in press). Learning beliefs and students'
wellbeing: A dilemma between quitting and persevering after failure in a Confucian-
heritage culture. In J.-C. Lee & J. Chen (Eds.), *Student and teacher mental health and
well-being in schools: Asian contexts and perspectives.* Springer Nature.

A response to the comments on "Confucian Ethics and Chinese Views on Education: Philosophical Reflection, Theoretical Construction, and Empirical Research"

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Abstract

The target article entitled "Confucian Ethics and Chinese Views on Education: Philosophical Reflection, Theoretical Construction, and Empirical Research" describes the author's decade-long journey of academic pursuit. The author thanks three scholars who commented on the target article from different perspectives. This paper responds to their comments, focusing on (1) What culture was selected based on culture-inclusive theories? (2) What are the possible directions for considering both the universality of the theory and cultural specificity? (3) How can scientific progress be assessed? The dialogue between the target article and comments can create a healthy academic conversation, spark new reflections, and further activate the research momentum in Indigenous social sciences.

Keywords: culture-inclusive theories, the universality of the theory, cultural specificity, scientific progress

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In 2000, when the Department of Psychology at National Taiwan University implemented the Ministry of Education's "Plan for Excellence in Chinese Indigenous Psychology Research," I had just joined the National Taiwan University Center for Teacher Education and had the opportunity to listen to discussions about the project across disciplines within the Department of Psychology. I have always admired the dialogue and debate between teachers and students in the department, and I look forward to an atmosphere where the truth emerges more clearly through debate. Based on this, I would like to thank Professors Kuang-Hui Yeh, Shun-Wen Chen, and Feng-I Feng for their assistance with my target paper, which I accepted humbly. Professor Yeh pointed out that when researchers construct theories, and teacher candidates use these theories to explain phenomena, they should consider the specificity of the situation or domain and adopt a perspective aligned with social cognitive psychology research, from which I benefited greatly. Professor Chen's supplementary explanation of the dual-mode achievement goal theory framework makes "Confucian Ethics and Chinese Views on Education: Philosophical Reflection, Theoretical Construction, and Empirical Research" (hereinafter referred to as "Confucian" article) clearer and more complete; the questions and comments raised by "Hard Core" help the author clarify blind spots. Furthermore, the feedback from the three professors provided the author with a chance to reflect on the "Confucian" article once more. This response article focuses on the following three parts: (1) How is the culture of " culture-inclusive theories defined? (2) What is the possible direction for balancing the universality of the theory and cultural specificity? (3) How is scientific progress determined? Each of these points is explained separately.

I. How Is the Culture of "Culture-Inclusive Theories" Determined?

Professor Feng asked why Confucian culture was chosen as the basis. Why was the role obligation theory of self-cultivation selected to explain the Chinese views on education? The author is not from the Department of Psychology. My research on the Chinese views on education began during my studies at UCLA in the United States. I heard the professor specifically point out that "Taiwanese students perform very well in the international evaluation TIMSS." At that time, I was curious about how the educational performance of a small island like Taiwan could attract the attention of scholars across the Pacific. The professor's words planted the seeds of the research topic in my mind. After returning to Taiwan to teach, I noticed that Japan, South Korea, Singapore, Hong Kong, and Taiwan have consistently performed well in the international academic evaluations of TIMSS (Trends in International Mathematics and

Science Study) and PISA (Programme for International Student Assessment) (Organisation for Economic Co-operation and Development [OECD], 2023; von Davier et al., 2020). Western scholars want to learn from the East, but they find that Western theories cannot fully explain the learning and performance of East Asian students. Given that these East Asian countries share the Confucian tradition (On, 1996), I was inspired to use Confucian culture as the foundation for my research, attempting to construct theories to explain East Asian students' learning in order to satisfy my curiosity.

