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政治排斥女性？或女性排斥政治？——女性青少年權力意識、政治興趣、政治偏好、政治活動及相關因素之研究(第2年)

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——女性青少年權力意識、政治興趣、政治偏好、
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中 華 民 國 99 年 9 月 20 日

政治排斥女性？或女性排斥政治？

—— 女性青少年權力意識、政治興趣、政治偏好、

政治活動及相關因素之研究

摘要

女性在政治上仍屬於弱勢，全球女性在議會的政治參與度只有 16%，遙遙落後男性。是「政治排斥女性」或「女性排斥政治」？青少年階段可能是男性與女性政治觀念與行為的分化階段。本研究由青少年政治社會化的歷程切入，兼採量化與質化研究法，探討女性青少年的政治發展過程，分析影響女性青少年政治社會化的重要影響因子及相關變項之關聯。本研究分三年進行，第一年研究（已結案）探討台灣男性與女性青少年之父母與同儕的政治價值觀、青少年權力意識、政治興趣、政治偏好與政治活動等變項的相關作用與影響。本次研究成果報告係第二年與第三年之研究成果。第二年研究（研究一）調查女性青少年父母與同儕的政治價值觀、權力意識、政治興趣、政治偏好與政治活動對於 2008 年台灣選舉（含立法委員與總統選舉）投入程度及其對未來台灣政治期望與對自我未來政治參與期望之影響。第三年之研究（研究二）先以量化研究法驗證瞭解影響青少年政治社會化歷程中之不同變項（父母與同儕政治態度、青少年權力意識與政治態度）和政治參與的差異情形，其次探討影響青少年政治社會化歷程中之不同變項與政治參與的相關，再次分析影響青少年政治社會化歷程中之不同變項對政治參與的預測作用。另再以質性研究法，探索女性青少年之父母與同儕的政治價值觀、青少年權力意識、政治興趣、政治偏好、政治活動，及其他與女性青少年政治社會化有關之變項的內在形成歷程與影響作用。

研究一之受試者共有 11 所國高中女性青少年 495 人，研究工具共包括「青少年 2008 年立委選舉投入程度調查表」、「對自我未來政治參與期望量表」、「青少年 2008 年總統選舉投入程度調查表」、「青少年對未來台灣政治期望量表」、「青少年權力意識量表」等五份量表。本研究所得資料經統計分析後，有下列重要發現：（一）總統選舉投入程度並不會因為年級的不同而有所差異，然而權力意識、政治期望、立委選舉投入程度則會因年級而有所不同。（二）權力意識、立委選舉投入程度並不會因為社會經濟地位的不同而有所差異，然而政治期望、未來政治參與期望、總統選舉投入程度則會因社會經濟地位有所不同。（三）青少年權力意識、對自我未來政治參與期望、未來政治參與期望、立委與總統選舉投入程度等各變項之間多數有顯著正相關存在。（四）在刪除青少年權力意識對立委與總統選舉投入程度、未來台灣政治期望對立委選舉投入程度之預測關係後，青少年權力意識、政

治期望與選舉投入修正模式顯示具有適配性。

研究二之量化研究共有國中、高中、高職生共 607 位青少年學生為研究對象。本研究結果發現：(一)不同背景變項中，影響青少年政治社會化歷程中之不同變項有顯著差異。(二)不同背景變項中，青少年在政治參與上有顯著差異。(三)影響青少年政治社會化歷程中之不同變項與政治參與有相關。(四)影響青少年政治社會化歷程中之不同變項對青少年政治參與具有顯著預測力。研究二之質化研究對象共分團體焦點訪談與個別訪談兩部份，共有四所國高中女性學生 33 人，團體焦點訪談共有兩所高中 14 人，個別訪談共有三所學校學生共 19 人。研究二之質化研究主要發現青少年父母基本上或多或少會關心政治，少數家庭爸媽不太關心政治，也不太會討論政治議題。女性青少年之父母都不希望她們向政治人物看齊，都不鼓勵從政。青少年同儕有些會關心政治，但朋友不曾希望像政治人物看齊、也不鼓勵從政。大多數青少年同學不會在網路上和別人聊到關於政治的事。基本上，女性青少年生活與學習中甚少涉政治議題。本研究根據研究發現，提供各項建議，供有關單位及青少年參考。本研究極具理論與實務應用之價值。

關鍵詞：女性青少年；權力意識；政治興趣；政治偏好；政治活動

Politics excludes female? Or females exclude politics?

Sense of power, political interest, political preference, political activities and related factors of female adolescents.

Abstract

Women are still disadvantaged in the political world of women's political participation in parliament only 16%, far behind men. Is the "political exclusion of women" or "politics of exclusion of women?" Adolescence may be the male and female political ideas and behavior of the differentiation stage. The study was funded by the political socialization process of youth cut, adopting both quantitative and qualitative research method to explore the political development of female adolescents, the influence of political socialization of young women important factors and variables related to the association. In this study, conducted over three years, the first year of study (already closed) male and female adolescents in Taiwan of parents and peers and political values, awareness of young people power, political interest, political preferences and political activities and the related role of the variables impact. The research report is the second year and third year of research. The second year (Study I) to investigate female parent and peer youth political values, sense of power, political interest, political preferences and political activity for the 2008 elections in Taiwan (including legislators and presidential elections) and its level of investment in the future, Taiwan political expectations for self-expectation of future political participation. The third year of study (Study II) first to verify the quantitative research method to understand the political socialization process of young people in the different variables (political attitude of parents and peers, youth power consciousness and political attitudes), and the differences of political participation, Secondly, to explore the political socialization process of young people in the different variables associated with political participation, young people re-analysis of the political socialization process of the different variables predict political participation. The other qualitative research methods and then to explore the female parents of young people's political values with their peers, young people sense of power, political interest, political preference, political activities, and other women in the political socialization of young people about the formation of the internal variables history and influence.

The subjects of a total of 11 junior high school 495 female adolescents, research tools, including a total of "teenage girls into 2008 legislative elections, surveys," and "future political participation of self-expectations scale", "girls 2008 Investigation into the extent of presidential elections, "and" girls on the future expectations of the Taiwan political scale ", " girls power consciousness Scale "five weight table. Data of this study by statistical analysis, the following important findings: (A) level of commitment and the presidential election year will not vary, but the sense of power, political aspirations will be legislative elections because of grades and levels of involvement different. (B) the power of consciousness, level of commitment and legislative elections because of socio-economic status does not vary, but the political expectations, expectations of future political participation, level of commitment the presidential election due to socio-economic status is somewhat different. (C) sense of power, adolescent girls, the future political participation of self-expectations, expectations of future political participation, level of legislative and presidential elections and other input variables have a significant positive correlation between the existence of the majority. (D) power to remove young girls awareness of the extent of legislative and presidential elections into the next legislative elections in Taiwan's political expectations of the predictive relationship between levels of involvement, the girls sense of power, political expectations and the election into a fit of the model showed. Study to focus on three individual interviews and qualitative research methods as the main interview, in subjects with central high school students in four countries.

Quantitative Analysis of a total of two junior high schools, vocational high school students a total of 607 young students as the research object. The study found: (a) different backgrounds, the influence of youth political socialization process of the different variables were significantly different. (B) of the different backgrounds, the young people there are significant differences in political participation. (C) of youth political socialization process of the different variables associated with political participation. (D) the political socialization process of young people of different variables in the political participation of young people have significant predictive power. Second, the qualitative research study consists of focus group interviews and individual interviews with two parts, a total of four junior high school students in 33 focus group interviews with two high schools a total of 14 individual interviews with students in three schools a total of 19 people. Second, the qualitative research study found that young parents are basically more or less interested in politics, a few families parents do not care about politics, but also less likely to discuss political issues, parents do not want to political figures in line has never been encouraged to politics. Some young people will be interested in politics with the peer, but a friend did not want to be like

politicians in line, do not encourage the politicians. Most young students and others on the network will not talk to about political things. Based on the findings of this study to provide, recommendations for the relevant units and the youth are made. The great value of theoretical and practical applications is so high in this study.

Keywords: Female adolescents; Sense of power; Political interest; Political preferences; Political activities

壹、前言

從古至今，從國內到國外，除了極少數案例之外，政治幾乎都被男性所支配。Mayer & Schmidt (2004)就指出，儘管世界各國的政治體系、文化、宗教、家庭價值觀、國家現代化程度差異極大，但是男人支配政治的現象 (Men dominate politics) 並無不同。近幾年來，女性權利意識高漲，女權運動也在世界各國推展，女性在甚多領域有重要與具關鍵性的貢獻，甚至「女性撐起半邊天」(Women hold up half of the sky) (Ai, 2000)，但唯獨在政治領域，雖然女性從政者日漸增多，但女性在政治上依然極端弱勢，甚至依賴「女性保障名額」從政，或「被男性所迫」從政，或「延續家族政治生命」從政，因而在女性在政治上仍處於從屬地位，往往被男性當作「政治花瓶」而已。根據「國際民主與選舉協助研究所」(International Institute for Democracy and Electoral Assistance, 2007)的報告指出，全球女性在議會的政治參與度只有16%，遙遙落後男性。也因此，「為何男性支配政治？」「為何女性從政者少？」「為何女性對政治較不感興趣？」「為何女性對政治冷漠？」「為何政治排斥女性？」或「為何女性排斥政治？」等課題就值得關注。本研究試圖由青少年政治社會化 (political socialization) 的歷程切入，兼採量化與質化研究法，探討女性青少年的政治發展過程，分析女性青少年的權力意識 (sense of power)、政治興趣 (political interest)、政治偏好 (political preference) 與政治活動 (political activities)，及其相關影響變項，如青少年日常活動與政治的關聯，父母與同儕的政治價值觀，藉以回答「為何政治排斥女性？」或「為何女性排斥政治？」的問題。事實上，政治就是眾人事務的管理，在青少年階段如果有良好的政治社會化發展，將有助於青少年，尤其是女性青少年未來在政治事務上的積極參與，並可能領導社會改革，促進社會發展。國內此方面的研究仍付闕如，本研究之結果極具理論與實務應用之價值。

黃德祥(2003)曾指出，「政治社會化」係指個人受父母、老師、同儕、大眾傳播等社會化因子所影響而形成個人政治態度、價值與行為的歷程。然而不同社會或家庭之中，對於政治常有不同的價值觀與定見。成人通常存有特定政治意識型態 (political ideology)，對政黨也會有個人好惡，此種政治偏好進而影響兒童與青少年。青少年男性與女性的政治價值、態度與行為都是經由學習而來，青少年的政治社會化就是青少年男女學習政治價值、態度與行為的歷程 (黃德祥, 1994; 2003)。基本上，青少年男生與女生在中小學階段所受的學校教育內容相同，但為何後來會形成男性支配政治的現象？青少年階段可能就是男生與女生權力意識、政治興趣、政治偏好、政治活動分化的關鍵階段，但其作用因子與影響歷程為何，仍有待探究。

青少年階段是個體成長與社會化的最重要階段，生理成熟的同時，父母、師長與社會的期待也同時改變，青少年必須學習成人社會所需具備的知識、技能與角色行為，才能順利地進入成人社會中。社會化乃是個體學習有效的參與社會所

需具備的知識與技能，並能表現適當行為的歷程（黃德祥, 2003）。一個人初到人間，首先接觸父母與手足，此後，自家庭開始擴展其生活範圍，隨著年歲的增長，接觸的範圍不斷擴大到鄰居、友伴、同學、老師，甚至於社會上廣大的人群，個體一方面接受社會環境的刺激，一方面依照社會所規定的種種行為方式作適當反應。青少年的社會化是個體與環境複雜交互作用的歷程，青少年在此時期受到父母、師長、同儕、社會環境的壓力與約束，逐漸學到以社會期望的方式來表現行為。

青少年的社會化具有五項特徵：(一)青少年的社會化是一種學習的歷程；(二)社會化反映了文化的期望與刻板印象；(三)社會化是個人行為與社會依個人年齡、性別、社會狀況等所期望之行為間的交互作用歷程；(四)不同文化與不同世代間的文化期望有差異存在；(五)社會化是一個複雜的歷程。青少年時期同時也是個體對自我及社會各方面敏銳感應的時期（a sensitive period），青少年會重新思辨自我的價值體系、人我關係，也會重新思考與認定自己的身分地位，對於有關眾人之事的政治事務或活動的相關政治信念體系（political belief system），也會積極去塑造或建構，這是達成青少年期之發展任務（developmental tasks）的重要歷程（黃德祥, 2003; Aries, 2001; Kuhn, 2004; Santrock, 2005）。

個人政治社會化發生的時間甚早，在兒童期階段，政治社會化就已經開始進行，三、四歲初懂事的兒童就已經開始由父母的政治活動，如投票，或在大眾傳播媒體中，認識重要的政治人物，如總統、市長等。在學齡階段，兒童也會對自己的身世背景，有基本的認識，如自己居住的地方、父母是本省人、外省人，是藍是綠，在種族複雜的地方，兒童並開始以膚色辨認人我差異。在學前階段兒童基本上尚不能分辨政黨的差異。依照年齡來看，青少年的政治社會化發展有下列的特徵：(一)青少年之前，兒童仍無法對政治事務有高度的個人化思考能力，政治活動的社會作用仍不被關切。(二)進入青少年期以後，青少年開始具有政府的具體概念，並有較高的個人政治思考。(三)15歲以後的青少年才能思考政治活動的長期目標與效果。(四)青少年階段對權威人物的依賴仍重，期望英雄或權威人物出來解決社會問題，尚無法充分考慮社會的複雜性。另有學者研究日本高中及大學生的政治態度，結果發現：(一)儘管年齡愈大，政治知識愈豐富，但愈年輕的青少年對政治愈會採取保守的立場。(二)大學二年級以上政治知識與政治激進主義者會顯著增多，此後政治立場即維持穩定。(三)政治取向的因素結構，不會受到個人發展階段的影響（黃德祥, 2003; Evans, 2007）。青少年階段既然是政治社會化的關鍵時期，家庭、學校與社會如果能充分瞭解青少年的政治發展過程，鼓勵女生提升權力意識，增進政治興趣，多參與政治活動，將有助於兩性在政治上的平權共治，促進社會進步。此外，由於台灣政治環境特殊，各種政治紛擾不斷，女性所特有的愛、關懷、接納、尊重的母性特質如果能融入政治之中，也許能讓台灣的政治環境撥雲見日。

然而不幸的是，社會上不只給予男性較多權力而且強化男性的權力，更對女

性的權力具有諸多的限制(Groshev, 2002)。權力的追求與政治企圖有關，女性對政治較冷淡可能與其權力意識較低有關。權力意識(sense of power)簡而言之，就是一個人可以控制自己未來的知覺。女性對權力的定義和傳統社會學對權力的定義並不同，甚至與傳統的權力定義相衝突。Groshev(2002)以俄羅斯女性為研究對象發現，女生認為權力是完全的自主能力(complete autonomy)及自我管理(self-management)，女性對權力的想法是個人的影響力而不是控制，大多數女性拒絕控制某人的想法，不喜歡宰制他人(concession)，與男性相較女性偏好個人的影響力的權力，而不是關係的擁有。女性對體重特別敏感，減重時覺得有權力感，增重則有失去權力感覺。女性對於權力的解釋明顯的與男性不同，女性相信權力可以分享，運用權力也是好事，男性則強調強制性與支配性。此外，女性對權力的企求似乎明顯低於男性，使女性要進入男女平等的政治領域仍頗遙遠。一般而言，女性較男生對政治活動較為冷漠，羅基繕(2007)以台灣青少年為研究對象，結果亦顯示出，女性青少年對政治活動的參與較為冷漠，是何原因造成女性青少年排斥政治，是女生欠缺權力意識？是忙於功課業？還是忙於化妝、交友、談戀愛、追逐偶像、八卦消息，而漠視政治？或父母、同儕不鼓勵女生談論政治、關心政治？均值得加以探究。

權力意識是個人政治社會化的結果。一個人主觀的權力意識對行為的影響力往往大於實際支配權力的能力(Smith, Wigboldus, & Dijksterhuis, 2007)，權力意識發生在日常的生活情況之中，個人權力感可能是有意識的覺知，有時是以在無意識的情況下被提醒(Anderson & Galinsky, 2006)。Smith, Wigboldus, & Dijksterhuis(2007)認為，權力和抽象訊息往往伴隨而生，抽象的(abstract)思考比具體的思考(concrete)較少受到壓抑，權力帶領讓人們更多的抽象思考，經以實驗研究法進行權力意識與思考風格的研究，結果發現抽象思考會產生較多的權力意識，抽象思考並使人較偏好富較高權力的角色，產生更多對環境的控制感。如較具權力意識者對冒險行為具有較大容忍和偏好(Anderson & Galinsky, 2006)，同時可以增加目標導向的活動 (Anderson, Keltner, & Gruenfeld, 2003)。Anderson & Galinsky(2006)提出，權力意識會透過樂觀知覺影響個人的冒險行為，不受避免出風頭的自我效能信念(self-efficacy)所影響。但是當高權力感的人感到有責任感時，影響力會被稀釋，但 Anderson & Galinsky 同時指出，缺乏權力意識會產生更多的冒險行為。低度權力感的人會有更多的尋求冒險的行為，因為他們願意做可以幫助他們改變不利地位的事情。低度權力感的人在冒險行為中比較不必害怕失去什麼，相對的，高度權力感的人害怕失去他們所擁有的，所以行為會比較保守。權力意識會影響個人對行為意義的解讀，並且可以進而預測個人未來行為的方向，當權力意識被刺激的時候，相關的行為傾向(behavioral tendency)和概念也會被刺激(Anderson & Galinsky, 2006)。權力意識與政治活動密切相關，基於此，本研究乃以

女性的權力意識當作探討女性排斥政治或政治排斥女性的重要變項。

就青少年而言，政治興趣是指運用各種媒體瞭解政治事務，進而與人討論，產生關心生活世界之行為。報紙、電視是傳統的政治媒體，網路則是新興強勢媒體，一般而言，學生很容易就可以得到政治新聞資訊。對青少年而言，電視和廣播是獲得資訊的主要來源。國內新聞談話性節目、電視政治 call in 節目與其他國家相較，擁有較高的收視率。但女性青少年是否也常收視新聞談話性節目、電視政治 call in 節目或看報紙政治新聞？則尚待實徵性探討。

青少年男女目前依賴網路甚深，當前網路上的政治訊息對青少年政治社會化歷程的影響，在國際學術研究上，未來會是一個廣受關注的領域。Quan-Haase & Wellman(2002)認為網路的線上接觸，增加了面對面與電話接觸的頻率，藉此，線上的活動增加了志願參與及政治參與的機會，網路與個人日常生活若相結合會增加個人社會資本及活動和地理空間上的廣度。Uslaner(2004)指出，網路使用者在社會上並不孤立，和不用網路的人相比，使用網路的人有些許較寬廣的人際互動的社會圈(social circles)，但是對陌生人而言，比較不會具有信任感，他們會在網上和認識的人大量溝通，但對網路上的人會有些許的防衛，他們對網路購物較開放，比較不相信個人的隱私會在網上遭洩露。但他們在網上也比較不會有認同感，在網路上社會關係的連結並沒有被強化，有些聊天室的成員有證據顯示是相互不信任的。Gillmor(2004)認為在部落格(Blog)興起之後，一般普羅大眾，不再只是閱讀資訊，而是可以以自己的方式創造新聞。個人可以透過部落格網誌發佈新聞，可以對特定議題做實況報導，經過網站經營者開放，更可以讓讀者張貼個人意見，進行參與討論，新一代的手機附有照相的功能，被視為新聞一部分的相片，由媒體掌控新聞的時代將過去，影像訊息可以在個人網站上被報導，散佈新聞消息不再只能依賴大量的印刷媒體，財源不足的非營利性組織更可以藉由部落格散播自己的理念。也因此，媒體(含傳統與新興媒體)對青少年政治社會化的影響需要更多實徵性資料作佐證，本研究即具有此種功能。

女性青少年的政治偏好也值得關注，青少年的政治偏好與父母極為相似，包括政黨傾向、政治人物好惡、候選人選擇與投票行為。因為父母是青少年政治社會化最重要的影響因子(黃德祥, 2003)。青少年在學校生活中，產生的人際關係與社會網絡也會影響其政治偏好與興趣，如說服別人贊成自己偏好之政治決定。影響青少年做決定最重要因素是「互為好友」的談話內容，青少年透過朋友、國中小同學、鄰居產生人際關係，建立社會網絡。人際關係與社會脈絡的聯結往往會影響公民的政治參與。青少年所面對的政治事務較成人世界單純，同儕之間的交談往往會影響個人對政治事件的看法，與社會脈絡相連結，直接或間接影響青少

年的政治參與。

在政治活動方面，Hahn(1999)指出，青少年如果有過政治性質競爭的經驗，會具有較高的政治興趣，學校課程如果包涵政治教育，學生對公共事務會比較有興趣。學生或多或少對政治事務會有「涉入感」(sense of involvement)。具有政治參與、關切政治事務的心理傾向，對政治事務興趣較高者透過政治事務處理的過程，說服同儕，影響同儕的政治決定。在學校，影響對行政單位、老師順從或抗拒的政治態度。班級教室也是具體而微的政治環境，於班級幹部的選舉中，決定的因素不是學業成就，而是同儕之間的人際關係。在成人社會中，政治參與就是進入決策體系中，參與作決定的歷程。在民主社會中透過選舉參與政治是主要進入決策體系的途徑。然而在政治歷史上，女性一向受到忽視，政治大都是無性別的，男性的政治價值理念與經驗就是政治的全部。到了1970年代，伴隨著西方女權主義運動的發展，對男性支配的政治有了批判與反省，女性的政治意識才稍見抬頭。然而有證據顯示，女性對政治的排斥現象仍相當明顯，其因果關係何在？相關的學術研究與實務改進都有待加強。

貳、研究目的

綜上所述，青少年的權力意識、政治興趣、政治偏好與政治活動等都與青少年的政治社會化有密切關聯，倘青少年有較佳的政治信念體系，也有較正向的政治參與意圖，將會對個體與未來社會發展有積極的影響。更何況青少年就是明日國家社會的主人翁，在教育學術研究上，有必要對青少年的政治社會化歷程及相關政治課題，加以探究。

本研究基於對女性青少年政治社會化歷程的關切，主要目的在於探討台灣男性與女性青少年在權力意識、政治興趣、政治偏好與政治活動上的差異，分析女性青少年權力意識、政治興趣、政治偏好與政治活動的因果關係，調查女性青少年權力意識、政治興趣、政治偏好與政治活動與對於2008年台灣選舉與政治環境的意見與自我期許，最後再以質性研究法分析女性青少年權力意識、政治興趣、政治偏好與政治活動的內在形成歷程與影響變項。

具體而言，本研究將分三年進行，第一年之研究（已經結案）目的在於探討台灣男性與女性青少年在權力意識、政治興趣、政治偏好與政治參與的差異，考驗女性青少年權力意識、政治興趣、政治偏好與政治活動的因果關係模型；第二年研究（本次報告稱研究一）目的在於調查女性青少年權力意識、政治興趣、政治偏好與政治活動對於2008年台灣選舉（含立法委員與總統選舉）的參與程度與對未來政治的期望及對自我政治參與的期許；第三年之研究目的（本次報告稱研究一）除再以量化方法驗證青少年之政治社會化歷程外，再以質性研究法，探索女性青少年權力意識、政治興趣、政治偏好與政治活動的內在形成歷程與影響變

項。最後根據研究結果，綜論「政治排斥女性」或「女性排斥政治」，並對影響女性青少年政治社會化歷程的相關人員與機構提供各種建議。

參、文獻探討

由於女生排斥政治或政治排斥女生的問題涉及女性青少年的權力意識、政治興趣、政治偏好與政治活動等的政治社會化歷程，相關作用因子或變項間的關係，猶待釐清。本計劃主持人曾指出（黃德祥, 2003; Huang, 2003），相對於學者對青少年身心發展之探究的蓬勃發展，青少年政治社會化之歷程的研究仍不多見，甚至貧乏。以下分述與女性青少年政治發展的重要議題並分析相關文獻。

一、性別、權力意識與政治

權力是影響個體或他人的能力，具有強制性特質，權力也是要求別人去做某些事的能力，此種要求又通常不被行為者所認可，或違反他們的意志。權力又包含有抗拒、衝突、力量、支配與控制等要素。權力就社會學領域而言，被認為是結構的變項，是社會關係的資產。在心理學上來說，權力的心理屬性存在於過去與權力相關的經驗中，或是發生在暗示權力的相關場域(Adam, Joe, Inesi, & Gruenfeld, 2006)。權力存在於於社會結構與關係之間，藉由權力意識將社會結構、社會關係與個人心理進行連結(Anderson & Galinsky, 2006)，不只包含了使用者，還包括了對象的接受與否。正當的權力被定義為權威(authority)，不正當的權力被認為是壓迫(coercion)或是支配與宰制(domination)。任何政治體制通常都包含了權威與壓迫兩個面向，但正當的權力是基於權力行使對象的許可，不應該有壓迫性權力作為支撐，愈是依賴壓迫和暴力的政體，愈不穩定，長期而言將面對正當性的危機和反抗。正當性(legitimacy)是權力概念的重要問題，所謂正當性指的是權力的行使是否被視為合理和有效(王振寰, 1999)。女性權力意識是近來社會心理學新興的議題，青少年的權力意識也是目前較受關注的青少年政治社會化的課題之一，對於政治興趣與政治參與具有因果關係(羅基繕, 2007; Mayer & Schmidt, 2004)。

社會認同理論指出，人從團體中獲得對自我認同，但是在尋找認同的過程中，時常藉由認同自己團體較他人團體為優，完成對自我的認同，於是偏見常出現在協商(negotiation)過程中(Nauta, Vries, & Wijngaard, 2001)。Sweetland(2001)指出，組織結構會影響成員的互動，授予權力的學校結構可以促進教師的真誠性(authenticity)及權力意識。Adam, Joe, Inesi, & Gruenfeld(2006)以實驗研究法進行權力與同理心的相關研究，指出權力容易讓人太過於以對自己有用的觀點來思考，忘記站在他人的立場思考問題。且權力對於同理心的感受有所阻礙，有權力的人較不會去瞭解其他人所見、所聞和感受。女性青少年是否因權力意識與男性具有差異，而導致政治冷漠，亦或是協商的過程中以男性霸權為中心之想法，對女性

青少年行為有所限制，甚至形成偏見，也值得關切。

參與冒險行為可以幫助個人維持或增加權力的方式。有權力的人參與冒險行為，通常可以更增加他們的權力慾。藉由冒險行為，有權利的人可以比拒絕冒險的人獲取更多利益。因為藉由冒險，有權力的人暗示他們的權力可以負擔如此的風險(Anderson & Galinsky, 2006)。Anderson, Keltner, & Gruenfeld(2003)認為權力知覺會影響人的行為。由圖 1 可知，獎賞和自由提高權力感，相反的威脅、處罰和社會約束(social constraint)降低權力感。下列因素可以增加權力：(一) 正面影響或正增強(positive affect) (二) 對獎賞的注意(attention to rewards) (三) 自動訊息處理 (automatic information processing) (四) 沒有抑制的行為(disinhibited behavior)；相反的，下列因素會降低權力：(一) 負面影響或負增強 (negative affect) (二) 對威脅、處罰、他人興趣及自己的特點和他有目標相關的部分(those features of the self that are relevant to others' goals) (三) 控制資訊的處理(controlled information processing) (四) 抑制的社會行為(inhibited social behavior)。

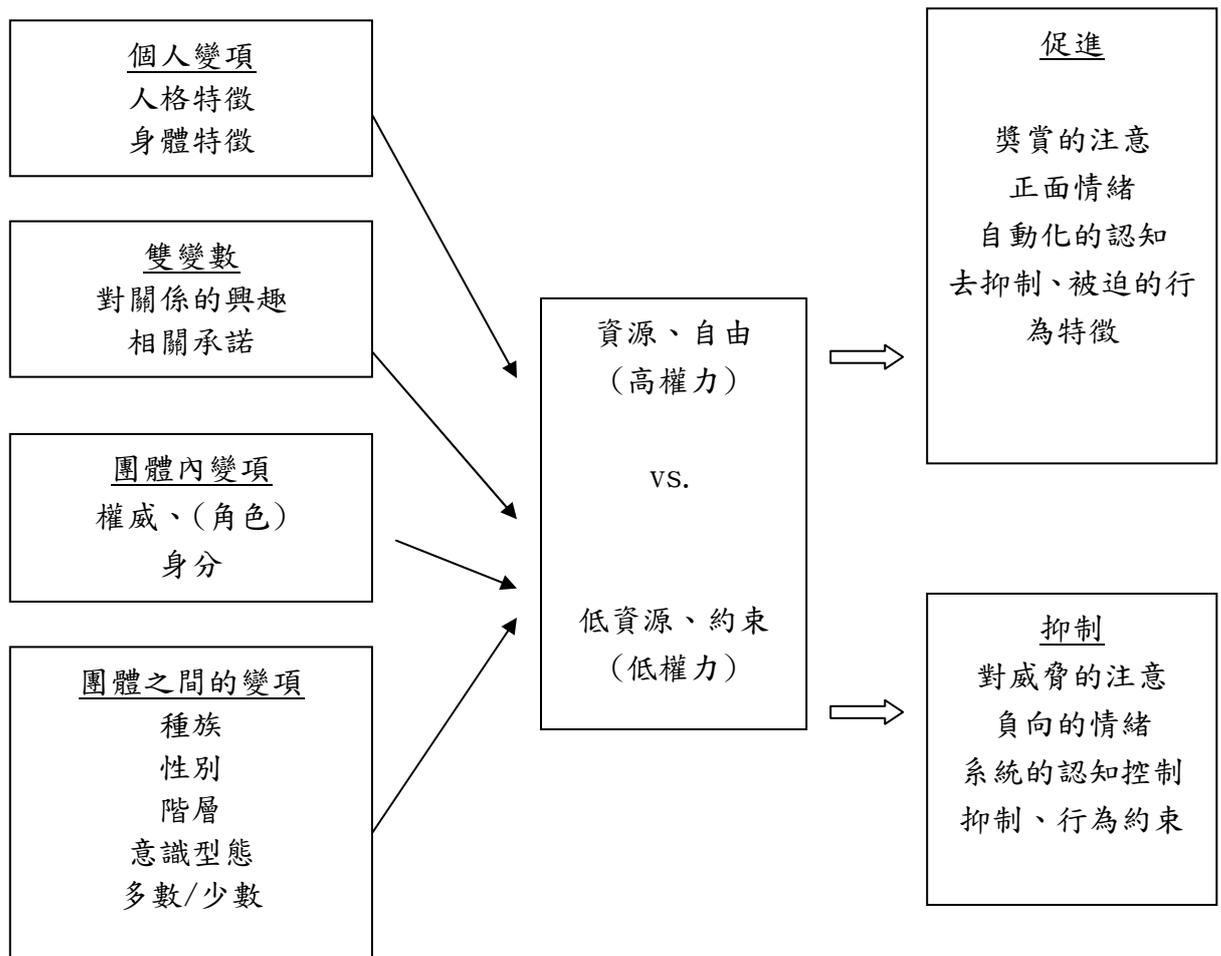


圖 1 權力決定的要素與結果圖

資料來源：Anderson, Keltner, & Gruenfeld(2003), p. 267.

個人經常為所隸屬的組織團體辯護和維持系統，但是超過某種特定的範圍，個人不再接受如此的系統的規定，產生反權威的活動。Martorana, Galinsky, & Rao(2005)提出如圖 2 的反權威行為模式，依圖 2 可知，權力意識、與權力相關的情緒、覺察系統的合法性與穩固三者交互作用之下，將影響反權威活動的產生。

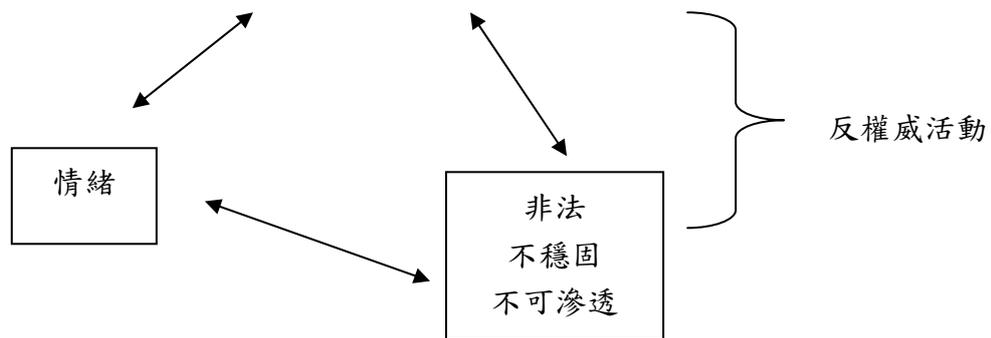


圖 2 反權威活動模式

資料來來源：Martorana, Galinsky, & Rao (2005), p. 304.

性別對權力意識的知覺存在差異的情況，會影響權力的行使。男性和女性對社會階層上的權力有不同的解讀，對權力有不同的價值傾向(Anderson & Galinsky, 2006)。Carli(1999)指出，一般而言，男性具有較高的專家和法定權力意識，而女性則在參照權力(referent power)上具較高的權力意識。女性比男性較難獲得專家權力，特別是男性權力的傳遞能力和權威的影響力較優於女性。但是女性擁有權力後被權力的影響與男性是相似的(Anderson & Galinsky, 2006)。綜上所述，權力意識與個人行為或政治活動有關，值得在女性青少年政治社會化的歷程中加以探討。

二、 青少年的政治興趣、政治偏好與性別差異

對成人而言，政治興趣係指選民在選舉期間對電視、報紙雜誌、廣播等大眾新聞媒體的接觸，以及選舉相關訊息的接收(徐火炎, 2001)。青少年的政治興趣是指運用各種媒體瞭解政治事務，進而與人討論，產生關心生活與政治世界之行為。政治興趣的內容包括媒體涉入、政治討論與政治關心三個向度，以下分別加以討論。

媒體決定公共論述的內容、問題及標準，使人產生政治感。經由媒體，人民可以決定什麼是重要的，以及如何做選擇(Pettersson, 2003)。青少年主要接觸新聞的媒體是：電視與廣播、報紙及網路。

(1)電視與廣播：在大多數國家，學生相信媒體所說的，學生可以獲取的新聞節目在不同的國家不盡相同，盛治仁(2005)以電視談話性節目之內容分析、製作人訪談與閱聽眾電話問卷調查等研究法，分析 2002 年北高市長選舉前後此類節目之議題與來賓資料。結果發現，立委與記者是談話性節目的主力，個別來賓的重複出現比例偏高；且節目中偏好討論選舉與政黨議題，忽略政府效能與內政等政策

議題。指出電視談話性節目最嚴重的問題，是「將政治視為跑馬賽」的做法，過度重視選情與選舉勝負，未能提供一個可以理性思辯公共政策的空間。顏秀美(2003)以臺北市高中學生為對象，進行青少年政治興趣的調查，發現臺北市高中生新聞媒體閱聽行為並不積極。Sei-Hill(2005)曾指出，接觸不同媒體會影響個人的政治參與。網路等新媒體可以促進政治參與的動機，但接觸電視娛樂節目對政治參與動機有不利的影響。由上所述可知，電視媒體對引起政治興趣有正向效果，但是對於公民參與行為的產生，似乎無正向影響。

(2)報紙：閱讀習慣可說是青少年政治社會化的一部分，針對媒體的研究指出，印刷媒體比電子媒體對學習公民與政治知識來的要有影響力(Mcleod, 2000)，時常閱讀報紙新聞的學生具有較高的民主政治價值。Chaffee(1997)以五、六年級阿根廷學生為對象研究，利用報紙進行教學，研究學生的政治社會化。經過比較利用報紙進行教學與未利用報紙進行教學，結果發現利用報紙進行教學的學生班級明顯的在政治知識、民主信念和溝通行為有顯著的差別。在家裏有閱讀報紙新聞與沒有閱讀報紙新聞的學生在政治容忍、支持民主與政治言論和家裏成員進行政治有顯著的差異。鄭慧蘭(2001)以臺北市公立高中一、二、三年級學生為研究對象，發現閱報時間達一小時以上者，較不看報紙者，有較積極的公民參與行為。另一方面，有學者發現男生討論國際新聞也比女生來的高。學生如果是以報紙為資訊來源者，閱讀國內新聞的興趣也高於國際新聞(Mayer & Schmidt, 2004)，討論國內新聞比國際新聞較多(Stephane et al., 2001)。由上所述，藉由閱讀報紙新聞獲取訊息者較由電視涉入媒體者，較能產生積極的公民行為。但國內近年來報紙普遍娛樂化與八卦化，是否會因而轉移青少年對政治消息的攝取，頗值得探究。

(3)網路：網路是新興媒體，網路時代的興起，每個人都可以擁有數位媒體向全世界發聲，相較於過去發表意見必需透過報章投稿或是在大街張貼佈告，網路的時代利用電腦即可散佈言論。近來網際民主(cyber democracy)的理論指出，網路提供了公民參與的管道，促進公民參與行動的增加，特別是對處於主流文化之外的邊緣性的團體，可藉由網際網路進行公民參與。如青少年團體相對於成人團體而言，即為邊緣性團體，因此青少年在網路上的揮灑空間大增，但是否因此影響其政治社會化的歷程，尚待探討。

Muhlberger(2002)指出，研究網路上的政治討論有正規化(normalization)、強化(reinforcement)、動員(mobilization)、文化改變(cultural change)、極化(polarization)等特色。Norris (2001)亦提出了以網際網路為工具，分為動員論點(mobilization thesis)與參與論點(participation thesis)構成的新興網路政治媒體涉入模式(如表 1)。

表 1 網路媒體的涉入模式

參與論點(participation thesis)		
	傳統團體 (Traditional Groups)	新團體 (New Groups)
動員論點 (mobilization thesis)	傳統價值	強化 (Reinforcement)
	新價值	文化改變 (cultural change)
		動員 (mobization)
		轉換 (transformation)

資料來源：出自 Norris(2001), p. 196.

(1)動員(mobilization)

網路正在改變文化價值，數位政治將會影響公共事務，透過新團體的動員，或是強化傳統參與的管道，動員論假設網路可能通知、組織和促進現在政治系統裏的邊緣份子，如年輕的世代、被孤立社區人民或是少數對政治系統不滿的邊緣人。網路將使政治機會變得讓使用者相互鼓勵。不用經由正式管道的政治參與如選舉、團體成員、政黨支援或是透過相關的直接參與社會組織和抗議活動這些團體成為公共生活和公民社群的一部分。資訊和溝通成本的降低，可以去除一些政治參與的礙障。如關於地區議會的網絡、參與政黨、選舉時的政見發表會、與政治部門聯繫等。

(2)強化(reinforcement)

網路強化了公民和政治系統的仲介組織。包括政黨、社區運動和利益團體、新聞媒體、公家部門、地方、中央和全球的政府組織。相反的網路可以強化既有的活動者，也可以與傳統管道相聯結。以 1996 年 1998 年美國選舉資料，研究指出網路使用者，呈現出的政治興趣是強化而非動員人們使用網路上的政治資源，大部分使涉入網路上政治資訊者，大多是已經有高度的動機或是對選舉有興趣的人。

(3)文化改變(cultural change)

透過網路的政治討論使成員價值幾無差異，加上網路工具的特性可以動員對政治既有的興趣，於是產生新型態的政治參與態度。成員在網路上被灌輸新型態的文化，進而改變政治態度。

(4)轉換(transformation)

網路上的政治討論易使成員政治態度兩極化，但可降低政治不平等。涉入網

路媒體會改變政治態度，進而可能影響政治價值，最後影響政治判斷。在網路線上和線下的政治討論和活動是明顯不同的。但是的討論次數與差異則不明顯。

由上所述可知，網路新興媒體的產生不論是發佈訊息或是獲得訊息變得簡單，媒體掌控新聞的時代將過去，積極而論，網路可以增加政治參與管道，促進公民參與；消極來說，網路並無法提高個人政治興趣，反而因網路特性，極端政治言論容易傳播，倘若青少年未具媒體識讀能力，涉入網路媒體將有負面影響。

政治討論指的是學生和朋友、鄰居、老師及父母討論政治題議之行為，一般人是和自己的伴侶或是其他的家庭成員討論政治事務，在家庭之外，最主要的討論對象是朋友，接著是工作上的同事，鄰居或是志願性團體的成員比較不會是政治討論的對象(陳東升、陳端容, 2002)。人際之間政治討論的行為是研究投票行為的重要變數。透過人際傳播可以強化媒介使用與選舉參與之間的關係。選民在選舉期間深受身邊親友、同事、鄰居、以及大眾媒體等傳播管道的影響。透過這些管道大量運用，競選宣傳的範圍擴展，各種選舉訊息流傳開來，將產生影響(王嵩音, 2005)。

青少年的政治討論會影響未來的公民責任感。青少年父母親的政治討論和公民參與有關(Torney-Purta & Richardson, 2002)。Smith & Zipp(1983)以分析住在政黨辦公室附近的居民(nigh-dweller)為對象，發現彼此關係愈親密，有愈多的政治討論。住在政黨辦公室附近的居民(nigh-dweller)較認同該政黨，並且有較高的投票率，比較有參與競選活動的管道。相反的，好朋友的政黨認同不會相互影響。當鄰裏人際網絡的政黨屬性相當清楚，人民如果可以明顯感受到與團體政治取向態度一致可以得到獎賞，人際網絡對政治行為的影響會非常明顯(陳東升、陳端容, 2002)。

但 Mutz & Martin(2001)指出，個人是經由新聞媒體產生更多差異的觀點，而不是藉由人與人的政治討論。張佑宗、趙珮如(2006)指出，選舉資訊除了以媒體傳遞，也受到其他社會機制所影響，如街頭巷尾的政治談論、廣告文宣等。選舉資訊的流動不僅可以在單獨的個人身上看見，也可以在人們彼此相互連結的團體中觀察。因此政治行為必須在網絡、團體或其他社會建構等「相互連結的個人」中觀察，這些社會建構將決定政治資訊交換的機會。

民主社會發展與政治討論之間具有相關，如果一個行動者可以跨越自己所屬團體的界時，進行政治討論，對於所屬社會團體的教條式政治主張的支持度就不可能太高，因為跨越行動者團體界限的社會互動有助於增加階級或是族群團體間的社會溝通。所以政治討論的對象的背景異質性越高，經過社會互動後，對於階級或族群政治既存的態度將有改變的可能。因此，當行動者的討論網絡中具有不

同階級或是不同族群成員時，特定階級或是族群的政治主張即較不易受到支持與強化(陳東升、陳端容，2002)。

(1)與父母的政治討論：在家庭中的政治討論有助於接受公民責任，成年後較能對政治事務感興趣，可預測成年後的政治參與行為，學校公民課程促使青少年接觸新聞媒體與在家中和父母討論選舉的活動。這些活動使得父母更加注意新聞，並且去獲得政治知識(Michael & Steven, 2000)。

(2)學校的政治討論：學校的政治討論可分為課堂上有關政治知識的討論與課堂外非正式的討論。前者可增強學生的公民知識，後者會影響青少年對政治事務的看法。Mayer & Schmidt(2004)指出美國國中學生會和老師、父母討論政治題議，但是討論國內新聞比國際新聞頻率來的較高。Mutz & Mondak(2006)認為公民之間不同意見的政治對話(political discourse)，對國家政策的制定具有貢獻。在對話的場所中，以工作場所的脈絡，最有貢獻。在工作的地方，有許多人一起談論政治，與在家中、和鄰居或是志願性組織裏的政治討論相較，工作的地方會有較多不同意見的產生。透過政治討論，不同政治觀點的人，彼此可以相互增長政治視野，更進一步增進政治容忍。

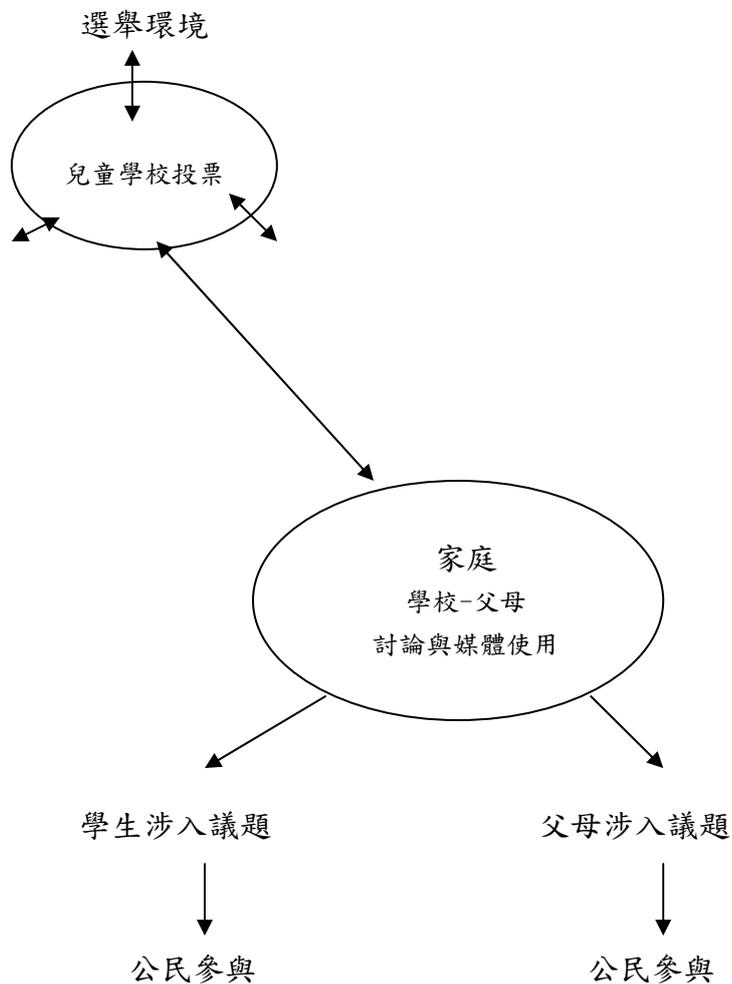


圖 3 兒童投票課程的影響

資料來源：McDevitt & Kiouisis (2006), p. 49.

McDevitt & Kiouisis(2006)指出，學校課程可以促進學生的公民能力發展。由圖 3 可知學校透過創新的選舉課程設計，藉由課程的刺激可以增加學校對新聞媒體的注意及家庭的討論，可以促進兒童及父母的公民參與。Simon & Merrill(1998)進行孩童選舉課程(Kids Voting)的實驗研究，比較有參加孩童選舉課程與沒有參加孩童選舉課程對於政治世界的知覺是否有改變？結果發現雖然，大多數學生覺得選舉課程(Kids Voting)是有趣的，而且是有用的。但經過比較參加選舉程與沒有參加選舉課程學生後發現，參加孩童選舉課程的學生政治世界的覺察只有微小的改變，不過孩童選舉課程可以增加學生使用新聞媒體和父母朋友增加討論政治討論。

(3)政治關心：政治關心指的是平時對政治事務主觀心理涉入的程度。Sotirovic

& Jack(2001)研究溝通模式與政治參與價值。指出政治知識的獲得方式，影響溝通模式。習慣由閱讀報紙獲知公共事務的人們，傾向後物質(postmaterial)價值，進而影響政治參與。唯物主義者(materialist)主要在看電視娛樂節目，政治價值沒有受影響。後物質主義者，認為人與人之間的相互討論，反映出新聞和整合各項較易瞭解政治世界的訊息，比政治知識提供更好的政治參與機會。選民如較常接觸選舉的訊息，也較常與人討論，關心政治議題，相對的也具有較高的政治興趣(徐火炎, 2005)。

綜合上述可知，青少年若藉由電視媒體觀看新聞，收視電視 call in 節目，對民主政治價值的提昇較無幫助，如藉由閱讀報紙新聞則較易產生理性之政治思維，至於新興之網路媒體可促進青少年之政治興趣，唯大部分點閱網路政治資訊者，大多是已經有高度的動機或是對選舉有興趣的人，是否可促進公民參與，則有待研究調查。

三、青少年的政治活動與性別差異

青少年課外政治活動的參與有助於成年公民參與。Lauglo & Øia(2006)將政治活動(political activity)分為代表的參與(representational participation)、政治行動主義(political activism)、不合法的抗議(unlawful protest)三種類型。

代表的參與指的是參加具有政治性組織的活動，取得可以進入政府部門的管道，就青年而言最常參與的是學校政黨的分部和學校的學生議會。Judith 等人(2001)指出，青少年同意好的公民包括有義務去投票，並且遵守法律。但是在實際的公民參與上，卻較認同社會運動活動，如環保運動、對社區有利的志願團體。而不喜歡傳統的政治活動，如參加政黨、討論政治議題(Torney-Purta & Richardson, 2002)。青少年認同傳統的政治價值，認為好的公民應該要守法並且參加投票。除了投票之外，學生懷疑傳統的政治參與活動，但是對其他參與公民生活的型態度則保持開放的態度。學生偏好屬於能夠與同儕一起做事和能看到他們能力結果的組織，這種組織對政治、態度知識有影響力，幫助學生未來的政治參與(Judith et al., 2001)。

政治行動主義指的是在利益團體之外，直接表達的意見。如連署簽名、政治集會、抵制某些產品。政治行動主義的理論指出，不同國家隨時間的改變選舉、政黨和公民參與的管道有系統性的減弱的現象(Norris, 2002)。個人能力必須在社會能夠支援個人發展潛能的條件下才能成功的被增強。能夠尊重每個人的權利，人民可以用社會行動去支持、抗議、和擴展社會制度的可能性，擁有公民自由與正義的社會才能使個人發揮最好的能力。

Lerner(2004)認為公民參與最重要的是發聲行動(call-to-action)。公民社會之中每個人都必須和團體一起工作，個人藉由公民參與、道德認同、自我的存在(transcendence of self)意識以及國家認同來維持與社會之間的關係。公民權利是社會成員藉由公民參與去維持自己的權利，出聲界定政治事務(Steinberg & Lerner, 2004)。個人必需對團體有所貢獻，團體中的個人則用抗議行為用來取得團體應該給予的支持(Lerner, 2004)。Beck & Jennings(1982)指出，成人的政治參與是被成年早期的公民定向所影響。運用1965-1973年國家社會化研究小組：美國年輕人和父母的資料，進行公民定向與政治參與研究。以社經地位、政治活動和公民定向與父母親人格特質為自變項，公民定向為中間變項，成年政治參與為依變項，證實公民定向對成年政治參與的是有間接影響的。其中以父母親的社經地位及高中時期的行動主義(activism)最為重要。

不合法的抗議指的是遊走在法令的邊緣，甚至是明顯的違法。如在牆上寫抗議的標語，參加非法的活動，抗議的形式是毀損公物和私人財物。自由主義者認為在民主社會中，冷漠無情的公民讓沙文主義傾向的領導人有機會去做決策，需要強壯的公民社會提供反抗高壓政府的力量，並且相信民主社會的公民可以讓暴力衝突減到最小及促進社會間建立信任感(Ftikhar, 2003)。現代化理論由長時間發展的觀點解釋政治參與，認為後工業化時期的西方的民主政治思潮，相信政治決策過程中，透過增加對公民參與活動的需求，導入直接參與行動、新的社會運動、抗議團體的參與藉此可以改變人民只習慣於順從權威和支持如教會、政黨等傳統的利益團體(Norris, 2002)。就青少年而言，抗議活動通常是透過與父母親政治討論而產生，學校雖然教導社會問題，但不會帶領學生參與抗議活動。

Glanville (1999)以高中學生資料進行羅吉斯迴歸模型(Logistic regression models)分析投票、替政治活動工作、捐錢給政治活動、參加政治活動集會、學生議會等項目等課外的課外政治活動。結果發現課外政治活動，可以預測成年初期的政治涉入感(political involvement)、自我效能網(net of self-efficacy)、社交能力(sociability)、政治興趣(political interest)、政治覺察(political awareness)和對社會領導者的態度。

不同性別參與政治活動是有差異的，性別的差異由青少年到成人逐漸明顯(Hooghe & Stolle, 2004)。女生較少抗議行為，即使是心中想有所做為，也會忍耐接受現狀男生則認為應該參加政治活動，而且男生比女生喜歡不合法的抗議活動(Judith et al., 2001)。就參與政治活動類型而言，女生偏好社會運動的政治活動而男生則偏愛激進的(radical)與對抗性質(confrontational)的政治活動；就參與的行為來說，女生比男生會捐錢、募款及參與連署活動，但男生比女生想要參與政黨，還

有對激進的政治活動，甚至暴力的參與有興趣；發展階段來說，青少年時，男女生都對政治活動的參與沒有差異。但成年時，差異是明顯的，原因在於性別資源的差異。以成人來說，女生擁有較少的公民技巧，如在公開場合發言，寫文章、散發傳單或參與會議。女生在職場也較少有專業的位置，家庭生活角色的期望，讓女性傾向減少參與公民活動，照顧兒童的責任也讓婦女減少政治參與，女性參與政治活動的途徑也有所限制，組織裏通常較少開放女性參與(Hooghe & Stolle, 2004)。

Talbani & Hasanali(2000)進行加拿大南亞移民女性青少年的社會和文化經驗研究，以質的研究方法，訪問 22 個住蒙特婁，來自於印度、巴基斯坦和孟加拉的女性青少年。獲致以下結論：南亞的家庭就如同其他移民社會一樣，忍受著文化適應的壓力，雖然南亞移民傾向將歐洲世俗文化和他們的原生文化融合在一起，但家庭和社會結構仍然還是男性支配權力。性別角色藉著性別分離(gender segregation)，控制女生的社會活動和安排婚姻。父母和社會比其他加拿大的社會對女性的社會化有更多迫切的規則。女性青少年在此狀況下察覺改變需要付出高的社會成本，然而心中充滿抗議和異議之意，他們雖然接受現在的狀況，但期待社會逐漸的改變。劉玉婷 (2004)研究指出，性別是預測大學生政治定向和行為的因素，在政治參與方面，控制環境因素和人格特質後，女大學生比男大學生更積極於參與政治活動，顯然女大學生在大學時期的政治社會化經驗並不是造成她們日後政治參與低落的原因，甚至這些成年期的政治社會化歷程促使她們有較活躍的政治參與。

Wolbercht & Campbell(2005)發現愈多女性議員的國家，青少年女性展現較高參與政治活動意圖。Hooghe & Stolle (2004)以 14 歲青少年為研究對象，發現女生比男生對公民參與有興趣，但十年後，反後比較沒有興趣，原因在於性別角色的刻板印象。就性別而言，對公民參與主要的影響來自性別角色的期待，當女生離開校園生活後，進入婚姻生活或社會職場，傳統文化價值觀，並不支持女性進行公民參與。

政治興趣對參與政治活動有重要的影響力。Sei-Hill(2005)指出，接觸不同媒體會影響個人的政治參與。研究指出網路等新媒體對可以促進政治參與的動機。張卿卿(2002)以調查法探討大學生的政治媒介認知(media perception)、政治媒介行為(media behaviors)與政治結果(political outcomes)之間的關係。研究結果顯示：大學生的政治媒介效益認知會影響到他們的政治媒介使用，並進而影響到大學生的政治參與及政治功效意識。同時，大學生的政治媒介功效意識會影響到他們的政治媒介參與行為，同時影響到大學生的政治參與及政治功效意識。換句話說，大學生

的政治興趣會影響其政治參與行為。

Norris(2002)將政治興趣與政治行動主義的關係，說明如圖 4。在國家現代化的過程中，經濟發展與民主化的程度習習相關，國家透過選舉法、政黨系統、憲法等制度，結構的決定了參與的機會。藉由設定規則改變參與的狀況，如公民權的擴大，競選活動的改革，許多國家人民藉由政治參與的管道，變得比較自由。

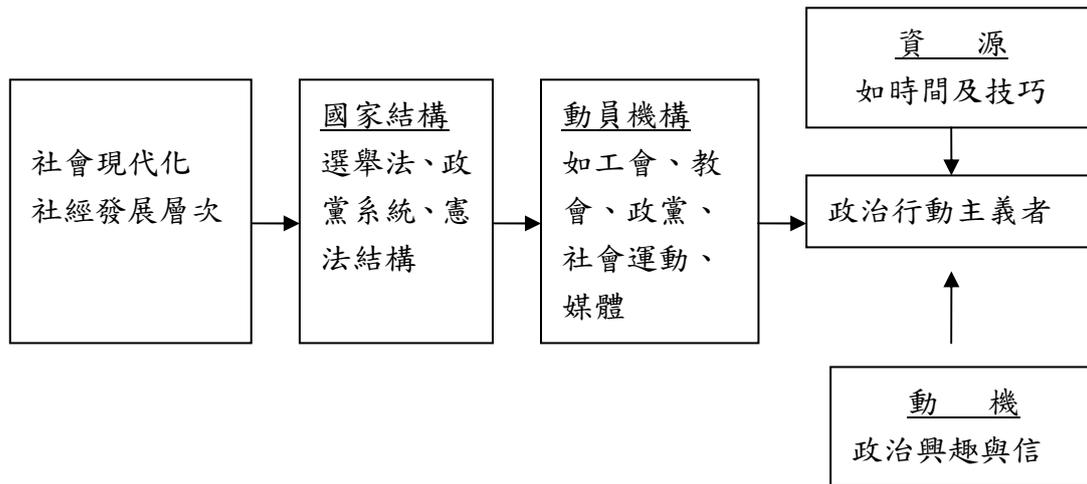


圖 4 政治興趣與政治行動主義關係圖

資料來源：Norris(2002), p. 20.

在此背景下，具社會資本的人，如時間、公民技巧和具備心理動機，如政治興趣者，會成為政治行動主義者。

就國小兒童而言，個人接觸大眾傳播媒體頻率較高者，政治參與傾向上有較為積極的表現(曹俊漢, 2004)，兒童接觸大眾傳播媒體頻率較高者在政治參與傾向上有較為積極的表現(侯淑媽, 2004)。就青少年而言，顏秀美(2003)研究指出，高中生收看電平均每天收看電視的時間在 3 小時以上者在公民參與上較其他學生消極。以成人來說，收視政治談話性節目的閱聽人，在政治參與上向政治人物直接反映意見的比例較高較常參與其他的政治活動，也會對政治人物的議題立場認知產生較大程度的扭曲(盛治仁, 2005)。透過與他人討論自媒介獲取之政治資訊，才能對於政治有更深入的了解，也才能積極參與政治行為，政治興趣是影響投票行為，最具影響力的因素，政治興趣愈高，愈會參與投票(王嵩音, 2005)。Stuhlmacher & Walters(1999)指出，男性協商的產出較女性為佳，協商者的權力可能是影響的因素。Guinote, Judd, & Brauer(2002)提出，團體變異的察覺受社會權力和身分為影響。亦即團體權力影響影響團體實際變異，高權力團體較低權力團體

具有較多的人際變異(interpersonal variability)。Nauta, Vries, & Wijngaard(2001)指出，協商行為(negotiation behavior)包括問題解決(problem solving)、競爭(contending)、棄權(yielding)、拒絕(avoiding)四項行為。

四、青少年政治發展及與政治有關之其他重要變項分析

青少年政治價值觀也是相當受到關注的課題，青少年政治價值觀主要受「政府權力」和對「經濟議題」的看法所影響。Stephane, Marianne, Dan, Elizabeth, & Carole(2001)比較研究美國等 28 個國家 14 歲青少年的政治價值觀，發現國中學生對政府權力的看法與經濟議題有高度相關。Henn, Weinstein, & Forrest (2005)發現，青少年對日常生活中的政治事務討厭，對政治冷感且疏離。雖然青少年支持民主程序，但懷疑政治系統是被政客和政黨所控制。Stephane 等人(2001)指出，國中學生認為參加每場選舉的投票及尊重政府的領導者是一個良好公民最重要的兩項特質。政治容忍是預測個人政治價值的良好指標。性別平等是預測政治容忍與個人自由的有效效標(Inglehart & Norris, 2003; Amn & Munck, 2003)。性自由(sexual liberalization)是衡量一個社會是否重視傳統價統的重要指標，如同性戀、墮胎、離婚等。同時性別平等和性自由也和政治容忍與平等主義有高度的相關(Inglehart & Norris, 2003)。對青少年而言，對同性戀的看法可用來預測政治容忍價值(Sotelo, 2000)，政治容忍與年紀、道德認知發展、同情心和自尊有關(Avery, 2001)。

具有政治容忍的學生可以把抽象的民主信念和具體的實際情況二者做連結，可以採取多元觀點，選擇問題的解決方式；不具政治容忍價值的學生難以將民主信念實踐或是超越自己的觀點看事情。他們傾向以專制的方法定義問題，清楚的回答對或錯(Avery, 2001)。對成人而言，政治興趣係指選民在選舉期間對電視、報紙雜誌、廣播等大眾新聞媒體的接觸，以及選舉相關訊息的接收(徐火炎, 2005)。就青少年而言，政治興趣是指運用各種媒體了解政治事務，進而與人討論，產生關心生活世界之行為。青少年政治興趣的內容包括媒體涉入、政治討論與政治關心三個向度。

青少年主要接觸新聞的媒體是：電視與廣播、報紙及網路。Sei-Hill(2005)指出，接觸不同媒體會影響個人的政治參與。網路等新媒體對可以促進政治參與的動機，但接觸電視娛樂節目對政治參與動機有不利的影響。時常閱讀報紙新聞的學生具有較高的民主政治價值(鄭慧蘭, 2001; Chaffee, 1997; Mcleod, 2000)。網路新興媒體的產生不論是發佈訊息或是獲得訊息變得簡單，媒體掌控新聞的時代將過去，積極而論，網路可以增加政治參與管道，促進公民參與；消極來說，網路並無法提高個人政治興趣，反而因網路特性，極端政治言論容易傳播，倘若青少年未具媒體識讀能力，涉入網路媒體將有負面影響。青少年的政治討論會影響未來的公民責任感。青少年父母親的政治討論和公民參與有關(Torney-Purta

& Richardson, 2002)。但 Mutz & Martin(2001)指出，個人是經由新聞媒體產生更多差異的觀點，而不是藉由人與人的政治討論。Mutz & Mondak(2006)認為公民之間不同意見的政治對話，對國家政策的制定具有貢獻。在對話的場所中，以工作場所的脈絡，最有貢獻。在工作的地方，有許多人一起談論政治，與在家中、和鄰居或是志願性組織裏的政治討論相較，工作的地方會有較多不同意見的產生。透過政治討論，不同政治觀點的人，彼此可以相互增長政治視野，更進一步增進政治容忍。

政治關心是個人平時對政治事務主觀心理涉入的程度。Sotirovic & Jack(2001)研究溝通模式與政治價值。指出政治知識的獲得方式，影響溝通模式。習慣由閱讀報紙獲知公共事務的人們，傾向後物質(post-material)價值，進而影響政治參與。唯物主義者(materialist)主要在看電視娛樂節目，政治價值沒有受影響。後物質主義者，認為人與人之間的相互討論，反映出新聞和整合各項較易瞭解政治世界的訊息，比政治知識提供更好的政治參與機會。選民如較常接觸選舉的訊息，也較常與人討論，關心政治議題，相對的也具有較高的政治興趣(徐火炎, 2005)。綜合上述可知，青少年若藉由電視媒體觀看新聞，收視電視 call in 節目，對民主政治價值的提昇較無幫助，如藉由閱讀報紙新聞則較易產生理性之政治思維，至於新興之網路媒體可促進青少年之政治興趣，唯大部分點閱網路政治資訊者，大多是已經有高度的動機或是對選舉有興趣的人，是否可促進公民參與，則有待研究調查。

在另一方面，課程經驗是指學生在學校學習過程中除了老師所教導的正式課程之外，並包括與同學、老師和學校整體氣氛互動之非正式課程，具體而言，課程經驗就是學生在學校所經歷到公民技巧的學習、學校氣氛的感受及多元文化的知覺。公民權也是公民身分，包涵權利與義務二個概念。換句話說，就是好公民要負擔什麼義務，擁有什麼權利(許火炎, 2006)。簡言之，課程經驗就是培養好公民的潛在課程。

公民技巧包括組織和帶領公共會議、準備議程、投書到報社和政黨、公開演說、學習投票、參加競選活動、領導和自願活動(Iftikhar, 2003)。公民技巧是持續解決衝突的過程，需要溝通、合作、肯定(affirmation)、批判(critical)和創造思考、問題解決及處理情緒的能力(Birthistle, 2000)。青少年在學校生活中必需被教導如何與他人合作，遇到衝突如何解決，與主流團體不一樣的人，如何與他相處。社運團體近年持續推動性別平等運動，主因在於認為在台灣學校與主流性傾向相違背的其他性別特質發展沒有獲得學校適當的期待、同學接納和教育行政體系的關注有關(蘇芊玲、蕭昭君, 2006)。學生公民技巧與性別平等概念有關，愈具備公民技巧知識、對民主愈了解愈偏好良好公民權 (Pettersson, 2003)。

培育青少年學生的民主公民素養，除了透過正式課程的教學，如語文、歷史、社會、公民等科目，亦要營造民主的學校環境（包括組織氣氛、典章制度、決策機制、教師教學、師生互動等各方面），使民主成為多學校氣氛的重要成分(張秀雄, 2004)。Lauglo & Øia (2006)認為開放討論的班級氣氛包括下列六項要點：(一)和老

師對政治和社會議題意見不同時，學生可以公開的和自由表示自己意見。(二)學生被鼓勵組成自己對社會議題的看法。(三)老師尊重我們的意見和鼓勵我們在上課時發表。(四)學生可以自由的發表自己的意見，即時和大多數人不同時也可以。(五)老師鼓勵我和對政治或社會議題有不同意見的人進行討論。(六)老師講解政治和社會有關的事時，會用好幾個角度來解釋。Pettersson (2003)指出，在社會化學習的過程中，班級氣氛與性別平等對良好公民的看法有相關，解放的氣氛中有助形成性別平等概念，並願意給予個人較大的政治權力，支持參與社會運動。由此可知學校氣氛需透過民主的學校制度，開放班級氣氛及平等的師生關係，才能形成有助解放的學校氣氛。

多元文化影響學生價值的形成，有助於青少年減少偏見，例如對少數族群的看法。民主價值的課程可以減少偏見，促進學生對差異團體的正向態度，增加政治容忍(Dale, 1996)。一個能尊重他人人權的人，也必能夠關心偏見的議題。同理心促使我們看見不同的觀點和改變偏見與成見，滋生容忍的態度和接受今日多元文化的差異，對自己鼓勵和正向的態度有助於青少年發展對偏見(prejudicial)的態度(Birthistle, 2000)。學校課程可以影響政治知識，但不會影響政治態度。政治態度主要是受班級氣氛、學生參與學校活動及學校組織氣氛所影響(Ehman, 1980)。性別平等也和社會化經驗有關(Pettersson, 2003)，在一個遵奉傳統的文化，開放教室氣氛是形成良好公民權最有效的方法(Pettersson, 2003)。富公民權的課程經驗可以傳遞民主政治價值，教師領導風格愈趨民主的兒童，其政治態度愈趨積極(侯淑媽，2004)。學校藉由討論議題開放的氣氛和邀請學生參與學校生活的形成，形成民主價值觀。民主知識雖然與民主政治價值習習相關，但營造班級的開放氣氛，學校的民主文化，教導學生持續解決衝突的能力，更能傳遞更深遠的民主政治價值。

課程、班級氣氛和學校文化影響青少年對公民活動的參與(Pettersson, 2003)。學生如果有機會研究調查、討論和表達對社會議題的觀點，比較可以發展出支持政治參與的態度(Hahn, 1999)。參加服務學習方案的學生對自己權利有較高的意識，而且可以增長自我概念和改善政治參與活動，服務學習課程有助於建立公民素質。開放的教室氣氛鼓勵學生參與討論，並且教導學生面對與自己相異的意見(Morgan & Streb, 2001)。教師教學方式的不同，其公民參與行為總體表現有顯著差異，接受民主教學方式者公民參與高於接受權威的教學方式者(鄭慧蘭，2001)。藉由知識的教學，在課程中做主題式的強調，告知信念在成人活動中的重要性。學校也可以藉由營造參與的文化，促進學生的公民能力與組織的角色，參與政治相關角色或是志願性的活動。

參與是公民社會的主要成份，年輕世代與年長的世代有不同型的政治參與(Goggin, 2005)。青少年在政治發展的心理過程中思考成為一個理想的成人需具備何項條件，由個人與自我能力(competence)、性格(character)、自我的對話，進而推展至個人與社會的關係與同情，期望能夠對公民社會有所貢獻。青少年可以透過投票、擁護(advocacy)、服務學習、社區大學的合作夥伴關係(community university

partnerships)和參與青少年組織以期對民主的社會生活、制度和鉅觀的政體(polity)有所貢獻(Sirianni, 2005)。但是黃德祥(1994)指出，青少年心理趨向獨立自主，青少年時期的政治社會化，具有反體制與權威的特性，不過由於青少年不具投票權，直接參與政治活動並不普遍。

青少年公民參與的方式可分為自願行為與涉入政治活動二種。志願行為包括利社會行為(prosocial behavior)與參與志願性組織。利社會行為指的是互惠合作、利人也利己、正向積極的社會作為，如關照、求助、合作等行為(羅瑞玉, 1996)。青少年志願行為，意義在於透過自己的參與能讓社會更美好(betterment)的願景。自願行為一部分受校外影響一部受校內因素影響，其中尤以宗教性的組織和志願行為具高相關(Torney-Purta & Richardson, 2002)。參與志願性組織是公民參與的一種形式，志願組織有助於民主健康的發展，人們參與志願組織，除了直接支持每個人對政治感興趣的部分，而且可以幫助每個人發現生活的意義，展現社會的認同，讓其他人生活更幸福(Bekkers, 2005)。青少年參與志願性活動可以促進社區服務與公民發展。青少年需要廣大的機會積極的對社區有貢獻，可以從非常簡單、不連續的活動，如當比自己年紀小的人的課後家教，在週末清理社區水溝，到長時間、複雜的計畫，訂定政策發展和解決與其他青少年和成人的合作關係。簡單的工作，可以從同儕中激發出貢獻的誘因，把對社區的服務，成為展示學習民主的開始和發展公民的美德。複雜的任務則是發展公民技巧的途徑，較佳的公民技巧可以產生更大的計畫和呈現大規模青少年的興趣，可能是在鄰近地區，高中或是整個城市(Sirianni, 2005)。青少年參加志願組織的管道包括校內的組織與校外的社會組織。一般而言，14歲的學生相信學生團體可以影響學校之改進，參與學校議會或學校法庭與學生的政治知識有關，但是並不是每個學校都有提供這些經驗。也由於此，學校妥善規劃與鼓勵青少年多方面的政治學習活動與初步的政治參與，如擔任志工，同時家庭、學校與同儕也能與青少年多方面討論政治課題，尤其是女生，將有助於青少年男女成熟的政治社會化，有助於未來政治的積極發展，不過此方面的努力上有待更多實徵性資料的佐證，本研究就具有此種引領作用。

肆、研究方法

研究一

一、研究架構

根據上述研究動機、文獻之分析，本研究將以問卷調查方式瞭解青少年權力意識、對自我未來政治參與期望、未來政治參與期望、立委與總統選舉投入程度間

的關係。本研究之研究架構圖如下所示：

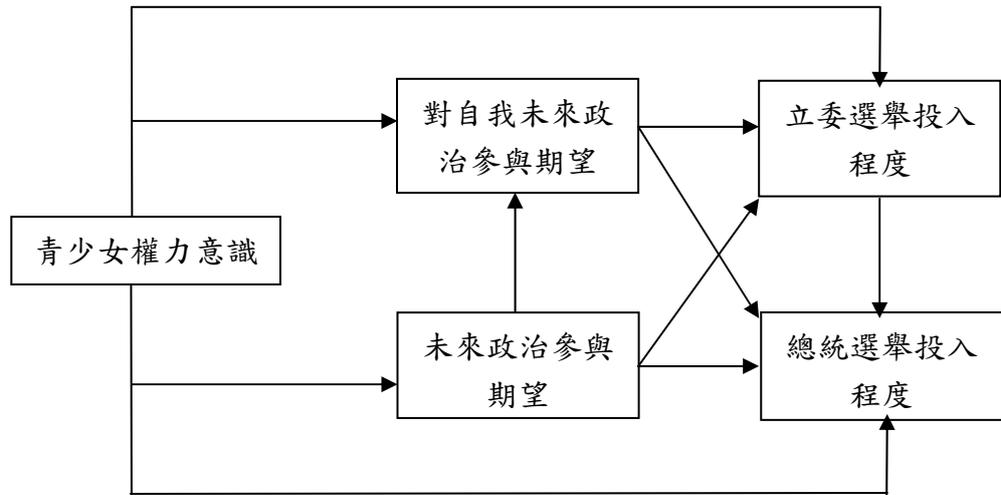


圖 5 研究架構圖

就研究變項而言，青少女權力意識為本研究之自變項，對自我未來政治參與期望、青少女對未來台灣政治期望、立委與總統選舉投入程度等四個變項為依變項，以瞭解青少女權力意識、政治期望與選舉投入間的關係。其中依變項間的關係，本研究假設青少女對自我未來政治參與期望、未來政治參與期望對 2008 年立委與總統選舉投入之間均具有正向的解釋力，而未來政治參與期望則可能會對自我未來政治參與有正向解釋力，同時，由於台灣 2008 年第七屆立法委員選舉於 1 月 12 日舉行，而總統選舉則於同年的 3 月 20 日舉行，因此於事件發生時間前後的觀點來看，本研究假定立委選舉投入程度對總統選舉投入程度有正向解釋力。

二、研究對象

為分析量表之信效度，並解決本研究所提出的研究目的，本研究樣本包含了預試樣本以及正式樣本，所涉及樣本為國中女學生。

(一) 預試抽樣

為瞭解本研究自編之量表信效度，遂以便利抽樣方式抽取樣本，有效量表之篩選標準包括若有二個題項以上未填答或任意填答(例如全部勾選同一選項者、具有規則性的填答方式)，一律視為無效問卷，即予以刪除。學生樣本以大同國中、彰化藝術高中(國中部)、文興中學、達德商工、四育國中等五校一、二、三年級各

一班為受試對象，共發出 200 份預試量表，回收經剔除填答不全之量表後，計得有效量表 139 份，有效率為 69.5%。

(二)正式樣本

由於目前國中學生多為男女合班，本研究欲探討國中女學生對於其政治期望與政治參與、選舉投入之關係，於樣本的選取上，必須刪除男學生的樣本。本研究採取分層隨機抽樣，預計抽取十一所學校為本研究樣本，經研究者與該學校聯繫，並瞭解其是否願意接受調查意願後，委請學校教師協助調查，若所抽取之學校配合意願不高，則再由研究者另行抽取其他學校，做為替代學校。最後選取包括二林高中(國中部)、小港國中、田中國中、光榮國中、光榮國中、伸港國中、明倫國中、新生國中、萬興國中、精誠國中、關西國中等十一所國中為本研究之正式樣本。

本研究正式問卷的發放，每校各選取一、二、三年級各乙個班級女學生，每班發出量表 15 份，共計 11 校，總計發出 495 份學生量表，經研究者剔除填答不全者(一題未答即視為廢卷)、無效問卷(有固定作答傾向)者，共得有效學生量表有效份數為 355 份，有效回收率為 71.7%。

三、研究工具

研究工具共包括「青少女 2008 年立委選舉投入程度調查表」、「對自我未來政治參與期望量表」、「青少女 2008 年總統選舉投入程度調查表」、「青少女對未來台灣政治期望量表」、「青少女權力意識量表」等五份量表。茲將量表的編製內容及過程述敘如下：

(一)青少女 2008 年立委選舉投入程度調查表

本量表將顧及台灣選舉現況與國外相關研究，如Kuhn (2004)、Mayer & Schmidt (2004)、Glanville (1999)等學者對青少女選舉參與之論點與觀察，編製量表。題目總數為23題，量表的計分採用Likert 6點量尺，並且以內部一致性效標分析、相關分析法進行項目分析，刪除不符合標準之題項，經最大變異法之轉軸法進行因素分析，KMO取樣適切性量數為.786，Bartlett球形檢定 $\chi^2_{(253)} = 1546.751 (P < .001)$ ，具有因素分析適合性，並保留特徵值大於1且至少包含三個題項的因素，並選取因素負荷量大於.5，但小於.5的題目將予以刪除，共得到三個因素，分別命名為「拒絕」、「積極參與」、「討論」，共可解釋54.98%的變異量。「青少女2008年立委選舉投入程度調查表」的分量表信度介於.8451至.8864，全部題目之內部一致性Cronbach

α 係數為.7423，可見本量表信度良好。

(二)對自我未來政治參與期望量表

「對自我未來政治參與期望量表」係研究者邀請政治學者、國高中教師、國高中學生家長、國高中學生舉行座談，彙整各方意見，編製而成。題目總數為 26 題，量表的計分採用 Likert 6 點量尺，並且以內部一致性效標分析、相關分析法進行項目分析，刪除不符合標準之題項，經最大變異法之轉軸法進行因素分析，KMO 取樣適切性量數為.808，Bartlett 球形檢定 $\chi^2_{(325)} = 1770.921$ ($P < .001$)，具有因素分析適合性，並保留特徵值大於 1 且至少包含三個題項的因素，並選取因素負荷量大於.5，但小於.5 的題目將予以刪除，共得到四個因素，分別命名為「行動式關注」、「關注政府政策」、「表達式關注」、「期望式關注」，可解釋 57.53%的變異量。「對自我未來政治參與期望量表」全部題目之內部一致性 Cronbach α 係數為.8873，量表中的分量表之內部一致性 α 係數介於.7316 至.8867，由此可知本量表之信度良好。

(三)青少年2008年總統選舉投入程度調查表

「青少年 2008 年總統選舉投入程度調查表」是研究者顧及台灣選舉現況與國外相關研究，如：Kuhn (2004)、Mayer & Schmidt (2004)、Glanville (1999)等學者對青少年選舉參與之論點與觀察，設計而成。題目總數為 31 題，量表的計分採用 Likert 6 點量尺，並且以內部一致性效標分析、相關分析法進行項目分析，刪除不符合標準之題項，經最大變異法之轉軸法進行因素分析，KMO 取樣適切性量數為.777，Bartlett 球形檢定 $\chi^2_{(465)} = 2631.55$ ($P < .001$)，具有因素分析適合性，並保留特徵值大於 1 且至少包含三個題項的因素，並選取因素負荷量大於.5，但小於.5 的題目將予以刪除，共得到五個因素，分別命名為「訊息積極關注」、「討論式關注」、「拒絕式關注」、「反向式關注」、「中立式關注」，可解釋 61.55%的變異量。「青少年 2008 年總統選舉投入程度調查表」全部題目之內部一致性 Cronbach α 係數為.8367，量表中的分量表之內部一致性 α 係數介於.7088 至.8961，由此可知本量表之信度良好。

(四)青少年對未來台灣政治期望量表

「青少年對未來台灣政治期望量表」係研究者邀請政治學者、國高中教師、國高中學生家長、國高中學生舉行座談，彙整各方意見，編製而成。題目總數為 34 題，量表的計分採用 Likert 6 點量尺，並且以內部一致性效標分析、相關分析法進行項目分析，刪除不符合標準之題項，經最大變異法之轉軸法進行因素分析，KMO 取樣適切性量數為.896，Bartlett球形檢定 $\chi^2_{(561)} = 3770.26$ ($P < .001$)，具有因素分

析適合性，並保留特徵值大於1且至少包含三個題項的因素，並選取因素負荷量大於.5，但小於.5的題目將予以刪除，共得到四個因素，分別命名為「行動式期望」、「樂觀期望」、「和平理性期望」、「關注式期望」，共可解釋66.33%的變異量。「青少年對未來台灣政治期望量表」全部題目之內部一致性Cronbach α 係數為.9546，量表中的分量表之內部一致性 α 係數介於.8359至.9576，由此可知本量表之信度良好。

(五)青少年權力意識量表

「青少年權力意識量表」係參考 Anderson & Galinsky (2006)、Anderson, Keltner, & Gruenfeld(2003)、Anderson, John, & Keltner (2005)、Carli (1999)、Groshev (2002)等學者對權力意識的建構概念及評量表，編製而成。題目總數為 20 題，量表的計分採用 Likert 6 點量尺，並且以內部一致性效標分析、相關分析法進行項目分析，刪除不符合標準之題項，經最大變異法之轉軸法進行因素分析，KMO 取樣適切性量數為.756，Bartlett 球形檢定 $\chi^2_{(190)} = 1187.238$ ($P < .001$)，具有因素分析適合性，並保留特徵值大於 1 且至少包含三個題項的因素，並選取因素負荷量大於.5，但小於.5的題目將予以刪除，共得到四個因素，分別命名為「人際性權力」、「自主權力」、「休人協助」、「控制欲」，共可解釋 59.48%的變異量。「青少年權力意識量表」全部題目之內部一致性 Cronbach α 係數為.8571，量表中的分量表之內部一致性 α 係數介於.7241 至.8792，由此可知本量表之信度良好。

研究二（量化分析）

一、研究架構

由文獻探討的分析中，研究者發現青少年政治參與與其影響政治社會化之不同變項之間彼此可能會有關聯。為了瞭解不同背景變項(性別、學習階段、父母社經地位、擔任幹部的經驗、參與社團活動的經驗、學業成究與人際關係)的青少年，影響其政治社會化之不同變項(包括父母與同儕影響、青少年權力意識、政治態度與政治參與(包括政治行動、抗議行為、代表的參與)的實際情形及其相關性。

二、研究對象

本研究正式問卷的研究對象取樣，先採取隨機取樣，以台灣地區九十八學年度之高級中學及國民中學學生為標的母群體(target population)，選取北、中、南部三個地區，採用叢集取樣(cluster sampling)法，預計以 650 位學生進行「青少年的生活經驗調查問卷」施測。

三、研究工具

(一)個人基本資料表

此資料表目的在蒐集樣本的基本資料，其中包括受試者教育程度、性別、父母親社經地位(父母親教育程度、父母親職業類別)等資料，均由受試者自行填答。

為了解受試者之社經地位，本研究採用魏麗敏(1999)的二因子社會地位指數(two-factor index of social position)，將受試者父母之教育程度與職業類別加權之後，再分出高、低兩類，其中父母親之教育程度共分五級。

(二)父母與同儕政治態度量表

本研究所訂定之父母與同儕政治態度量表係研究者參閱 Mayer & Schmidt(2004)、Muhlberger(2002)等學者建構的概念與評量表。茲將「父母與同儕政治態度量表」分為兩個層面，分別為「父母政治態度量表」與「同儕政治態度量表」。