Secondly, examining the various schools of thought in Chinese culture—including Confucianism, Buddhism, Taoism, Legalism, and Military Science—we find that Confucianism is the most relevant to learning, so we will begin with Confucian culture. The representative figure of Confucianism is Confucius, who is revered as a saint, with the Four Books and Five Classics regarded as essential texts, many of which contain significant insights related to learning. Here are some classic sentences: For example, In "The Analects": "Isn't it a pleasure to learn and practice it from time to time?"; "Learning without thinking is confusing; thinking without learning is dangerous"; "If you are not angry, you will not be enlightened; if you are not frustrated, you will not be inspired; if you do not use the other three corners to reflect on one corner, you will not be able to recover." In "Mencius": "Getting the world's talents and educating them is the third joy." In "The Great Learning": "If you are new every day, you will be new every day, and you will be new every day."   In "The Doctrine of the Mean": "Learn extensively, ask carefully, think critically, distinguish clearly, and practice diligently." In the Five Classics, The Book of History states: "Learning is half learning, and teaching is half teaching." The Book of Songs says: "I admire the lofty mountains and the beautiful people." The Book of Changes states: "Heaven moves vigorously, and the gentleman strives to improve himself."   The Book of Rites states: "If jade is not carved, it will not become a tool; if people do not learn, they will not know."

As for why the "role obligation theory of self-cultivation" is chosen, it is closely related to Confucian culture. Compared to Western society, which emphasizes individualism, Confucian society focuses on relationshipism. Ames (2011) pointed out in his book Confucian Role Ethics: A Vocabulary that Western ethics—such as the theory of utility, the theory of obligation, and the theory of virtue—concentrate on individual autonomy and universal principles. If Confucianism is explained using the framework of Western ethics, its core concept— "interpersonal relationship"—may be overlooked. The worldview of Confucianism is grounded in relationships, roles, and interpersonal harmony. The self is not an isolated individual; rather, it exists within an interpersonal network of dual relationships (such as those between parents

and children, couples, and teachers and students). Ethical behavior arises from understanding one's position in these relationships and fulfilling the corresponding role obligations and responsibilities. Confucian role ethics does not emphasize universal moral norms; instead, it is role-based, judging the roles involved in specific relationships. For example, the role obligation of parents is to "be kind to their children," while the role obligation of children is to "be filial to their parents." The role obligations of parents and children differ, and thus they are not universal. Confucianism uses the extent to which an individual strives to fulfill their role obligations as an important criterion for assessing personal virtue, and virtue can reflect a person's moral cultivation (Fwu et al., 2021). Moral cultivation is a dynamic process. Individuals assume different roles at various stages of life and must continuously cultivate themselves to meet the obligations of these roles. In other words, virtue is not fixed but is gradually developed through lifelong learning and reflection, especially within families and communities.

In response to comments regarding why the empirical research did not examine the perspectives of parents and teachers, the potential lack of correlation to moral cultivation, and the possible gap between children's perceptions and parents' educational views, the author employs the "role obligation theory of cultivation" as the framework. The empirical research of Fwu et al. (2014, 2017) indicates that the more effort one exerts in school, the more they are perceived to have met their role obligations, and the more they are regarded as possessing a moral image and learning virtues. Reflecting on the author's empirical research, it is not limited to the students' perspective. Fwu et al. (2014)'s study included samples from teachers, parents, and students, highlighting that parents and teachers communicated that hardworking and successful individuals fulfilled their role obligations and displayed a moral image throughout the socialization process, which led to their praise. Students internalized these beliefs, resulting in consistent outcomes and shared beliefs among the three groups. Additionally, Fwu et al. (2022)'s research on teacher feedback integrated the perspectives of both teachers and students. The author's 2024 National Science and Technology Accounting Project aims to investigate teachers' and parents' views on discipline in recent years, particularly in light of the tense parent-teacher relationships. In summary, the series of empirical research on Chinese views on education includes important stakeholders, such as teachers, parents, and students, depending on the topic, and is not restricted to the student perspective.