(三)青少年權力意識量表

本研究採用之權力意識量表，係研究者參考 Anderson & Galinsky(2006)、Anderson, John, & Keltner(2003)、Anderson, Keltner, & Gruenfeld(2003)、Groshev(2002)等學者對權力意識的概念編製而成，共包含兩個層面，分別為「自主決定」及「言論重視」。

(四) 青少年政治態度量表

本研究所定之社會支持量表係參考吳宜芳(2003)、曾欣儀(2002)等人研究中所使用之問卷，再依本研究需要取其相關題項修訂而成，分成「政治信任感」、「民主態度」、「公民責任感」、「政治功效感」四個因素。

(五) 青少年政治參與量表

研究者依據徐火炎(2006)、Torney-Purta & Richardson(2002)及 Lauglo & Øia(2006)的分類，參考先前文獻，將青少年政治活動分為代表的參與、政治行動主義及抗議行為三項。

四、 資料處理與統計方法

(一)資料處理

本研究所得之有效研究樣本，以量化方式處理，並利用 SPSS 12.0 版統計套裝軟體進行資料分析之處理，驗證各研究假設，而顯著水準定為 $\alpha=0.05$ 。

(二)統計方法

一、描述性統計

以描述性統計分析青少年的背景變項分佈情形，以平均數及標準差分析各層面的反應狀態。

二、*t*檢定(*t*-test)

分析不同性別(男、女)、學習階段(國中、高中)、父母社經地位(高、低)的青少年，在影響政治社會化之不同變項與政治參與各層面的差異情形，以回答假設一、假設二。

三、單因子變異數分析(one-way ANOVA)

分析青少年幹部經驗、社團經驗、學業成就與人際關係，影響其政治社會化之不

同變項與政治參與各層面的差異情形。若達顯著水準再進行費雪事後比較，以回答假設一、假設二。

四、皮爾森積差相關(pearson correlation)

探討影響青少年政治社會化之不同變項與政治參與各層面之間的皮爾森積差相關，以回答假設三。

五、多元迴歸分析(multiple regression)

先將性別與年級轉化成虛擬變項，再用依變項之父母與同儕政治態度、權力意識、政治態度為預測變項，分別以政治參與為效標變項，做試探性研究，以多元迴歸分析各層面的預測力，以回答假設四。

研究二（質化分析）

一、 研究對象

本研究二之質化研究對象共分團體焦點訪談與個別訪談兩部份，團體焦點訪談共有兩所高中 14 人，分別是彰化縣國立溪湖高中（代號 HFG）有 9 人，與台中市立東山高中（代號 TSG），有 5 人。個別訪談共有三所學校學生共 19 人，分別是台中市三光國中（代號 SK），有學生 5 人，台中市忠明高中（代號 CM），有 7 人，以及彰化縣國立溪湖高中（代號 HF）有學生 7 人。

二、 質化分析基礎

本研究將紮根理論及現象學做為第三年研究的二個研究方法基礎。質性研究資料的蒐集強調以編碼(coding)的方式進行資料的概念化，資料的編碼包括三個階段：開放式編碼(open coding)、主軸式編碼(axial coding)以及選擇性編碼(selective coding)。開放式編碼決定資料所呈現的類別，涉及了各個參與者訪談稿中的譯碼，據之加以比較與分析。為了決定類別間的關連性，本研究將參考Glaser (1978)的論點，採用許多的編碼族群(coding families)，此亦即為主軸式編碼(axial coding)，是要將開放式編碼中碎裂的各個譯碼重新組合起來並加以瞭解其間的差異性。編碼分析可將區分為三個階段，第一個階段為將所蒐集到的資料，亦即為逐字稿區分成為許多小的片段，這些小片段包含了一個或較多的句子以呈現一種抽象的概念，每一個抽象概念則被譯成一碼，所有的片段被編成許多的「碼」。第二階段時將第一階段所形成的碼濃縮成類別，而這些類別還必須加以相互比較與對照以確保類別間是互斥的。第三個階段則要辨識出一個統整性的主題，這個核心變項即成為產生紮根理論的基礎，核心的變項是一種理論的架構，通常會在資料中產生並且將資料組織在一起、能解釋所觀察到資料的變異性。此外現象學就是要從參與者

敘說的故事情境中誘導出主題，而這些故事強調諸如「你的經驗是什麼？」之類的廣泛性問題，現象學即是研究參與者之間經由互為主體性的互動歷程，而獲得「他者」主體性現實(subjective reality)的主要方法。研究者也必須要能決定核心變項以及其他被辨識出來的變項間之關係。本研究質性研究的精確度考驗，包括目的性抽樣、紮根理論、多位編碼者、三角檢定以及反應者效度(respondent validation)(Berends & Johnston, 2005)。

三、取樣與質性資料蒐集

本研究主要著重於受訪者關於父母政治價值觀、同儕政治價值觀、權力意識、政治興趣、政治偏好、政治活動等重要變項之個人的感受、生活與經驗，藉著與受訪者的對話，以獲得、了解及解釋受訪者個人對政治相關經驗與歷程之認知。主要的資料蒐集方法有焦點團體法與半結構式訪談法，以下再分述之：

1. 焦點團體：焦點團體訪談易激發彼此間互動，可談較廣泛的個人政治社會化歷程相關議題，以深入明確瞭解研究對象的實際情況。焦點團體的議題主要包括：
(1) 個人於幾歲開始對政治感到興趣？(2) 父母的政治取向對個人的影響為何？(3) 老師與同儕對個人的政治傾向影響為何？(4) 自己的權力意識的形成過程為何？(4) 個人的政治興趣受何種媒體影響最大或最多？(5) 自己有何政治偏好？如何形成？(6) 個人最長參與哪些政治活動？(7) 個人對政治有何期許？(7) 政治可怕嗎？(8) 政治無情嗎？(9) 政治無趣嗎？(10) 其他關於自身成長過程中的政治經驗與感想。訪談重點將置於女性青少年政治社會化的歷程，以及「為何政治排斥女性？」或「為何女性排斥政治？」的問題。
2. 半結構式訪談：議題與前述焦點團體的議題相近，但是容許開放性回答。如果受訪者對政治不感興趣則訪談其不感興趣之原因與內在歷程。當受訪者可能會講到一個故事或繞著某個話題，研究者就將受訪者敘述內容加以分析。除學生樣本外，本研究將另外對一般中學生家長10人進行深度訪談，藉以了解親子互動在青少年女生政治社會化中所扮演的角色及互動歷程，訪談題目包括：
(1) 在家中經常親子討論政治問題？(2) 親子間是否有相似的政黨偏好與政治傾向？(3) 在家中對政治消息的獲取（電視、廣播、報紙、網路）是否相同或相異？內容相似？(4) 對子女的政治期望為何？(5) 自己有何政治偏好？如何形成？又如何影響子女？等。半結構式訪談亦關注「政治排斥女性？」或「女性排斥政治？」的問題。

四、研究軟體之採用與資料分析

本研究質性訪談後將做逐字稿，建立訪談書面記錄。逐字稿力求「詳盡確實」，使逐字稿不僅能使質性資料接近原貌，更能了解受訪者的意念。本研究將採用 NUD.IST 軟體分析資料，NUD.IST 軟體包含了「階層類別」技巧的分析(Richards &

Richards, 1991, 1994)。分析步驟：1.將訪談稿、備忘錄及其他文件予以貯存並且分類。2藉由電腦操作以協助編碼、創造類別。3進行分析性的搜尋。4當較高的次序性主題出現時可順利的移動以及連結資料。5基礎階層模式的編碼。

伍、結果與討論

研究一

一、不同年級對青少年權力意識、政治期望、未來政治參與期望、選舉投入程度變項之差異分析

本研究以國中女生的年級為自變項，青少年權力意識、政治期望、未來政治參與期望、選舉投入程度為依變項，進行單因子變異數分析，以瞭解不同年級之國中女生對於青少年權力意識、政治期望、未來政治參與期望、選舉投入程度的差異性。值得注意的是，權力意識、政治期望、未來政治參與期望等變項未能符合變異數同值之假定，因此將權力意識變項予以平方、政治期望予以倒數，而未來政治參與期望在經本研究者予以平方、倒數以及取對數後，仍未達變異同值之假定，不予進行分析。

由表 1 的結果顯示，總統選舉投入程度並不會因為年級的不同而有所差異，然而權力意識、政治期望、立委選舉投入程度則會因年級而有所不同， F 值分別為 3.339($p < .05$)、4.461($p < .05$)、3.385($p < .05$)，但經由事後考驗得知，國中女學生的權力意識得分為二年級高於三年級；對自我未來政治期望則是二年級女學生的得分要高於一年級。

表 1 不同年級之青少年權力意識、政治期望、未來政治參與期望、選舉投入程度差異考驗摘要表

	年級	樣本數	平均數	標準差	F 值	事後比較
青少年權力意識	一年級	68	5207.15	2531.56	3.339*	(2)>(3)
	二年級	148	5725.29	1879.83		
	三年級	138	5103.43	2161.41		
政治期望	一年級	68	0.0210	0.0078	4.461*	(2)>(1)
	二年級	148	0.0183	0.0073		
	三年級	138	0.0204	0.0067		
立委選舉投入程度	一年級	68	60.218	11.044	3.385*	
	二年級	148	56.687	12.239		
	三年級	138	55.694	11.856		
總統選舉投入程度	一年級	68	64.966	18.635	.867	
	二年級	148	66.764	16.690		
	三年級	138	64.223	15.444		

* $p < .05$.

二、不同社經地位對青少年權力意識、政治期望、未來政治參與期望、選舉投入程度變項之差異分析

本研究以國中女生的社經地位為自變項，青少年權力意識、政治期望、未來政治參與期望、選舉投入程度為依變項，進行單因子變異數分析，以瞭解不同社會經濟地位之國中女生對於青少年權力意識、政治期望、未來政治參與期望、選舉投入程度的差異性。值得注意的是，本研究將社經地位區分為五大類，然第五等級之社經地位僅有 3 名，因此將第四類與第五類加以合併進行單因子變異數分析。結果顯示，權力意識、立委選舉投入程度等變項未能符合變異數同值之假定，因此將權力意識變項予以倒數、立委選舉投入程度予以平方，進行分析。

由表 2 的結果顯示，權力意識、立委選舉投入程度並不會因為社會經濟地位的不同而有所差異，然而政治期望、未來政治參與期望、總統選舉投入程度則會因社會經濟地位有所不同， F 值分別為 3.630($p < .05$)、3.03($p < .05$)、5.73($p < .001$)，但經由事後考驗得知，國中女學生的政治期望得分為第四等級高於第一等級；對未來政治參與期望則未見組別差異；對總統選舉投入程度，則是第三等級高於第一等級、第四等級高於第一等級。

表 2 不同社經地位之青少年權力意識、政治期望、未來政治參與期望、選舉投

入程度差異考驗摘要表

	社經地位	樣本數	平均數	標準差	F 值	事後考驗
權力意識	第 I 等級(1)	48	0.0149	0.0027	.541	
	第 II 等級(2)	120	0.0148	0.0034		
	第 III 等級(3)	86	0.0143	0.0032		
	第 IV 等級(4)	68	0.0143	0.0041		
政治期望	第 I 等級(1)	48	141.333	31.213	3.630*	(4)>(1)
	第 II 等級(2)	120	146.331	29.207		
	第 III 等級(3)	86	140.489	30.282		
	第 IV 等級(4)	68	153.613	24.206		
未來政治 參與期望	第 I 等級(1)	48	51.024	16.819	3.03*	
	第 II 等級(2)	120	57.067	19.306		
	第 III 等級(3)	86	59.707	21.422		
	第 IV 等級(4)	68	63.051	21.992		
立委選舉 投入程度	第 I 等級(1)	48	3201.97	1137.00	2.62	
	第 II 等級(2)	120	3281.01	1410.94		
	第 III 等級(3)	86	3447.56	1201.92		
	第 IV 等級(4)	68	3777.98	1345.54		
總統選舉 投入程度	第 I 等級(1)	48	58.635	11.770	5.73***	(3)>(1) (4)>(1)
	第 II 等級(2)	120	64.046	16.400		
	第 III 等級(3)	86	69.672	18.194		
	第 IV 等級(4)	68	68.434	16.523		

* $p < .05$; *** $p < .001$.

三、青少年權力意識、政治期望、未來政治參與期望、選舉投入程度變項之相關性分析

本研究為瞭解研究變項間之關聯性，以 Pearson 積差相關法，針對青少年權力意識、對未來台灣政治期望、立委、總統選舉投入程度與對自我未來政治參與期望等五變項，進行 Pearson 積差相關分析。表 3 顯示，各變項之間相關係數僅「青少年對未來台灣政治期望」與「青少年 2008 年立委選舉投入程度」、「青少年對未來台灣政治期望」與「青少年 2008 年總統選舉投入程度」之相關係數未達顯著水準，其餘分量表間均達顯著水準，且呈現正向關係，相關係數則介於.113 至.533 ($p < .001$) 之間。

表 3 青少年權力意識、政治期望、未來政治參與期望、選舉投入程度變項之相關性分析摘要

	平均數	標準差	權力意識	青少年對未來台灣政治期望	對自我未來政治參與期望	青少年 2008 年立委選舉投入程度	青少年 2008 年總統選舉投入程度
權力意識	71.835	14.602	1.000				
青少年對未來台灣政治期望	145.955	28.965	.332***	1.000			
對自我未來政治參與期望	57.733	20.203	.377***	.370***	1.000		
青少年 2008 年立委選舉投入程度	56.990	11.934	.113***	.001	.164***	1.000	
青少年 2008 年總統選舉投入程度	65.441	16.587	.233***	.078	.533***	.415***	1.000

* $p < .05$. *** $p < .001$.

四、徑路分析

本研究之青少年權力意識、政治期望與選舉投入修正模式，各變項均呈現常態分配，因此採取最大概似法（maximum likelihood method）進行參數估計，所得適配值為 $\chi^2_{(3)}=1.467$ ， $N=355$ ， $p<.05$ ， $GFI=0.995$ ， $IFI=0.996$ ， $CFI=0.996$ ， $TLI=0.985$ ， $RMSEA=0.036$ （Hu & Bentler, 1998, 1999），假設模式的適配度指標均達理想標準，標準化值如圖 2 所示。

若就本研究所提出修正模式之直接效果而言，青少年權力意識對青少年對自我未來政治參與期望(0.28)、對未來台灣政治期望(0.33)為正向預測關係；對未來台灣政治期望對青少年對自我未來政治參與期望(0.28)為正向預測關係；青少年對自我未來政治參與期望能正向預測 2008 年立委選舉投入程度(0.16)、2008 年總統選舉投入程度(0.52)；此外，立委選舉投入程度對總統選舉投入程度亦存在正向預測關係(0.33)。然而，對未來台灣政治期望對 2008 年總統選舉投入程度則存在顯著的負向預測關係(-0.12)。

就本研究的間接效果而言，青少年權力意識對 2008 年總統選舉投入程度之間接效果為 0.179，大於青少年權力意識對 2008 年立委選舉投入程度間接效果之 0.062；此外，對未來台灣政治期望對 2008 年總統選舉投入程度的間接效果為 0.159，大於青少年對未來台灣政治期望對 2008 年立委選舉投入程度間接效果之 0.045。

由青少年權力意識、政治期望與選舉投入修正模式結果而言，本研究所提出假設未來政治參與期望對 2008 年立委與總統選舉投入之間均具有正向的解釋力均未獲得支持，同時，青少年權力意識亦未對 2008 年立委與總統選舉投入程度存在顯著的直接預測效果，卻存顯著的間接效果，顯示青少年權力意識必須透過對自我未來政治參與期望、對未來台灣政治期望等二個變項，間接影響立委與總統選舉投入程度，青少年權力意識愈強者，若其對自我未來政治參與期望、對未來台灣政治期望愈高者，愈會投入 2008 年立委與總統選舉。

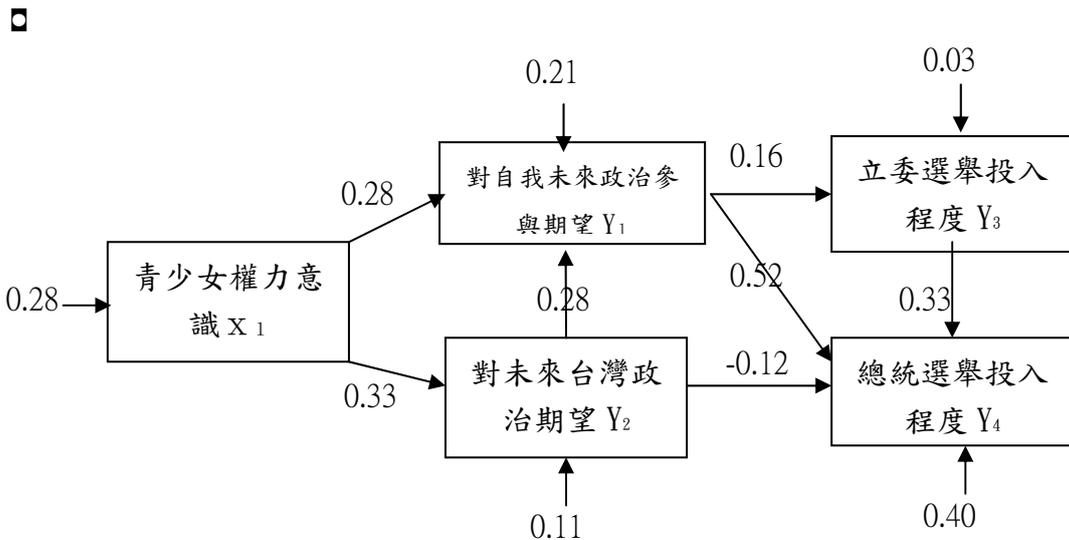


圖 2 青少年權力意識、政治期望與選舉投入修正模式

雖然青少年對未來台灣政治期望對總統選舉投入程度為負向預測關係，然而由本研究之相關性分析來看，對未來台灣政治期望與總統選舉投入程度之間並無顯著相關存在，其間的顯著負向預測關係可能是受到對自我未來政治參與期望的影響，而產生些變化，然而影響總統選舉投入最重要的變項，亦是對自我未來政治參與期望，青少年對自我未來政治參與期望愈高，愈可能投入總統選舉。另一方面，即便本研究之相關分析中發現，青少年權力意識與青少年 2008 年立委選舉投入程度、青少年 2008 年總統選舉投入程度均存在顯著正相關，然而對自我未來政治參與期望變項存在時，可能影響了青少年權力意識與青少年 2008 年立委與總統選舉投入程度間的關係，可見對自我未來政治參與期望為青少年權力意識影響 2008 年。立委與總統選舉投入程度的重要中介變項。

本研究旨在探討青少年權力意識、對自我未來政治參與期望、未來政治參與期望、立委與總統選舉投入程度間的關係。為達成研究目的，首先進行相關理論及文獻探討，以建構本研究理論基礎，並進行問卷的編製。再針對國中女學生為樣本，隨機抽取十一所學校，共可回收 355 份有效問卷以進行統計資料分析工作。資料分析方法以單因子變異數分析、Pearson 積差相關、徑路分析等統計方法進行分析，經研究結果分析討論後，茲將本研究之主要發現、研究結論與建議和研究限制分別說明如下。

一、研究結論

- (一) 總統選舉投入程度並不會因為年級的不同而有所差異，然而權力意識、政治期望、立委選舉投入程度則會因年級而有所不同。

- (二) 權力意識、立委選舉投入程度並不會因為社會經濟地位的不同而有所差異，然而政治期望、未來政治參與期望、總統選舉投入程度則會因社會經濟地位有所不同。
- (三) 青少年權力意識、對自我未來政治參與期望、未來政治參與期望、立委與總統選舉投入程度各變項之間相關係數僅青少年對未來台灣政治期望、青少年 2008 年立委與總統選舉投入程度之相關係數未達顯著水準，其餘各變項之間均有顯著正相關存在。
- (四) 在刪除青少年權力意識對立委與總統選舉投入程度、未來台灣政治期望對立委選舉投入程度之預測關係後，青少年權力意識、政治期望與選舉投入修正模式顯示具有適配性。

由本研究所提出之徑路模式與相關分析結果多相符合，例如青少年權力意識與對自我未來政治參與期望、對未來台灣政治期望等二個變項均為正相關；對未來台灣政治期望與對自我未來政治參與期望之間亦存在顯著正向關連性；對自我未來政治參與期望與立委、總統選舉投入程度等二個變項存在正相關；立委選舉投入程度與總統選舉投入程度之間亦存在正向關連性。然而對未來台灣政治期望於立委、總統選舉投入程度上而言，較不具有影響力，較值得注意的是對自我未來政治參與期望於青少年權力意識對立委、總統選舉投入程度存在著顯著的中介作用。

二、研究建議

(一) 對學校之建議

本研究建議學校，在國中課程領域中可藉由增加學校對新聞媒體的注意及家庭討論，抑或將選舉課程融入現行課程中，加強國中女學生在人際互動、人際協助，以清楚地發展對自我的權力意識、自我的定位，使其能對政治期望更趨於正向、樂觀，且能夠透過參與宣傳活動、參與投票、能為不公義的事發聲、持續投注政治事務等，進而能提高國中女學生選舉投入程度。從整體變項觀察來看，學校除應強化女學生自我瞭解能力外，權利、義務、公眾事務等訊息應加入學校本位課程概念，其間可配合公民與法治教育、人權教育等，以提升其未來對自我政治參與期望、以及選舉投入程度。

(二) 對學生之建議

目前社會觀念仍強調婦女傳統角色，要求女性須承擔工作與家務兩方的責任壓力，再加上社會的文化、教育、經濟、婚姻等條件仍不鼓勵婦女參政，女性參與政治仍有其困難極待克服。然而藉由本研究結果可知，國中女學生對台灣未來政治仍存在許多正向、樂觀期待，唯有透過課外政治活動的參與、學生本身能夠

與同儕一起參與學生社團、運動活動、或社區性的服務團體與志願團體，方能提升自己對於未來政治活動的參與程度。因此基於本研究之發現認為，青少年的權力意識若能獲得提升，其對自我未來政治參與、對未來台灣政治期望將能更為正向，進而得以提升選舉投入程度。然而在國中女生權力意識提升的同時，應避免過於自我中心，而忘記站在他人的立場思考問題，甚至形成偏見，值得注意。

（三）研究限制

本研究僅以國中女學生為研究對象，未包含國中男學生，可能具有同源偏差之問題，亦無法推論至其他族群或不同學習階層之學生，或許未來研究可以選取不同學習階層之學生作為研究對象，透過差異比較或複製研究以擴大此類研究之成果累積。其次，本研究所探討之權力意識、對自我未來政治參與期望、對未來台灣政治期望、立委與總統選舉投入之關連性，並無法說明因果關係。第三，就研究變項而言，未來研究亦可將人格特質變項、政治活動參與動機及家庭環境的影響力一併加以探討，另外，尚可以考慮女性權力意識、政治參與期望與選舉投入等變項是否會因教育程度而有所不同。在研究方法上，未來研究可以考慮在較長的時間中，以不同時間點蒐集受試者在權力意識、對自我未來政治參與期望、對未來台灣政治期望、立委與總統選舉投入等量表上的得分，以確認研究變項之間的因果關係。另本研究以自評的方式蒐集資料，因此在填答權力意識、對自我未來政治參與期望、對未來台灣政治期望、立委與總統選舉投入時，受試者可能受到自我期望的影響，在填答上可能有社會期許現象，因此後續研究可以嘗試採取多元評量的方式收集資料，如此應較能反映個體的真實行為。

研究二（量化分析）

一、不同背景變項下影響青少年政治社會化之不同變項「父母與同儕政治態度」各層面之差異分析

在「父母政治態度」層面上，性別與父母政治態度有顯著差異，社經地位的青少年與父母政治態度有顯著差異，研究者推測社經地位高的家庭，青少年受到父母教育程度與職業類別影響，有較多資源投入政治活動，與父母有較多時間談論政治，在談論過程中可建立其政治價值與政治知識、而有幹部經驗的青少年及社團經驗之青少年與父母政治態度有顯著差異。其他如學習階段、學業成就與人際關係等背景變項上，並無明顯差異(表 4-1)。

其次，在「同儕政治態度」層面上，性別與同儕政治態度有顯著差異、有幹部經驗的青少年及社團經驗之青少年與同儕政治態度有顯著差異。其他如社經地位、學習階段、學業成就與人際關係等背景變項上，並無明顯差異(表 4-1)。

表 4-1 不同背景變項下影響青少年政治社會化之不同變項中「父母與同儕政態度」的平均數、標準差及 *t* 考驗、F 值

變項		父母政治態度				同儕政治態度		
		N	M	SD	<i>t</i> 值/ <i>F</i> 值	M	SD	<i>t</i> 值/ <i>F</i> 值
性別	男	263	2.05	.65	2.09*	2.77	.74	-.43
	女	344	1.94	.50		2.74	.67	
學習階段	國中	289	1.96	.62	1.15	2.74	.77	-.60
	高中	318	2.01	.52		2.77	.63	
社經地位	高	319	2.00	.56	2.79*	2.78	.69	1.01
	低	288	1.97	.58		2.73	.72	
幹部經驗	(1)無	56	2.04	.66	2.26*	2.78	.84	3.55**
	(2)一年	156	1.93	.59		2.83	.67	
	(3)兩年	145	1.94	.51		2.85	.67	
	(4)三年	250	2.00	.64		2.65	.69	
社團經驗	(1)無	48	2.00	.61	2.01*	2.72	.79	2.75*
	(2)一年	106	1.96	.61		2.85	.73	
	(3)兩年	252	1.94	.53		2.74	.68	
	(4)三年	201	2.04	.58		2.74	.70	
學業成就	(1)上上	42	2.05	.77	.92	2.84	.87	.98
	(2)中上	142	2.03	.54		2.76	.70	
	(3)中等	268	1.97	.55		2.73	.69	
	(4)中下	122	1.91	.53		2.83	.61	
	(5)下下	33	2.04	.70		2.59	.81	
人際關係	(1)很好	57	2.16	.77	1.46	2.84	.84	1.21
	(2)良好	187	1.97	.56		2.80	.62	
	(3)尚可	309	1.96	.53		2.71	.72	
	(4)不佳	40	1.93	.48		2.83	.61	
	(5)惡劣	14	1.96	.61		2.51	.80	

* $p < .05$. ** $p < .01$. *** $p < .001$.

二、不同背景變項下影響青少年政治社會化之不同變項「權力意識」各層面之差異分析

在「自主決定」層面上，性別與權力意識有顯著差異、有幹部經驗與社團經驗之青少年其自主決定較無幹部經驗之青少年積極、學業成就高的青少年其自主

決定較學業成就中等與中下的青少年積極、人際關係佳的青少年其自主決定較人際關係不佳的青少年積極。其他如學習階段、社經地位等背景變項上，並無明顯差異(表 4-2)。

其次，在「言論重視」層面上，有幹部經驗及社團經驗的青少年較無幹部經驗之青少年正向積極、學業成就中上較學業成就中等之青少年正向積極、人際關係很好的青少年其自主決定較人際關係不佳的青少年積極。其他如不同性別、不同學習階段、不同家庭社經地位等背景變項上，並無明顯差異(表 4-2)。

表 4-2 不同背景變項下影響青少年政治社會化不同變項中「權力意識」之平均數、標準差及 *t* 考驗、*F* 值

變項		人數		自主決定			言論重視		
		N	M	SD	<i>t</i> 值/ <i>F</i> 值	M	SD	<i>t</i> 值/ <i>F</i> 值	
性別	男	263	2.55	.66	2.91*	2.65	.68	1.09	
	女	344	2.40	.56		2.59	.58		
學習階段	國中	289	2.15	.66	-.49	2.58	.69	-1.22	
	高中	318	2.47	.56		2.65	.56		
社經地位	高	319	2.50	.61	1.44	2.65	.63	1.44	
	低	288	2.43	.61		2.58	.62		
幹部經驗	(1)無	56	2.39	.73	2.94*	2.36	.76	5.14**	
	(2)一年	156	2.41	.62		2.54	.60		
	(3)兩年	145	2.43	.56		2.59	.61		
	(4)三年	250	2.53	.60		2.73	.60		
社團經驗	(1)無	48	2.41	.76	2.69*	2.59	.87	3.20*	
	(2)一年	106	2.37	.60		2.47	.62		
	(3)兩年	252	2.46	.57		2.61	.59		
	(4)三年	201	2.53	.62		2.70	.60		
學業成就	(1)上上	42	2.68	.88	5.12***	2.84	.85	6.66***	
	(2)中上	142	2.61	.54		2.80	.52		
	(3)中等	268	2.37	.55		2.55	.59		
	(4)中下	122	2.44	.60		2.52	.62		
	(5)下下	33	2.44	.79		2.43	.79		
人際關係	(1)很好	57	2.84	.86	11.16***	2.94	.81	22.85***	
	(2)良好	187	2.57	.51		2.84	.51		
	(3)尚可	309	2.38	.58		2.50	.58		
	(4)不佳	40	2.20	.51		2.17	.57		
	(5)惡劣	14	2.25	.64		2.04	.84		

* $p < .05$. ** $p < .01$. *** $p < .001$.

三、 不同背景變項下影響青少年政治社會化之不同變項「政治態度」各層面之差異分析

在政治態度中的「政治信任感」層面上，不同性別、學習階段、家庭社經地位、幹部經驗、社團經驗、與政治態度均有顯著差異。尤其是男性明顯高於女性，高中生明顯高於國中生，家庭社經地位高者明顯高於家庭社經地位低者，有幹部經驗之青少年明顯高於無幹部經驗之青少年，有社團經驗者高於無社團經驗者，其他如不同學業成就、人際關係等背景變項上，並無明顯差異(表 4-3)。

在政治態度中的「民主態度」層面上，不同性別、學習階段、家庭社經地位、幹部經驗、社團經驗、與政治態度有顯著差異。尤其是男性明顯高於女性，高中生明顯高於國中生，家庭社經地位高者明顯高於家庭社經地位低者，有幹部經驗之青少年明顯高於無幹部經驗之青少年，有社團經驗者高於無社團經驗者，學業成就中上者高於學業成就中下者，其他如不同人際關係等背景變項上，並無明顯差異(表 4-3)。

在政治態度中的「公民責任感」層面上，不同性別、學習階段、家庭社經地位、幹部經驗、社團經驗、學業成就與政治態度有顯著差異。尤其是男性明顯高於女性，高中生明顯高於國中生，家庭社經地位高者明顯高於家庭社經地位低者，有幹部經驗之青少年明顯高於無幹部經驗之青少年，有社團經驗者高於無社團經驗者，學業成就中上者高於學業成就中下者，其他如不同人際關係等背景變項上，並無明顯差異(表 4-3)。

此外，在「政治功效感」層面上，不同社經地位、幹部經驗、人際關係與政治態度有顯著差異，家庭社經地位高者明顯高於家庭社經地位低者，有幹部經驗之青少年明顯高於無幹部經驗之青少年，人際關係良好的青少年高於人際關係不佳與惡劣的青少年。其他如不同性別、學習階段、社團經驗、學業成就等背景變項上，並無明顯差異。

表 4-3 不同性別的青少年其影響政治社會化不同變項中「政治態度」之平均數、標準差及 t 考驗、 F 值

變項	人數	政治信任感				民主態度		
		N	M	SD	t 值/ F 值	M	SD	t 值/ F 值
性別	男	263	1.98	.71	2.06*	3.08	.71	2.9*
	女	344	1.87	.58		3.24	.57	
學習階段	國中	289	1.79	.66	4.97**	3.05	.70	4.51**
	高中	318	2.05	.59		3.28	.56	
社經	高	319	1.91	.62	.14	3.21	.62	1.73

地位	低	288	1.92	.67		3.12	.66	
幹部 經驗	(1)無	56	2.11	.66	3.03*	2.87	.68	5.20***
	(2)一年	156	1.95	.66		3.13	.62	
	(3)兩年	145	1.92	.60		3.17	.60	
	(4)三年	250	2.32	.64		3.26	.63	
社團 經驗	(1)無	48	2.06	.65	4.21**	2.88	.88	4.13**
	(2)一年	106	2.08	.66		3.16	.59	
	(3)兩年	252	1.88	.64		3.21	.58	
	(4)三年	201	2.15	.63		3.19	.65	
學業 成就	(1)上上	42	1.92	.71	.70	3.15	.80	5.72***
	(2)中上	142	1.88	.66		3.33	.52	
	(3)中等	268	1.89	.63		3.15	.68	
	(4)中下	122	1.99	.63		3.14	.55	
	(5)下下	33	1.97	.65		2.76	.60	
人際 關係	(1)很好	57	1.79	.80	1.47	3.13	.77	.26
	(2)良好	187	1.97	.61		3.21	.61	
	(3)尚可	309	1.89	.62		3.16	.64	
	(4)不佳	40	2.04	.59		3.13	.63	
	(5)惡劣	14	1.98	.68		3.14	.61	

(待續)

續表 4-3

變項		人數		公民責任感		政治功效感		
		N	M	SD	t 值/F 值	M	SD	t 值/F 值
性別	男	263	2.63	.76	2.0*	2.33	.69	1.53
	女	344	2.76	.68		2.41	.53	
學習 階段	國中	289	2.58	.73	4.01**	2.34	.64	1.16
	高中	318	2.81	.69		2.40	.59	
社經 地位	高	319	2.72	.73	.45	2.41	.59	1.42
	低	288	2.69	.72		2.34	.64	
幹部 經驗	(1)無	56	2.48	.68	3.08**	2.38	.68	3.35**
	(2)一年	156	2.64	.64		2.29	.61	
	(3)兩年	145	2.71	.71		2.34	.58	
	(4)三年	250	2.80	.77		2.48	.61	
社團	(1)無	48	2.59	.91	3.64**	2.38	.74	.40

經驗	(2)一年	106	2.68	.66		2.37	.55	
	(3)兩年	252	2.71	.69		2.35	.59	
	(4)三年	201	2.74	.74		2.41	.64	
學業成就	(1)上上	42	2.59	.86		2.42	.74	
	(2)中上	142	2.82	.76		2.47	.55	
	(3)中等	268	2.74	.69	3.07**	2.37	.59	1.72
	(4)中下	122	2.60	.65		2.31	.61	
	(5)下下	33	2.43	.78		2.24	.80	
人際關係	(1)很好	57	2.53	.94		2.44	.77	
	(2)良好	187	2.78	.69		2.55	.56	
	(3)尚可	309	2.71	.69	2.55*	2.30	.60	7.73**
	(4)不佳	40	2.49	.67		2.11	.51	
	(5)惡劣	14	2.90	.83		2.19	.57	

* $p < .05$. ** $p < .01$. *** $p < .001$.

四、不同背景變項下影響青少年政治社會化之不同變項「政治參與」各層面之差異分析

在政治參與的「政治行動」層面上，不同性別、幹部經驗、社團經驗、學業成就與政治參與有顯著差異。尤其是男性明顯高於女性，有幹部經驗之青少年明顯無幹部經驗之青少年，有社團經驗者高於無社團經驗者，學業成就上上者高於學業成就下下者，其他如不同學習階段、社經地位、人際關係等背景變項上，並無明顯差異(表 4-4)。

在政治參與中的「抗議行為」層面上，不同性別、學習階段、家庭社經地位、幹部經驗、社團經驗、人際關係與政治參與有顯著差異。尤其是男性明顯高於女性，高中生明顯高於國中生，家庭社經地位高者明顯高於家庭社經地位低者，有幹部經驗之青少年明顯高於無幹部經驗之青少年，有社團經驗者高於無社團經驗者，人際關係很好者高於人際關係不佳者，其他如不同學業成就等背景變項上，並無明顯差異(表 4-4)。

在政治參與中的「代表參與」層面上，不同性別、學習階段、家庭社經地位、幹部經驗、社團經驗、學業成就、人際關係與政治參與有顯著差異。尤其是男性明顯高於女性，高中生明顯高於國中生，家庭社經地位高者明顯高於家庭社經地位低者，有幹部經驗之青少年明顯高於無幹部經驗之青少年，有社團經驗者高於無社團經驗者，學業成就中上者高於學業成就中下者、人際關係良好者高於人際關係不佳者(表 4-4)。

表 4-4 不同背景的青少年在「政治參與」各層面之平均數、標準差及 *t* 考驗、*F* 值

變項		政治行動				抗議行為			代表參與		
		N	M	SD	<i>t</i> 值/ <i>F</i> 值	M	SD	<i>t</i> 值/ <i>F</i> 值	M	SD	<i>t</i> 值/ <i>F</i> 值
性別	男	263	1.61	.68	2.72*	2.21	.73	1.89	2.37	.82	1.55
	女	344	1.47	.57		2.11	.59		2.27	.73	
學習階段	國中	289	1.55	.68	.99	2.09	.69	2.09*	2.25	.76	2.23*
	高中	318	1.51	.56		2.21	.64		2.39	.77	
社經地位	高	319	1.53	.62	-.11	2.22	.67	2.60*	2.35	.75	.85
	低	288	1.54	.63		2.08	.65		2.30	.79	
幹部經驗	(1)無	56	1.64	.69	2.75*	1.96	.69	3.64**	2.03	.78	4.02**
	(2)一年	156	1.55	.65		2.10	.65		2.26	.73	
	(3)兩年	145	1.49	.59		2.12	.64		2.33	.72	
	(4)三年	250	1.51	.61		2.43	.66		2.43	.80	
社團經驗	(1)無	48	1.55	.65	2.48*	1.86	.63	7.86***	2.02	.78	2.88*
	(2)一年	106	1.59	.68		2.03	.60		2.38	.77	
	(3)兩年	252	1.51	.62		2.15	.67		2.35	.74	
	(4)三年	201	1.51	.59		2.30	.66		2.34	.78	
學業成就	(1)上上	42	1.60	.71	2.89*	2.41	.77	1.85	2.19	.10	2.40*
	(2)中上	142	1.43	.55		2.17	.65		2.44	.72	
	(3)中等	268	1.50	.58		2.14	.64		2.34	.75	
	(4)中下	122	1.59	.65		2.11	.66		2.27	.76	
	(5)下下	33	1.78	.85		2.28	.71		2.06	.72	
人際關係	(1)很好	57	1.67	.85	1.19	2.47	.78	5.32***	2.14	.89	2.59*
	(2)良好	187	1.50	.58		2.17	.63		2.41	.73	
	(3)尚可	309	1.53	.59		2.13	.63		2.34	.75	
	(4)不佳	40	1.41	.61		1.87	.67		2.07	.74	
	(5)惡劣	14	1.55	.79		2.03	.87		2.38	.91	

* $p < .05$. ** $p < .01$. *** $p < .001$.

五、影響青少年政治社會化之不同變項與政治參與之相關分析

影響青少年的政治社會化之不同變項「政治態度」中的「政治信任感」、「民主態度」、「公民責任感」和「政治功效感」與「態度總平均」對政治參與的各層面均有顯著正相關。政治態度總量表與政治參與總量表之間的相關係數為.41，且相關係數之考驗達顯著水準。而政治態度四層面(政治信任感、民主態度、公民責

任感、政治功效感)與政治參與三層面(政治行動、抗議行為、代表參與)均達顯著水準，相關係數介於.00 與.46 之間。政治態度各層面與整體政治參與之相關係數介於.17 與.38 之間，尤其以「政治功效感」與政治參與的相關最高，為.38；在各層面方面，以政治態度的「公民責任感」與政治參與的「代表參與」相關最高，為.46。對青少年而言，基本的民主態度包含自由和平等，有充分的選擇權與講求機會的平等，青少年在校期間，若學校能加強其民主教育、強調投票的重要性，日後參與投票的機會就越高；本研究發現，國高中生對政治的信任感普遍偏低，覺得政府不夠了解人民的需求，但若青少年對政府政策或基層人員的表現信任感越高，相對的也會影響其往後的政治參與(表 4-5)。

表 4-5 影響青少年政治社會化不同變項與政治參與之相關分析

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
(1)父母態度	1														
(2)同儕態度	.39***	1													
(3)父母同儕總量	.42***	.68***	1												
(4)自主決定	.20***	.19*	.15***	1											
(5)言論重視	.23***	.06*	.19***	.64***	1										
(6)權力總量	.23***	.00*	.19***	.90***	.91***	1									
(7)政治信任感	.31***	.07*	.18**	.94*	.82*	.09*	1								
(8)民主態度	.78*	.01*	.56	.54	.17***	.13**	.06***	1							
(9)公民責任感	.23***	.09*	.09*	.12**	.19***	.18***	.21**	.42***	1						
(10)政治功效感	.28***	.05*	.17***	.24***	.26***	.27***	.48***	.31***	.46***	1					
(11)態度總量	.32***	.81*	.17***	.18***	.25***	.24***	.60***	.64***	.77***	.78***	1				
(12)政治行動	.35***	.13**	.15***	.20**	.19***	.21***	.31***	.37***	.21***	.27***	.25***	1			
(13)抗議行為	.21***	.11**	.59*	.25***	.30***	.31***	.00*	.11***	.10*	.16***	.14***	.42***	1		
(14)代表參與	.30***	.13***	.12**	.21***	.24***	.25***	.28***	.31***	.46***	.42***	.52***	.36***	.33***	1	
(15)參與總量	.38***	.16***	.14***	.28***	.32***	.34***	.25***	.17***	.35***	.38***	.41***	.75***	.75***	.78***	1

* $p < .05$. ** $p < .01$. *** $p < .001$.

一、 研究結論

(一)不同個人背景變項中，影響青少年政治社會化之各變項「父母與同儕政治態度」，在部分層面有顯著差異

研究發現，背景變項在「父母與同儕政治態度」層面上大都達顯著差異。總括來說，青少年在政治社會化過程中，會受到父母與同儕政治態度的影響，尤以男性高於女性；社經地位高的青少年較社經地位低的青少年，更容易受到父母與同儕政治態度的影響；有幹部經驗與社團經驗之青少年較無幹部與社團經驗之青少年，受到父母與同儕政治態度影響較大

(二)不同個人背景變項中，影響青少年政治社會化之不同變項「權力意識」，在大部分的層面上有顯著差異

研究發現，背景變項在權力意識層面上大都達顯著差異。總括來說，男性的權力意識較女性來得高、有幹部經驗與社團經驗之青少年其權力意識較為正向積極、學業成就中上、人際關係良好的青少年則擁有較高的權力意識。

(三)不同個人背景變項中，影響青少年政治社會化之不同變項「政治態度」，在大部分的層面上有顯著差異

背景變項在政治態度各層面上大都達顯著差異，尤其是男性、高中生、社經地位高者、有幹部經驗、有社團經驗之青少年其政治態度較為積極正向。

(四)不同個人背景變項中，影響青少年政治社會化之不同變項「政治參與」，在大部分的層面上有顯著差異

背景變項在政治參與各層面上大都達顯著差異，不同性別、幹部經驗、社團經驗、學業成就與政治參與有顯著差異。尤其是男性明顯高於女性，有幹部經驗之青少年明顯無幹部經驗之青少年，有社團經驗者高於無社團經驗者，學業成就上上者高於學業成就下下者，其他如不同學習階段、社經地位、人際關係等背景變項上，並無明顯差異

(五)影響青少年政治社會化之不同變項與政治參與有相關

研究發現政治參與中的「政治行動」、「抗議行為」、「代表參與」、與影響青少年政治社會化之不同變項「父母與同儕政治態度」的「父母政治態度」、「同儕政治態度」各層面間有顯著的正相關，而政治參與與影響青少年政治社會化之不同變項「權力意識」的「自主決定」、「言論重視」各層面間則有顯著的正相關，此外，政治參與與影響青少年政治社會化之不同變項「政治態度」的「政治信任感」、「民主態度」、「公民責任感」、「政治功效感」各層面間有顯著的正相關。

而這研究結果與許多研究大致相同，影響青少年政治社會化之不同變項「父母與同儕政治態度」、「權力意識」、「政治態度」與青少年的政治參與，呈現顯著正相關，當父母與同儕的政治態度越正向積極時，青少年的政治參與就越正向積極(Perrone & Portney, 2007)；當青少年有較高的權力意識時，其政治參與也越積極(Smith, 2005)；雖然青少年的政治參與感普遍偏低，但若其自身的政治態度較正向積極時，其政治參與也較正向積極，此研究結果與國內外學者的研究結果不謀而合(張華娟, 2007; Karp & Banducci, 2007)。

二、研究建議

(一)給青少年的建議

本研究指出，青少年對於政治事務的參與興趣缺缺，對政府官員與政策都抱持著質疑的態度，青少年應該養成由不同媒體獲取新聞的習慣，透過與他人討論的過程中，增加對政治的興趣、培養正向積極的政治態度，利用正確的管道與自身的力量，參與各項使社會能夠更

美好的政治活動，此階段的青少年若是能培養關心公共事務的能力，將來則有助於國家社會的進步繁榮。

(二)給父母的建議

本研究發現，父母的政治態度對青少年的政治態度有正相關，且高社經地位的學生其政治態度高於低社經地位的學生，其原因可能是因為低社經地位背景的家長多忙於工作，較少與子女討論與政治相關的話題，更無多餘的時間或管道參與政治，連帶對子女也造成影響。因此當父母在討論公共政策或政治議題時，應鼓勵子女共同參與，關心子女的學校事務與政策，從中傾聽子女對學校事務的看法與意見，引導孩子從多元的意見中找到自己的看法，培養其批判思考的能力，久而久之，子女自然對公共事務產生興趣，了解公民自身的權利後，並願意積極參與各項政治活動，欲培養出具有民主態度的公民，父母應以身作則並循循善誘引導子女，從小培養其關心社群的態度，才能收到潛移默化的效果。

(三)給學校的建議

研究發現，有幹部經驗與社團經驗的青少年，其政治態度與政治參與都較為正向積極，因此學校或教師應多讓學生擔任幹部、參與社團的機會，如此一來，有助於培養學生的積極參與行為。學生藉由擔任幹部的機會可以學習溝通、表達、負責、決策，並關心公共事務，而學校若能多舉辦相關公民活動、鼓勵學生參與治社團活動，例如，班會、課外教學活動、自治幹部選舉活動、服務學習等，間接營造民主參與過程，讓青少年從中培養容忍力、解決衝突的能力，並有機會與管道可以關心學校與社會。此外，學校在面對學生抗議行為時，也應引導學生須透過民主方式表達己見，以民主態度為核心，尊重學生的言論自由、平等權利，此將有助於政治參與的提升，過程中除了可以培養學生政治參與的技能之外，也間接提升了其政治知能、培養其積極正向的政治態度。

(四)給政府行政機關的建議

政治系統需要人民的支持才能夠運作，青少年對政治信任感較為低落，歸咎其原因，可能是青少年藉由報章雜誌或新聞媒體，看見政府行政官員在議會討論政策時的衝突畫面而心生無力感，認為自身的力量有限，並無法改變政治社會整個大環境。因此政府官員應以身作則，提供社會大眾一個清廉正向的政治運作環境、重視自身的品德修養、守法態度，成為人民的榜樣，並傾聽民眾的意見，以民眾的利益為前提，並以溝通、協議等正確的管道來解決爭議，勿落入口水戰或形成政治秀，讓這些負面的觀感成為民眾對政治信任感低落的原因。政治人物若能將民眾利益列為首要考量，則能有效提升青少年對政治的關心度與參與感。

(五)對未來研究方向的建議

本研究雖納入背景變項（性別、學習階段、社經地位、幹部經驗、社團經驗、學業成就、人際關係），來探討影響青少年政治社會化之不同變項對政治參與的分析，同時利用各種統計方法，分析青少年生理現況及各變項間的差異性與關連性，並得到上述的研究結果。但本研究仍有所不足，以下對未來相關研究提供各項建議：

1.在研究變項上

不同背景變項的選擇上，除了本研究的性別、學習階段、家庭社經地位、幹部經驗、社團經驗、學業成就、人際關係之外，觀看報紙的頻率、電視新聞次數等，都是可以納入研究變項的參考，以期能對影響青少年政治社會化之不同變項有更多的瞭解。

2.在研究對象上

本研究以台灣九十八學年度就讀於公立國中、高中、高職在學生分為北、中、南三區，但事

實上在取樣時，受限於時間及人力、物力，只能以方便取樣，因此在推論上，仍有其限制。因此，若能再加入私立學校樣本且採用隨機抽樣，或許研究的發現會更多樣化，在推論上也能更普及。

3.在研究方法上

本研究採用問卷調查法，僅能以統計數據作為解釋之依據，其是否真實呈現內心的想法，研究者不得而知。而在施測過程中，受試者的作答意願，外在因素干擾的影響，致使研究成果有所誤差，再加上受限於填答題數，均會影響調查結果，為了克服上述限制，除了盡可能選擇適當時機施測之外，與班級導師做好良好溝通，往後的研究，也可以兼採參與觀察法、晤談法或個案研究法，並配合錄音機、攝影機等研究工具的使用，兼重質與量的研究，相信更能獲得正確且多元的研究結果，為青少年政治參與提供具體的方向。

4.在研究工具上

本研究採納之問卷，乃研究者參考國內外學者所設計之量表編製而成，雖經項目分析、信度效度考驗以符合本研究需求，但仍有未盡周延之處，如採用因素分析法考驗各量表是否完善，分量表題目過少，無法周延涵蓋整體概念，均加以改善。未來研究宜進一步依據研究概念，發展更有效的測量工具，使研究更具精準性，目前國內尚未建立專門發展測驗工具的學術機構，希望有關單位能夠鼓勵並成立專門機構，以發展高信度、效度之研究工具，供研究者使用。

研究二（質化分析）

一、焦點訪談結果分析

本研究焦點訪談主要關切女性青少年父母與同儕對其政治社會化的影響、青少年的政治興趣、青少年政治偏好與青少年政治活動情形。綜合兩所高中學生的焦點訪談結果如下：

一、父母與對女性青少年政治的影響

（一）爸爸(媽媽)關心政治嗎?兩位認為父母關心，其餘認為父母不關心政治。（二）你認為父母關心政治，從什麼地方可以看出?一位表示父母會看政治性談話節目，也會看新聞。另一位爸爸媽媽會看 call-in 的談話節目。其他同學的爸爸媽媽從來都不看這類節目嗎?多數答其實還好，有時候也看。有時候會看此類節目有 6 位，1 位從來不看。（三）與父母經常討論政治議題嗎?比如最近的[ECFA]?多數回答沒有，爸媽不會跟我聊這些問題。多數搖頭。（四）會經常看報紙上的政治議題嗎?少數會看報紙，有時看看標題而已。（五）會收聽廣播政治消息嗎?多數不會。在車上或在工作時收聽廣播，但不會特別聽政治消息。其他搖頭。（六）如有資格選舉會去投票嗎?8 位會去，其餘看工作時間是不是允許。（七）全家人會關心哪位候選人當選嗎?選舉時會談論，爸爸比較關心，其他人都還好。（八）爸爸(媽媽)會希望你像政治人物看齊嗎?全部回答都不會。（九）爸爸(媽媽)鼓勵你未來從政嗎?全部都不會

二、同儕朋友(同學)對女性青少年政治的影響

（一）同儕朋友(同學)關心政治嗎?只有少數人會。（二）與朋友(同學)經常討論政治議題嗎?全部回答都沒有。（三）平時在學校會收看電視政治談論性節目嗎?全部回答學校午餐時放新聞節目一起看。（四）朋友(同學)會經常看報紙上的政治議題嗎?全部

回答應該不會。(五)朋友(同學)會上網瀏覽政治消息嗎?多數回答應該很少。(六)朋友(同學)會關心哪位候選人當選嗎?全部回答不會。(七)對於選舉時的宣傳品，比如旗子、文宣、廣播車覺得如何?全部反應覺得很浪費錢；覺得很吵、很髒。(八)朋友(同學)會希望你像政治人物看齊嗎?全部回答不會。(九)朋友(同學)鼓勵你未來從政嗎?全部回答不會。

三、青少年的政治興趣

(一)會在網路上和別人聊有關政治的事情嗎?全部回答不會。(二)會用「即時通」或「msn」?全部都會。(三)會用「即時通」或「msn」和同學聊國家大事嗎?全部回答不會。(四)會和家人討論罷免總統的事情嗎?有6位回答會。(五)常和爸媽一起討論政府的政策嗎?例如：軍公教人員應該納稅，新流感疫苗應不應注射?1位回答不會討論，新流感疫苗就看自己要不要去注射。其他不會。(六)會說服同學支持我喜歡的總統候選人嗎?全部回答不會。會遊說別人投票給某人當班長嗎?2位會，其餘不會。(七)會說服朋友支持我喜歡的政黨嗎?全部回答都沒有喜歡的政黨。(八)會和朋友討論如換「行政院長」的事情嗎?全都回答不會。(九)會和鄰居討論有關「換誰當總統」的事情嗎?都回答不會。(十)會關心下一任總統由誰來做嗎?只有2位會。其餘不會。(十一)會注意立法院在討論什麼事情嗎?2位會注意打架時的鏡頭，反而不會注意他們討論什麼事情。其餘不會注意。(十二)看電視上的政治新聞(談話節目)嗎?不喜歡的有9位。(十三)會利用網際網路獲得政治新聞與訊息嗎?全部回答不會。(十四)你未來樂於從事政治活動嗎?全都不會。

四、青少年政治偏好

(一)喜歡有創意的政黨嗎?有1位回答：不能只有創意，還要看他能不能實行。其餘都不會。(二)喜歡英俊(漂亮)的候選人嗎?全部都不會。(三)會投票給能言善道的候選人嗎?5位會。其餘不會。(四)會說服別人支持我喜歡的候選人嗎?都不會。(五)會為我喜歡的候選人做義工嗎?只有1位可以。(六)會捐款給候選人嗎?全部都不會。(七)會經常瀏覽我支持的候選人網站嗎?全都不會。(八)偏好能敢於衝撞的候選人嗎?都不喜歡。(九)喜歡能抗爭的候選人嗎?1位回答：我喜歡做事有魄力、敢作敢當的候選人。其他都不喜歡。(十)喜歡有風度的候選人嗎?都喜歡。(十一)經常關注選舉的消息嗎?全部不會。(十二)希望選舉能帶給社會進步的希望嗎?都希望。(十三)對政治人物都很失望嗎?7位感到失望，2位還好。(十四)喜歡政治嗎?喜歡政治活動?全都不喜歡。(十五)有沒有寫過這類作文題目?或多或少有。

五、青少年政治活動

(一)曾經投稿表達我對政治事件的看法嗎?全部都沒有。(二)會聽政黨的意見，決定對政治事務的看法都回答不會。(三)找過政治人物或公務人員表達我的看法嗎?都沒有。(四)有自己的政治理念嗎?都沒有。(五)我會向教育部(局)投訴學校不合理的事情嗎?都不會。(六)會向導師反應班規不合理的地方嗎?4位回答會。(七)找過老師表達我覺得學校不對的做法?全部沒有。(八)會主動要求學校改進應做的事情嗎?有2位曾經對社團活動有意見，找組長反應。(九)我會找同學一起向學校爭取權利嗎?2位希望學校辦一些沒有辦理過的活動。(十)找過校長抗議不合理的規定嗎?都沒有。(十一)午餐菜色不好，我會向學校抗議嗎?4位會換別家廠商，一週就可以換。(十二)會寫E-mail給政府單位，抗議對學校不滿的地方?

都不會。(十三)曾經幫參加選舉的人募款嗎?都不會。(十四)運動會裁判判決不公平,我會向學校抗議參嗎?都不會。(十五)曾簽過名,表達意見的連署嗎?1位有,連署員林鐵路高架化,其他都沒有經驗。(十六)曾經對學校服裝儀容的規定,表達抗議。2位認為可以不用穿制服,穿運動服就可以了。

有的班級就可以這樣!2位因為是觀光餐飲科,有實習課時就可以穿運動服,所以會有整週都穿運動服的時候。(十七)有因此而向學校抗議嗎?1位沒有,自己偷偷的換就好了。也不會想向學校抗議。(十八)會在網路上投訴學校不合理的事情?都不會。(十九)學校如舉辦學生會長選舉模範生選舉時會去投票嗎?

都會投票。(二十)未來會追求你的政治理想嗎?都不想。(二十一)如果可以的話,你願意投票選舉總統嗎?假設投票年齡降低,你會去投票嗎?1位不會,理由是我不想。(二十二)如果可以的話,你願意參加政黨嗎?都不願意。理由是:1位反應政黨都在作秀;2位表示他們只是互相攻擊;2位我看不出誰比較好;1位參加政黨就會有壓力,好像就一定要選誰。(二十三)你覺得高中生都跟你們一樣比較不喜歡?1位回答:不一定啦,應該也有人很喜歡。另1位回答:只有少數人比較感興趣吧。(二十四)不可能到大學、年齡增長時,你會比較關心政治?4位覺得應該會,3位可能會,2位覺得不會。

二、個別訪談結果分析

本研究個別訪談亦主要關切女性青少年父母與同儕對其政治社會化的影響、青少年的政治興趣、青少年政治偏好與青少年政治活動情形。綜合三所高中學生的焦點訪談結果如下:

一、父母與對女性青少年政治的影響

父母與對女性青少年政治的影響是屬於全面性的,青少年的父母對青少年的政治社會化歷程扮演重要角色。本研究質性訪談資料有下列顯著結果:

在家不喜歡看新聞,很少看電視,放鬆活動就是玩電腦、facebook,不用補習時才玩,家裡爸爸媽媽沒有在討論政治新聞話題、也沒有在討論選舉的事,他們不會看連續劇 (SKS002)

〔爸媽〕他們也會看政治的新聞,比較不會在我面前講,不會討論得很激烈、不會 call in,我也比較不會看新聞,所以也不會太常和我討論,爺爺奶奶都看連續劇比較多 (SKS001)

爸爸媽媽吃完飯時會看一下新聞,阿嬤會唱卡拉 ok,我不知道他們黨派是甚麼,但是感覺蠻合的,他們只會自己討論新聞,某某人做得好、某某人比較不好,爸爸有在看文茜節目,媽媽會一邊看報紙、一邊看電視,我看不懂覺得很複雜,爸爸不會跟我討論...爸爸媽媽會跟我講社會新聞 (SKS003)。爸爸很喜歡看新聞、幾乎大部分都在看新聞,我自己沒有很樂意興趣關注政治 (SKS003)。

爸爸媽媽是不談政治的,媽媽覺得每個人看法都不一樣 (SKS004)

爸爸媽媽在家裡面噯會不會跟我談論到政治的話題 (CMS001)

他們吃飯的時候,會看電視新聞,他們好像在睡前也有看于美人主持的國民大會,看完就睡覺了 (CMS003) 我有說過以後長大走政治應該也是不錯,媽媽說走政治很累,她覺得政治人物不管怎麼做都會被放大,這樣會很累 (CMS003)

爸爸媽媽每天大概在吃飯時間,看1小時的電視新聞,我也會一起看,其他時間就看綜

藝節目 (CMS005)

我都回房間寫功課，新聞我會看，不會和爸媽討論，他們也很少在討論 (CMS006)

從整體來分析，本研究發現青少年爸媽基本上或多或少會關心政治，平時在家也會討論政治議題、收看政治談論性節目，父母會看報紙上的政治新聞，但較少收聽廣播上的政治消息。選舉時會去投票，全家都會關心哪位候選人當選，但爸媽不會希望向哪位政治人物看齊，從未鼓勵從政，希望子女依照自己的興趣選擇未來的志願。少數家庭爸媽不太關心政治，也不太會討論政治議題。

二、同儕朋友(同學) 對女性青少年政治的影響

有些同學(朋友)會關心政治，例如上經濟課時所談到的 ECFA 議題，同學平常不會主動談到政治議題，多半較關心時事。同學之間平常在校會收看電視新聞，較少瀏覽網路的政治消息，多少會關心哪位候選人當選，同學不會希望我向哪位政治人物看齊，不過由於我是班聯會會長，同學曾建議我以後可以出來競選民意代表(HFS001)

以前高一老師叫我們做剪報，有一個男生都剪政治的，然後就開始寫一些批評罵人的話，我都剪文章或社會新聞，不會剪政治的，大家會輪流欣賞、老師規定的，就會看到那個男生偏激的罵 (CMS007)

會和同學聊影劇版的、偶像劇的，像是羅志祥演.....男生都是聊線上遊戲 (SKS001) 我們會在星期六日用網路即時通，掛在線上不一定會聊天、偶爾問功課，平常不會用電腦、因為功課很多，星期日晚上 10 點看個偶像劇大長今 (SKS001)

我們假日會用即時通跟其他朋友聊天，在佛教的課程中，認識台灣各地的朋友，聊在學校發生的事，像是某幾班停課了 (SKS004)

那像平時跟朋友聊天的時候會用即時通，MSN 之類的，但不會聊到政治 (CMS001)

有些會關心喔。女生大部分都還好，男生有些就明顯的偏藍或偏綠。有時在班上討論政黨。也會討論政治議題。學校中午統一會播放新聞台，大部分是時事，有時候就有政治議題。有些人會關心，我有一個朋友就很關心，他比較奇怪。因為他是女生。為我覺得大部分女生應該不太喜歡，可是這個朋友就很有研究。比較誇張像打架、吵來吵去的網路政治消息，我才會瀏覽。哈~同學完全不會希望我向政治人物看齊。也沒聽說誰將來希望從政(HFS007)

基本上青少年同儕有些會關心政治，看新聞或報紙，也會討論政治與教育議題，同學較少上網瀏覽政治消息；與同學不曾討論過哪位候選人當選，曾討論過總統大選的候選人，但不是很熱烈，朋友不曾希望我像政治人物看齊、也不鼓勵從政。

三、青少年的政治興趣

我不曾在網路上談論有關政治的事情，但會和同學聊到教育議題，公民課曾討論到罷免的議題，但不曾和家人討論關於罷免總統的事情。我不會說服同學支持我喜歡的總統候選人，端看個人意願 (HFS001)

我不曾在網路上聊到關於政治的事情；也不會用「msn」和同學聊國家大事，ECFA 只會在課堂上討論 (HFS003)

之前本來有訂自由時報，後來跟隔壁鄰居一起看，甚麼板都看、沒空時看標題重點，政治我通常不看政治版的，只看電視的政治新聞，偶爾也看今晚誰當家、麻辣天后宮、綜藝大哥大 (SKS004)

不會和同學討論。國中時籃球社，會討論體育版，現在越長大愈懶，就不想動，會聊台灣的籃球、最近台灣棒球有點失敗，現在也沒在聊了。和同學只聊等一下要考甚麼、前一天都沒念、作業沒寫，諸如此類很沒有意義的話（CMS006）

由訪談者談話內容中得知，大多同學不會在網路上和別人聊到關於政治的事情；此外，大部分同學均有使用「msn」的習慣，但大多沒有和同學討論國家大事的經驗，除了其中有兩位學生因課堂上的需要，曾和同學談論過 ECFA 的議題；大多數學生會看電視上的政治新聞，但不常收看；但僅有少數學生會利用網際網路獲得政治新聞與訊息，除非政治新聞正巧在奇摩新聞的首頁，才會因好奇而點進去看，有些則只注意影劇新聞。

四、青少年政治偏好

之前本來有訂自由時報，後來跟隔壁鄰居一起看，甚麼板都看、沒空時看標題重點，政治我通常不看政治版的，只看電視的政治新聞，偶爾也看今晚誰當家、麻辣天后宮、綜藝大哥大（SKS004）

我有時候不想當領導人，蠻累的，我們家都沒有生男生，都是表姊表妹.....現在我會比較注意打扮（SKS005）

一般在班上男生或比較勇於討論班級事務，但是女生通常都會舉出比較有建設性的意見（CMS001）

我們班對政治比較熱衷，很多老師也這樣跟我們說，我們班對政治比較熱衷，不過棒球比較兇（CMS002）

我們班比較害羞，男女生都比較少發表言論（CMS004）

我會喜歡有創意的政黨，但要對人民有幫助；不會因為對方長相而投給他，會看他的政策與經歷；我不喜歡能言善道的候選人，因為有些只會出一張嘴，但我不會服別人支持我喜歡的候選人；我不會替我喜歡的候選人當義工，我會默默支持，對於心理所支持的候選人，我會捐款的候選人；也會瀏覽我支持的候選人網站，我欣賞有魄力、有風度的候選人，我覺得風度很重要；我不太會關心選舉的消息，希望選舉能帶給社會進步的希望；我對政治人物有點失望，覺得他們都會貪汙；我不太喜歡政治(HFS003)

多數學生不會說服別人支持自己喜歡的候選人，均尊重對方決定；少數學生會為自己喜歡的候選人當義工，例如拉票、或發傳單，其餘學生則表示不會；有些學生會捐款給候選人表達支持，有些人認為候選人都很有錢，不會將錢捐給他們，有些則寧可將錢捐給慈善機構；大多數學生對於支持的候選人，都會瀏覽他們的網站，少數學生則不會；多數學生也會關心選舉消息。學生都希望選舉可以帶給社會希望與進步，但均認為目前好像還沒有做得很好，對政治人物的看法有好有壞、有些希望候選人不要貪汙、多為人民爭取福利，有些則表示候選人可以做得更好，有些則希望立法院的官員不要動手動腳，以免造成不良的示範；多數學生均不喜歡政治，有些表示雖不喜歡，但會關心兩岸議題，有些表示非常沒有興趣。

五、青少年政治活動

我不會投稿表達對政治事件的看法，但會聽政黨意見，從中衡量政策的利弊得失再做判斷；不曾找過政治人物或公務人員表達我的看法；不曾向教育部（局）投訴學校不合理的事情（HFS001）

高中就沒有管那麼多，高中幾乎都只有管課業，像我有聽我哥哥，他跟他導師幾乎不熟，幾乎事情都是自己弄（CMS004）

我不會投稿表達對政治事件的看法，但會聽政黨意見，從中衡量利弊得失再做判斷；不

曾找過政治人物或公務人員表達我的看法；不曾幫候選人募款；不會在網路上連署簽名；也不會在網路上投訴學校不合理的事情，我會積極參與學生會長的投票；未來我會追求自己的政治理想，例如積極參與投票；擁有投票權之後，我會參與投票選舉總統；我不會參加政黨，從沒想過這個問題（HFS005）

整體分析結果發現，受訪者均不曾投稿表達自己對政治事件的看法、也不曾找過政治人物或公務人員表達看法；但大多數受訪者會聽政黨意見，決定對政治事務的看法，例如課堂上曾經辯論 ECFA 是否應簽訂的議題；沒有自己的政治理念，部份表示從未想過這個問題。大部分學生會找老師表達自己覺得學校不對的做法；受訪者表示均未曾幫候選人募款；大多數不曾參加簽名、表達意見的連署；學校如舉辦學生會長選舉模範生選舉時，大家表示都會去投票；大多數表示未來不會追求自己的政治理想；也不願意參加政黨，有些認為政治很可怕、很複雜，有些則是對政治一點興趣也沒有；如果可以的話，大家都會投票選舉總統。

三、結論與建議

由本研究二質化分析結果來看，青少年家庭中對於政治新聞有些關心，有些則不關心，整體而言，青少年女生都沒有被鼓勵參與政治活動，她們多數只專心功課或影劇新聞，父母都不希望向政治人物看齊，從未被鼓勵從政。青少年同儕有些會關心政治，但朋友不曾希望像政治人物看齊、也不鼓勵從政。大多青少年同學不會在網路上和別人聊到關於政治的事。基本上，女性青少年生活與學習中甚少涉政治議題。大多數同學不會在網路上和別人聊到關於政治的事情；雖然大部分青少年均有使用「msn」的習慣，但大多沒有和同學討論國家大事的經驗；大多數學生會看電視上的政治新聞，但不常收看；但僅有少數學生會利用網際網路獲得政治新聞與訊息，有些則只注意影劇新聞。多數學生不會說服別人支持自己喜歡的候選人。整體而言，多數學生均不喜歡政治，政治銳度低，也沒有太高權力意識，對週遭環境也幾乎沒有抗議行為，少數偶而關心選舉消息。

本研究的質化分析結果可見女性青少年的政治社會化程度不高，與政治有關的議題與活動都沒有受到積極鼓勵，父母及同儕也都不鼓勵未來從政。整體來看，女性青少年未來可能也難與男生在政治事務上相抗衡。建議學校應提高青少年，尤其女生的政治關心程度。另外學校課程、班級氣氛和學校文化都會影響青少年對公民活動的參與。學生如果有機會參與研究調查、討論和表達對社會議題的觀點，比較可以發展出支持政治參與的態度，此方面國高中學校都有待加強。本研究發現青少年對於政治事務的參與興趣缺缺，實非未來國家社會發展之福。另外父母積極應鼓勵子女共同參與公共事務，關心子女的學校事務與政策，引導孩子從多元的意見中找到自己的看法，培養其批判思考的能力，久而久之，子女自然對公共事務產生興趣。本研究量化與質化分析結果相近，可見當前青少年的權力意識、政治關懷、政治參與及能為公共事務付出等都有待加強，也是當前青少年教育輔導上的重要課題。從本研究結果看來，應該不是政治排斥女性，而是女性在家庭、學校與同儕互動中就自我選擇排斥政治。

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附 錄

附錄 1 父母與同儕政治價值觀量表

【初編題目】

- | | | |
|----------------------------|---|---|
| 1. 我爸爸鼓勵我未來從政。----- | 是 | 否 |
| 2. 我媽媽鼓勵我未來從政。----- | 是 | 否 |
| 3. 我經常與父母討論政治問題。----- | 是 | 否 |
| 4. 我的父母政治不關心政治 (*).----- | 是 | 否 |
| 5. 我的父母認為政治很可怕 (*).----- | 是 | 否 |
| 6. 我的父母認為政治可以促進社會進步。----- | 是 | 否 |
| 7. 我們在家裡不看政治談話節目 (*).----- | 是 | 否 |
| 8. 我們家很少去投票 (*).----- | 是 | 否 |
| 9. 我們家不關心選舉誰當選 (*).----- | 是 | 否 |
| 10. 我們從不參與競選活動 (*).----- | 是 | 否 |

- | | | |
|--------------------------------|---|---|
| 11. 我父母對政治非常敏銳。----- | 是 | 否 |
| 12. 我父母希望我像政治人物看齊。----- | 是 | 否 |
| 13. 我們家經常一起看報紙政治消息。----- | 是 | 否 |
| 14. 我們家經常收看電視政治消息。----- | 是 | 否 |
| 15. 我們家經常一起收聽政治消息廣播。----- | 是 | 否 |
| 16. 我同學鼓勵我未來從政。----- | 是 | 否 |
| 17. 我經常與朋友（同學）討論政治問題。----- | 是 | 否 |
| 18. 我的朋友（同學）政治不關心（*）。----- | 是 | 否 |
| 19. 我的朋友（同學）認為政治很可怕（*）。----- | 是 | 否 |
| 20. 我的朋友（同學）不看政治談話節目（*）。----- | 是 | 否 |
| 21. 我的朋友（同學）不關心選舉誰當選（*）。----- | 是 | 否 |
| 22. 我的朋友（同學）從不參與競選活動（*）。----- | 是 | 否 |
| 23. 我的朋友（同學）對政治非常敏銳。----- | 是 | 否 |
| 24. 我的朋友（同學）希望我像政治人物看齊。----- | 是 | 否 |
| 25. 我的朋友（同學）經常一起看報紙政治消息。----- | 是 | 否 |
| 26. 我的朋友（同學）經常收看電視政治消息。----- | 是 | 否 |
| 27. 我的朋友（同學）經常一起收聽政治消息廣播。----- | 是 | 否 |
| 28. 我的朋友（同學）經常上網瀏覽政治消息。----- | 是 | 否 |

註：（*）係反向題。

附錄2 青少年權力意識量表

【初編題目】	完全不同意<----->完全同意 (請在數字上圈起來)						
	1	2	3	4	5	6	7
1.我覺得，我可以讓別人聽我說話。-----	1	2	3	4	5	6	7
2.我覺得我的願望微不足道。-----	1	2	3	4	5	6	7
3.我覺得我可以讓別人為我做事。-----	1	2	3	4	5	6	7
4.我覺得即使我說出我的意見，我依然沒有把握。-----	1	2	3	4	5	6	7

5.我想我有很大的權力。-----	1	2	3	4	5	6	7
6.我覺得，我的想法和意見經常被忽視。-----	1	2	3	4	5	6	7
7.只要我想，我就可以自己作決定。-----	1	2	3	4	5	6	7
8.我會敏銳的去察覺誰的權力最大。-----	1	2	3	4	5	6	7
9.我很想影響別人。-----	1	2	3	4	5	6	7
10.權力是我追求的目標。-----	1	2	3	4	5	6	7

附錄3 青少年政治興趣量表

【初編題目】	完全不同意<----->完全同意 (請在數字上圈起來)						
	1	2	3	4	5	6	7
1.我會在網路上和別人聊有關政治的事情。-----	1	2	3	4	5	6	7
2. 我會用「即時通」或「msn」和同學聊國家大事。-----	1	2	3	4	5	6	7
3. 我會和家人討論罷免總統的事情。-----	1	2	3	4	5	6	7
4. 我常和爸媽一起討論政府的政策。-----	1	2	3	4	5	6	7
5. 我會說服同學支持我喜歡的總統候選人。-----	1	2	3	4	5	6	7
6. 我會遊說別人投票給某人當班長。-----	1	2	3	4	5	6	7
7. 我會說服朋友支持我喜歡的政黨。-----	1	2	3	4	5	6	7
8. 我會和朋友討論換「行政院長」的事情。-----	1	2	3	4	5	6	7
9. 我會和鄰居討論有關「換誰當總統」的事情。-----	1	2	3	4	5	6	7
10. 我很關心下一任總統由誰來做。-----	1	2	3	4	5	6	7
11. 我很注意立法院在討論什麼事情。-----	1	2	3	4	5	6	7
12. 我常看電視上的政治新聞。-----	1	2	3	4	5	6	7
13. 我常看電視上政治性的談話節目。-----	1	2	3	4	5	6	7
14. 我會看報紙，知道其他國家發生的事情。-----	1	2	3	4	5	6	7
15. 我常利用網際網路獲得政治新聞與訊息。-----	1	2	3	4	5	6	7
16. 我會去看有關政治的部落格。-----	1	2	3	4	5	6	7

17. 我常看電視上新聞的 call in 節目。-----	1	2	3	4	5	6	7
18. 我未來樂於從事政治活動。-----	1	2	3	4	5	6	7

附錄 4 青少年政治偏好量表

【初編題目】	完全不同意<----->完全同意 (請在數字上圈起來)						
	1	2	3	4	5	6	7
1. 我喜歡有創意的政黨。-----	1	2	3	4	5	6	7
2. 我喜愛維持傳統的政黨。-----	1	2	3	4	5	6	7
3. 我偏好能保留核心價值的政黨。-----	1	2	3	4	5	6	7
4. 我喜歡英俊（漂亮）的候選人。-----	1	2	3	4	5	6	7
5. 我會投票給能言善道的候選人。-----	1	2	3	4	5	6	7
6. 我會說服別人支持我喜歡的候選人。-----	1	2	3	4	5	6	7
7. 我會為我喜歡的候選人做義工。-----	1	2	3	4	5	6	7
8. 我會捐款給候選人。-----	1	2	3	4	5	6	7
9. 我會經常瀏覽我支持的候選人網站。-----	1	2	3	4	5	6	7
10. 我偏好能敢於衝撞的候選人。-----	1	2	3	4	5	6	7
11. 我喜歡能抗爭的候選人。-----	1	2	3	4	5	6	7
12. 我喜歡有風度的候選人。-----	1	2	3	4	5	6	7
13. 我反對有不良紀錄的候選人。-----	1	2	3	4	5	6	7
14. 我經常關注選舉的消息。-----	1	2	3	4	5	6	7
15. 我經常關注選舉的消息。-----	1	2	3	4	5	6	7
16. 我希望選舉能帶給社會進步的希望。-----	1	2	3	4	5	6	7
17. 我對政治冷漠。（*）-----	1	2	3	4	5	6	7
18. 我討厭政治。（*）-----	1	2	3	4	5	6	7
19. 我對政治人物都很失望。（*）-----	1	2	3	4	5	6	7
20. 我喜歡激進的候選人。-----	1	2	3	4	5	6	7

- | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|
| 21. 我喜歡有具體政見的候選人。----- | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 22. 我對未來的政治不抱希望。(*) ----- | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

註：(*) 代表反向題

附錄 5 青少年政治活動量表

【初編題目】	完全不同意<----->完全同意 (請在數字上圈起來)						
1. 我曾經投稿表達我對政治事件的看法。-----	1	2	3	4	5	6	7
2. 我會主動要求學校改進應做的事情。-----	1	2	3	4	5	6	7
3. 如果可以的話，我願意投票選舉總統。-----	1	2	3	4	5	6	7
4. 我有自己的政治理念。-----	1	2	3	4	5	6	7
5. 未來我會追求我的政治理想。-----	1	2	3	4	5	6	7
6. 我會向導師反應班規不合理的地方。-----	1	2	3	4	5	6	7
7. 我會聽政黨的意見，決定對政治事務的看法。-----	1	2	3	4	5	6	7
8. 我曾經幫參加選舉的人募款。-----	1	2	3	4	5	6	7
9. 我找過老師表達我覺得學校不對的做法。-----	1	2	3	4	5	6	7
10. 我參加過選舉時的政見發表會。-----	1	2	3	4	5	6	7
11. 我會找同學一起向學校爭取權利。-----	1	2	3	4	5	6	7
12. 如果可以的話，我願意參加政黨。-----	1	2	3	4	5	6	7
13. 我找過校長抗議不合理的規定。-----	1	2	3	4	5	6	7
14. 午餐菜色不好，我會向學校抗議。-----	1	2	3	4	5	6	7
15. 學校如舉辦學生會長選舉或模範生選舉時我會去投票。----	1	2	3	4	5	6	7
16. 我找過政治人物或公務人員表達我的看法。-----	1	2	3	4	5	6	7
17. 我會向上課老師反應，老師應該改變的事情。-----	1	2	3	4	5	6	7
18. 我寫過請願書給學校或政府機關表達我的意見。-----	1	2	3	4	5	6	7
19. 我會向教育部 (局)投訴學校不合理的事情。-----	1	2	3	4	5	6	7
20. 我運動會裁判判決不公平，我會向學校抗議參加過示威遊行。----	1	2	3	4	5	6	7

21. 我參加過政黨舉辦的活動。-----	1	2	3	4	5	6	7
22. 我曾簽過名，表達意見的連署。-----	1	2	3	4	5	6	7
23. 我參加過政治集會或造勢活動。-----	1	2	3	4	5	6	7
24. 我會在網路上投訴學校不合理的事情。-----	1	2	3	4	5	6	7
25. 我會寫 E-mail 給政府單位，抗議對學校不滿的地方。-	1	2	3	4	5	6	7
26. 我曾經對學校服裝儀容的規定，表達抗議。-----	1	2	3	4	5	6	7

國科會補助專題研究計畫成果報告自評表

請就研究內容與原計畫相符程度、達成預期目標情況、研究成果之學術或應用價值（簡要敘述成果所代表之意義、價值、影響或進一步發展之可能性）、是否適合在學術期刊發表或申請專利、主要發現或其他有關價值等，作一綜合評估。

1. 請就研究內容與原計畫相符程度、達成預期目標情況作一綜合評估

達成目標

未達成目標（請說明，以 100 字為限）

實驗失敗

因故實驗中斷

其他原因

說明：

2. 研究成果在學術期刊發表或申請專利等情形：

論文： 已發表 未發表之文稿 撰寫中 無

專利： 已獲得 申請中 無

技轉： 已技轉 洽談中 無

其他：（以 100 字為限）

3. 請依學術成就、技術創新、社會影響等方面，評估研究成果之學術或應用價值（簡要敘述成果所代表之意義、價值、影響或進一步發展之可能性）（以500字為限）

女性在政治上仍屬於弱勢，全球女性在議會的政治參與度只有16%，遙遙落後男性。是「政治排斥女性」或「女性排斥政治」？青少年階段可能是男性與女性政治觀念與行為的分化階段。本研究由青少年政治社會化的歷程切入，兼採量化與質化研究法，探討女性青少年的政治發展過程，分析影響女性青少年政治社會化的重要影響因子及相關變項之關聯。本研究發現女性青少年的政治社會化程度不高，與政治有關的議題與活動都沒有受到積極鼓勵，父母及同儕也都不鼓勵未來從政。整體來看，女性青少年未來可能也難與男生在政治事務上相抗衡。建議學校應提高青少年，尤其女生的政治關心程度。本研究發展了多份評量工具，也有重要的研究發現，甚具理論與應用價值。本研究關切青少年女生的政治社會化歷程，也是全世界的首見，後續相關研究可以持續進行。

附件三

國科會補助計畫衍生研發成果推廣資料表

日期：99年9月20日

日

<p>國科會補助計畫</p>	<p>計畫名稱：政治排斥女性？或女性排斥政治？——女性青少年權力意識、政治興趣、政治偏好、政治活動及相關因素之研究</p> <p>計畫主持人：黃德祥</p> <p>計畫編號：97-2629-H-212-001-MY2</p> <p>領域：性別研究</p>		
<p>研發成果名稱</p>	<p>(中文)</p> <p>(英文)</p>		
<p>成果歸屬機構</p>		<p>發明人 (創作人)</p>	
<p>技術說明</p>	<p>(中文)</p> <p>(200-500字)</p>		

	(英文)
產業別	
技術/產品應用範圍	
技術移轉可行性及預期 效益	

註：本項研發成果若尚未申請專利，請勿揭露可申請專利之主要內容。

國科會補助專題研究計畫項下出席國際學術會議心得報告

日期：98_年_1_月_20_日

計畫編號	NSC 97-2629-H-212-001-MY2		
計畫名稱	政治排斥女性？或女性排斥政治？——女性青少年權力意識、政治興趣、政治偏好、政治活動及相關因素之研究		
出國人員姓名	黃德祥	服務機構及職稱	大葉大學師資培育中心教授
會議時間	2009年1月2日 (Friday)至1月7日 (Wednesday)	會議地點	Hilton Hawaiian Village Beach Resort & Spa in Honolulu, Hawaii, U. S. A
會議名稱	(中文)2009 夏威夷國際教育學術研討會 (英文)2009 Hawaii International Conference on Education		
發表論文題目	(中文)台灣青少年身體意象及相關因素之研究 (英文) Body Image and Related Factors of Adolescents in Taiwan		

出席國際學術研討會報告

報告人：黃德祥

會議名稱：2009 Hawaii International Conference on Education

開會日期：2009 年 1 月 2 日(Friday)至 1 月 7 日(Wednesday)

**開會地點：Hilton Hawaiian Village Beach Resort & Spa in Honolulu,
Hawaii, U. S. A.**

一、參加會議經過

「2009 夏威夷國際教育學術研討會」(2009 Hawaii International Conference on Education) 是目前全世界規模最大的教育類國際學術研討會，本研討會由 2003 年創設至今已有七屆，每年吸引近五十個國家，約近二千名的教育學術專家學者參與。這項研討會剛開始由夏威夷大學主辦，隨後演變成由專業的研討會主辦機構籌辦，目前的主辦單位是「夏威夷國際研討會組織」(Hawaii International Conferences)，每年再由該組織邀請世界各國的大學學術團體贊助或合辦。北京大學曾於 2006 年協辦該年的學術研討會。今年此項研討會的合作機