II. What Is the Possible Direction of Considering both The Universality of the Theory and Cultural Specificity?

The original intention of the author's research was to explain student learning within the Confucian cultural circle, starting from the perspective of the Confucian cultural system. I would like to thank the three professors for their reminders regarding the cultural systems approach. Professor Ye suggested that I develop a theory applicable to all human cultural societies that can also explain cultural differences; Professor Chen encouraged exploring the integration of different cultural systems; and Professor Feng recommended considering the impact of globalization and social changes on the Chinese bicultural orientation. In fact, with the rapid development of technology and media, the wave of globalization is unstoppable. Appadurai (1996) pointed out that "globalization" is mostly derived from "Western culture." When Western culture encounters local culture, Hassi and Storti (2012) noted that the following three scenarios may occur.

1. "**Cultural homogenization**" refers to the phenomenon in which goods, services, capital, technology, or culture from different countries are constantly exchanged, creating a highly homogeneous world. Because "globalization" primarily originates from "Western culture," localized cultures are influenced by dominant foreign or global cultures, tend to adopt Western European and American social organizations and lifestyles, and contribute to the creation of standardized or universal culture. McDonald's is the most representative example of global culture. In various regions or countries around the world, increasing numbers of people watch the same entertainment programs, listen to the same music, use global brand goods and services, and wear similar clothing. This represents global culture. For instance, 85% of the global internet content originates from American companies, and American media and music are pervasive globally. Therefore, "globalization" seems to have become "Americanization."

2. "**Cultural heterogenization**" refers to the process of integrating global culture (Western culture) into local culture. Due to globalization, local culture will experience continuous transformation and reinvention. While it is challenging for local culture to remain unaffected by globalization, its core concepts stay intact, with only the peripheral aspects experiencing direct impact. Therefore, cultural heterogenization does not eliminate local culture. In essence, foreign culture exists on the periphery of local culture, allowing global culture and local culture to coexist simultaneously.

3. "**Cultural hybridization**" refers to the phenomenon of fusing "global" and "local" cultures as globalization advances. For example, "global localization" and "local globalization" are both applications of this concept. Cultural hybridization arises from the continuous mixing of globalization and localization, resulting in new and unique cultures. It produces distinctive

outcomes in different regions, reflecting the world's increasing diversity. Global localization only blends the surface elements of culture, while deep-rooted culture is not easily mixed or integrated. For instance, only marginal elements of culture, such as delicacies, fashion, shopping habits, handicrafts, and entertainment can transcend national cultures, but deep-rooted assumptions, culture, and beliefs remain connected to the original culture.

In the three scenarios mentioned above, "cultural homogeneity" resembles prior research that followed Western theories, yet scholars found it inadequate for explaining phenomena in non-Western countries. After reflection, the author believes future research can take two directions: "cultural heterogeneity" and "cultural hybridization." Regarding "cultural heterogeneity," we can refer to Chen and Wei's (2013) "two-factor model" of college students' learning motivation, which highlights the coexistence of global and local cultures. The article points out that "academic identity" and "role identity" represent different motivational factors and influence academic engagement behavior through distinct psychological mechanisms. "Academic identity" refers to "the degree to which an individual understands and recognizes his or her academic interests and academic abilities;" whereas "role identity" denotes "the degree to which an individual recognizes the role obligations he or she has as a student." The first process is called the "academic identity influence process." This process begins with "academic identity," leading to "learning satisfaction," and then from "learning satisfaction" to "academic engagement." In other words, the more an individual understands or identifies with his or her academic interests and abilities, the higher the overall satisfaction with the learning experience. Subsequently, "learning satisfaction" significantly affects "academic engagement." These research findings resonate with contemporary Western achievement motivation theories, emphasizing the connection between students' learning motivation and their satisfaction, as well as the relationships among students' learning satisfaction, academic engagement, and academic performance. The second process is termed the "role identity influence process." This process demonstrates a significant direct effect from "role identity" to "academic engagement." Thus, the more an individual recognizes and identifies with the obligations of being a student, the more engaged he or she will be in learning activities. In other words, local students might not have a strong interest in academic goals but may still exert effort to meet their role obligations. Therefore, in the future, further cross-cultural comparative studies could investigate whether both Eastern and Western societies exhibit the two processes of "academic identity influence process" and "role identity influence process," though the proportions of students undergoing these processes may differ between the East and West. For instance, Western societies may have a higher proportion of students inclined toward the "academic identity influence process,"

while Confucian societies may show a greater proportion of students leaning toward the "role identity influence process." This dual-factor integration model can apply to theories shared across all cultures and societies and can also elucidate cultural differences. It will be a significant direction for future research. Additionally, the "academic identity" component of the dual-factor model addresses aspects of students' spontaneous learning that Professor Feng mentioned, which the author may have overlooked.

In terms of "cultural hybridization," after the collision between Confucian traditional concepts and Western culture, these may merge to form new viewpoints. Taking "implicit theory" as an example, Dweck and Molden (2017) indicated that in North America, about 40% of both adults and children hold the "essential view" and "enhancement view," while another 20% remain undecided. Chiu et al. (1997)'s cross-cultural comparative study demonstrated that American students tend to adopt the "essential view," believing that personal traits such as ability are fixed and immutable, whereas East Asian students tend to favor the "enhancement view," believing that personal traits such as ability can change through hard work. Under the obligation theory of self-cultivation, the author proposes the "obligation view," emphasizing that personal traits are not only changeable but must also improve over time. The author's research group, Yang et al. (2025), investigated the types and distribution of beliefs among college students in Taiwan using latent class analysis (LCA). The results revealed that (1) 10.1% of students endorse an essentialist view, (2) 20.1% adopt an enhancement view, (3) 41.8% hold both an obligation view and an enhancement view, and (4) 28.0% maintain both an obligation view and an essentialist view. This indicates that, amidst globalization, cultural hybridization has occurred, forming new and unique beliefs. A significant 70% of students adhere to beliefs related to the "obligation view," including those who embrace both the obligation view and the enhancement view, making this the largest group at 42%. This is followed by those who hold both the obligation view and the essentialist view, accounting for 28%. Despite global localization, 70% of students' beliefs are still tied to the original cultural "obligation view." In other words, the implicit theory of the "essentialist view" and the "enhancement view" can only explain 30% of the Chinese student sample, leaving another 70% unaccounted for. Under "cultural hybridization," new categories, such as "people who hold both the obligation and enhancement views" and "people who hold both the obligation and essential views," emerge. The former category emphasizes that personal characteristics can change, suggesting that the two views are not contradictory. In contrast, the latter category believes that personal characteristics cannot change while simultaneously insisting that they must improve, resulting in a conflicting mindset. Notably, the belief conflict among "people who hold both the

obligation and essential views" places them in a dilemma, as this group has the highest proportion of students with severe mental health issues, accounting for 21.7%. Following "cultural hybridization," these new categories may create theories applicable to all human cultural societies, provided cross-cultural research is conducted, and they may explain the phenomenon of cultural differences. This represents the second potential direction for future research.

III. How to Judge Scientific Progress?

Professor Feng discussed the validity of approximate truth and the criteria for assessing the explanatory power of a theory. Different philosophers of science hold varying criteria for scientific progress. Karl Popper noted that all theories are equivalent in terms of their closeness to the truth. Since the degree is a relative concept, if "fidelity" is used to gauge how closely a theory approaches the truth, then "fidelity" is only relevant in comparing two theories and is not suitable for evaluating a single theory. For instance, if theory T2 can make more accurate predictions, explain more facts, describe facts more comprehensively, or pass tests that T1 cannot, then T2 demonstrates higher fidelity than T1. Although a theory will inevitably confront facts it cannot explain or tests it cannot pass, as long as T2 can explain more facts than T1, even if it is proven false by certain facts, its fidelity must still be taken into account, allowing T2 to be considered more advanced than theory T1 (Hwang, 2001, pp. 150-151). Additionally, Larry Laudan argues from a pragmatic perspective that the purpose of science is to solve problems. In any field, two theories developed sequentially can only be deemed progressive if the latter theory resolves the problem more effectively than the former and ultimately replaces it (Hwang, 2001, p. 222).