構是 Pepperdine University - Graduate School of Education and Psychology、University of Louisville - Center for Sustainable Urban Neighborhoods、New Horizons in Education - The Journal of Education, Hong Kong Teachers' Association、California State University, East Bay - Educational Leadership Program。今年的會議於 2008 年 1 月 4 日(Sunday)至 7 日(Wednesday) 於夏威夷的 Hilton Hawaiian Village Beach Resort & Spa in Honolulu 舉行。該飯店緊鄰世界最著名海灘 Waikiki 海邊，風景秀麗，飯店的 Waiters 與 Waitresses 對台灣來的學者非常友善。由於開會地點頗富盛名，因此，今年參加此項國際學術研討會的學者仍然非常踴躍，但由於受金融風暴的影響，有少數論文發表者臨時缺席，殊為可惜。今年發表的論文，仍頗多佳作，另有壁報發表及未收錄於光碟片者共計約近五百篇論文，可說是國際少見大規模的教育學術研討饗宴。個人今年論文發表之時間排在 2009 年 1 月 4 日下午 1:15~2:45PM 於 Hilton 飯店之 South Pacific 2 Room 舉行，由 University of Kansas 之 Robert Harrington 教授主持，約二十餘位學者參加。由於 Harrington 教授幽默風趣，又能引發深度討論，使會場氣氛非常熱絡。本 Session 發本之論文有 Robert Harrington 教授之憤怒女生之團體諮商效果研究，以及 Washington State University 華裔學者 Huihua He 發表之課後輔導對學生學業成就之影響，另有一位發表人缺席。也由於時間充分，各篇論文發表者均能暢所欲言，並引發熱烈討論。

二、與會心得

今年個人發表之論文是：「台灣青少年身體意象及相關因素分析」(Body

Image and Related Factors of Adolescents in Taiwan)，本研究之主要目的在於探討影響青少年身體意象之相關因素及組別差異，本研究的研究受試者為中部高中職學生 180 人。本研究的評量工具計有基本資料調查表、個人特質量表（含自尊與沮喪）、父母影響量表、同儕影響量表、身體意象量表與體型偏好圖。所得資料經以積差相關、逐步迴歸分析、*t* 檢定等方法進行統計分析。本研就有下列重要發現：青少年高自尊者其身體意象得分較低；父母影響、同儕影響等變項與身體意象得分有顯著的正相關；沮喪和身體意象則有顯著的正相關；BMI 值與身體意象也顯現正相關。同儕影響、BMI、自尊與性別對青少年之身體意象有顯著預測作用；自尊、父母影響、同儕影響、BMI 等得分高低不同組別之受試者在身體意象上有顯著差異；青少年學生希望變高與減重的人數佔多數，在九個體型偏好之選擇上，個人「實際上」體型屬於 3 號與 4 號體型，「理想上」則偏好 3 號體型，屬偏好纖細或瘦長型。本研究乃根據研究發現對青少年之教育及輔導提供建議。本論文發表完之後與會學者包括來自美國、加拿大與澳洲之學者對本研究深感興趣，除索取論文資料外，並表示如進行不同國家之研究將有更大學術貢獻。另也有學者關心質量研究之差異，均由個人一一答覆。

三、建議

這次參與國際學術研討會，激勵個人更多成長機會，對未來研究有積極幫助。此次會議在 Hotel 不同的 Room 同時分場舉行，無中場休息，連續發表，也由於分成多個場次同時進行，所有參與者只能自選部分感興趣的主題旁聽，因此，每個場次聽眾的人數大約在十至二十人左右，但也因此，論文的發表反像

是小型研討會，論文發表者的壓力較小，相互溝通的機會較多。

這次國際教育學術研討會幾乎涵蓋所有教育領域的主題，包括：教育行政、課程研究與發展、閱讀教育、健康教育、音樂教育、諮商教育、藝術教育、數學教育、特殊教育、師資培育、成人教育、遠距教育、初等教育、商業教育、本土教育、多元文化教育、幼兒教育、科學教育、教育科技、教育心理學、體育與休閒教育等，內容豐富。來自不同國家的人相互觀摩，也可以促進國際學術交流與合作。夏威夷是東西文化交流最密切的地方，觀光業尤其發達，是世界著名渡假勝地，一月適逢年假，且美國寒冬，因此人山人海，今年因為世界性經濟不景氣，人潮稍減，值得關注。今年個人並安排至大島（Hawaii's Big Island）參訪，美景令人印象深刻。夏威夷是美國第五十州，於一九五九年八月二十一日才成為美國的一州，目前主要人種，除美國白種人外，以日本人最多，其次是華人、韓國人、土著及菲律賓人等，是具有多討元文化與多重語言的地方，更有美國本土少見的多元種族通婚與種族融合。個人慶幸能應邀與會，除能將個人研究所得與世界各國學術界人士分享外，並能增廣見聞，獲悉當前國際教育學術發展潮流，可謂成果豐碩。

四、攜回資料名稱及內容

2009 Hawaii International Conference on Education 會議手冊光碟

Title: Body Image and Related Factors of Adolescents in Taiwan

Topic: Educational psychology

Keywords: Body Image, Personal Traits, Parental Influence, Peer Influence, BMI

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Body Image and Related Factors of Adolescents in Taiwan

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Abstract

The primary goal of this research is to investigate factors influencing body image among adolescents and their group differences. Subjects were 180 vocational high school students. Scales included a basic inventory, personal trait inventory (including self-esteem and depression), parental influence inventory, peer influence inventory, body image inventory, and figure rating scale. Data were analyzed using Pearson correlation, stepwise regression, and t-testing. Relevant findings include: adolescents with higher self-esteem had lower body image scores; parental influence and peer influence showed significant positive correlation with body image; depression showed significant positive correlation with body image; and BMI also showed significant positive correlation with body image. The variables peer influence, BMI, self-esteem, and gender show predictive value with respect to body images. Groups with high/low self-esteem, parental influence, peer influence, and BMI scores showed significant variance in body image. Most adolescents would like to lose weight and get taller. Of the nine body type figures, subjects' "actual" body type corresponded to numbers 3 or 4, while "ideal" body type tended toward number 3, tall and slender. Recommendations regarding education and counseling of adolescents are made based on the findings.

Keywords: Body Image, Personal Traits, Parental Influence, Peer Influence, BMI

Introduction

Adolescence is the stage of most rapid body growth and development, as well as an important period of individual physiological and psychological adaptation. After the onset of pubescence the secondary sexual characteristics become increasingly apparent. At around 12 years of age girls experience physical growth, the beginning of menstruation, breast development, auxiliary and pubic hair growth, and genital development. At around 14 years boys experience a growth spurt, Adam's apple development, lowered voices, receding hairlines, auxiliary and pubic hair growth, increased body hair, and development of the external genitalia (Huang, 2004). The extensive physical development and changes that boys and girls experience during pubescence bring with them psychological changes in self perception and identity, which in turn influence behavioral adaptation and character development. These psychological changes however differ between cultures, times, and locations. Adolescent body image has become a topic of considerable interest in adolescent research.

Body image refers to an individual's subjective consciousness, thoughts, and feelings about his or her physical characteristics, as well as feelings about other people's perception of these characteristics. Contemporary television, newspaper, magazine, and online media are pervasive and fast paced, and are constantly broadcasting all manner of body types. Adolescents, who are at a stage of intense social comparison, are likely to adopt media images as standards of reference and use them as the basis for judging their own and other people's bodies. Adolescents are also very susceptible to peer influences, and peer group opinions can also influence body image-related judgments and values.

An adolescent's experiences, viewpoints, and feelings regarding body image are mutually influential. Adolescents who are not satisfied with their body image may readily develop feelings of inferiority, depression, or eating disorders. On the other hand those who are satisfied with their body image will have more confidence and higher self-esteem (Huang, 2004; Smolak, 2004; Stice, 2002). Research indicates that in many countries including Australia, Croatia, England, Israel, Japan, Mexico, Sweden, and the US, dissatisfaction with body image is widespread among adolescents. For example, surveys show that 28% to 55% of adolescent girls want to lose weight, while 4% to 18% want to gain weight; 17% to 30% of adolescent boys want to lose weight, and 13% to 48% want to gain weight (Ricciardelli & McCabe, 2001). In general adolescents tend to be sensitive to issues relating to their height, weight, body type, breast development, and muscle mass, girls even more so than boys. Adolescents are concerned about being accepted by others, making them easily influenced by their surroundings and prone to negative judgments of their own appearance. Receiving external criticism related to appearance or body shape can be unsettling or embarrassing for adolescents. Adolescent boys generally want to be stronger and have more muscle (Smolak, Murnen, & Thompson, 2005), while girls want to lose weight (Muris, Meesters, van de Blom, & Mayer, 2005).

Body image is influenced by cultural and social values, and attitudes towards body shape often change with the times and with prevailing tastes. In the Tang dynasty for example fatness was prized, and full-figured women like Yang Kwei-Fei were considered beautiful. At present most fashion models are thin and frail looking and the media seem to have developed a reverence for thinness, creating a general belief that "thin is beautiful." This view has also taken root among adolescents. Aesthetic values however are learned, and an individual's standards of beauty are formed via social comparison. Those who do not meet society's standards of beauty are assumed to be unattractive or ugly. Body image among adolescents is also strongly influenced by significant others, including parents, siblings, teachers, and peers. The family is the first environment with which an individual comes in contact, and the family's attitude toward and appraisal of body image

plays a pivotal role. Children rely on and learn from parents at home, and an awareness of parental opinions forms the standard for body satisfaction or dissatisfaction and for related behaviors. Early adolescent girls are most strongly influenced by their families, and family pressures are strongly correlated with body dissatisfaction, more strongly than media pressure or peer pressure (Blowers, Loxton, Grady-Flessner, Occhipinti, & Dawe, 2003). Young, Clopton, & Bleckley (2004) discovered that males were most strongly influenced by their mothers, with most boys saying that their mothers concern had a positive influence, and 25% of mothers praising their adolescent sons, a higher percentage than fathers or male peers. Fathers influenced their sons' self concept and values and provided a model for gender roles. Overall parents play a more important role in the formation of body image than peers (Stanford & McCabe, 2005).

With respect to their peers adolescents are highly susceptible to feelings of helplessness, lack of self confidence, and negative self concept. After entering a peer group adolescents develop a sense of belonging and the peer group becomes their support structure, leading to increased self confidence. Adolescents will feel that they personally possess any special attributes possessed by the group as a whole (Der-Hsiang Huang, 2004). Relationships with peers play an extremely important role in adolescent development, and peers have important powers of influence over an individual's character development, physical characteristics, and behavioral tendencies. Peers also have a strong influence on body image for both boys and girls, with girls focused on weight loss behaviors and boys focused on both muscle building and weight loss. Intimate friends during the period of late adolescence are thought to play the most important role. Adolescent girls are influenced by their female friends with regard to appearance and weight loss, with groups of friends sharing body image and diet related experiences. Research assessing both concern for body image and binge/purge behavior found similar scores for all adolescent girls, indicating that peers have an important impact on body image and diet related issues during early adolescence (Hutchinson & Rapee, 2007; McCabe & Ricciardelli, 2005). Therefore determining the major variables affecting body image, as well as their variation between groups and their predictive values, is of great importance.

The primary goal of this research is to investigate the factors influencing body image among adolescents, including such background variables as gender, height, and weight; body mass index (BMI), which is calculated using height and weight; personal traits (including self-esteem and depression); and the influence of parents and peers. Based on the findings, recommendations will be made about ways to promote healthy body image and overall physical and mental health among adolescents. This research thus has both theoretical and practical value.

Methods

1. Research Framework

As described above, this research investigates factors influencing body image among adolescents including personal traits, body mass index (BMI), and parental and peer influence, and measures variations of body image scores with respect to background variables and personal trait groups. The following framework was made based on an analysis of related literature and the goals of this research.

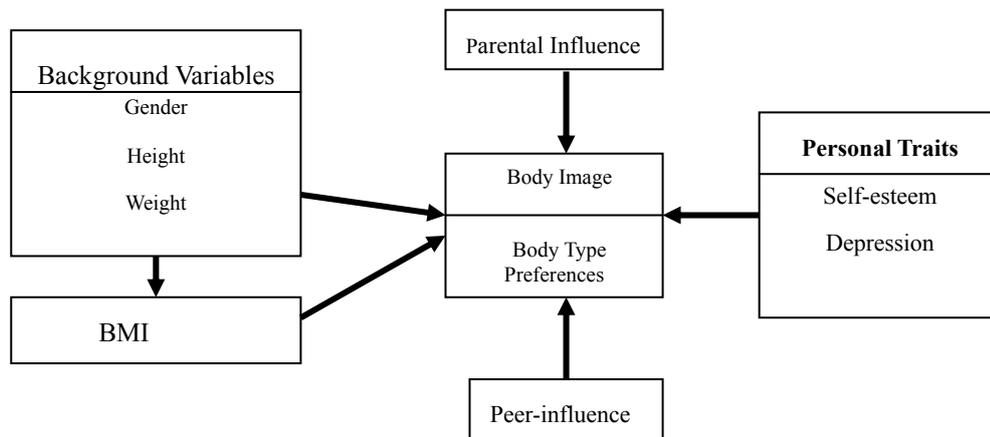


Figure 1 Research Framework

From the research framework above we see that the background variables used in this research are gender, height, and weight, as well as BMI. Other factors influencing body image include parental and peer influences, and personal trait variables self-esteem and depression.

2. Research Subjects

This research studied male and female students in the first through third years of vocational high school in central Taiwan. To facilitate cooperation and honest responses, research surveys stated: "Your responses will be used solely for academic research purposes, and will be kept strictly confidential. Please answer honestly." The survey was conducted over a two week period and given by teachers in their classrooms. A total of 205 surveys were returned. After elimination of invalid surveys, 180 valid surveys remained. The final sample group included 90 males and 90 females (50% each).

3. Research Tools

In order to achieve the goals set out above and determine whether or not the hypotheses hold, the following tools were used to collect data: (1) basic inventory; (2) personal trait inventory; (3) parental influence inventory; (4) peer influence inventory; (5) body image inventory; and (6) figure rating scale. Each is described below.

(1) Basic Inventory

The basic inventory includes information on gender, age, grade in school, actual height and weight, and desired height and weight. BMI was calculated according to the formula $BMI = \text{weight (kg)} / \text{height}^2 (\text{cm}^2)$. Subjects were classified as overweight or underweight based on the height and weight standards for adolescents established by the Executive Yuan Department of Health. Normal height range for boys is 166 cm. - 177.5 cm, and for girls 154 cm. - 164.5 cm. Normal weight range is 55 kg. – 71 kg. for boys and 45.9 kg. – 58 kg. for girls. Normal BMI values are 19.2 - 23.7 for boys and 18.3 - 22.7 for girls. Values outside this range are considered over or underweight (Executive Yuan Department of Health, 2007).

(2) Personal Trait Inventory

The personal trait inventory used included scales for self-esteem and depression which were created by the author.

1. Self-esteem Inventory: Reference was made to the Self Esteem Scales of Rosenberg (1965), Tiggemann (2005), and Young, Clopton, & Bleckley (2004). There were 5 reversed items, questions 3, 5, 8, 9, and 10, with the rest being positively worded. Four possible responses were offered: 1 = strongly disagree; 2 = disagree; 3 = agree; 4 = strongly agree. The highest possible score is 40 points, with higher scores indicating higher levels of self-esteem and lower scores representing lower self-esteem. Factor analysis revealed 2 factors, with an explained variance of 49% and Cronbach's α of 0.759 and 0.701. The overall internal consistency reliability of the scales was 0.791, indicating good uniformity between the two scales. These scales have relatively high construct validity and reliability.

2. Depression Inventory: The depression inventory was formulated by the author based on the Beck Depression Inventory (Beck, Steer, & Garbin, 1988). Numerous studies have shown that the original scale has a high degree of reliability and validity (Beck, Steer, & Garbin, 1988). The inventory has 10 questions each of which had four responses scored 0 - 3. The maximum possible score is 30. The KMO value of a sample was 0.732, indicating very few common factors among the variables. Therefore a factor analysis was not done. The internal consistency reliability of the inventory was 0.640.

(3) Parental Influence Inventory

This scale is a modification of the Social Influence Model proposed by Keery, van den Berg, & Thompson (2004). It contains 43 questions covering three factors: peer, parental, and media influence. Sixteen questions concern parental influence, primarily investigating parent's attitudes and opinions about their children's appearance, weight, and health. Points are awarded as follows: 1 = strongly disagree; 2 = disagree; 3 = agree; and 4 = strongly agree. The highest possible score is 64, with higher scores indicating a higher degree of parental influence over the body image of their adolescent children. A factor analysis revealed factor loadings of 0.45 and above, all of which were retained. KMO value of a sample was 0.825, indicating common factors among the questions. The factor analysis also revealed explained variance of 66% for the four variables. The Cronbach's α of the four subscales were between 0.807 and 0.871, and internal consistency reliability was 0.890, indicating very good internal consistency. This scale possesses good construct validity and reliability.

(4) Peer Influence Inventory

This inventory was likewise a modification of the Societal Influence Model created by Keery, van den Berg, & Thompson (2004). The inventory contains 13 questions covering the attitudes and opinions of the subject's peers with regard to appearance, weight, and health. The inventory contains 3 reversed items, numbers 3, 4, and 5, with the remainder being positively worded. Four response options were given: 1 = strongly disagree; 2 = disagree; 3 = agree; 4 = strongly agree. The highest possible score is 52, with higher scores indicating a stronger peer influence over body image. The KMO value of a sample was 0.684, indicating very few common factors and eliminating the need for a factor analysis. Internal consistency reliability was 0.767.

(5) Body Image Inventory

A modification of the Body Attitudes Questionnaire of Ben-Tovim & Walker (1991) was used. The original inventory was multidimensional and contained 44 questions assessing six different dimensions: feeling fat, attractiveness, disparagement, salience, lower body fatness, and strength. The scores of the sub-inventories and the inventory as a whole reveal the subject's attitude towards his or her body. After modification the inventory contained a total of 14 questions in two dimensions, namely "emphasis on body shape" and "perception of physical appearance".

There was 1 reversed item, number 11, with the remainder being positively worded. There were four possible responses to each question: 1 = strongly disagree; 2 = disagree; 3 = agree; 4 = strongly

agree. The maximum possible score was 52, higher scores representing a higher level of dissatisfaction with the body. The KMO value of a sample was 0.817, indicating the existence of common factors. A factor analysis revealed a total of two factors, with factor loading of 0.45 or above for all factors in all 14 questions, and an explained variance of 44%. Reliability analysis shows that the two sub-inventories have Cronbach's α of 0.834 and 0.604 respectively.

(6) Figure Rating Scale

The figure rating scale used in this research is a modification of the figure rating scale in Stunkard, Sorenson, & Schlusinger (1983). The original scale contained nine figures designed to measure body image and body type. The images numbered 1 through 9 grow in size linearly (boys in Fig. 2, girls in Fig. 3).

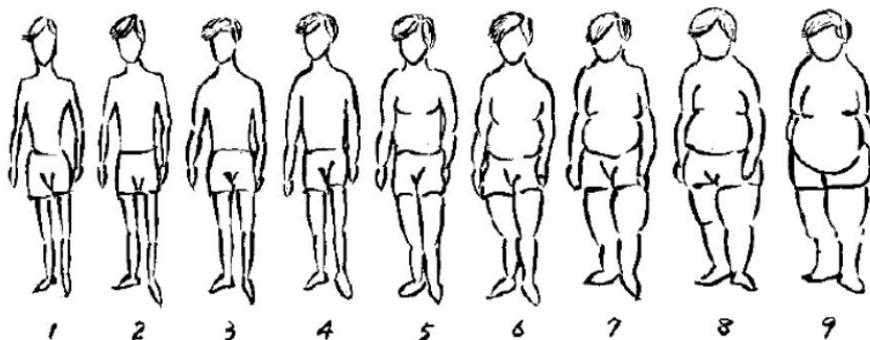


Figure 2 Boy's Figure Rating Scale

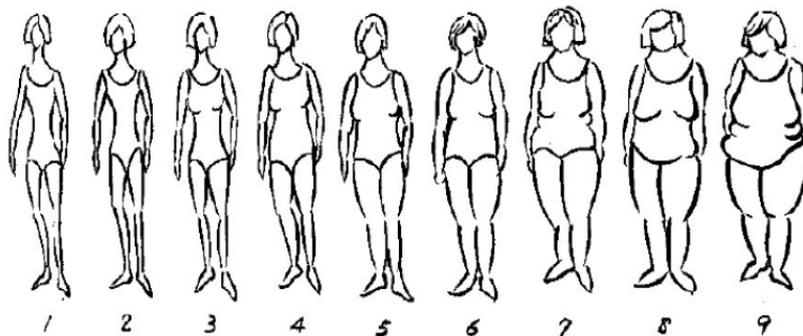


Figure 3 Girl's Figure Rating Scale

This figure rating scale has three main questions for the subject to answer: 1. In your opinion, you most resemble figure (); 2. You believe your actual shape to be most like (); 3. You would like your shape to resemble (). This inventory is designed to measure the discrepancies between body type ideals, awareness, and preferences, and whether or not agreement exists between them (Reiss, 2001).

4. Research Procedure

In August 2007 the inventories to be used in this research were compiled and preliminary editing was done. This was followed by a preliminary testing period involving 60 vocational high school students from central Taiwan. The data collected in the preliminary testing was used as the basis for the factor analysis and reliability testing.

Formal testing was entrusted to high school teachers, with questionnaires filled out in the classrooms. Timing of data collection was coordinated with the vocational high school and covered a period of two weeks. After collection was complete the invalid inventories were eliminated and the data was entered into a computer. SPSS software was used to carry out statistical analysis.

5. Statistical Analysis

The primary statistical methods used include: 1. Factor Analysis: used to determine the factor structure of each major inventory. 2. t-Test: the t-test was used to analyze gender-based differences in BMI and body image scores, as well as differences in body image scores between lower BMI groups and higher BMI groups (abnormally high and low). 3. Pearson Correlation Analysis: used to test the correlation significance in the overall score of body image factors with regard to BMI value, parental influence, peer influence, self-esteem, and depression. 4. Stepwise Regression: used to test the predictive value of gender, BMI, parental influence, peer influence, self-esteem, and depression with respect to body image.

Results and Discussion

1. Correlation between Primary Variables and Body Image

The primary goal of this research was to investigate the impact of each primary variable on adolescent body image. First the relationship between the primary variables and adolescent body image scores was determined. Primary variables included self-esteem, depression, parental influence, peer influence, and BMI. Table 1 presents a correlation matrix showing the correlation between body image and self-esteem, depression, parental influence, peer influence, and BMI.

Table 1 Correlation Matrix for Body Image and Self-esteem, Depression, Parental Influence, Peer Influence, and BMI

	Mean	SD	Body Image	Self esteem	Dep.	Parental Influence	Peer Influence	BMI
Body Image	34.77	5.59	1.000					
Self-esteem	27.89	3.80	-0.297 ***	1.000				
Depression	3.86	2.84	0.232 ***	-0.529***	1.000			
Parental Infl.	32.84	7.44	0.316 ***	-0.109	0.056	1.000		
Peer Influence	28.82	4.54	0.422 ***	-0.236**	0.086	0.221**	1.000	
BMI	21.10	3.53	0.417 ***	0.128	-0.076	0.264***	0.010	1.000

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Table 1 indicates a strong negative correlation between self-esteem and body image ($r = -0.297, p < 0.001$); a strong positive correlation between depression and body image ($r = 0.232, p < 0.001$); a strong positive correlation between parental influence and body image ($r = 0.316, p < 0.001$); a strong positive correlation between peer influence and body image ($r = 0.422, p < 0.001$); and a positive correlation between BMI and body image ($r = 0.417, p < 0.001$). Aside from body image, the only variable that showed a significant correlation with BMI was parental influence ($r = 0.264, p < 0.001$); the others showed no significant variation.

2. Primary Variables and Regression Forecasting of Body Image

In order to test the predictive value of each primary variable with respect to body image, gender was added to the variables given in the above matrix. Statistical analysis was done using stepwise regression. Predictor variables included gender, self-esteem, depression, parental influence, peer influence, and BMI. The criterion variable was adolescent body image score. Results are given

in Table 2.

Table 2 Multiple Regression Analysis of Primary Variables with Respect to Body Image

Variable	Multiple Correlation Coeff. (R)	Deterministic Cumulant (R squared)	Deterministic Variance (R squared)	F value	β coeff.	t value
Peer Infl.	0.422	0.178	0.173	38.549	*** 0.327	5.675 ***
BMI	0.591	0.349	0.341	47.383	*** 0.498	8.699 ***
Self-esteem	0.646	0.417	0.407	41.937	*** -0.236	-4.043 ***
Gender	0.680	0.462	0.450	37.569	*** 0.224	3.832 ***

*** $p < 0.001$.

Table 2 shows that of the six predictor variables used in the regression, four were significant. The multiple correlation coefficient was 0.680, and combined explained variance was 0.462, indicating that the four variables can jointly predict 46.2% of the variance in adolescent body image. Taken separately, peer influence had the highest predictive power, explaining 17.8% of the variance, followed by BMI (17.1%), self-esteem (6.8%), and gender (4.5%). The standardized regression equation is given by: body image = 0.327×peer influence + 0.498×BMI - 0.236×self-esteem + 0.224×gender.

3. Testing Group Variance in Adolescent Body Image

This research also investigated group variance in body image, particularly the differences in body image between groupings based on self-esteem (high vs. low), depression (high vs. low), parental influence (high vs. low), and peer influence (high vs. low). Table 3 gives the results of this group variance testing.

Table 3 Body Image Scores for High/Low Score Groupings of Each Variable

Variable	High Group		Low Group		t-Test
	M	SD	M	SD	
Self-esteem	33.11	4.89	37.20	4.54	4.644 ***
Depression	35.55	6.08	33.92	4.95	1.654
Parental Infl.	37.21	5.07	33.18	5.72	3.834 ***
Peer Infl.	36.79	5.95	32.51	5.23	4.179 ***
BMI	38.26	5.33	31.44	5.19	5.947 ***

*** $p < 0.01$.

Table 3 shows that apart from depression, groupings based on all other primary variables show significant variance in body image. Self-esteem had a t-value of 4.66 ($p < 0.001$), and it is clear from that table that subjects with higher self-esteem had lower body image scores. Students with higher self-esteem cared less about their bodies, consistent with the findings presented in Tables 1 and 2. From parental influence ($t = 3.834$, $p < 0.001$), peer influence ($t = 4.179$, $p < 0.001$), and BMI ($t = 5.947$, $p < 0.001$) we see that the greater the concern from parents and peers, the larger the differences between the high and low scoring groups. BMI value exhibits the same variance.

4. Desired Height and Weight, and Body Type Preferences among Adolescents

To determine desired height, weight, and body type among adolescents, subjects were queried regarding desired height and weight. Results are given in Table 4.

Table 4 Desired Height and Weight among Adolescent Boys and Girls

Desire to be:		Boys		Girls		Total	
		#	%	#	%	#	%
Height	shorter	4	4.4	7	7.8	11	6.1
	same	2	2.2	7	7.8	9	5.0
	taller	84	93.3	76	84.4	160	88.9
	Total	90	100.0	90	100.0	180	100.0
Weight	heavier	24	26.7	8	8.9	32	17.8
	same	11	12.2	9	10.0	20	11.1
	lighter	55	61.1	73	81.1	128	71.1
	Total	90	100.0	90	100.0	180	100.0

Table 4 shows that 93.3% of boys want to be taller, as do 84.4% of girls, indicating that taller stature is prized by today's youth. Only a small minority wanted to be shorter or to remain the same height. Both boys and girls expressed a desire to lose weight, 61.1% of boys and 81.1% of girls. Over 10% also expressed a desire to gain weight (26.7% of boys and 8.9% of girls). Very few subjects wanted to maintain current weight.

Test subjects were also provided with figures (fig. 2 and fig. 3) and asked to select those corresponding to their actual body type and their desired body type. Results are given in Table 3.

Table 5 Actual and Desired Body Type among Adolescent Boys and Girls

Body Type	Actual Body Type		Desired Body Type	
	#	%	#	%
1	1	0.6	1	0.6
2	18	10.0	14	7.8
3	43	23.9	98	54.4
4	52	28.9	44	24.4
5	34	18.9	19	10.6
6	18	10.0	4	2.2
7	10	5.6	0	0.0
8	4	2.2	0	0.0
9	0	0.0	0	0.0
Total	180	100.0	180	100.0

Table 5 shows that for both boys and girls, "actual body type" corresponded most often to figure 3 (N = 43, 23.9%) and figure 4 (N = 53, 28.9%), while "desired body type" corresponded most often to figure 3 (N = 98, 54.4%) and figure 4 (N = 44, 24.4%). Thus for both actual and ideal body types adolescents preferred tall and slender figures. This suggests that most of today's adolescents desire "slim figures".

5. Summary and Discussion

The results presented above show that an inverse correlation exists between self-esteem and body image scores. Adolescents with higher self-esteem generally have stronger self confidence, value themselves, and are not swayed by the words of others. Therefore increasing self-esteem among adolescents may help prevent excessive concern about physical appearance and anxiety about personal status. Scholars often recommend promoting academic achievements, providing more opportunities for success, increasing interpersonal interaction, and promoting athletic skills as

ways to strengthen self-esteem (Huang, 2004). This research also discovered a positive correlation between depression and body image, indicating that people with poor body image are prone to feelings of melancholy and unhappiness. Adolescence is a time of egocentrism often characterized by the imaginary audience and personal fable (Santrock, 2007). Adolescents can be overly sensitive and overly concerned about other people's reactions. Teachers and parents should therefore try to be empathetic towards adolescents, giving them approval and encouragement. Both parental influence and peer influence were shown to have positive correlations with body image, with very clear differences between the high and low scoring groups. Parents and peers play a very important role in the formation of adolescent body image, something that parents should be aware of. Positive correlation was also found between BMI and body image. Tables 4 and 5 also indicate that some adolescents are in fact overweight; thus physical fitness and weigh loss programs may be necessary in order to promote improved body image among adolescents.

Conclusions and Implications

1. Conclusions

The primary goal of this research was to investigate primary factors influencing adolescent body image, their effects and group differences. Test subjects were 180 vocational high school students from central Taiwan. Evaluative tools included a basic inventory, personal trait inventory (including self-esteem and depression), parental influence inventory, peer influence inventory, body image inventory, and figure rating scale. Statistical analysis was done using Pearson correlation, stepwise regression, and t-testing. The following important findings were made: (1) Adolescents with high self-esteem had lower body image scores; (2) Parental influence and peer influence showed positive correlation with body image scores; (3) Depression has a marked positive correlation with body image; (4) BMI is also positively correlated with body image; (5) Peer influence, BMI, self-esteem, and gender have significant predictive value with respect to adolescent body image; (6) Body image varied significantly between groups with high and low self-esteem, parental influence, peer influence, and BMI; (7) Most adolescents would like to grow taller and lose weight; (8) Given nine body types to choose from, subjects' "actual" body type tended toward nos. 3 or 4, while "ideal" body type tended towards no. 3, a tall slender figure. These findings indicate that the variables under investigation all have significant influence on adolescent body image; self-esteem however is inversely proportional to body image; thus, increasing adolescent self-esteem is extremely important. The findings also showed that depression is not a strong predictive factor for adolescent body image. A cause/effect analysis was not performed however, and more research is needed into the relationship between depression and body image. BMI value is considered a reliable way to test whether or not a person is overweight, and this research found that adolescents with high BMI (potentially overweight) are more concerned about their own body image. It was also found that peers have considerable influence, in agreement with the work of other adolescent researchers (Der-Hsiang Huang, 2004; Santrock, 2007; Smolak & Stein, 2006). Peer influence must not be overlooked in efforts to promote physical and mental wellbeing among adolescents.

2. Implications

Recommendations concerning education and counseling strategies are based on the aforementioned findings. It was discovered that although parental influence over body image is not as strong as peer influence, it is still an important factor. Parents should be involved in the daily lives of their adolescent children, ensuring balanced nutrition, adequate sleep, regular exercise and appropriate recreational activities in order to promote healthy physical and mental development (Huang, 2004). Eating a variety of foods and avoiding foods that are greasy, deep fried, high in sugar, and high in fat will help adolescents maintain desirable body types, and help create positive body image. Schools should provide similarly nutritious foods, allowing classmates and peers to

mutually encourage healthy eating and exercise habits and share correct body images. In addition, counseling should be given to those with negative body images and high levels of depression, and weight loss plans should be developed. Teachers and parents should empathize with and show concern for adolescents, expressing approval and encouragement. These are important ways to promote healthy growth and development, the formation of desirable body type and body shape, and the establishment of positive body image.

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of Education, Hong Kong
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Pepperdine University -
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Psychology

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Dear Der-Hsiang Huang,

Congratulations! The Hawaii International Conference on Education is pleased to inform you that your submission, "BODY IMAGE AND RELATED FACTORS OF ADOLESCENTS IN TAIWAN", has been accepted for presentation at the 2009 Hawaii International Conference on Education to be held from January 4 to January 7, 2009 in Honolulu, Hawaii. The decision to accept your submission was based on a review process.

The exact time and room of your session will be specified in the final program. The final program will be available at http://www.hiceducation.org/program_edu.htm by December 2008. Please note that everyone who participates in the conference must register. If we do not receive your registration or an e-mail by November 23, 2008 indicating you plan on attending the conference, we will automatically schedule you for a poster session. For more information about hotel reservations, tour programs, and registering see www.hiceducation.org

Your submission will be published in the proceedings if you follow the enclosed instructions. We encourage you to purchase your air tickets, reserve your hotel rooms, and submit your registration fee as soon as possible if you have not done so. If you have co-authors, please inform them of this acceptance and the enclosed materials.

Your Submission ID Number is "1593". Please refer to this number on all correspondence.

Congratulations on the acceptance of your proposal! Your participation will help make the 2009 Hawaii International Conference on Education a great success.

Andrew Burge



Conference Coordinator
Hawaii International Conference Coordinator

國科會補助專題研究計畫項下出席國際學術會議心得報告

日期：99_年_2_月_15_日

計畫編號	NSC 97-2629-H-212-001-MY2		
計畫名稱	政治排斥女性？或女性排斥政治？——女性青少年權力意識、政治興趣、政治偏好、政治活動及相關因素之研究		
出國人員姓名	黃德祥	服務機構及職稱	大葉大學師資培育中心教授
會議時間	2010年2月4日 (Thursday)至2月5日 (Friday)	會議地點	Flamingo Hotel in Las Vegas, Nevada, U. S. A.
會議名稱	(中文)2010 美國行為與社會科學學會國際學術研討會 (英文)2010 Conference of The American Association of Behavioral and Social Sciences		
發表論文題目	(中文)台灣青少年吃檳榔的次級文化、上癮模式與心理歷程 (英文)Chewing Betel Nut and its Subculture, Addiction Model and Psychological Processes of Adolescents in Taiwan		
發表論文題目	(中文)台灣國中學生家庭社會資本與學業成就之研究 (英文)Family and Social Capital and Academic Achievements of junior High School Students in Taiwan		

發表論文 題目	(中文)台灣教師之集體效能、自我效能、專業發展與社會歸屬感 (英文)Collective Teacher Efficacy, Self Efficacy, Professional Development, and Social Belongingness in Taiwan
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2010 年出席國際學術研討會報告

出席國際學術研討會報告

報告人：黃德祥

會議名稱：2010 美國行為與社會科學學會國際學術研討會(2010 Conference of The American Association of Behavioral and Social Sciences)

開會日期：2010 年 2 月 4 日(Thursday)至 2 月 5 日(Friday)

開會地點：Flamingo Hotel in Las Vegas, Nevada, U. S. A.

一、參加會議經過

2010 美國行為與社會科學學會國際學術研討會(2010 Conference of The American Association of Behavioral and Social Sciences)於 2010 年 2 月 4 日(Thursday)至 2 月 5 日(Friday)在 Las Vegas, Nevada 的 Flamingo 飯店舉行。本學術研討會係由美國頗負盛名的「美國行為與社會科學學會」(The American Association of Behavioral and Social

Sciences，簡稱 AABSS）所主辦，今年與第十三屆年會合併舉行。美國行為與社會科學學會（AABSS）主要係由美國教育、心理、人類學、經濟、政治、社會、犯罪防治等行為與社會科學相關領域的四年制大學教授及行政主管所組成，由於會員主要為大學教授，因此本學會的學術氣息濃厚，今年的學會主席係 Dr. Norma Winston，她現任佛羅里達坦帕大學（Tampa University, Florida）「政府、歷史與社會學系」（Department of Government, History and Sociology）社會學教授，她是華盛頓大學博士，專供家庭與社會及性別不公議題，除了擔任美國行為與社會科學學會（AABSS）主席外，同時也是美國應用與臨床社會學會及應用社會學學會委員(the Commission on Applied and Clinical Sociology and the board of the Society for Applied Sociology)。本年年會中 Dr. Norma Winston 也上台期勉會員繼續努力、貢獻社會，尤其歡迎我們國外學者與研究生的參與。年會午餐時邀請 Dr. Theophilus Herrington, Dean of the Barbara Jordan-Mickey Leland School of Public Affairs at Texas Southern University 作專題演講，講題是：“Barbara C. Jordan and George “Mickey” Leland: Advocates for the Common Good”。餐會場合氣氛融洽，個人也認識來自瑞士及其他國家的多位學者。

個人今年共有三篇論文被2010美國行為與社會科學國際學術研討會接受口頭論文發表，分別是（一）台灣青少年吃檳榔的次級文化、上癮模式與心理歷程(Chewing Betel Nut and its Subculture, Addiction Model and Psychological Processes of Adolescents in Taiwan)，本文共同作者係國立台中教育大學諮商與應用心理系教授兼人文暨藝術學院院長魏麗敏教授；（二）台灣國中學生家庭社會資本與學業成就之研究(Family and Social Capital and Academic Achievements of junior High School Students in Taiwan)，本文共同作者係國立台中教育大學諮商與應用心理系教授兼人文暨藝術學院院長魏麗敏教授與台

中縣宜欣國小洪潔稜老師；（三）台灣教師之集體效能、自我效能、專業發展與社會歸屬感(Collective Teacher Efficacy, Self Efficacy, Professional Development, and Social Belongingness in Taiwan)，本文共同作者係輔英科大鄭進丁教授與正修科大吳百祿教授。

二、與會心得

個人第一篇論文的研究對象為台灣中部地區有嚼食檳榔經驗或目前正嚼食檳榔的國中生，探討其嚼食檳榔的次級文化、形成模式與心理歷程，並對此提供相關的處遇計畫。本研究採用訪談與觀察的質性研究的方法，對受試者的訪談內容作逐字稿分析，並觀察紀錄訪談過程中受試者的口語與行為表現，透過對資料的描述、分析和詮釋等方式，真實的呈現訪談的內容，本研究得到以下幾項重要的結論：（一）國中生開始嚼食檳榔的動機多數為好奇心，且又受同儕的影響，導致開始接觸檳榔產生嚼食檳榔的行為。（二）父母親對於自身的孩子是否有嚼食檳榔的情況並非皆知情，而家中的兄弟姊妹對於同輩間是否有嚼食檳榔的情況大多數不知情，當父母親知情的情況下大都會取用勸誡的方式，兄弟姊妹的反應則較不一致，有的會勸誡有的則沒反應，老師的態度則較一致以責罵的方式管教學生。（三）對於檳榔的稱呼會因民族性的不同而有相異之處，當國中生嚼食檳榔時，會感覺自己與其他的同學有不一樣之處（如感覺自己是老大等）。國中生的金錢來源多數為零用錢，而檳榔來源的管道則較多樣如朋友、同學、部落等。（四）受訪者大都知道嚼食檳榔的後果，多數有想過要戒除吃檳榔的行為，希望獲得的管道多數為老師、父母親、朋友，少數為不知道要如何戒除吃檳榔的行為。（五）戒除檳榔的方式有：希望老師與朋友提醒不要吃檳榔；父母親限制零用錢、勸誡等。綜合研究結果，本研究建議學校、老師、家長以及衛生主管機關相關的建議，避免國中生有嚼食檳榔的現象並提昇其健康，加強正向的健康行為。本論文發表時吸引眾多與會學者的興趣，紛

紛舉手發問，問題包括：檳榔在台灣是否合法？吃檳榔的心理與上癮歷程與抽菸及喝酒有何關係？台灣吃檳榔如此普遍，政府單位與學校教育有何對策？如何輔導吃檳榔的青少年？相關問題均由個人一一回答。

個人第二篇論文主要在探討國中學生家庭與社會資本對國中學生學業成就之影響。本研究共有受試國中學生 445 人，本研究主要是以自編的問卷，調查並蒐集所需的資料，命名為「我的生活經驗量表」。問卷包含三個部份，分別為：「基本資料」、「我的生活經驗量表一」、「我的生活經驗量表二」。「基本資料」包含受試者的性別、自評在班上的功課等級與人際關係等級、父母親的教育程度與父母親的職業。「我的生活經驗量表(一)」是在測量受試者和父母親的關係。「我的生活經驗量表(二)」測量受試者家長和老師、其他家長以及朋友的關係。本研究之主要發現有：(一)不同背景變項的國中學生在家庭內社會資本，大部分的層面上並無顯著差異。(二)不同背景變項的國中學生在家庭外社會資本，大部分的層面上並無顯著差異。(三)國中學生的家庭內社會資本與學業成就有顯著相關；家庭外社會資本與學業成就有顯著相關。其中國中學生的家庭內社會資本與學業成就有顯著相關，其次，國中學生的家庭外社會資本與學業成就大部分無顯著相關。(四)國中學生的家庭社會資本對學業成就具有顯著的預測力。本研究根據研究發現，建議家長須不斷學習先求自我成長、家長帶領子女接受文化洗禮、重視親子間有效的聯繫、與學校班級家長和朋友保持良好關係。

個人第三篇論文主要探討台灣國中教師的集體效能、自我效能、專業發展與社會歸屬感之關係。本研究以台灣地區 340 位國中教師為研究對象，施以自編的「教師集體量表」、「教師自我效能量表」、「教師專業發展量表」與「教師歸屬感量表」，經統計分析

後發現：(一) 教師因是否擔任行政工作、性別與最高學歷之不同而在集體效能、自我效能、專業發展與社會歸屬感得分上有顯著差異。(二) 國中教師之集體效能、自我效能、專業發展與社會歸屬感有顯著相關。本研究根據研究發現對師資培育與教育實務提供各項建議。第二與第三篇論文同場發表，與會學者也發言踴躍，他們尤其對於台灣的教育制度、師資養成與學校狀況頗感興趣，相關提問都獲得圓滿解答。

三、建議

此次行為與社會科學國際學術研討會在 Las Vegas 召開，個人係第一次到 Las Vegas。該地雖是世界著名賭城，但是風景與豪華及炫麗造景仍讓個人大開眼界。個人論文發表除能提高台灣的能見度外，個人並認識頗多與會來自世界各國的學者。另外旁聽幾場其他國家學者的論文發表，也獲益良多。尤其加拿大 St. Thomas University 教授 Professor Ian Fraser 他發表了 Generation Y and the Use of Anecdote and Humor in the Classroom 與 Teacher's Anxiety 的研究，主要發現頗多可供國內參考，回國後個人並去函索取全文，Professor Ian Fraser 的主要論點有 Baby Boomers: 1946-1964, Generation Y: 1976-97 or 2000 - some say beyond Generation Y are vastly different in learning styles from Baby Boomers. Reliance on spoken word: Baby Boomers age 15 - 25000 word vocabulary. Generation Y age 15 - 10000 word vocabulary. Generation Y have shorter attention-spans and regularly engage in multitasking. Auditory- like to listen, debate and discuss. Visual- like visual media, such as power point, graphs, computers and television. Baby Boomers - 43% Auditory Generation Y - 47% Visual. 相關論點個人並於本校新學期之全校教師期初輔導知能研討會上報告，為全校教師同仁打氣。建議爾後相關單位能從寬補助教授出國參加學術研討會，因為對大學教授專業成長貢獻卓著。

總之，此次參與 2010 美國行為與社會科學國際學術研討會，發表論文對個人學術能力之成長及對國際學術社區有貢獻之外，並能增益所能，擴及當前服務的大學，真是獲

益良多。

四、攜回資料名稱及內容

2010 Conference of The American Association of Behavioral and Social Sciences 會議首
及光碟版

附錄一 2010 美國行為與社會科學國際學術研討會邀請函

5 October, 2009

Chin-Ting Cheng
Fooyin University
151 Chin-Shei Rd., Da-Liao Shang
Kaoshung County, TAIWAN

Dear Dr. Cheng:

This is to inform you that your paper, co-authored with Pai-Lu Wu and Der-Hsiang Huang entitled, "Collective Teacher Efficacy, Self Efficacy, Professional Development, and School Belongingness in Taiwan," has been accepted for presentation at the 13th Annual Meeting of the American Association of Behavioral and Social Sciences (AABSS.) The meeting will be held at the Flamingo Las Vegas in Las Vegas, Nevada, February 4-5, 2010.

You will be allowed a maximum of 15 minutes in which to deliver your presentation. Each conference room will be equipped with an overhead projector and a screen. Be prepared to bring your own equipment if you wish to use power point slides for your presentation.

Conference information, including details about the location, the registration form and information about publishing your work with the AABSS can be found on the organization's web site at "aabss.org". A preliminary program for the forthcoming meeting will be posted on the AABSS website in late November. Please note that to be included in the final conference program, your registration fee must be postmarked by December 11th. A registration form is included for your convenience.

A block of discounted rooms is being held at the Flamingo Las Vegas for Wednesday, February 3rd through Saturday, February 6th, 2010. To book your room at the discounted rate, phone 1-888-373-9855 and identify yourself as a participant at the AABSS conference.

The deadline for booking rooms at the discounted rate is January 4th, 2010.

I am pleased that you have chosen to participate at the AABSS conference. I look forward to meeting you at that time. In the meantime, should you need more information, please contact me at: Ph 813-974-7476: email wienker@cas.usf.edu.

Sincerely,
Curtis Wienker, Ph.D.,
Program Chair,
Department of Anthropology, SOC 107,
University of South Florida,
Tampa, FL 33620-8100.

附錄二 2010 美國行為與社會科學國際學術研討會發表之論文

論文一

Chewing Betel Nut and its Subculture, Addiction Model and Psychological Processes of Adolescents in Taiwan

This research object of study has for the middle area chews the betel nut experience or at present is chewing the betel nut the middle school students, understood it chews the betel nut the secondary culture, forms the pattern and the psychological course, regarding this and provides the correlation place the pre-plan. In order to achieve above goal, this research uses the interview and the observation nature research method, to receives the trying interview content to make word by word the manuscript analysis, and observes in the record interview process the trying spoken language and the behavior performance, penetrates to ways and so on material description, analysis and annotation, real presents the interview the content, obtains following several important conclusions:

1. the middle school students starts to chew the food betel nut most the motive is a curiosity, also receives associates' influence to cause to start to contact the betel nut to produce chews the betel nut the behavior.
2. Parents regarding own child whether has chews the betel nut the situation all to know the circumstances of the matter by no means, but in family's brothers sisters regarding of the same generation between whether has chews the food betel nut the situation majority not to know the circumstances of the matter, when the parents know the circumstances of the matter in the situation the metropolis uses the way which expostulates, brothers sisters' response then is inconsistent, some can expostulate has had responded, then teacher's manner unanimously scolds the way teaches the student.
3. Can because of national characteristic different have the different place regarding the betel nut name, when the middle school students chews the betel nut, can feel oneself has the dissimilar place with other

schoolmates (for example to feel oneself is eldest child and so on). The middle school students' money originates most is a pocket money, but the betel nut originates then pipeline diverse like friend, schoolmate, tribe and so on.

4. The participant knew mostly chews the food betel nut the consequence, has most had thought must give up eats the betel nut the behavior, hoped obtains the pipeline for teacher, the parents, the friend, minority for did not know most how has to give up eats the betel nut the behavior. Gives up the betel nut the way to include: Hoped teacher and the friend reminds do not want to eat the betel nut; The parents limit the pocket money, expostulate and so on.

The synthetic study result, this research suggested the school, teacher, the guardian as well as the hygienic manager machine tube correlation suggestion, avoids the middle school students having chews the food betel nut the phenomenon and promotes its health, strengthens the forward healthy behavior.

論文二

Family and Social Capital and Academic Achievements of junior High School Students in Taiwan

I. Introduction

Research Motivation

The earliest living environment after a person is born is his or her family, which is the first place for children's socialization. A family has different functions to satisfy individuals' diverse needs. Although a family's functions will change following society movements, a family as a whole has the functions of production, love, sex, economy, protection, education, and recreation, etc (Hwang DH, 2002). Scholars in the psychiatric analysis field have emphasized the effect of children's living experience in the early ages to an individual's lifelong growth. An equal parent-child relationship in a family, a democratic family atmosphere, and parents and children's responsibilities can promote a normal development and growth of a parent-child relationship. In Erikson's social development theory, an individual's development is distinguished to eight processes. In the development of the main social and interpersonal relationship, five processes are originated from a family. Thus, the importance of a family is felt.

A child has to enter kindergarten to study when he or she is three years old in Taiwan, because their parents worry that their children will lose in the beginning. A regular school education starts when he or she is six. These nine years of mandatory education are influential to students' development. Starting from the first grade, parents and teachers teach their children to take things seriously and to have good grades. Due to the change of era, the change of family structure, and the decline of pregnancy ratio, the amounts of children in a family are decreasing. Hence, children's statuses are increasing continuously (Hwang DH, 2002). Parents

tend to put more emphasis on children's education, especially on academic achievements.

It is said that "there is no occupation better than being a scholar." This is social public's opinion of education. In the process of Taiwan's economic booming, the social floating initiated from education is affirmed by everyone. Hence, academic achievement's level of emphasis is getting higher. Parents have high expectation to their children's education and consider that high educational background means high salary in the modern society of emphasizing on diplomas.

A family environment always is an important factor to decide what type of education an individual can receive. Parents have different recognitions on education due to diverse family environments. Different family values supply diverse learning resources. Hence, academic achievements and an individual's future occupational development are different. In Huey Zhen, Yuang (2008) and Jodl (2001)'s research, parents' educational values can predict children's acknowledgement behavior and children's future occupational development.

The importance of family on children's academic achievement and continuous education doesn't abate through the development of industrialization. The class difference still exists due to family background. Bandura (1997) thinks that a student's successful experience in school is influential to his or her future leaning and living. For the most parents in Taiwan, there is an equal sign linking successful experience, high ranking schools, high scores, continuous education, and good future together. Hence, academic achievements always become an indicator to value a student's good or bad performance by people.

But, due to the change of social type, dual-earner couples, single parent family, and grand-parents raised family are gaining. After-school education like day-care becomes a major issue. To solve this problem, cram school, day-care school, and talent and skill school have come out enormously. Children are not forwarding home happily after school, but oppositely been picked up by day-care schools. Family members waiting outside of a school have been replaced by different teachers (Liu Ruai Mei, 2008).

Although, a family is not the only place for raising and taking care of children and a child's personality development isn't contributed by parents only. But, a family is an individual's earliest place to get education. Parents are children's first teachers. Walberg (1984) points out that a person until he or she is eighteen years old, 13% of their time is at school and 87% of their time is at home. This figure indicates the importance of family education. A family can satisfy children's diverse needs and parents are the main suppliers for satisfying these needs. A family's parent and education functions have been replaced. Relatively, children's personality, values, and living habits will also be affected greatly. The time of getting together for communication between parents-children is little and parents-teachers are even worse. Most of parents' time is focused on their work. The only thing they ask for their children is good grades. Few input of family capital to get well

academic achievements is difficult for children. Hence, no matter how social type changes, if parents use the same physical and mental efforts like working on families, it is helpful for children's each area of development.

Parents participate in school education has become an absolute trend. The purpose is not only for improving school education's efficiency, but also for upgrading children's learning effect. When parents participate, a free market mechanism will begin. Each school competes with each other to attract students and this makes schools upgrade their efficiency. Furthermore, after parents participate in school education, interactions with teachers will gain. Through interactions with teachers can understand children's learning behavior at school and assist timely. Also, this way can understand children's acting behavior at school and give complements and corrections on time. Because participating in school activities can let children have a feeling of respect, this makes them be more confident and improves their behavior's self-constraint and studies' self-discipline (鄭招興, 2007; Fejgin, 1995). Parents learn knowledge and information by educating children through talking to teachers and other parents at school. 翟本瑞 (2002)'s research mentions that each parent will expect to upgrade children's education quality after the society becomes wealthy gradually. Although the same caring for children's education, parents from different background face different situations.

The idea of social capital mainly emphasizes on group identification, norm, interpersonal relationship and influence of internet to individuals, families, and communities. Bourdieu (1986) is the first scholar who analyzes social capital structurally. Coleman (1988,1990) thinks that the social capital theory means when an individual acts, resource built by relationships with others or organizations only exists in the relationship with actors and others. Actors can treat this kind of relationship and structure as resource and has an influence on actors' capability and effectiveness. And, this relationship cannot be replaced and occupied. Recently, social capital has been emphasized. The two reasons are first, social capital emphasizes on the positive side of interpersonal relationship and social interactions. Second, social capital expands the traditional cognitive and framework of the "capital" idea. Also, it is emphasized that this kind of incorporeal capital which is not related to materials can be an important resource of power and influence. The effectiveness of this kind of resource is even higher than physical capital. Under the limited children situation in a family, each child is treated preciously, parents and teachers all greatly emphasize on children's development (黃德祥, 2002). In this research, the emphasizing points are focusing on children in a family, how parents utilize family social capital to supply children a well family environment, to assist timely for children's well interpersonal relationship and academic achievements, and to upgrade their confidence for a smoother future on the long learning journey.

2. Research Hypotheses

According to the above research questions, this research points out the following research hypotheses:

- (1) There is a significant difference of junior high school students' different background (variable) to inner-family social capital.
 1. There is a significant difference of junior high school students' different gender to inner-family social capital.
 2. There is a significant difference of junior high school students' different level of self-evaluation school work to inner-family social capital.
 3. There is a significant difference of junior high school students' different level of self-evaluation interpersonal relationship to inner-family social capital.
 4. There is a significant difference of junior high school students' different family social and economical level to inner-family social capital.

- (2) There is a significant difference of junior high school students' different background (variable) to outer-family social capital.
 1. There is a significant difference of junior high school students' different gender to outer-family social capital.
 2. There is a significant difference of junior high school students' different level of self-evaluation school work to outer-family social capital.
 3. There is a significant difference of junior high school students' different level of self-evaluation interpersonal relationship to outer-family social capital.
 4. There is a significant difference of junior high school students' different family social and economical level to outer-family social capital.

- (3) There is a significant relationship of junior high school students' inner-family social capital and academic achievements.

- (4) There is a significant relationship of junior high school students' outer-family social capital and academic achievements.

- (5) Junior high school students' inner-family social capital is predictive to academic achievements.

- (6) Junior high school students' outer-family social capital is predictive to academic achievements.

(7) There is a significant difference of different roles in family social capital

3. Phrase Interpretation

(1) Inner-family social capital

Inner-family social capital means the relationship between parents and children or the interaction relationship between children and other members. But, it is the interaction between parents and children that influences more (Coleman, 1990). The operating definition uses Coleman's definition of family social capital in this research. Inner-family social capital means the relationship between parents and children. This research evaluates inner-family social capital through the following indicators: first, parents' cultural assistance on children's studies; second, parents-children feelings; third, parents' assistance on children's studies, which is symbolic by urging; fourth, parents' trust on children's studies; fifth, parents-children communication; six, parents' expectation on children's studies.

(2) Outer-family social capital

The idea of outer-family social capital is simplified as parents and others' relationship in communities or working places (何瑞珠, 1998). The operating definition uses Coleman's definition of family social capital in this research. Outer-family social capital means the relationship between parents and other adults, especially the relationship between parents and teachers, parents and other students' parents, and parents and friends. This research evaluates outer-family social capital through the following indicators: first, communication between parents and teachers; second, exchanging information between parents and other students' parents; third, education sharing between parents and friends.

(3) Academic achievements

Academic achievements use the subject classification of the basic competence test as standards, like the five Chinese, English, Math, Society, and Science subjects. Each school firstly transfers grades to class's T value and uses the T value to run statistical analysis.

II. Methodology

1. Research Object

This research formally and conveniently uses the questionnaires. There are total 15 classes as samples, including 3 junior high school classes in Taichung City, 3 junior high school classes in Taichung County DaLi City, 5 junior high school classes in Taichung County Taiping City, and 4 junior high school classes in Zhonghua County. There are total 500 students and use the "my living experience evaluation" questionnaire. The 517 formal

questionnaires called “my living experience scale“are initiated. There are 461 returning questionnaires and the returning ratio is 89.17%. Deducting 6 incomplete questionnaires and the effective samples are 445, meaning the ratio of effectiveness is 96.53%. In the effective samples, in terms of gender, the ratio of male and female is around half and half. Male is 47.64% and female is 52.36%. In terms of the level of self-evaluation of studies, the level of self-evaluation of interpersonal relationship, and family’s social and economical status, all turn out a bell shape normal distribution curve, meaning the sampling is very successful.

2. Research Method

This research mainly uses the self created questionnaires to evaluate and collect data. It is named the “my living experience scale”. There are three parts in this questionnaire, which are basic data, my living experience scale one, and my living experience scale two. Basic data includes the gender of the one who is tested, the level of self-evaluation class performance, the level of interpersonal relationship, and parents’ education background and occupation. My living experience scale one evaluates the relationship between the one who is tested and his or her parents. My living experience scale two evaluates the relationship between the person (who is tested)’s parents and teachers, other parents, and friends.

3. Research Framework

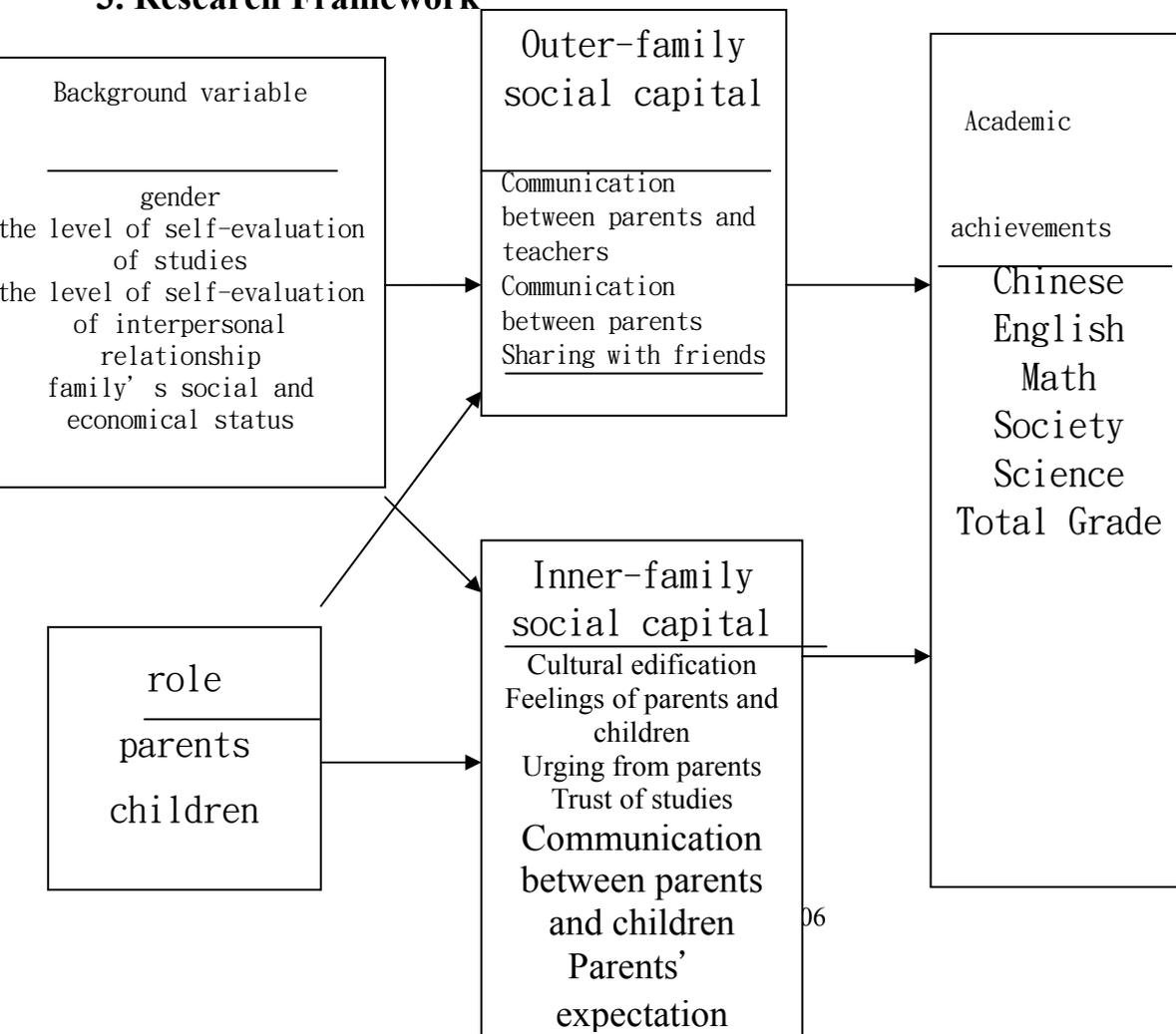


Figure 2-1: Research Framework

4. Research Method-Reliability Analysis

After factor analysis, to test the questionnaires' reliability and appropriateness, this research uses the Cronbach α coefficients as indicators to test each scale's inner consistence. The higher the α efficient, the higher each scale's inner consistence.

In the second part, after reliability analysis of "my living experience scale one" 's questions, each α coefficient is listed in the following: the total scale, $\alpha=.955$; cultural edification, $\alpha=.893$; feelings of parents and children, $\alpha=.908$; urging from parents, $\alpha=.867$; trust of studies, $\alpha=.881$; communication between parents and children, $\alpha=.848$; and parents' expectation, $\alpha=.732$. The six Cronbach α coefficients are above .70 and the total scale's Cronbach α coefficient is .955.

In the third part, after reliability analysis of "parents' living experience" 's questions, each α coefficient is listed in the following: the total scale, $\alpha=.885$; communication between parents and teachers, $\alpha=.886$; communication between parents, $\alpha=.825$; and sharing with friends, $\alpha=.703$. The three Cronbach α coefficients are above .70 and the total scale's Cronbach α coefficient is .885, meaning the scale's reliability is well.

5. Data Processing

The SPSS 12.0 edition software is used to run further data management and analysis to test each research hypothesis. The statistical method used in this research is the following:

(1) Frequency distribution and the % ratio

To understand testing samples' basic data distribution and analyzes "my living experience scale one" and "my living experience scale two" 's % ratio of each question's answer.

(2) Independent-Samples *t* Test

To test the difference of junior high school students' different background (variable) on their academic achievements such as each subject and total grade, the table of inner-family social capital's total amount and each level, and the table of outer-family social capital's total amount and each level in this research, and to answer hypothesis (1)1., hypothesis (1)4., hypothesis (2)1., hypothesis (2)4., and hypothesis (7).

(3) One-way ANOVA

To test the difference of junior high school students' different background (variable) on their inner-family social capital and outer-family social capital and the whole academic

achievements and each level in this research, and to answer hypothesis (1)2., hypothesis (1)3., hypothesis (2)2., and hypothesis (2)3.. If the testing result by using ANOVA is significant, then Scheffé is later used to compare.

(4) Person Product-moment Correlation Method

To discuss the relationship between inner-family social capital, outer-family social capital, and academic achievements in this research, and then answer hypothesis (3) and hypothesis (4).

(5) Multiple Regression

To test the prediction of junior high school students' different background (variable) on their each level's inner-family social capital and outer-family social capital and academic achievements, and to answer hypothesis (5) and hypothesis (6).

III. Results and Discussion

1. To analyze the difference of junior high school students' different background (variable) on the table of the total amount of inner-family social capital and each level.

The background variable in this research includes four items which are gender, self-evaluation of different school work level, self-evaluation of different interpersonal level, and family's social and economical level. The difference of junior high school students' different background (variable) on inner-family social capital is discussed separately.

This chapter distinguishes junior high school students' inner-family social capital to six levels to consider which are cultural edification, feelings of parents and children, urging from parents, trust of studies, communication between parents and children, and parents' expectation. It is described in the following:

- (1) To test the difference of junior high school students' different gender on the table of the total amount of inner-family social capital and each level.

Table1: Junior high school students' different gender on the table of the total amount of inner-family social capital and each level-the independent sample's testing analysis.

level	gender	<i>N</i>	<i>M</i>	<i>SD</i>	<i>T</i> value
Cultural edification	male	212	30.94	7.56	-.30
	female	233	31.16	7.67	
Feelings of	male	212	30.87	6.34	-1.00

parents and children	female	233	31.49	6.68	
Urging from parents	male	212	24.58	6.12	.46
	female	233	24.31	6.29	
Trust of studies	male	212	16.32	3.83	-1.57
	female	233	16.91	4.13	
Communication between parents and children	male	212	24.20	5.39	
	female	233	26.35	5.69	-4.08*
Parents' expectation	male	212	16.05	2.87	-1.49
	female	233	16.45	2.89	
the table of the amount of inner-family	male	212	142.95	25.56	
	female	233	146.67	26.60	-1.50

* $p < .05$.

From the above table, there is a significant difference of different gender's students on the communication between parents and children variable. There is no significant difference on the cultural edification, feelings of parents and children, urging from parents, trust of studies, trust of studies, and the table of the total amount of inner-family variables. Among the significant level variables, from the average, in the communication between parents and children level, female junior high school students ($M=26.35$) is above male junior high school students ($M=24.20$).

This research conclusion is the same as Muller (1998), and Ho and Willams (1996). In Ho and Willams (1996)'s research, it is discovered that in a family, female is more often to discuss living experience with parents. To discuss what happened at schools, communication with parents and children is more often. Muller (1998) the same uses the NELS data base and the 12766 students as samples. There is a research focusing on the eighth and tenth grades students' parents' participation and the relationship with math testing grades. The result is that parents are more often to discuss what happened at schools with female which means there is a lot of communication between parents and children.

(2) The difference analysis of the table of the total amount of self-evaluation different school work level to inner-family social capital and each level.

Table2: The ANOVA analysis of the total amount of junior high school students' self-evaluation of different school work level variable to inner-family social capital and each level.

level	The source of variance	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>
Cultural edification	Between level	1406.44	4	351.61	6.37***
	Inner level	24306.27	440	55.24	
Feelings of parents and children	Between level	357.44	4	89.36	2.12
	Inner level	18531.94	440	42.12	
Urging from parents	Between level	605.36	4	151.34	4.04**
	Inner level	16484.19	440	37.46	
Trust of studies	Between level	375.44	4	93.86	6.15***
	Inner level	6716.12	440	15.26	
Communication between parents and children	Between level	283.95	4	70.99	2.25
	Inner level	13867.45	440	31.52	
Parents' expectation	Between level	162.01	4	40.50	5.05***
	Inner level	3531.75	440	8.03	
the table of the total amount of inner-family	Between level	15158.07	4	3789.52	5.78***
	Inner level	288369.58	440	655.39	

** $p < .01$. *** $p < .001$.

Besides, from the Table 2 ANOVA analysis, in the cultural edification level, self-evaluation different school work level of junior high school students, $F=6.37$, $df=444$, $p < .001$. In the urging from parents level, $F=4.04$, $df=444$, $p < .01$.

In the trust of studies level, $F=6.15$, $df=444$, $p < .001$. In the parents' expectation, $F=5.05$, $df=444$, $p < .001$. And, in the table of the total amount of inner-family level, $F=5.78$,

$p < .001$. All the above are statistically significant. The feelings of parents and children and the communication of parents and children levels are not statistically significant.

Table3: The average, standard deviation, and the afterwards comparison result of the total amount of junior high school students' self-evaluation of different school work level variable to inner-family social capital and each level.

level	The level of self-evaluation school work	<i>N</i>	<i>M</i>	<i>SD</i>	The Scheffé method of afterwards comparison
Cultural edification	(1) not very good	18	26.06	6.99	(4) > (2)
	(2) not good	77	28.90	7.57	(4) > (1)
	(3) average	279	31.24	7.39	
	(4) good	60	33.78	7.15	
	(5) very good	11	34.64	9.68	
Urging from parents	(1) not very good	18	21.28	5.32	(3) > (2)
	(2) not good	77	22.48	6.20	
	(3) average	279	25.00	6.06	
	(4) good	60	25.07	6.08	
	(5) very good	11	25.82	8.39	
Trust of studies	(1) not very good	18	14.06	4.15	(4) > (2)
	(2) not good	77	15.52	3.83	(4) > (1)
	(3) average	279	16.73	3.85	
	(4) good	60	18.03	4.00	
	(5) very good	11	18.55	4.95	
Parents' expectation	(1) not very good	18	14.61	3.58	(5) > (3)
	(2) not good	77	15.79	3.16	(5) > (2)
	(3) average	279	16.29	2.78	(5) > (1)
	(4) good	60	16.73	2.56	
	(5) very good	11	19.00	1.26	

the table of the total amount	(1) not very good	18	130.39	24.06	(4)>(2)
	(2) not good	77	136.58	26.87	(4)>(1)
	(3) average	279	145.99	24.97	
	(4) good	60	152.03	25.82	
	(5) very good	11	160.45	33.26	

The research shows that in the cultural edification, trust of studies, and the inner-family table of the total amount levels, the average of the students who self evaluates school works “good” is higher than those who self evaluates school works “not good” and “not very good”.

In the urging from parents level, the average of the students who self evaluates school works “average” is higher than those who self evaluates school works “not good”.

In the parents’ expectation level, the average of the students who self evaluates school works “very good” is higher than those who self evaluates school works “average”, “not good”, and “not very good”.

(3) The difference analysis of the table of the total amount of self-evaluation different interpersonal relationship level to inner-family social capital and each level.

Table4: the ANOVA analysis of the total amount of junior high school students’ self-evaluation of different interpersonal relationship level variable to inner-family social capital and each level

level	The source of variance	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>
Cultural edification	Between level	588.76	4	147.19	2.58*
	Inner level	25123.95	440	57.10	
Feelings of parents and children	Between level	214.16	4	53.54	1.26
	Inner level	18675.22	440	42.44	
Urging from parents	Between level	311.42	4	77.86	2.04
	Inner level	16778.13	440	38.13	
Trust of studies	Between level	79.53	4	19.88	1.25
	Inner level	7012.03	440	15.94	

Communication between parents and children	Between level	549.75	4	137.44	4.45**
	Inner level	13601.65	440	30.91	
Parents' expectation	Between level	33.23	4	8.31	1.00
	Inner level	3660.53	440	8.32	
the table of the total amount of inner-family	Between level	7384.87	4	1846.22	2.74*
	Inner level	296142.78	440	673.05	

* $p < .05$. ** $p < .01$.

Besides, from the table 3 ANOVA analysis, it is found that in the 「Cultural edification」 level, junior high school students' self-evaluation different interpersonal relationship, $F=2.58$, $df=444$, $p < .05$; In the 「Communication between parents and children」 level, $F=4.45$, $df=444$, $p < .01$ and the table of the total amount of inner-family », $F=2.74$, $df=444$, $p < .05$ are all statistically significant. And, in the 「Feelings of parents and children」, 「Urging from parents」, and 「Trust of studies」 levels, are all not statistically significant.

Table 5: The average, standard deviation, and the afterwards comparison result of the total amount of junior high school students' self-evaluation of different interpersonal relationship level variable to inner-family social capital and each level.

level	Different level of self-evaluation interpersonal relationship	<i>N</i>	<i>M</i>	<i>SD</i>	The Scheffé method of afterwards comparison
Cultural edification	(1) not very good	7	28.71	5.56	
	(2) not good	14	27.00	8.11	
	(3) average	242	30.76	7.36	
	(4) good	143	32.37	8.04	
	(5) very good	39	29.90	7.00	

Communication between parents and children	(1) not very good	7	19.00	5.86	(4) > (1)
	(2) not good	14	24.57	6.27	
	(3) average	242	25.41	5.69	
	(4) good	143	26.13	5.29	
	(5) very good	39	23.26	5.39	
the table of the total amount of inner-family	(1) not very good	7	129.29	20.00	
	(2) not good	14	134.86	30.00	
	(3) average	242	144.64	25.44	
	(4) good	143	148.98	27.09	
	(5) very good	39	137.97	23.98	

The research is found that in the 「Communication between parents and children」 level, the average of the students who self evaluates interpersonal relationship “good” is higher than those who self evaluates interpersonal relationship “not very good”.

(4) The difference analysis of the table of the total amount of junior high school students’ families’ different social and economical status to inner-family social capital and each level.

Table6: junior high school students’ different families’ social and economical status on the table of the total amount of inner-family social capital and each level-the independent sample’s testing analysis

level	The family’ social and economical status	<i>N</i>	<i>M</i>	<i>SD</i>	<i>T</i> value
Cultural edification	High social and economical status	159	32.84	7.53	3.74***
	Low social and economical status	286	30.06	7.48	
Feelings of parents and children	High social and economical status	159	31.40	6.73	.49

		Low social and economical status	286	31.08	6.41	
		High social and economical status	159	25.48	6.64	
Urging parents	from	Low social and economical status	286	23.86	5.88	2.67**
		High social and economical status	159	17.01	4.21	
Trust of studies		Low social and economical status	286	16.42	3.86	1.50
		High social and economical status	159	25.34	6.13	
Communication between parents and children	and	Low social and economical status	286	25.31	5.37	.05
		High social and economical status	159	16.35	3.19	
Parents' expectation		Low social and economical status	286	16.21	2.70	.50
		High social and economical status	159	148.42	27.36	
the table of the total amount of inner-family		Low social and economical status	286	142.94	25.28	2.13*
		High social and economical status	159			

* $p < .05$. ** $p < .01$. *** $p < .001$.

From the above table, students who have different families' social and economical status, the 「Cultural edification」, 「Urging from parents」, and 「total grade」 levels are statistically

significant. In the 「Feelings of parents and children」, 「Trust of studies」, 「Communication between parents and children」, and 「Parents expectation」 levels are not statistically significant. Among the variables which are significant, from the average, the average of high social and economical family's 「Cultural edification」 is ($M=32.84$), which is statistically significant than low social and economical status family ($M=30.06$); High social and economical status family's average ($M=25.48$) on the 「Urging from parents」 level is statistically higher than low social and economical family ($M=23.86$); the average ($M=148.42$) of the high social and economical family's 「the table of the total amount of inner-family」 is statistically significant than low social and economical family ($M=142.94$).

(5) Conclusion

To synthesize the above research, different background's junior high school students' inner-family social capital testing is analyzed as the following Table 7.

Table 7: The testing and analyzing table of the table of the total amount of different background variables junior high school students' inner-family social capital and each level.

level	gender <i>T</i> value	Self-evaluation different school work level <i>F</i> value	Self-evaluation interpersonal relationship level <i>F</i> value	Family's social and economical status <i>T</i> value
Cultural edification	-.30	6.37***	2.58*	3.74***
Feelings of parents and children	-1.00	2.12	1.26	.49
Urging from parents	.46	4.04**	2.04	2.67**
Trust of studies	-1.57	6.15***	1.25	1.50
Communication between parents and children	-4.08*	2.25	4.45**	.05
Parents' expectation	-1.49	5.05***	1.00	.50
the table of the	-1.50	5.78***	2.74*	2.13*

total amount of
inner-family

* $p < .05$. ** $p < .01$. *** $p < .001$.

From the above table, 「Cultural edification」 and 「the table of the total amount of inner-family」 on the self-evaluation different school work level, self-evaluation different interpersonal relationship level, and family's social and economical status three background variables are statistically significant ; 「Trust of studies」 and 「Parents' expectation」 on the self-evaluation different school work level back ground variable are statistically significant ; 「Urging from parents」 on the self-evaluation different school work level and family's social and economical status back ground variable is statistically significant ; 「Communication between parents and children」 on gender and self-evaluation different interpersonal relationship level back ground level is statistically significant.

2. The difference analysis of the table of the total amount of junior high school students' different background variables to inner-family social capital and each level.

In this research, back ground variables include four items like gender, self-evaluation different school work level, self-evaluation different self-evaluation interpersonal relationship level, and families' social and economical status. In the following, the difference situation of the table of the total amount of junior high school students' different background variables to outer-family social capital and each level is discussed separately.

This chapter will distinguish junior high school students' outer-family social capital to three levels to consider which are communication between parents and teachers, parents' exchange, and friends' sharing. It is described in the following:

(1) The difference analysis of the table of the total amount of junior high school students' different gender to outer-family social capital and each level.

Table 8: Junior high school students' different gender on the table of the total amount of outer-family social capital and each level-the independent sample's testing analysis.

level	ender	<i>N</i>	<i>M</i>	<i>SD</i>	<i>T value</i>
Communication of parents and teachers	male	212	13.56	3.83	3.27***
	female	233	12.34	4.01	
Parents' exchange	male	212	16.06	5.20	2.37*
	female	233	14.92	4.92	
Friends' sharing	male	212	10.52	2.80	-.85
	female	233	10.74	2.77	

The table of the male	212	40.13	9.96	
total amount of female	233	38.00	9.84	2.27*
outer-family				

* $p < .05$. *** $p < .001$.

From the above table, students who have different gender, there is a significant difference in communication between parents and teachers, parents' exchange, and the table of the total amount of outer-family social capital. There is no significant difference in the level of friends' sharing. Among the variables which are significant, from the average, male junior high school students' average ($M=13.56$) is higher than female ($M=12.34$) on the communication between parents and teachers level. Male junior high school students' average ($M=16.06$) is higher than female ($M=14.92$) on the parents' exchange level. Male junior high school students' average ($M=40.13$) is higher than female ($M=38.00$) on the table of the total amount of outer-family social capital level.

2. The difference analysis of the table of the total amount of self-evaluation different school work level to outer-family social capital and each level.

Table 9: the ANOVA analysis of the total amount of junior high school students' self-evaluation of different school work level variable to outer-family social capital and each level

level	The source of variance	SS	df	MS	F
Communication of parents and teachers level	Between	32.66	4	8.17	.52
	Inner level	6970.43	440	15.84	
Parents' exchange level	Between	52.36	4	13.09	.51
	Inner level	11398.20	440	25.91	
Friends' sharing level	Between	95.94	4	23.99	3.16*
	Inner level	3343.08	440	7.60	
The table of the total amount of outer-family	Between	308.70	4	77.17	.78
	Inner level	43602.20	440	99.10	

* $p < .05$.

Besides, from the above Table 9 ANOVA analysis, it is known that in the level of friends' sharing, there is a significant difference among junior high school students' self-evaluation of different school work level ($F=3.16$, $p < .05$). There is no significant difference in the communication between parents and teachers, parents' exchange, and the table of the total amount of outer-family social capital.

Table10: The average, standard deviation, and the afterwards comparison result of the total amount of junior high school students' self-evaluation of different school work level variable to outer-family social capital and each level.

level	Self-evaluation of school work level	<i>N</i>	<i>M</i>	<i>SD</i>	The Scheffé method of afterwards comparison The Scheffé method of afterwards comparison
Friends' sharing	(1) not very good	18	8.56	2.83	(4) > (1)
	(2) not good	77	10.65	2.65	(3) > (1)
	(3) average	279	10.65	2.79	
	(4) good	60	11.18	2.68	
	(5) very good	11	10.64	2.91	

The research finds out that in the level of friends' sharing, those students who self-evaluates their school work as “good” and “average”, their grades are better than those who self-evaluate their school work as “not very good”.

(3) The difference analysis of the table of the total amount of self-evaluation different interpersonal relationship level to outer-family social capital and each level

Table 11: The ANOVA analysis of the total amount of junior high school students' self-evaluation of different interpersonal relationship level variable to outer-family social capital and each level.

level	The source of variance	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>
Communication of parents and teachers	Between level	81.68	4	20.42	1.30
	Inner level	6921.41	440	15.73	

Parents' exchange	Between level	60.77	4	15.19	.59
	Inner level	11389.80	440	25.89	
Friends' sharing	Between level	41.70	4	10.43	1.35
	Inner level	3397.32	440	7.72	
The table of the total amount of outer-family	Between level	359.05	4	89.76	.91
	Inner level	43551.84	440	98.98	

Besides, from the above Table 11 ANOVA analysis, it is known that junior high school students who self-evaluate different interpersonal relationship level, the communication between parents and teachers, parents' exchange, friends' sharing, and the table of the total amount of outer-family social capital are not statistically significant.

(4) The difference analysis of the table of the total amount of junior high school students' different families' social and economical status to outer-family social capital and each level.

Table 12: Junior high school students' families' social and economical status variable on the table of the total amount of outer-family social capital and each level-the independent sample's testing analysis.

level	The family' social and economical status	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i> value
Communication of parents and teachers	High social and economical status	159	13.30	4.22	1.52
	Low social and economical status	286	12.71	3.82	

Parents' exchange	High and economical status	social	159	15.84	5.58	1.18
	Low and economical status	social	286	15.25	4.77	
Friends' sharing	High and economical status	social	159	10.73	3.01	.53
	Low and economical status	social	286	10.58	2.65	
The table of the total amount of outer-family	High and economical status	social	159	39.87	11.07	1.29
	Low and economical status	social	286	38.54	9.25	

From the above table, students who have different families' social and economical status, the level of communication between parents and teachers, parents' exchange, friends' sharing, and the table of the total amount of outer-family social capital are not statistically significant.

(5) Conclusion

To synthesize from the above research, different back ground's junior high school students' inner-family social capital testing analysis is categorized in the following Table 4-20.

Table 13: The testing and analyzing table of the table of the total amount of different background variables junior high school students' outer-family social capital and each level.

Level	gender	Self-evaluation		
		Self-evaluation different school level	work level	Self-evaluation different interpersonal relationship level
	<i>t</i> value	<i>F</i> value	<i>F</i> value	<i>t</i> value
Communication of parents and teachers	3.27***	.52	1.30	1.52
	2.37*	.51	.59	1.18
Parents' exchange	-.85	3.16*	1.35	.53
	2.27*	.78	.91	1.29

* $p < .05$. *** $p < .001$.