The author's research on Chinese views on education initially focused on addressing the issue that Western theories do not fully explain the learning and performance of students within the Confucian cultural circle. According to the recommendations of the three professors, if we can adopt "cultural heterogeneity" and "cultural hybridization" to develop a theory that is applicable to all human cultural societies, it could also account for the phenomenon of cultural differences. Additionally, if we can support cross-cultural comparative empirical research, it should be able to explain more facts, clarify more phenomena, and solve problems more effectively than the original theory constructed by the "Confucian article" Chinese views on education. This way, the theory developed later is stronger and more convincing than the previous theory.

IV. Conclusion

Reflecting on the past, the author entered the field of indigenous psychology to address the problem that arose when Western theories were introduced to teaching practice during teacher education, where teacher candidates complained that theories were useless. Echoing the beginning of this article, the critiques from the three scholars provided me with intellectual nourishment for growth and prompted deeper contemplation about the future direction of research. This approach is not limited to indigenous psychology; it can also be extended to indigenous social sciences. The author hopes that the dialogue between the "Confucian article" and the three commentators fosters a space for constructive academic conversation, generates new insights, and invigorates the potential of indigenous social science research.

Reference

Ames, R. (2011). *Confucian role ethics: A vocabulary*. Chinese University Press. doi: 10.1007/s11712-012-9297-7.

Appadurai, A. (1996). *Modernity at large*: *Cultural dimensions of modernity*. University of Minnesota Press.

Chen, S.-W., & Wei, C.-Y. (2013). A two-factor model of learning motivation for Chinese undergraduates: On the function of academic identity and role identity. *Chinese Journal of Psychology*, *55*(1), 45-55. https://doi.org/10.6129/CJP.20120717 (In Chinese)

Chiu, C. Y., Dweck, C. S., Tong, J. Y. Y., & Fu, J. H. Y. (1997). Implicit theories and conceptions of morality. *Journal of Personality and Social Psychology, 73*, 923-940.

Dweck, C. S., & Molden, D. C. (2017). Their impact on competence motivation and acquisition. In A. J. Elliot, C. S. Dweck, & D. S., Yeager (Eds.), *Handbook of competence and motivation: Theory and application* (pp. 135–154). Guilford Press.

Fwu, B.-J., & Chen, S.-W., Wei, C.-F., & Wang, H.-H. (2021). Chinese academic achievement goals and Confucian ethics: A response to "Do Taiwanese adolescents believe in the moral significance of effort and school performance?" *Chinese Journal of Psychology*, *63*(4), 357-372. (In Chinese)

Fwu, B.-J., Chen, S.-W., Wei, C.-F., & Wang, H.-H. (2017). The mediating role of self-exertion on the effects of effort on learning virtues and emotional distress in academic failure in a Confucian cultural context. *Frontiers in Psychology, 7: 2047*. published: 09 January 2017 doi: 10.3389/fpsyg.2016.02047

Fwu, B.-J., Wei, C.-F., Chen, S.-W., & Wang, H.-H. (2014). Effort counts: The moral significance of effort in the patterns of credit assignment on math learning in the Confucian cultural context. *International Journal of Educational Development, 39*, 167-172. https://doi.org/10.1016/j.ijedudev.2014.07.010

Fwu, B.-J., Yang, T.-R., Chen, Y.-K., & Chen, R. (2022). The impact of teacher feedback on students' decisions to stay on or change course after math failure in a Confucian cultural context. *Frontiers in Psychology, 13*:1046806. https://doi.org/10.3389/fpsyg.2022.1046806

Hassi, A., & Storti, G. (2012). Globalization and culture: The three H scenarios. In H. Cuadra-Montiel (Ed.), *Globalization - Approaches to diversity.* Intechopen.

Hwang, K.-K. (2001). *The logic of social science*. Psychological Publishing Co. (In Chinese)

On, L.-W. (1996). The culture context for Chinese learners: Conceptions of learning in the Confucian tradition. In D. A. Watkins & J. B. Biggs (Eds.), *The Chinese learner: Cultural, psychological and contextual influences* (pp. 25–41). Hong Kong University Press.