In the communication between parents and teachers, parents' exchange, and the table of the total amount of outer-family social capital levels, the gender variable is significant. Male students' average is higher than female's. Male students in their junior high school period are the age of crude and impetuous. Parents are more severe to boys than girls on behavior discipline. Also, to boys' communication barrier is severer than to girls. Parents thus always ask help from teachers to assist them for children's behavior discipline. They also learn from other parents to let their sons get through the emotional and unstable junior high school period. In the friends' sharing level, there is a significant difference on the self evaluation of different school work level.

3. The analysis of the relationship between junior high school students' academic achievements and the table of the total amount of inner-family social capital and each level.

The following is the analysis of the relationship between junior high school students' academic achievements and the table of the total amount of inner-family social capital and each level. The Pearson method is used to analyze the correlation between each level.

Academic achievements are separated to the following five subjects like Chinese, English, Math, Society, and Science and the total grades. And, inner-family social capital is distinguished to cultural edification, feelings of parents and children, urging from parents, trust of studies, communication between parents and children, parents' expectation, and the table of the total amount of inner-family. The analyzed result is shown in the following Table 14.

Table 14: the analysis of the relationship between junior high school students' academic achievements and the table of the total amount of inner-family social capital and each level

subject	Cultural edification	Feelings of parents and children	Urging from parents	Trust of studies	Communication between parents and children	Parents' expectation	the table of the total amount of inner-family social capital
Chinese	.15**	.09*	.07	.19**	.06	.12*	.14**
English	.22**	.12*	.16**	.18**	.12*	.14**	.20**
Math	.20**	.09	.12*	.12**	.03	.05	.14**
Society	.16**	.07	.07	.15**	.03	.07	.12*
Science	.21**	.14**	.10*	.17**	.05	.09	.17**
total	.22**	.11*	.12**	.19**	.06	.11*	.18**

* $p < .05$. ** $p < .01$.

(1) The relationship analysis between cultural edification and academic achievements

The analytic result shows that each subject of academic achievements like Chinese, English, Math, Society, and Science and the total grades and the level of cultural edification is positively and significantly related. The correlation is .15, .22, .20, .16, .21, .22.

From 陳曉佳 (2004) 's research, the data is used from the TEPS data base, in the 2001 investigation, the accumulative result of cultural edification from female junior high school students is higher than male students. The more the accumulative result, the more it is effective to academic grades gradually.

(2) The relationship analysis between feelings of parents and children and academic achievements

The analytic result shows that each subject of academic achievements like Chinese, English, Science, and total grades and the level of feelings of parents and children are positively and significantly related. The coefficients are .09, .12, .14, .12.

(3) The relationship analysis between urging from parents and academic achievements

The analytic result shows that each subject of academic achievements like English, Math, Science, and total grades and the level of urging from parents are positively and significantly related. The coefficients are .16, .12, .10, .12.

(4) The relationship analysis between trust of studies and academic achievements

The analytic result shows that each subject of academic achievements like Chinese, English, Math, Society, Science, and total grades and the level of trust of studies are positively and significantly related. The coefficients are .19, .18, .12, .15, .17, .19.

(5) The relationship analysis between communication between parents and children and academic achievements

The analytic result shows that the subject of academic achievements like English and the level of communication between parents and children are positively and significantly related. The coefficient is .12.

(6) The relationship analysis between parents' expectation and academic achievements

The analytic result shows that each subject of academic achievements like Chinese, English, and total grades and the level of parents' expectation are positively and significantly related. The coefficients are .12, .14, .11.

Hence, when parents expect their children to have well academic achievements, the stronger the faith, and the better the children's behavior. Hao and Burns (1998)'s research analyzes the difference of Asian immigrants and American students' academic achievements, one of the main factors to have a difference of each country's students' academic achievements is the difference of social capital. Chinese and Korean immigrants students have a high quality and frequency exchanges with their parents during their learning process, and increases parents' expectation to education. Thus, children's academic achievements are increased. 楊慧珍(2008)'s research has the same result that parents' expectation to children's education can directly affect children's academic grades.

Parents always use their selves' roles demonstration, convey of expectation, and values and experience to let their children learn and realize parents' values and faiths. And, this affects children's learning achievements (Sigel,1992 ; Belt & Peterson,1991) . Parents' achievements related faiths also affect their children's achievements related faiths (Jodel, Michael, Malanchuk, Eccles, & Sameroff,2001) . The result reflects the following in the questionnaires: "parents always say that they wish me to enter a good university in the future", "parents expect me to be a meaningful person in the future", and "I carry the great responsibility to fulfill parents' hopes". To earn parents' happiness and fulfill parents' expectation of entering a good university and be a meaningful person, children, children in the emotion of cherishing, respecting, and revering to parents, they will remind themselves their academic achievements to fulfill their parents' hopes.

(7) The relationship analysis between the table of the total amount of inner-family and academic achievements

The analytic result shows that each subject of academic achievements like Chinese, English, Math, Society, Science, and total grades and the level of the table of the total amount of inner-family are positively and significantly related. The coefficients

are .14, .20, .14, .12, .17, .18.

4. The analysis of the relationship between junior high school students' academic achievements and the table of the total amount of outer-family social capital and each level

In the following, the relationship between junior high school students' academic achievements and the table of the total amount of outer-family social capital and each level will be discussed. And, the Pearson method will be applied to analyze to understand each level's correlation.

Academic achievements are separated to the following five subjects like Chinese, English, Math, Society, and Science and the total grades. And, outer-family social capital is distinguished to three levels like communication between parents and children, parents' exchange, and friends' sharing and the table of the total amount of outer-family social capital. The analytic result is shown in the following Table 15.

Table 15: the analysis of the relationship between junior high school students' academic achievements and the table of the total amount of outer-family social capital and each level

subject	communication between parents and children	parents' exchange	friends' sharing	the table of the total amount of outer-family social capital
Chinese	-.07	-.09	.10*	-.04
English	-.06	-.02	.19**	.02
Math	-.01	.03	.09	.04
Society	-.07	-.06	.12*	-.03
Science	-.01	.01	.11*	.03
total	-.05	-.02	.14**	.01

* $p < .05$.

(1) The relationship analysis between communication between parents and children and academic achievements

The analytic result shows that each subject of academic achievements like Chinese, English, Math, Society, Science, and total grades and the level of communication between parents and children are not significantly related.

(2) The relationship analysis between parents' exchange and academic achievements

The analytic result shows that each subject of academic achievements like Chinese, English, Math, Society, Science, and total grades and the level of parents' exchange are not significantly related.

(3) The relationship analysis between friends' sharing and academic achievements

The analytic result shows that each subject of academic achievements like Chinese, English, Society, Science, and total grades and the level of friends' sharing are positively and significantly related. The coefficients are .10 、 .19 、 .12 、 .11 、 .14.

(4) The relationship analysis between the table of the total amount of outer-family social capital and academic achievements

The analytic result shows that each subject of academic achievements like Chinese, English, Math, Society, Science, and total grades and the level of the table of the total amount of outer-family social capital are not significantly related.

5. The predictive analysis of junior high students' each level of inner-family social capital and academic achievements

This chapter mainly discusses the predictive function of junior high students' each level of inner-family social capital and academic achievements. Hence, in this research, each level of inner-family social capital is the predictive variable. And, the five subjects of the basic competence test are Chinese, English, Math, Society, Science, and academic total grades are the dependent variables to run multiple regression analysis.

(1) The predictive analysis of junior high school students' inner-family social capital to the Chinese subject grade

To use each level of inner-family social capital as the predictive variable, and its effect on the academic subject like the Chinese subject grade to run multiple regression. The result is shown in Table 16.

Table 16: The multiple regression analysis table of junior high school students' inner-family social capital to the Chinese subject grade

Input variable	Un-standardized coefficient		Standardized coefficient	tvalue
	<i>B</i>	Standard estimate error	β	
Cultural edification	.20	.09	.15	2.11*

Feelings of parents and children	-.09	.11	-.06	-.82
Urging from parents	-.18	.11	-.11	-1.57
Trust of studies	.55	.17	.22	3.25***
Communication between parents and children	-.15	.12	-.08	-1.21
Parents' expectation	.27	.20	.08	1.36

Reference: $F = 4.25^{***}$; $R = .23$; $R^2 = .06$

* $p < .05$. *** $p < .001$.

The research result shows that there is a predictive function of junior high school students' inner-family social capital to the Chinese subject grade ($F = 4.25, p < .001$). Each level of inner-family social capital totally can explain 6% ($R^2 = .06$) of the Chinese subject grade of the academic achievement. Thus, inner-family social capital is effective to the Chinese subject grade of the academic achievement. To further analyze data, we can understand inner-family social capital's cultural edification ($\beta = .15, t = 2.11, p < .05$) and trust of studies ($\beta = .08, t = 3.25, p < .001$) can positively predict junior high school students' Chinese subject grade of the academic achievement. This means that the more junior high school students' cultural edification and the stronger of trust of studies, the better performance of the Chinese subject grade. Also, the predictive power of trust of studies is higher than cultural edification. Other levels' predictive power to Chinese subject grade of the academic achievement is not significant.

(2) The predictive analysis of junior high school students' inner-family social capital to the English subject grade

To use each level of inner-family social capital as the predictive variable, and its effect on the academic subject like the English subject grade to run multiple regression. The result is shown in Table 17.

Table 17: The multiple regression analysis table of junior high school students' inner-family social capital to the English subject grade

Input variable	Un-standardized coefficient	Standardized coefficient	tvalue
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	<i>B</i>	Standard estimate error	<i>β</i>	
Cultural edification	.27	.09	.21	2.97**
Feelings of parents and children	-.13	.11	-.09	-1.12
Urging from parents	-.05	.11	-.03	-.47
Trust of studies	.32	.17	.13	1.90
Communication between parents and children	-.01	.12	-.01	-.12
Parents' expectation	.16	.20	.05	.82

Reference: $F = 4.67^{***}$; $R = .25$; $R^2 = .06$

** $p < .01$.

The research result shows that there is a predictive function of junior high school students' inner-family social capital to the English subject grade ($F = 4.67$, $p < .001$). Each level of inner-family social capital totally can explain 6% ($R^2 = .06$) of the English subject grade of the academic achievement. Thus, inner-family social capital is effective to the English subject grade of the academic achievement. To further analyze data, we can understand inner-family social capital's cultural edification ($\beta = .21$, $t = 2.97$, $p < .01$) can positively predict junior high school students' English subject grade of the academic achievement. This means that the more junior high school students' cultural edification, the better performance of the English subject grade. Other levels' predictive power to English subject grade of the academic achievement is not significant.

(3) The predictive analysis of junior high school students' inner-family social capital to the Math subject grade

To use each level of inner-family social capital as the predictive variable, and its effect on the academic subject like the Math subject grade to run multiple regression. The result is shown in Table 18.

Table 18: The multiple regression analysis table of junior high school students' inner-family social capital to the Math subject grade

Input variable	Un-standardized coefficient		Standardized coefficient	tvalue
	<i>B</i>	Standard estimate error	β	
Cultural edification	.30	.09	.23	3.26***
Feelings of parents and children	-.00	.11	-.00	-.03
Urging from parents	-.04	.11	-.03	-.35
Trust of studies	.21	.17	.08	1.21
Communication between parents and children	-.20	.12	-.11	-1.68
Parents' expectation	-.05	.20	-.01	-.23

Reference: $F = 3.71^{***}$; $R = .22$; $R^2 = .05$

*** $p < .001$.

The research result shows that there is a predictive function of junior high school students' inner-family social capital to the Math subject grade ($F = 3.71, p < .001$). Each level of inner-family social capital totally can explain 5% ($R^2 = .05$) of the Math subject grade of the academic achievement. Thus, inner-family social capital is effective to the Math subject grade of the academic achievement.

To further analyze data, we can understand inner-family social capital's cultural edification ($\beta = .23, t = 3.26, p < .001$) can positively predict junior high school students' Math subject grade of the academic achievement. This means that the more junior high school students' cultural edification, the better performance of the Math subject grade. Other levels' predictive power to Math subject grade of the academic achievement is not significant.

(4) The predictive analysis of junior high school students' inner-family social capital to the Society subject grade

To use each level of inner-family social capital as the predictive variable, and its effect on the academic subject like the Society subject grade to run multiple regression. The result is shown in Table 19.

Table 19: the multiple regression analysis table of junior high school students' inner-family social capital to the Society subject grade

Input variable	Un-standardized coefficient		Standardized coefficient	tvalue
	<i>B</i>	Standard estimate error	β	
Cultural edification	.27	.09	.21	2.90**
Feelings of parents and children	-.08	.11	-.06	-.74
Urging from parents	-.16	.11	-.10	-1.40
Trust of studies	.43	.17	.17	2.54*
Communication between parents and children	-.17	.12	-.10	-1.45
Parents' expectation	.11	.20	.03	.53

Reference: $F = 3.62^{**}$; $R = .22$; $R^2 = .05$

* $p < .05$. ** $p < .01$.

The research result shows that there is a predictive function of junior high school students' inner-family social capital to the Society subject grade ($F = 3.62$, $p < .01$). Each level of inner-family social capital totally can explain 5% ($R^2 = .05$) of the Society subject grade of the academic achievement. Thus, inner-family social capital is effective to the Society subject grade of the academic achievement.

To further analyze data, we can understand inner-family social capital's cultural edification ($\beta = .23$, $t = 3.26$, $p < .001$) and trust of studies ($\beta = .09$, $t = 2.90$, $p < .01$) can positively predict junior high school students' Society subject grade of the academic achievement. This means that the more junior high school students' cultural edification and the stronger of trust of studies, the better performance of the Society subject grade. Also, the predictive power of cultural edification is higher than trust of studies. Other levels' predictive power to Society subject grade of the academic achievement is not significant.

(5) The predictive analysis of junior high school students' inner-family social capital to the Science subject grade

To use each level of inner-family social capital as the predictive variable, and its effect on the academic subject like the Science subject grade to run multiple regression. The result is shown in Table 20.

Table 20: the multiple regression analysis table of junior high school students' inner-family social capital to the Science subject grade

Input	Un-standardized coefficient		Standardized coefficient	tvalue
	<i>B</i>	Standard estimate error	β	
Cultural edification	.34	.09	.26	3.72***
Feelings of parents and children	.07	.11	.05	.64
Urging from parents	-.20	.11	-.12	-1.68
Trust of studies	.29	.17	.12	1.69
Communication between parents and children	-.24	.12	-.14	-2.00
Parents' expectation	.13	.20	.04	.68

Reference: $F = 5.19^{***}$; $R = .26$; $R^2 = .07$

*** $p < .01$.

The research result shows that there is a predictive function of junior high school students' inner-family social capital to the Science subject grade ($F = 5.19$, $p < .001$). Each level of inner-family social capital totally can explain 7% ($R^2 = .07$) of the Science subject grade of the academic achievement. Thus, inner-family social capital is effective to the Science subject grade of the academic achievement.

To further analyze data, we can understand inner-family social capital's cultural edification ($\beta = .26$, $t = 3.72$, $p < .001$) can positively predict junior high school students' Science subject grade of the academic achievement. This means that the more junior high school students' cultural edification, the better performance of the Science subject grade.

Other levels' predictive power to Science subject grade of the academic achievement is not significant.

(6) The predictive analysis of junior high school students' inner-family social capital to the academic total grades

To use each level of inner-family social capital as the predictive variable, and its effect on the academic total grades to run multiple regression. The result is shown in Table 21.

Table 21: the multiple regression analysis table of junior high school students' inner-family social capital to the academic total grades

Input variable	Un-standardized coefficient		Standardized coefficient	tvalue
	B	Standard estimate error	β	
Cultural edification	.33	.09	.25	3.57***
Feelings of parents and children	-.06	.11	-.04	-.57
Urging from parents	-.13	.11	-.08	-1.19
Trust of studies	.10	.17	.16	2.38*
Communication between parents and children	-.18	.12	-.10	-2.00
Parents' expectation	.14	.20	.04	.68

Reference: $F = 5.19^{***}$; $R = .26$; $R^2 = .07$

*** $p < .01$.

The research result shows that there is a predictive function of junior high school students' inner-family social capital to academic total grades ($F = 5.19, p < .001$). Each level of inner-family social capital totally can explain 7% ($R^2 = .07$) of the academic total grades. Thus, inner-family social capital is effective to the academic total grades.

To further analyze data, we can understand inner-family social capital's cultural edification ($\beta = .25, t = 3.57, p < .001$) and trust of studies ($\beta = .16, t = 2.38, p < .05$) can positively predict junior high school students' academic total grades. This means that the

more junior high school students' cultural edification and the stronger of trust of studies, the better performance of the academic total grades. Also, the predictive power of cultural edification is higher than trust of studies. Other levels' predictive power to the academic total grades is not significant.

This research uses each level of junior high school students' inner-family social capital and each subject of academic achievements and total grades to run multiple regression analysis. The result shows that each level of junior high school students' inner-family social capital is effective to each subject of academic achievements and total grades. This means that each level of junior high school students' inner-family social capital and each subject of academic achievements and total grades are related. All the t values from Table 4-24 to 4-29 are synthesized in the following Table 4-30.

Table 22: the table of the multiple regression t values of each level of inner-family social capital and each subject of academic achievements and total grades

Input variable	Chinese	English	Math	Society	Science	total
Cultural edification	2.11*	2.97**	3.26***	2.90***	3.72***	3.57***
Feelings of parents and children	-.82	-1.12	-.03	.74	.64	-.57
Urging from parents	-1.57	-.47	-.35	-1.40	-1.68	-1.19
Trust of studies	3.25***	1.90	1.21	2.54*	1.69	2.38*
Communication between parents and children	-1.21	-.12	-1.68	-1.45	-2.00	-2.00
Parents' expectation	1.36	.82	-.23	.53	.68	.68

* $p < .05$. ** $p < .01$. *** $p < .001$.

After comparing the table of the t values of junior high school students' inner-family social capital and each subject of academic achievements and total grades, the further analysis shows that the cultural edification of inner-family social capital in each subject, its t values are positively and significantly related. This means that cultural edification has a predictive power to all junior high school students' each subject of academic achievements. In other words, if a junior high school student can get more cultural edification in his or her family, academic achievements can also be better. There is an old Chinese proverb, which says, "You would

rather teach him how to catch fish than just give him fish”. Therefore, it is better to teach students how to use tools to get what he or she wants than just stuff things, which adults think useful knowledge, in students’ brains.

And, the trust of studies in inner-family social capital is significant to the two Chinese and the Society subject of academic achievements. This means that trust of studies has a significant prediction of power to the Chinese and Society subjects. Parents’ encouragement, praise, and trust to students will let students read and learn more actively. Those students who like to learn will have good performance.

To synthesize from the above, the major discover in this research is that parents need to provide tools and methods to teach students how to use these tools and resources well, this affects the most to junior high school students’ academic achievements. Assisting students own learning blind spots can let them selves improve their weaker subjects. What parents need is to cherish their children to strengthen children’s confidence. To let children feel happy to learn and then enjoy learning. As long as you want to learn, you will have excellent academic achievements.

6. The predictive analysis of junior high students’ each level of outer-family social capital and academic achievements

This chapter mainly discusses the predictive function of junior high students’ each level of outer-family social capital and academic achievements. Hence, in this research, each level of outer-family social capital is the predictive variable. And, the five subjects of the basic competence test are Chinese, English, Math, Society, Science, and academic total grades are the dependent variables to run multiple regression analysis.

(1) The predictive analysis of junior high school students’ outer-family social capital to the Chinese subject grade

To use each level of outer -family social capital as the predictive variable, and its effect on the academic subject like the Chinese subject grade to run multiple regression. The result is shown in Table 23.

Table 23: the multiple regression analysis table of junior high school students’ outer -family social capital to the Chinese subject grade

Input variable	Un-standardized coefficient		Standardized coefficient	tvalue
	<i>B</i>	Standard estimate error	β	
Communication	-.12	.15	-.05	.77

between parents and teachers				
Parents' exchange	-.31	.13	-.16	-2.42*
Friends' sharing	.72	.20	.20	3.64***

Reference: $F = 5.60^{***}$; $R = .19$; $R^2 = .04$

* $p < .05$. *** $p < .001$.

The research result shows that there is a predictive function of junior high school students' outer-family social capital to the Chinese subject grade ($F = 5.60, p < .001$). Each level of outer-family social capital totally can explain 4% ($R^2 = .04$) of the Chinese subject grade of the academic achievement. Thus, outer-family social capital is effective to the Chinese subject grade of the academic achievement.

To further analyze data, we can understand outer-family social capital's parents' exchange ($\beta = -.16, t = -2.42, p < .05$) can negatively predict junior high school students' Chinese subject grade of the academic achievement. And, friends' sharing ($\beta = .20, t = 3.64, p < .001$) can positively predict junior high school students' Chinese subject grade of the academic achievement. This means that the more intense of junior high school students' parents' exchange, the worse performance of the Chinese subject grade. But, more friends' sharing causes the better performance of the Chinese subject grade. Also, the predictive power of friends' sharing is higher than parents' exchange. The predictive power of the communication between parents and teachers level to Chinese subject grade of the academic achievement is not significant.

(2) The predictive analysis of junior high school students' outer-family social capital to the English subject grade

To use each level of outer-family social capital as the predictive variable, and its effect on the academic subject like the English subject grade to run multiple regression. The result is shown in Table 24.

Table 24: The multiple regression analysis table of junior high school students' outer-family social capital to the English subject grade

Input variable	Un-standardized coefficient	Standardized coefficient	tvalue
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	<i>B</i>	Standard estimate error	β	
Communication between parents and teachers	-.27	.15	-.11	-1.80
Parents' exchange	-.17	.13	-.09	-1.36
Friends' sharing	.98	.19	.28	5.05***

Reference: $F = 9.15^{***}$; $R = .24$; $R^2 = .06$

*** $p < .001$.

The research result shows that there is a predictive function of junior high school students' outer-family social capital to the English subject grade ($F = 9.15$, $p < .001$). Each level of outer-family social capital totally can explain 6% ($R^2 = .06$) of the English subject grade of the academic achievement. Thus, outer-family social capital is effective to the English subject grade of the academic achievement.

To further analyze data, we can understand outer-family social capital's friends' sharing ($\beta = .28$, $t = 5.05$, $p < .001$) can positively predict junior high school students' English subject grade of the academic achievement. This means that the more junior high school students' outer-family social capital's friends' sharing, the better performance of the English subject grade. Other levels' predictive power to English subject grade of the academic achievement is not significant.

(3) The predictive analysis of junior high school students' outer-family social capital to the Math subject grade

To use each level of outer-family social capital as the predictive variable, and its effect on the academic subject like the Math subject grade to run multiple regression. The result is shown in Table 25.

Table 25: The multiple regression analysis table of junior high school students' outer-family social capital to the Math subject grade

Input variable	Un-standardized coefficient	Standardized coefficient	<i>t</i> value
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	<i>B</i>	Standard estimate error	β	
Communication between parents and teachers	-.15	.16	-.06	-.98
Parents' exchange	.03	.13	.02	.26
Friends' sharing	.39	.20	.11	1.93

Reference: $F=1.64$; $R = .11$; $R^2 = .01$

The research result shows that there is no predictive function of each level's outer-family social capital to the Math subject grade of the academic achievement.

(4) The predictive analysis of junior high school students' outer-family social capital to the Society subject grade

To use each level of outer-family social capital as the predictive variable, and its effect on the academic subject like the Society subject grade to run multiple regression. The result is shown in Table 26.

Table 26: The multiple regression analysis table of junior high school students' outer-family social capital to the Society subject grade

Input variable	Un-standardized coefficient		Standardized coefficient	<i>t</i> value
	<i>B</i>	Standard estimate error	β	
Communication between parents and teachers	-.20	.15	-.08	-1.33
Parents' exchange	-.22	.13	-.11	-1.70
Friends' sharing	.74	.20	.21	3.77***

Reference: $F=5.54^{***}$; $R = .19$; $R^2 = .04$

*** $p < .001$.

The research result shows that there is a predictive function of junior high school students' outer-family social capital to the Society subject grade ($F = 5.54, p < .001$). Each level of outer-family social capital totally can explain 4% ($R^2 = .04$) of the Society subject grade of the academic achievement. Thus, outer-family social capital is effective to the Society subject grade of the academic achievement.

To further analyze data, we can understand outer-family social capital's friends' sharing ($\beta = .21, t = 3.77, p < .001$) can positively predict junior high school students' Society subject grade of the academic achievement. This means that the more junior high school students' outer-family social capital's friends' sharing, the better performance of the Society subject grade. Other levels' predictive power to Society subject grade of the academic achievement is not significant.

(5) The predictive analysis of junior high school students' outer-family social capital to the Science subject grade

To use each level of outer-family social capital as the predictive variable, and its effect on the academic subject like the Science subject grade to run multiple regression. The result is shown in Table 27.

Table 27: the multiple regression analysis table of junior high school students' outer-family social capital to the Science subject grade

Input variable	Un-standardized coefficient		Standardized coefficient	tvalue
	B	Standard estimate error	β	
Communication between parents and teachers	-.09	.16	-.03	-.55
Parents' exchange	-.11	.13	-.06	-.83
Friends' sharing	.56	.20	.16	2.81**

Reference: $F = 2.66^*$; $R = .13$; $R^2 = .02$

* $p < .05$. ** $p < .01$.

The research result shows that there is a predictive function of junior high school students' outer-family social capital to the Science subject grade ($F=2.66, p<.05$). Each level of outer-family social capital totally can explain 2% ($R^2 = .02$) of the Science subject grade of the academic achievement. Thus, outer-family social capital is effective to the Science subject grade of the academic achievement.

To further analyze data, we can understand outer-family social capital's friends' sharing ($\beta = .16, t=2.81, p<.01$) can positively predict junior high school students' Science subject grade of the academic achievement. This means that the more junior high school students' outer-family social capital's friends' sharing, the better performance of the Science subject grade. Other levels' predictive power to Science subject grade of the academic achievement is not significant.

(6) The predictive analysis of junior high school students' outer-family social capital to the academic total grades

To use each level of outer-family social capital as the predictive variable, and its effect on the academic total grades to run multiple regression. The result is shown in Table 28.

Table 28: the multiple regression analysis table of junior high school students' outer-family social capital to the academic total grades

Input variable	Un-standardized coefficient		Standardized coefficient	tvalue
	B	Standard estimate error	β	
Communication between parents and teachers	-.19	.15	-.08	-1.26
Parents' exchange	-.17	.13	-.09	-1.30
Friends' sharing	.77	.20	.21	3.89***

Reference: $F=5.39^{***}$; $R = .19$; $R^2 = .04$

*** $p<.001$.

The research result shows that there is a predictive function of junior high school students' outer-family social capital to academic total grades ($F=5.39, p<.001$). Each level

of outer-family social capital totally can explain 4% ($R^2 = .04$) of the academic total grades. Thus, outer-family social capital is effective to the academic total grades.

To further analyze data, we can understand outer-family social capital's friends' sharing ($\beta = .21$, $t=3.89$, $p<.001$) can positively predict junior high school students' academic total grades. This means that the more junior high school students' outer-family social capital's friends' sharing, the better performance of the academic total grades. Other levels' predictive power to the academic total grades is not significant.

This research uses junior high school students' outer-family social capital and each subject of academic achievements and total grades to run multiple regression analysis. The result shows that junior high school students' outer-family social capital is effective to each subject of academic achievements and total grades. This means that outer-family social capital and each subject of academic achievements and total grades are related.

Table 29: The table of the multiple regression t values of each level of outer-family social capital and each subject of academic achievements and total grades

Input variable	Chinese	English	Math	Society	Science	total
Communication between parents and teachers	.77	-1.80	-.98	-1.33	-.55	-1.26
Parents' exchange	-2.42	-1.36	.26	-1.70	-.83	-1.30
Friends' sharing	3.64***	5.05***	1.93	3.77***	2.81***	3.89***

*** $p<.001$.

After comparing the table of the t values of junior high school students' outer-family social capital and each subject of academic achievements and total grades, the further analysis shows that in each subject except Math, the outer-family social capital's friends' sharing, t values are positively and significantly related. This means that friends' sharing has a significant power of prediction to each subject of junior high school students' academic achievements. In other words, if junior high school students' parents can let students find an excellent role model to learn from, their academic achievements also can have a better performance. In 黃懷德 (2008)'s research, it is mentioned that "role model learning" is an important step of Bandura's social learning theory. *When we see others earn rewards because of learning, we will take a reference for self actions.*

To synthesize from the above, the major discover in this research is that the most influential to junior high school students' academic achievements is to know how to accept or reject educational problems discussed by parents and friends. To get a beneficial educational method for students to learn from discussions and to know what kind of academic trouble students will face and ask for help from friends' experiences.

6. The difference analysis of junior high school students' parents and children's families' social capital

This research will separately discuss the difference situation of the table of the total amount of parents and children's families' social capital and the average of each level. This chapter will compare the difference of the table of the total amount of parents and children's families' social capital and the average of each level in the following.

(1) The difference analysis of the table of the total amount of inner-families' social capital and the average of each level

First, different roles like parents and children are independent variables. And, separately, the table of the total amount of inner-families' social capital and the average of each level are dependent variables to run independent sample t test. To test the difference of different junior high school students' roles in the table of the total amount of inner-families' social capital and each level, and to list all the averages and standard deviations in Table 4-38.

Table 30: the independent sample testing analysis of different roles in the table of the total amount of inner-families' social capital and each level

level	role	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i> value
Cultural edification	children	445	31.02	7.62	-5.03***
	parents	445	33.69	8.18	
Feelings of parents and children	children	445	31.19	6.52	-4.13***
	parents	445	33.02	6.69	
Urging from parents	children	445	24.47	6.12	-7.60***
	parents	445	27.56	5.98	
Trust of studies	children	445	16.67	3.92	-5.77***
	parents	445	18.03	3.08	
Communication between parents and children	children	445	25.37	5.52	-3.67***
	parents	445	26.67	5.05	

Parents' expectation	children	445	16.29	2.78	.35
	parents	445	16.23	2.59	
The table of the total amount of inner-family	children	445	145.02	25.91	-5.88***
	parents	445	155.14	25.46	

*** $p < .001$.

In each level of inner-families' social capital and the total amount table, the averages of parents are all higher than children. Thus, parents always feel "I have already given children a lot", "I already taken care of them a lot", "I have already been strict to them", "I have already always praised children than blamed", and "I always spend a lot of time to communicate with them, but children don't feel the same". On the level of parents' expectation, there is no significant difference of parents and children's averages.

(2) The difference analysis of the table of the total amount of parents and children's outer-families' social capital and the average of each level

First, different roles like parents and children are independent variables. And, separately, the table of the total amount of outer-families' social capital and each level are dependent variables to run independent sample t test. To test the difference of different junior high school students' roles in the table of the total amount of outer-families' social capital and each level, and to list all the averages and standard deviations in Table 4-39.

Table 31: the independent sample testing analysis of different roles in the table of the total amount of outer-families' social capital and each level

level	role	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i> value
Communication between parents and teachers	children	445	12.95	3.92	-3.54***
	parents	445	13.88	3.95	
Parents' exchange	children	445	15.50	5.02	-1.17
	parents	445	15.78	4.57	
Friends' sharing	children	445	10.66	2.74	1.17
	parents	445	10.46	2.27	
The table of the	children	445	39.10	9.77	-1.49

total amount of outer-family	parents	445	40.03	8.90
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*** $p < .001$.

On the level of communication between parents and teachers, there is a significant difference of parents and children's averages. Parents' averages are significantly higher than children's. There is no significant difference on other levels.

IV. Conclusion and Suggestion

1. Conclusion

(1) About different background variable's junior high school students' inner-family social capital, there is no significant difference on most levels

On the level of cultural edification, there is a significant difference on self-evaluation different schoolwork level. The average of those students who self-evaluate schoolwork level "good" is significantly higher than those who self-evaluate schoolwork level "not good" and "not very good". On the level of different self-evaluation of interpersonal relationship, there is a great difference, but there is no especially huge difference among each level. There is a significant difference on the aspect of family's social and economical status. A student who has a high family social and economical status, cultural edification is significantly higher than those whose family social and economical status is low. The gender variable to cultural edification is not significantly different.

On the level of feelings of parents and children, there is no significant difference on four background variables, which are different gender, different self-evaluation schoolwork level, different self-evaluation interpersonal level, and different family social and economical status.

On the level of urging from parents, there is a significant difference on different self-evaluation schoolwork level. The average of students who self-evaluate schoolwork level "average" is significantly higher than those whose self-evaluate schoolwork level "not good".

On the level of family social and economical status, there is a significant difference. Students who have a high family social and economical status, urging from parents is significantly higher than those students whose family social and economical status is low. The gender and different interpersonal relationship level variables have no significant difference on urging from parents.

On the level of trust of studies, there is a great difference on the self-evaluation different schoolwork level. The average of those students who self-evaluate schoolwork level "good" is significantly higher than those who self-evaluate schoolwork level "not good" and "not very good". There is significant difference on family social and economical status. Students who have a high family social and economical status, urging from parents is significantly higher than those students whose family social and economical status is low. The gender and different

interpersonal relationship level variables have no significant difference on urging from parents.

On the level of communication between parents and children, the significant difference of gender, the average of female is significantly higher than male. There is also a significant difference on the different interpersonal relationship self-evaluation level. The average of those students who self-evaluate interpersonal relationship level “good” is significantly higher than those who self-evaluate interpersonal relationship level “not very good”. The self-evaluate different schoolwork level and the family social and economical status variables have no significant difference on the communication between parents and children.

On the level of parents’ expectation, there is a significant difference on self-evaluation different schoolwork level. The average of those students who self-evaluate schoolwork level “very good” is significantly higher than those who self-evaluate schoolwork level “average”, “not good”, and “not very good”. The gender, different self-evaluation interpersonal relationship level, and family social and economical status variables have no significant difference on communication between parents and children.

On the table of the total amount of inner-family social capital, there is a significant difference on the level of self-evaluation different schoolwork. The average of those students who self-evaluate schoolwork level “good” is significantly higher than those who self-evaluate schoolwork level “not good” and “not very good”. There is also a significant difference on different interpersonal relationship self-evaluation level, but there is no especially huge difference among each level. There is also a significant difference on the family social and economical status. Students who have a high family social and economical status, the table of the total amount of the inner-family social capital is significantly higher than students whose family social and economical status is low. The gender variable has no significant difference on the table of the total amount of the inner-family social capital.

(2) About different background variable’s junior high school students’ outer-family social capital, there is no significant difference on most levels

On the level of communication between parents and teachers, there is a significant difference on gender. The average of male is higher than female. The three variables self-evaluation different schoolwork level, self-evaluation different interpersonal relationship level, and family different social and economical status have no significant difference on the communication between parents and teachers level.

On the level of parents’ exchange, there is a significant difference on gender. The average of male is higher than female. The three variables self-evaluation different schoolwork level, self-evaluation different interpersonal relationship level, and family different social and economical status have no significant difference on the parents’ exchange level.

On the level of friends' sharing, there is a significant difference on self-evaluation different schoolwork level. The average of those students who self-evaluate schoolwork level "good" is significantly higher than those who self-evaluate schoolwork level "not good". The average of those students who self-evaluate schoolwork level "average" is significantly higher than those students whose self-evaluate schoolwork level "not good". The three variables gender, self-evaluation different interpersonal relationship level, and family different social and economical status have no significant difference on the friends' sharing level.

On the table of the total amount of outer-family social capital, there is a significant difference on gender. The average of male is higher than female. The three variables self-evaluation different schoolwork level, self-evaluation different interpersonal relationship level, and family different social and economical status have no significant difference on the table of the total amount of outer-family social capital.

(3) Junior high school students' inner-family social capital is significantly related to academic achievements; outer-family social capital is significantly related to academic achievements

1. Junior high school students' inner-family social capital is significantly related to academic achievements

The grade of the Chinese subject and cultural edification, feelings of parents and children, trust of studies, communication between parents and children, parents' expectation, and the table of the total amount is significantly and positively related.

The grade of the English subject and cultural edification, feelings of parents and children, urging from parents, trust of studies, communication between parents and children, parents' expectation, and the table of the total amount is significantly and positively related.

The grade of the Math subject and cultural edification, urging from parents, trust of studies, and the table of the total amount is significantly and positively related.

The grade of the Society subject and cultural edification, trust of studies, and the table of the total amount are significantly and positively related.

The grade of the Science subject and cultural edification, feelings of parents and children, urging from parents, trust of studies, and the table of the total amount are significantly and positively related.

The grade of the total grade and cultural edification, feelings of parents and children, urging from parents, trust of studies, parents' expectation, and the table of the total amount are significantly and positively related.

This result shows that inner-family social capital has taken an important step of academic achievements. If students want to have well academic achievements, except children's own

talent and motivation, parents' providing of children's quality cultivation, support, encouragement, and trust are all motivation sources of children's academic achievements. Furthermore, textbooks are not the only knowledge source. It is necessary to teach children to read a wide variety of books and not limiting children's knowledge origin. To read books not taught in class is not a waste of time for children, but to learn broad aspects of knowledge. It is not only helpful to current academic behavior, but also provides students a way for future job finding and interests finding.

2. Junior high school students' outer-family social capital is mostly not significantly related to academic achievements

There is a significant relationship of the grades of the Chinese, English, Society, Science, and the total grade and outer-family social capital's friends' sharing

This result shows that a learnable role model is important to junior high school students. But, junior high school students put too much emphasis on classmates. Sometimes, one will blindly accept any group's invitation in order not to be isolated. Parents in order not to let children be influenced from their classmates and satisfy children's needs of classmates in this process. The best way is to help find friends their selves. Accidentally, their own children and the self-searching friends become good friends. Therefore, in the meetings of parents and friends, don't dismiss your children. To let each other's children imitate and learn from each other can increase parents and children's intimate feelings through adults' meetings and then family meetings.

(4) Junior high school students' family social capital has a significant predictive power to academic achievements

Junior high school students' inner-family social capital has a significant predictive power to each subject of academic achievements and total grades. The cultural edification level has the biggest predictive power to students' academic achievements, like each subject and total grade are both significant. The other trust of studies level also has a positive predictive power on the grades of Chinese, Society, and total grade subjects.

Junior high school students' outer-family social capital has a significant predictive power to each subject of academic achievements and total grades. The parents' exchange level has a positive predictive power to students' Chinese subject grade. The friends' sharing level has a positive predictive power to students' Chinese, English, Science subjects, and the total grades.

In sum, in junior high school students' living, family members and friends all are important. It is important to have family members' support and encouragement and friends' help and experience learning.

2. Suggestion

According to the literature review, research findings, and conclusion, this chapter focuses on parents, teachers, and education administrative organizations and future research directions. Suggestions are separately given to give reference to related people.

(1) Suggestions for parents

1. Parents have to constantly learn and ask for self-growing first

Parents can participate in community colleges more often. Through constant self-growing, can let you get in touch with newspapers and books, or, to participate in museums to increase your cultural capacity. The development of reading habit from parents can influence children to have a well reading habit.

2. Parents bring children to accept cultural influence

Parents can use holidays to bring children to bookstores and libraries to read new books and discuss the feelings after reading. Trough developing the above habit let children have reading habit unconsciously. To bring children to galleries and museums to see exhibits and enjoy art performances, not only to cultivate children's right and healthy recreation, but also can increase feelings of parents and children. Though pressure-less chatting can fulfill communication between parents and children. Also, knowledge learned from activities can be applied to acknowledge capability and learning of academic achievements. It is helpful to children's acknowledge learning and academic achievements.

3. To put emphasis on parents and children's effective connection

Social capital is invisible and can create next generation's human capital (Coleman, 1988). The more important is that the benefit created by social capital doesn't need to be paid by money, which can be afforded by each family. In the modern society of depression and busy life, parents need to put more emphasis on the investment of social capital to let children have well academic achievements. Parents can enhance the intimate connection between parents and children. For example, to use short dinner or snack time daily to turn off TV and begins easy conversation with children. To understand what children think can be familiar with the newest junior high school student's generation. Through conversation, parents shouldn't always talk about history and use a scold tone. Meanwhile, to be concerned with academic achievements, one should put emphasis on the difficulties of leaning and making friends rather than asking for achievements only to create pressure for children. The express of love, the acceptance of warmness, active listening, and mutual respect can maintain well parents and children relationship and effective discipline. Further, to put emphasis on one self's academic achievements.

4. To maintain good relationship with classmates' parents and friends

It is found in the research that the exchange of parents and teachers and participation in school activities, not only can understand children's school behavior, but also can let children know parents attention and have well performance on academic achievements. Hence, although parents are busy, once in a while to appear at school also can let children feel happy. Besides, parents' connection and maintaining friends' friendship are also important. Especially to find learning role model from friends' children to your selves' children. But, parents should notice that it is no need to let learning role model becomes the pressure of learning to be perfect.

(2) Suggestions for teachers

1. To manage parents' educational activities

A family is still the most influential place to students. Parents' words and behavior always affect children invisibly. Schools can use art activities and sport activities with written information to let parents understand children's in-school behavior and take this opportunity to take care of children's learning. For encouraging parents' participation to parents' occupational education, the way of encouragement can increase parents' participation ratio through teachers' suggestions about schools related preparation.

2. To connect parents actively

Some parents know how to use the way of communication between parents and teachers wisely to help children to learn. But, most parents feel embarrassed to get to school physically and trouble teachers. Therefore, if teachers actively connect with parents, not only can teach weaker position's parents to search for resources, but also can decrease frictions among parents.

3. To wisely use class meetings with parents

Annually, schools will all announce a class meeting with parents. Teachers can use this opportunity to introduce parents to each other. This can help parents to build up a class connection net and uses this connection net to assist each activity in class.