Organisation for Economic Co-operation and Development. (2023). *PISA 2022 Results (Volume I): The state of learning and equity in education.* PISA, OECD Publishing. https://doi.org/10.1787/53f23881-en.

von Davier, M., Kennedy, A., Reynolds, K., Fishbein, B., Khorramdel, L., Aldrich, C., Bookbinder, A., Bezirhan, U., & Yin, L. (2024). *TIMSS 2023 international results in mathematics and science*. Boston College, TIMSS & PIRLS International Study Center. https://doi.org/10.6017/lse.tpisc.timss.rs6460

Yang, T.-R., Chen, Y.-K., & Fwu, B.-J. (2025, in press). Learning beliefs and students' wellbeing: A dilemma between quitting and persevering after failure in a Confucian-heritage culture. In J.-C. Lee & J. Chen (Eds.), *Student and teacher mental health and well-being in schools: Asian contexts and perspectives.* Springer Nature.

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本學刊以發表輔導、諮商心理、臨床心理、復健諮商、社會工作、精神醫學、精神護理、心理衛生、職能治療、語言治療、特殊教育、員工協助方案等與心理學及助人專業相關學科之本土化專論為主。接受全球之正體中文、簡體中文與英文稿件之投稿。

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正文請統一採 12 級字，段落距離 0 列，單行間距，中文部份（含標點符號）請以新細明體與全形輸入，英文部分（include punctuation marks）請以 Times New Roman 與半型輸入為原則。若文章中有出現表與圖，文字請在 8~12 級字間彈性調整。稿件格式請依下列規定：

一、標題層次

（一）中文書寫者請依序使用

層級一：壹、（粗體、上下空一行、內文開一個新段落撰寫）
層級二：一、（粗體、上下空一行、內文開一個新段落撰寫）
層級三：（一）（不加粗、上空一行、句後要加上句點、內文接著層級標題同一行撰寫，成為完整的一段）
層級四：1.（不加粗、不空行、句後要加上句點、內文接著層級標題同一行撰寫，成為完整的一段）
層級五：（1）（不加粗、不空行、句後要加上句點、內文接著層級標題同一行撰寫，成為完整的一段）

如下列範例所示：

壹、（粗體、上下空一行、內文開一個新段落撰寫）

一、（粗體、上下空一行、內文開一個新段落撰寫）

（一）（不加粗、上空一行）。
1.（不加粗、不空行）

（1）（不加粗、不空行）

（二）英文書寫者請依序使用

<div align="center">

Centered, Boldface, Uppercase and Lowercase Heading

（置中，加粗，每個單字字首大寫，上下空一行）

Text begins indented as a new paragraph.

</div>

Flush Left, Boldface, Uppercase and Lowercase Heading

（置左，加粗，每個單字字首大寫，上下空一行）

Text begins indented as a new paragraph.

Flush Left, Boldface, Uppercase and Lowercase Heading

（置左，加粗，每個單字字首大寫，上下空一行）

Text begins indented as a new paragraph.

    Indented, boldface, lowercase paragraph heading ending with a period.

    （空四格半形，標題加粗，第一個字字首大寫，上下空一行）

    Text begins on the same line and continues as a regular paragraph.

    Indented, boldface, italicized, lowercase paragraph heading ending with a period.

    （空四格半形，標題加粗，第一個字字首大寫，不空行）

    Text begins on the same line and continues as a regular paragraph.

二、正文

（一）行文原則

一頁以 38 行、一行 35 字為原則，並註明頁碼。

（二）標題與註解

1. 文內標題請依標題層次規定方式處理，體例如前述。
2. 表的標號與名稱的格式，包含以下原則：

（1）表的標號與名稱皆為 12 級字，內容則為 8~12 級字為彈性調整範圍。

（2）標號和名稱置於表格之上，靠左對齊，分兩行，第一行為標號，第二行為表名。

（3）標號的寫法：中文為「表一」、「表 1」或「表 1-1」，中文不必加粗體；英文為「**Table 1**」、「**Table1.1**」，英文則應以粗體呈現。

（4）表名在撰寫上需盡量以簡短、清楚且有效的說明表達出表格的重點，不應過長。**中文表名**需以**粗體**呈現，*英文表名則為斜體*。

（5）資料來源請於表格下方列示，以靠近正文引用處隨後出現為原則。

3. 圖的標號與名稱的格式，包含以下原則：

（1）標號和名稱置於圖片上方，分兩行說明，第一行為標號，第二行為圖名，皆靠左對齊。

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（3）圖名在撰寫上應盡量簡短並能表達出圖形的重點，**中文圖名**需以**粗體**呈現，*英文圖名則以斜體呈現*。

（4）中文圖名之行距設定則以可清楚看出標號和圖名之區隔為原則;英文的圖名在行距上應設定為「2 倍行高」。

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（三）參考文獻與其它體例

1. 參考文獻依照中文、英文順序排列，前者依作者姓氏筆劃順序，後者依作者姓氏英文字母順序排列，同一筆資料自第二行起中文須內縮 2 個全形字元、英文亦同。

2. 文稿格式、符號、標題、數字、圖表、文獻引用方式及參考文獻等撰稿體例請參考「三、撰稿體例說明」，未在體例範圍內請依照「美國心理學會出版手冊」第七版（Publication Manual of the American Psychological Association, 7th ed.）之規定體例或本學刊之內容。

三、撰稿體例說明

（一）文獻引用方式

　　正文中引用文獻，以標示作者名（中文作者姓名全列，英文作者只列出姓）、出版時間（一律以西元年代表示），中文引用使用全型符號，英文引用使用半型符號，範例如下：

1. 單一作者

（1）中文，如：（林杏足，2002）

（2）英文，如：（Hsieh, 2003）

2. 兩位作者

（1）中文，如：（謝麗紅、鄭麗芬，1999）

（2）英文，如：（Chang & Chu, 2001）

3. 三位以上作者

（1）中文，第一次出現即以第一作者等表示，如：（賀孝銘等，2007）。

（2）英文，引用規則如上述之中文文獻，如：（Wang et al., 2002）。

4. 翻譯本引用：請註名原作者姓名，以及作品及譯本之年代，如：（Johnson & Johnson, 2003/2005）。

5. 引用兩篇以上文獻以分號隔開（中文在前，英文在後，依姓氏或字母排序）

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（2）英文，如：（Huang & Huang, 2005; Wu, 2003）

（二）參考文獻

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　　範例如下：

1. 書籍

（1）中文

張景然（2004）。**團體諮商的觀念與應用**。弘智。

高淑貞（2006）。親子共讀、怎麼開始？載於何琦瑜（主編），**家庭教育：贏的起點**（頁 317-321）。天下雜誌。

（2）英文

Corey, G., Corey, M., & Collanan, P. (1993). *Issues and ethics in the helping professions* (4th ed.). Brooks/Cole.

Collie, R. K., Mitchell, D., & Murphy, L. (2000). Skills for on-line counseling: Maximum impact at minimum bandwidth. In J. W. Bloom & G. R. Walz (Eds.), *Cybercounseling and cyberlearning: Strategies and resources for the millennium* (pp. 219-236). American Counseling Association.

（3）譯本

Jacobs, E. E., Masson, R. L., & Harvil, R. L.（2008）。**團體諮商：策略與技巧**（程小蘋、黃慧涵、劉安真、梁淑娟譯）。五南。（原著出版年：2006）

2. 期刊

（1）中文

王智弘、林清文、劉淑慧、楊淳斐、蕭宜綾（2008）。台灣地區網路諮商服務發展之調查研究。**教育心理學報，39**（3），395-412。

劉淑慧、林怡青（2002）。國三學生選擇入學學校之抉擇歷程與其影響因素。**中華輔導學報，11**，71-123。

（2）英文

Hsieh, Y. H. (2003). Spatiotemporal characteristics of interaction between exogenous and endogenous orienting of visual attention. *Chinese Journal of Psychology, 45*(3), 227-241.

Kao, S. C., Lin, C. E., & Chiu, N. Y. (2006). A proposed e-care center for mental health interventions. *Journal of Psychiatric Practice, 12*(3), 180-186.

3. 會議、研討會

（1）中文

陳巧翊、趙淑珠（2020 年 10 月 24 日）。**親密關係中性困擾者之求助經驗探究—女性當事人之敘說**〔論文發表〕。台灣輔導與諮商學會 2020 年會暨學術研討會，臺北市，臺灣。

王智弘（2020 年 10 月 24 日）。**雖然不太會做研究，但沒關係：我如何走出一條學術研究的路**〔專題演講〕。台灣輔導與諮商學會 2020 年會暨學術研討會，臺北市，臺灣。

（2）英文

Meister, K. L. (2018, April 26-29). *Gender identity as a three dimensional model: Taking identity beyond the continuum* [Roundtable session]. American Counseling Association 2018 Conference & Expo, Atlanta, GA.

Jin, Y. Y. (2018, April 26-29). *Counseling in China* [Poster presentation]. American Counseling Association 2018 Conference & Expo, Atlanta, GA

4. 學位論文

（1）中文

李鴻昇（2020）。**母親罹患思覺失調症之子女家庭角色轉換歷程之敘事研究**〔未出版之碩士論文〕。國立彰化師範大學。

施郁恆（2019）。**大學生網路成癮危險因子、網路成癮與心理健康問題之相關研究**（系統編號：107NCUE5464018）〔碩士論文，國立彰化師範大學〕。臺灣博碩士論文知識加值系統。

（2）英文

Massa, A. (2006). *Psychophysiological correlates of childhood maltreatment and physical aggression perpetration* [Unpublished master's thesis]. Purdue University.

Kado Hogan, R. M. (2011). *Ethical decision making of psychologists: Emotions, ethical decision frame, and social context* [Doctoral dissertation, University of South Dakota] (Publication No. 3473582). ProQuest Dissertations & Theses A & I.

5. 專門研究報告

（1）中文

趙淑珠、程小蘋（2001）。**中學行政主管人員性別意識之評估研究**。行政院國科會研究計畫（NSC89-2413-H-018-031）。

（2）英文

Mazzeo, J., Druesne, B., Raffeld, P. C., Checketts, K. T., & Muhlstein, A. (1991). *Comparability of computer and paper-and-pencil scores for two CLEP general examinations* (College Board Rep. No. 91-5). Princeton, NJ: Educational Testing Service.

6. 有團體作者的網頁

（1）中文

台灣輔導與諮商學會（2001）。台灣輔導與諮商學會諮商專業倫理守則。http://www.guidance.org.tw/ethic.shtm

（2）英文

American Counseling Association (2005). *ACA Code of Ethics*. May 25, 2013, Retrieved from http://www.counseling.org/Resources/odeOfEthics/TP/Home/CT2.aspx

（文稿格式不符者，將退回給作者，修正後歡迎再投稿）

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姓名（註一）	中文：
	英文：
任職單位與 職稱（註一）	中文：
	英文：
聯絡電話	第一作者（O）：　　　　　　　　　　　（H）： 　　　　　　手機： 通訊作者（O）：　　　　　　　　　　　（H）： 　　　　　　手機：
聯絡地址	第一作者： 通訊作者：
電子郵件	第一作者： 通訊作者： （此 E-mail 將列於稿件首頁註腳處，作為學術交流之用）
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註一：超過兩位以上者請依序編號排列填寫於本欄。通訊作者請於姓名右上角打星號（＊）以為標示。
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　　　在○○○教授指導下完成）、於研討會發表（如：本論文曾發表於○○○研討會）等訊息，將以括弧
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- The Board consists of one Editor in Chief.
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- The terms and conditions take effect as the date of the approval or amendment of the Editorial Board meeting.

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	Accept after revision	Accept after revision	Accept after revision	Accept or re-review after revision*	Include a third reviewer
	Re-review	Accept or re-review after revision*	Accept or re-review after revision*	Reject or re-review *	Reject or re-review *
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