(3) Suggestions for schools

1. To manage a course for parents' occupational education

Parents pay a lot of attention on children's academic achievements, but, usually the opposite to school-hold activities. Therefore, schools can use the way of encouraging students. To let students go home and ask parents to attend schools physically to participate in courses.

The time of courses also needs to fit parents' schedules like, holidays or nights. The arrangement of courses needs to be more practical than just emphasizing on theory. The content also needs to be diverse to fit parents' different needs.

2. To use diverse ways to let parents understand how schools function

Schools can use the front door's electronic screen or school webpage to promote school activities. Parents can use this to understand schools' information and get students' learning information. The written journal information also is one of the promoting ways.

3. To build up class-owned books

Schools can assist classes to build up class-owned books. To use part of the books from the library and separate them into different book cases and to let each class can read. This can increase a great amount of reading opportunities and encourage students to write reading reports through the ways of encouragements.

論文三

Collective Teacher Efficacy, Self Efficacy, Professional Development, and School Belongingness in Taiwan

Abstract

The main purpose of this research is to investigate the relationships among collective teacher efficacy, self-efficacy, professional development and school belongingness of junior high school teachers in Taiwan. The research subjects are 340 junior high school teacher in 15 schools in western Taiwan. A survey questionnaire is designed for data collection from the survey participants. The Survey instrument mainly includes a Collective Teacher Efficacy Inventory, a Teacher Self-Efficacy Inventory, a Teacher professional Development Inventory, a School Belongingness Inventory, and a Basic Inventory for demographic information collection. This investigation is basically a pretest of the survey instrument. The data collected were than analyzed through descriptive analysis, reliability analysis, Pearson correlation, *t*-test, and factor analysis.

The main research findings include: The number of female research subjects is double to that of the male subjects. In this study, there are more junior high school teachers receiving their professional training from teacher education programs at general universities than those from normal universities. *t*-test analysis shows that the attitudes/opinions of the research subjects toward collective teacher efficacy, teacher self-efficacy,

teacher professional development, and teacher school belongingness varies significantly based on the differences of their possessing schooling administrative responsibility, gender, and the highest degree of education received. Additionally, the relationships among collective teacher efficacy, teacher self-efficacy, teacher professional development, and teacher school belongingness are positive and significant. Finally, the researcher then provides suggestions regarding policy making/implementation and the development of a survey inventory measuring extrinsic characteristics for future research based on the research findings.

Keywords: Collective Teacher Efficacy, Self-Efficacy, Professional Development, and School Belongingness

Introduction

This study mainly investigates relationships among collective efficacy, self-efficacy, professional development, and school belongingness of junior high school teachers in Taiwan. A questionnaire survey is the main research method for data collection. Research subjects include junior high school teachers in western Taiwan. This research contributes to teachers' school belongingness, and professional efficacy and development.

Self-efficacy, collective efficacy, professional development, and school belongingness are important variables in this research. The literature review of the research variables are described as follows :

Teacher Efficacy: Teacher efficacy is defined as the extent of a teacher's belief regarding his/her ability to influence students' performance (Berman, McLaughlin, Bass, Pauly, & Zellman, 1977). It is "teachers' belief or conviction that they can influence how well students learn, even those who may be difficult or unmotivated" (Guskey & Passaro, 1994, p.628). Henson (2001) states that general teaching efficacy means a teacher's ability to overcome negative obstacles/hindrances and to positively influence students' learning. In educational discussion regarding efficacy, "[t]he self-efficacy of teachers" "the sense of efficacy of teachers," and "the collective efficacy of the school" are the very common issues in relevant research.

Teacher Self Efficacy: Self-efficacy is generally defined as one's self-capacity belief of motivation and achievement in favorably accomplishing tasks (Bandura, 1986, 1997; Schell et al., 1995; Schunk & Miller, 2002). Bandura describes "self-efficacy belief" as individuals' self-evaluation/assessment on ability regarding the level of intended performance/attainment (Bandura, 1977). He also defined self-efficacy as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p.2).

Collective Teacher Efficacy: Collective teacher efficacy is "the perception of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students" (Goddard, Hoy, & Hoy, 2000, p. 480). Research often shows that collective teacher efficacy have positive effects on students' learning outcomes/academic achievements (Bandura, 1993; Goddard, 2001; Goddard et al., 2000; Goddard, Hoy, & LoGerfo, 2003). Bandura (2000) indicates that measuring/collecting individual teacher efficacy beliefs and individual teachers' evaluation/assessment of their group's capacity both to the school level are the two very

common ways for data collection on collective teacher efficacy.

Belongingness: Somers defines belongingness as “the need to be and perception of being involved with others at differing interpersonal levels ... which contributes to one’s sense of connectedness (being part of, feeling accepted, and fitting in), and esteem (being cared about, valued and respected by others)” (1999, p.16). Research shows people whose belongingness is taken away tend to lose self-esteem (Maslow, 1987) and gain more depression (Sargent et al., 2002), stress and anxiety (Anant, 1967). These people are also easily to be deprived of happiness and general well-being (Lakin, 2003).

Professional Development: Professional development generally means the development of one’s professional role. Teacher professional development is defined as teachers’ professional growth and increasing capacity in systematical review of his/her teaching itself via obtaining more experiences. The meaning of professional development is broader than that of “career development” or “staff development” (Glatthorn, 1995, p.41) It is not completely the same as “staff development” or “vocational training” although workshops or short-term courses often provide opportunities for teachers to increase special/specific knowledge. Villegas-Reimers (2003) indicates that teacher professional development not only benefits personal contentment/gratification but also positively affects teachers’ belief and practice, students’ learning, and educational revolution.

Literature on Relationships among Teachers’ Self-efficacy, Collective Efficacy, Professional Development, and School Belongingness: Research indicates that teachers with strong efficacy generally tend to accept new ideas/concepts and to adopt/implement new teaching strategies in order to meet/satisfy the needs of students (Berman et al., 1977; Guskey, 1988, Stein & Wang, 1988). Teachers with higher degree of efficacy often show more teaching devotion (Allinder, 1994; Guskey, 1984 ; Hall et al., 1992) and have great teaching commitment (Coladarci, 1992; Evans & Tribble, 1986; Trentham et al., 1985). They also tend to continually contribute their careers to teaching professional (Burley, et al., 1991; Glickman, & Tamashiro, 1982).

Teachers’ self-efficacy is relate to the satisfaction of their professional development and both the ranking and competition of their schools (Trentham, Silvern, & Brogdon, 1985). Many studies have reported that self-efficacy belief of teachers affects recognition and attainment/accomplishment of their students (Moore & Esselman, 1992, 1994; Muijs & Rejnolds, 2001; Ross, 1992, 1998).

Additionally, teachers’ self-efficacy beliefs play a vital role in influencing and strengthening teachers’teaching/school commitment and job satisfaction (Caprara, Barbaranelli, Borgogni, Petitta et al, 2003; Caprara, Barbaranelli, Borgogni, & Steca, 2003). Strong self-efficacy enhances/increases teachers’ firm commitment toward their professional development and the cooperative/coordination relationships among parents and their colleague (Coladarci, 1992; Hoover-Dempsey, Bassler, & Brissie, 1992; Imants & Van Zoelen, 1995). Teachers with self-efficacy respect school regulations more, have more contribution to schooling, and often view a school as a system with capacity for its own tasks (Caprara, Barbaranelli, Borgogni, Petitta, & Rubinacci, 2003; Caprara, Barbaranelli, Borgogni, & Steca, 2003).

A higher degree of teacher efficacy is associated with a sound organizational environment and atmosphere (Hoy & Woolfolk, 1993) 、well-structured and positive schooling climate (Moore & Esselman, 1992), and better collective efficacy (Fuller & Izu, 1986; Newmann, Rutter & Smith, 1989). A study (Henson, 2000) reports that teaching efficacy is associated with cooperation/coordination among teachers. Other studies also support the significant influences of teacher efficacy on teaching motivation and

professional performance/outcome (Bandura, 1997; Ross, 1998; Tschannen-Moran & Woolfolk Hoy, 2001; Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998; Woolfolk & Hoy, 1990; Woolfolk, Rosoff, & Hoy, 1990; Woolfolk Hoy & Davis, 2006).

Additionally, a study reports that teachers with higher level of efficacy have stronger teaching commitment and better ability in planning and organizing programs/activities. Teacher with better efficacy are more open to new information/concepts and more willing to implement/experiment new pedagogical strategies to meet the needs of their students (Cousins & Walker, 1995a, b; Guskey, 1988; Stein & Wang, 1988). Additionally, they tend to have higher/stronger commitment toward their professional development and easily apply their professionalism into the constructive/beneficial influences on student learning outcomes and teacher self-efficacy (Ashton & Webb, 1986; Podell & Soodak, 1993; Tschannen-Moran & Woolfolk Hoy, 2001).

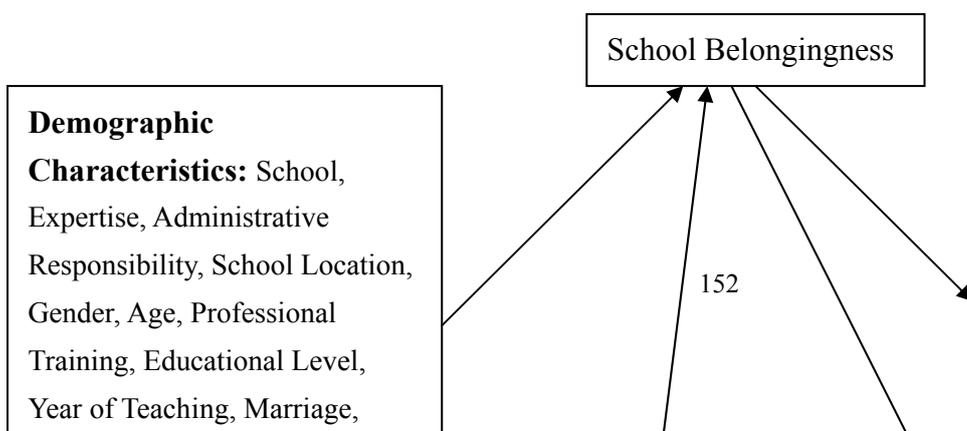
Therefore, based on the preceding description, the researcher then summarizes that both collective teacher efficacy and teacher self-efficacy are positively related to teacher professional development. Teacher self-efficacy is strongly associated with collective teacher efficacy. Teachers' senses of school belongingness have a strong relationship with collective teacher efficacy. Finally, teachers' senses of school belongingness also influence their senses of self-efficacy.

Methodology

This research studies the relationships among collective efficacy, self-efficacy, professional development, and school belongingness of junior high school teachers in western Taiwan. A questionnaire survey is the main research method for investigating the relationships among collective efficacy, self-efficacy, professional development, and school belongingness of the research subjects – junior higher school teachers in Taiwan. The researcher used cluster sampling method to invite junior high schools teachers to participate in the research. Data collected through the questionnaire survey are then analyzed via descriptive and inferential statistical methods

Research Framework:

Based on the literature review, the research designs the research framework as follows:



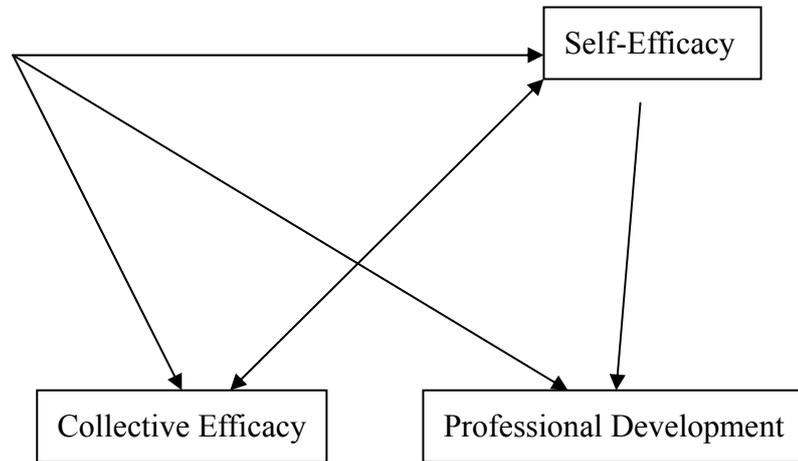


Figure1. Research Framework

Basically, the researcher assumes that demographic characteristics would influence collective teacher efficacy, teacher self-efficacy, teacher professional development, and teacher school belongingness of the research subjects. Teacher school belongingness affects junior high school teachers' self-efficacy and professional development. Additionally, teacher self-efficacy influences teacher professional development. Teacher school belongingness is strongly associated with collective teacher efficacy. Finally, teacher self-efficacy is also positively related to collective teacher efficacy.

Research Subjects

Teachers in 15 junior high schools in western Taiwan are the research subjects of this study. The researcher uses cluster sampling method to draw the research subjects to participate in the questionnaire survey. The overall research population is junior high school teachers in Taiwan and the sampling frame is the teachers in western Taiwan. The researcher distributed 500 copies of the survey questionnaire to the research subjects and the survey was administered near the end of 2008-9 academic year. Most of the survey participants filled out the research questionnaire within 3 weeks.

Three hundred forty of the 500 (68%) teachers, from fifteen junior high schools, in western Taiwan completed the questionnaire. This investigation is the pretest of the survey instrument. The results not only benefit research on teachers but also better the further development of the survey instrument. Finally, research ethics, such as confidentiality, and the researcher's responsibility for the privacy of the research subjects are strictly obeyed. Research findings are only reported via aggregated statistical data.

Research Procedure

The survey instrument of this research was first completed in June 2009. This investigation is the pretest of the new research inventory. The researcher distributed the questionnaire to 500 teachers at 15 junior high schools in western Taiwan at the end of June, 2009. The researcher also invited the survey participants to give suggestions and feedback for further modification of this research inventory. Most of the questionnaires were filled out and mailed back to the researcher by the end of July. The survey feed back sheets show that the faster average time for the research subjects to answer all item questions is between five

to ten minutes and that all of the subjects were able to fill out the questionnaire in about twenty minutes. After this data collection, the researcher used the Statistical Package for the Social Sciences (SPSS) to analyze the research data.

Survey Instrument

For the purpose of collecting research data, the researcher develops a survey instrument via adopting and modifying other researchers' existing applicable and very useful research instruments. This survey instrument mainly includes a Collective Teacher Efficacy Inventory, a Teacher Self-Efficacy Inventory, a Teacher School Belongingness Inventory, a Teacher Professional Development Inventory, and a Basic Inventory for demographic information collection from the research subjects. These inventories are briefly introduced as follows:

I Collective Teacher Efficacy Inventory

The Collective Teacher Efficacy Inventory in this research referenced and revised the Collective Teacher Efficacy Scale in research from Roger D. Goddard, Wayne K. Hoy, and Anita Woolfolk Hoy (2000). It contains 12 positively worded and 9 (No. 2, 5, 8, 12, 13, 14, 17, 20 & 21) reversed question items inquiring junior high school teachers' attitudes/opinions toward collective teacher efficacy at their current employed schools. It required the survey participants to assess/state their agreement with question items on a Likert scale (1 = completely disagree; 2 = strongly disagree; 3 = disagree; 4 = agree; 5 = strongly agree; 6 = completely agree). The reliability analysis shows that the internal consistency reliability (Cronbach α coefficient) of this scale is 0.509, indicating not good internal consistency. From factor analysis, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is 0.889, indicating the existence of common factors among the questions.

II Teacher Self-Efficacy Inventory

The Teacher Self-Efficacy Inventory mainly adopted and modified concepts from the Self Teacher Belief Scale created by Robert and Henson (2001). It contains 36 positively worded items measuring junior high school teachers' self-belief regarding their professional efficacy. Scores are assigned to the following responses on a Likert scale: 1= completely disagree; 2= strongly disagree; 3= disagree; 4= agree; 5= strongly agree; and 6= completely agree. A higher score shows a higher degree of teacher's self-belief of his/her professional and teaching efficacy. The internal consistency reliability (Cronbach α coefficient) of this scale is .975, indicating good internal consistency. The KMO measure of sampling adequacy is 0.962, indicating the existence of common factors among the questions. This scale possesses very good construct validity and reliability.

III. Teacher Professional Development Inventory

The Teacher Professional Development Inventory mainly adopts and revised concepts/questionnaires from the Factor Influencing Teaching-Choice (FIT-Choice) Scale (Watt & Richardson, 2007) and the Teacher Identity in Physicians Scale/Questionnaire (Starr, Haley, Mazor, Ferguson, Philbin, & Quirk, 2006). It includes 35 positively worded and 5 (No. 2, 3, 38, 39 & 40) reversed question items measuring junior high school teachers' attitudes/opinions on teacher professional development. It requires the research sample to assess their agreement with question items on a Likert scale: 1= completely disagree; 2= strongly disagree; 3= disagree; 4= agree; 5= strongly agree; and 6= completely agree. The internal consistency reliability (Cronbach α coefficient) of this scale is 0.939, indicating good internal consistency. The factor analysis

shows that the KMO measure of sampling adequacy is 0.950, indicating the existence of common factors among the questions. This scale also possesses very good construct validity and reliability.

IV. Teacher School Belongingness Inventory

The Teacher School Belongingness Inventory mainly adopts and modifies the Psychological Sense of School Membership (PSSM) Scale in Goodenow's research (1993). It contains 25 positively and 5 (No. 11, 13, 15, 25 & 27) negatively worded question items assessing junior high school teachers' agreement with question items regarding school belongingness. The same as the previous scales, questionnaire respondents' responses on a Likert scale are assigned to different scores: 1= completely disagree; 2= strongly disagree; 3= disagree; 4= agree; 5= strongly agree; 6= completely agree. A higher score shows a higher degree of school belongingness of junior high school teachers. The internal consistency reliability (Cronbach α coefficient) of this scale is 0.866, indicating good internal consistency. The KMO measure of sampling adequacy is 0.953, indicating the existence of common factors among the questions. This scale possesses good construct validity and reliability.

V. The Basic inventory

This inventory mainly investigates and collects the demographic information of the research subjects. It investigates research subjects' personal information regarding school name, teaching expertise, administrative responsibility, school location, gender, age, type of professional training, highest educational degree, year of teaching experience, marital status, the number of children, wage, parental education, and parental vocation. Teachers' type of professional training is mainly classified into traditional training at normal universities and newly training from teacher education programs at general universities, and others (very few research subjects belong to this category). Parental vocations are grouped into six categories based on professionalism.

Statistical Analysis

This research uses descriptive statistical analysis, factor analysis, t-Test analysis, reliability analysis, and Pearson correlation analysis to analyze the data collected from 340 teachers in 15 junior high schools in western Taiwan. Factor analysis is used to determine the factor structure of each major inventory. *t*-Test is used to analyze the variance of the research subjects' attitudes/opinions on collective teacher efficacy, teacher self-efficacy, teacher professional development, and teacher school belongingness based on their differences in possessing schooling administrative responsibility, gender, type of professional training, degree of education received, and marital status. Pearson correlation analysis is to test the correlation significance in the overall score of collective teacher efficacy, teacher self-efficacy, teacher professional development, and teacher school belongingness.

3. Results and Conclusions

I Demographic Characteristics

Three hundred forty of the 500 (68%) teachers in western Taiwan completed the questionnaire survey. The valid data show that 101 (29.7%) responders are male and 233 (68.5%) responders are female. The age range of the research participants is between 23 and 63 years old. 131 (38.5%) teachers' age ranges from 27 to 43 years old.

159 (46.8%) teachers received their professional training from normal universities. 168 (49.4%) teachers received training from teacher education programs at general universities. The ranges of the year of teaching experience for both current schools and overall personal junior high school career are the same, from

less than one to thirty-eight years. 259 (76.2%) of the junior high school teachers have less than 11 years teaching experience at current schools. 206 (57.6%) survey participants have less than 11 years junior high school teaching experience. The valid data collected show 214 (62.9%) research participants are married and 118 (34.7%) are still single.

II *t* -Test Analysis

This study also investigates group variance in collective teacher efficacy, teacher self-efficacy, teacher professional development, and teacher school belongingness based on with/without schooling administrative responsibility, gender, type of professional training, degree of education received, and marital status. Data analysis shows that the research subjects do not show significant differences in their attitudes/opinions toward the four main research variables based on their different marital status and professional training background. Therefore, the researcher only summarizes and describes the important statistical data and information based on the research subjects' differences of possessing schooling administrative responsibility, gender and the highest degree of education received as the following tables:

Table 1 Scores for Each Research Variable Based on With/Without Administrative Responsibility

Research Variable	Administrative Responsibility		With (Yes)		Without (No)		<i>t</i> -Test
	M	SD	M	SD	M	SD	
Collective Teacher Efficacy	3.65	0.22	3.62	0.25	3.62	0.25	0.996
Teacher Self-Efficacy	4.33	0.55	4.17	0.47	4.17	0.47	2.752 **
Teacher Professional Development	4.31	0.50	4.18	0.46	4.18	0.46	2.291 *
Teacher School Belongingness	4.10	0.41	4.00	0.36	4.00	0.36	2.140 *

Table 1 indicates that the research participants with/without junior-high schooling administrative responsibility show significant variance in attitude/opinion toward teacher self-efficacy ($t = 2.752, p < 0.01$), teacher professional development ($t = 2.291, p < 0.05$), and teacher school belongingness ($t = 2.140, p < 0.05$). A junior high school teacher with schooling administrative responsibility usually has a higher sense of teacher self-efficacy, teacher professional development, and teacher school belongingness. Additionally, teachers with schooling administrative responsibility have larger variance in attitude/opinion toward teacher self-efficacy, professional development, and school belongingness than those without the responsibility.

Table 2 Scores for Each Research Variable Based on Different Gender

Research Variable	Gender		Male		Female		<i>t</i> -Test
	M	SD	M	SD	M	SD	
Collective Teacher Efficacy	3.71	0.30	3.60	0.20	3.60	0.20	3.884 ***
Teacher Self-Efficacy	4.39	0.55	4.14	0.46	4.14	0.46	4.267 ***
Teacher Professional Development	4.36	0.50	4.17	0.46	4.17	0.46	3.330 **
Teacher School Belongingness	4.15	0.41	3.99	0.36	3.99	0.36	3.511 **

Table 2 reports that both male and female research participants show significant variance in their attitude/opinion toward collective teacher efficacy ($t = 3.884, p < 0.001$), teacher self-efficacy ($t = 4.267, p < 0.001$), teacher professional development ($t = 3.330, p < 0.01$), and teacher school belongingness ($t = 3.511, p < 0.01$). A male junior high school teacher on average shows a higher score on agreement with

attitude/opinion toward collective teacher efficacy, teacher self-efficacy, teacher professional development, and teacher school belongingness. Additionally, male teachers in this research generally shows a larger variance in score regarding collective teacher efficacy, teacher self-efficacy, teacher professional development, and teacher school belongingness than female teachers.

Table 3 Scores for Each Research Variable Based on the Highest Degree of Education Received

Research Variable	Degree of Education		Bachelor		Master's Graduate		t-Test
	M	SD	M	SD	M	SD	
Collective Teacher Efficacy	3.65	0.25	3.57	0.20	2.641	*	
Teacher Self-Efficacy	4.21	0.49	4.20	0.53	0.105		
Teacher Professional Development	4.20	0.49	4.26	0.47	-0.910		
Teacher School Belongingness	4.05	0.40	4.00	0.38	1.069		

Table 3 states that the junior high school teachers with a bachelor degree and those with a Master's degree only show significant variance in their attitude/opinion toward collective teacher efficacy ($t = 2.641, p < 0.05$). A junior high school teacher with a bachelor degree averagely shows a higher score on agreement with attitudes/opinions toward collective teacher efficacy. Additionally, a teacher with a bachelor's degree generally shows, on average, a little larger variance in attitude/opinion toward collective teacher variance than those with a Master's degree.

IV. Correlation among Research Variables

One main purpose of this research is to investigate the relationships among the main research variables: Collective teacher efficacy, teacher self-efficacy, teacher professional development, and teacher school belongingness. Tables 4 shows the correlation matrix describing the pair correlations among these key research variables.

Table 4. Correlation Matrix for Collective Teacher Efficacy, Teacher Self Efficacy, Teacher Professional Development, and Teacher School Belongingness

	Mean	SD	Collective Efficacy	Self Efficacy	Professional Development	School Belongingness
Collective Efficacy	3.63	0.25	1.000			
Self Efficacy	4.22	0.51	0.366	***	1.000	
Professional Development	4.22	0.49	0.311	***	0.751	***
School Belongingness	4.03	0.38	0.314	***	0.688	***

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 4 reports the following information: There is a strong positive correlation between collective teacher efficacy and teacher self-efficacy (Pearson correlation coefficient = 0.366, $p < 0.001$). The correlation between collective teacher efficacy and teacher professional development (Pearson correlation coefficient = 0.311, $p < 0.001$) is strong and positive. Additionally, a strong positive correlation exists between collective teacher efficacy and teacher school belongingness (Pearson correlation coefficient = 0.314

$p < 0.001$). There is also a strong positive correlation between teacher self-efficacy and teacher professional development (Pearson correlation coefficient = 0.751, $p < 0.001$). A strong positive correlation also exists between teacher self-efficacy and teacher school belongingness (Pearson correlation coefficient = 0.688, $p < 0.001$). Finally, there is also a strong positive correlation between teacher professional development and teacher school belongingness (Pearson correlation coefficient = 0.755, $p < 0.001$).

Summary and Discussion

Based on the information from the Basic Inventory, one research finding shows that the number of the female research participant junior high school teacher is more than the double number of the male research participant. This information indicates that “junior high school teacher” is still a typical females’ job in Taiwan. Since the 1990s, an education policy was initiated to diversify the channels of teacher professional training in Taiwan. Therefore, in this research, the research subjects receiving professional training from teacher education programs at general universities are more than those from normal universities. About two-third of the research subjects are unmarried. The correlation analysis shows that there is positive correlation between each pair of the research variables: Collective teacher efficacy and teacher self-efficacy, collective teacher efficacy and teacher professional development, collective teacher efficacy and teacher school belongingness, teacher self-efficacy and teacher professional development, teacher self-efficacy and teacher school belongingness, and teacher professional development and teacher school belongingness.

Finally, through the reliability analysis of the items in the Collective Teacher Efficacy Inventory, the correlated item-total correlation shows that items 8, 9, 17, and 21 (factor loading < 0.3) are not homogeneous with the other items in the Inventory so it is better to get rid of these four items for the revision of the formal survey instrument. The factor loading of items 2 (0.351) and 21 (0.310) also did not perform well wherefore the researcher may need to consider modifying these items also. The Collective Teacher Efficacy mainly adopted and revised the Collective Teacher Efficacy Scale developed by Goddard, Hoy, and Hoy (2000). However, some items in this scale were not suitable for the survey in Taiwan. The researcher considered that this difference may be caused by the variation in culture and working environment in Taiwan. This also means that the responses of research subjects are different from those surveyed in the U.S. is mainly resulted from the different collective and external working environment.

Conclusions and Suggestions

This research finds that the four main research variables – collective teacher efficacy, teacher self-efficacy, teacher professional training, and teacher school belongingness – have positive strong correlation between/to each other. The research subjects with different marital status and background of professional training do not show significant group variance in their attitudes/opinions on the four main research variables. However, junior high school teachers with schooling administrative responsibility show significantly higher degree of self-efficacy than those without administrative responsibility. They also significantly show higher agreement with professional development and school belongingness. Additionally, male junior high school teachers on average show significantly higher degree/agreement of collective efficacy, self-efficacy, professional development, and school belongingness than female teachers. Furthermore, bachelor’s graduates show a significantly higher degree of collective teacher efficacy than Master’s graduates.

The researcher then provides suggestions for relevant research. First, because of the concerns regarding gender balance and research findings related to gender difference, policies should encourage more males to

pursue their career as a junior high school teacher. Second, the Collective Teacher Efficacy Inventory of the survey instrument is advised to be further investigated and modified because four of the twenty-one question items are not homogeneous with the other items in the same Inventory. Finally, teacher self-efficacy, teacher professional development, and teacher school belongingness measure the intrinsic attitudes of research subjects whereas collective teacher efficacy mainly assesses research subjects' attitudes/thoughts toward extrinsic factors. Therefore, for future research, a researcher should carefully adopt and employ an existing survey instrument and should avoid issues, such as cultural differences and variance in a survey environment, that could influence the reliability and validity of a survey instrument.

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附錄三 參加 AABSS 學術研討會活動剪影



AABSS 現任主席 Dr. Norma Winston



個人上場論文發表





國科會補助專題研究計畫項下出席國際學術會議心得報告

日期：98_年_1_月_20_日

計畫編號	NSC 97-2629-H-212-001-MY2		
計畫名稱	政治排斥女性？或女性排斥政治？——女性青少年權力意識、政治興趣、政治偏好、政治活動及相關因素之研究		
出國人員姓名	黃德祥	服務機構及職稱	大葉大學師資培育中心教授
會議時間	2009 年 1 月 2 日 (Friday)至 1 月 7 日 (Wednesday)	會議地點	Hilton Hawaiian Village Beach Resort & Spa in Honolulu, Hawaii, U. S. A
會議名稱	(中文)2009 夏威夷國際教育學術研討會 (英文)2009 Hawaii International Conference on Education		
發表論文題目	(中文)台灣青少年身體意象及相關因素之研究 (英文) Body Image and Related Factors of Adolescents in Taiwan		

出席國際學術研討會報告

報告人：黃德祥

會議名稱：2009 Hawaii International Conference on Education

開會日期：2009 年 1 月 2 日(Friday)至 1 月 7 日(Wednesday)

**開會地點：Hilton Hawaiian Village Beach Resort & Spa in Honolulu,
Hawaii, U. S. A.**

一、參加會議經過

「2009 夏威夷國際教育學術研討會」(2009 Hawaii International Conference on Education) 是目前全世界規模最大的教育類國際學術研討會，本研討會由 2003 年創設至今已有七屆，每年吸引近五十個國家，約近二千名的教育學術專家學者參與。這項研討會剛開始由夏威夷大學主辦，隨後演變成由專業的研討會主辦機構籌辦，目前的主辦單位是「夏威夷國際研討會組織」(Hawaii International Conferences)，每年再由該組織邀請世界各國的大學學術團體贊助或合辦。北京大學曾於 2006 年協辦該年的學術研討會。今年此項研討會的合作機

構是 Pepperdine University - Graduate School of Education and Psychology、University of Louisville - Center for Sustainable Urban Neighborhoods、New Horizons in Education - The Journal of Education, Hong Kong Teachers' Association、California State University, East Bay - Educational Leadership Program。今年的會議於 2008 年 1 月 4 日(Sunday)至 7 日(Wednesday) 於夏威夷的 Hilton Hawaiian Village Beach Resort & Spa in Honolulu 舉行。該飯店緊鄰世界最著名海灘 Waikiki 海邊，風景秀麗，飯店的 Waiters 與 Waitresses 對台灣來的學者非常友善。由於開會地點頗富盛名，因此，今年參加此項國際學術研討會的學者仍然非常踴躍，但由於受金融風暴的影響，有少數論文發表者臨時缺席，殊為可惜。今年發表的論文，仍頗多佳作，另有壁報發表及未收錄於光碟片者共計約近五百篇論文，可說是國際少見大規模的教育學術研討饗宴。個人今年論文發表之時間排在 2009 年 1 月 4 日下午 1:15~2:45PM 於 Hilton 飯店之 South Pacific 2 Room 舉行，由 University of Kansas 之 Robert Harrington 教授主持，約二十餘位學者參加。由於 Harrington 教授幽默風趣，又能引發深度討論，使會場氣氛非常熱絡。本 Session 發本之論文有 Robert Harrington 教授之憤怒女生之團體諮商效果研究，以及 Washington State University 華裔學者 Huihua He 發表之課後輔導對學生學業成就之影響，另有一位發表人缺席。也由於時間充分，各篇論文發表者均能暢所欲言，並引發熱烈討論。

二、與會心得

今年個人發表之論文是：「台灣青少年身體意象及相關因素分析」(Body

Image and Related Factors of Adolescents in Taiwan)，本研究之主要目的在於探討影響青少年身體意象之相關因素及組別差異，本研究的研究受試者為中部高職學生 180 人。本研究的評量工具計有基本資料調查表、個人特質量表（含自尊與沮喪）、父母影響量表、同儕影響量表、身體意象量表與體型偏好圖。所得資料經以積差相關、逐步迴歸分析、*t* 檢定等方法進行統計分析。本研就有下列重要發現：青少年高自尊者其身體意象得分較低；父母影響、同儕影響等變項與身體意象得分有顯著的正相關；沮喪和身體意象則有顯著的正相關；BMI 值與身體意象也顯現正相關。同儕影響、BMI、自尊與性別對青少年之身體意象有顯著預測作用；自尊、父母影響、同儕影響、BMI 等得分高低不同組別之受試者在身體意象上有顯著差異；青少年學生希望變高與減重的人數佔多數，在九個體型偏好之選擇上，個人「實際上」體型屬於 3 號與 4 號體型，「理想上」則偏好 3 號體型，屬偏好纖細或瘦長型。本研究乃根據研究發現對青少年之教育及輔導提供建議。本論文發表完之後與會學者包括來自美國、加拿大與澳洲之學者對本研究深感興趣，除索取論文資料外，並表示如進行不同國家之研究將有更大學術貢獻。另也有學者關心質量研究之差異，均由個人一一答覆。

三、建議

這次參與國際學術研討會，激勵個人更多成長機會，對未來研究有積極幫助。此次會議在 Hotel 不同的 Room 同時分場舉行，無中場休息，連續發表，也由於分成多個場次同時進行，所有參與者只能自選部分感興趣的主題旁聽，因此，每個場次聽眾的人數大約在十至二十人左右，但也因此，論文的發表反像

是小型研討會，論文發表者的壓力較小，相互溝通的機會較多。

這次國際教育學術研討會幾乎涵蓋所有教育領域的主題，包括：教育行政、課程研究與發展、閱讀教育、健康教育、音樂教育、諮商教育、藝術教育、數學教育、特殊教育、師資培育、成人教育、遠距教育、初等教育、商業教育、本土教育、多元文化教育、幼兒教育、科學教育、教育科技、教育心理學、體育與休閒教育等，內容豐富。來自不同國家的人相互觀摩，也可以促進國際學術交流與合作。夏威夷是東西文化交流最密切的地方，觀光業尤其發達，是世界著名渡假勝地，一月適逢年假，且美國寒冬，因此人山人海，今年因為世界性經濟不景氣，人潮稍減，值得關注。今年個人並安排至大島（Hawaii's Big Island）參訪，美景令人印象深刻。夏威夷是美國第五十州，於一九五九年八月二十一日才成為美國的一州，目前主要人種，除美國白種人外，以日本人最多，其次是華人、韓國人、土著及菲律賓人等，是具有多討元文化與多重語言的地方，更有美國本土少見的多元種族通婚與種族融合。個人慶幸能應邀與會，除能將個人研究所得與世界各國學術界人士分享外，並能增廣見聞，獲悉當前國際教育學術發展潮流，可謂成果豐碩。

四、攜回資料名稱及內容

2009 Hawaii International Conference on Education 會議手冊光碟

Title: Body Image and Related Factors of Adolescents in Taiwan

Topic: Educational psychology

Keywords: Body Image, Personal Traits, Parental Influence, Peer Influence, BMI

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Body Image and Related Factors of Adolescents in Taiwan

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Abstract

The primary goal of this research is to investigate factors influencing body image among adolescents and their group differences. Subjects were 180 vocational high school students. Scales included a basic inventory, personal trait inventory (including self-esteem and depression), parental influence inventory, peer influence inventory, body image inventory, and figure rating scale. Data were analyzed using Pearson correlation, stepwise regression, and t-testing. Relevant findings include: adolescents with higher self-esteem had lower body image scores; parental influence and peer influence showed significant positive correlation with body image; depression showed significant positive correlation with body image; and BMI also showed significant positive correlation with body image. The variables peer influence, BMI, self-esteem, and gender show predictive value with respect to body images. Groups with high/low self-esteem, parental influence, peer influence, and BMI scores showed significant variance in body image. Most adolescents would like to lose weight and get taller. Of the nine body type figures, subjects' "actual" body type corresponded to numbers 3 or 4, while "ideal" body type tended toward number 3, tall and slender. Recommendations regarding education and counseling of adolescents are made based on the findings.

Keywords: Body Image, Personal Traits, Parental Influence, Peer Influence, BMI

Introduction

Adolescence is the stage of most rapid body growth and development, as well as an important period of individual physiological and psychological adaptation. After the onset of pubescence the secondary sexual characteristics become increasingly apparent. At around 12 years of age girls experience physical growth, the beginning of menstruation, breast development, auxiliary and pubic hair growth, and genital development. At around 14 years boys experience a growth spurt, Adam's apple development, lowered voices, receding hairlines, auxiliary and pubic hair growth, increased body hair, and development of the external genitalia (Huang, 2004). The extensive physical development and changes that boys and girls experience during pubescence bring with them psychological changes in self perception and identity, which in turn influence behavioral adaptation and character development. These psychological changes however differ between cultures, times, and locations. Adolescent body image has become a topic of considerable interest in adolescent research.

Body image refers to an individual's subjective consciousness, thoughts, and feelings about his or her physical characteristics, as well as feelings about other people's perception of these characteristics. Contemporary television, newspaper, magazine, and online media are pervasive and fast paced, and are constantly broadcasting all manner of body types. Adolescents, who are at a stage of intense social comparison, are likely to adopt media images as standards of reference and use them as the basis for judging their own and other people's bodies. Adolescents are also very susceptible to peer influences, and peer group opinions can also influence body image-related judgments and values.

An adolescent's experiences, viewpoints, and feelings regarding body image are mutually influential. Adolescents who are not satisfied with their body image may readily develop feelings of inferiority, depression, or eating disorders. On the other hand those who are satisfied with their body image will have more confidence and higher self-esteem (Huang, 2004; Smolak, 2004; Stice, 2002). Research indicates that in many countries including Australia, Croatia, England, Israel, Japan, Mexico, Sweden, and the US, dissatisfaction with body image is widespread among adolescents. For example, surveys show that 28% to 55% of adolescent girls want to lose weight, while 4% to 18% want to gain weight; 17% to 30% of adolescent boys want to lose weight, and 13% to 48% want to gain weight (Ricciardelli & McCabe, 2001). In general adolescents tend to be sensitive to issues relating to their height, weight, body type, breast development, and muscle mass, girls even more so than boys. Adolescents are concerned about being accepted by others, making them easily influenced by their surroundings and prone to negative judgments of their own appearance. Receiving external criticism related to appearance or body shape can be unsettling or embarrassing for adolescents. Adolescent boys generally want to be stronger and have more muscle (Smolak, Murnen, & Thompson, 2005), while girls want to lose weight (Muris, Meesters, van de Blom, & Mayer, 2005).

Body image is influenced by cultural and social values, and attitudes towards body shape often change with the times and with prevailing tastes. In the Tang dynasty for example fatness was prized, and full-figured women like Yang Kwei-Fei were considered beautiful. At present most fashion models are thin and frail looking and the media seem to have developed a reverence for thinness, creating a general belief that "thin is beautiful." This view has also taken root among adolescents. Aesthetic values however are learned, and an individual's standards of beauty are formed via social comparison. Those who do not meet society's standards of beauty are assumed to be unattractive or ugly. Body image among adolescents is also strongly influenced by significant others, including parents, siblings, teachers, and peers. The family is the first environment with which an individual comes in contact, and the family's attitude toward and appraisal of body image

plays a pivotal role. Children rely on and learn from parents at home, and an awareness of parental opinions forms the standard for body satisfaction or dissatisfaction and for related behaviors. Early adolescent girls are most strongly influenced by their families, and family pressures are strongly correlated with body dissatisfaction, more strongly than media pressure or peer pressure (Blowers, Loxton, Grady-Flessner, Occhipinti, & Dawe, 2003). Young, Clopton, & Bleckley (2004) discovered that males were most strongly influenced by their mothers, with most boys saying that their mothers concern had a positive influence, and 25% of mothers praising their adolescent sons, a higher percentage than fathers or male peers. Fathers influenced their sons' self concept and values and provided a model for gender roles. Overall parents play a more important role in the formation of body image than peers (Stanford & McCabe, 2005).

With respect to their peers adolescents are highly susceptible to feelings of helplessness, lack of self confidence, and negative self concept. After entering a peer group adolescents develop a sense of belonging and the peer group becomes their support structure, leading to increased self confidence. Adolescents will feel that they personally possess any special attributes possessed by the group as a whole (Der-Hsiang Huang, 2004). Relationships with peers play an extremely important role in adolescent development, and peers have important powers of influence over an individual's character development, physical characteristics, and behavioral tendencies. Peers also have a strong influence on body image for both boys and girls, with girls focused on weight loss behaviors and boys focused on both muscle building and weight loss. Intimate friends during the period of late adolescence are thought to play the most important role. Adolescent girls are influenced by their female friends with regard to appearance and weight loss, with groups of friends sharing body image and diet related experiences. Research assessing both concern for body image and binge/purge behavior found similar scores for all adolescent girls, indicating that peers have an important impact on body image and diet related issues during early adolescence (Hutchinson & Rapee, 2007; McCabe & Ricciardelli, 2005). Therefore determining the major variables affecting body image, as well as their variation between groups and their predictive values, is of great importance.

The primary goal of this research is to investigate the factors influencing body image among adolescents, including such background variables as gender, height, and weight; body mass index (BMI), which is calculated using height and weight; personal traits (including self-esteem and depression); and the influence of parents and peers. Based on the findings, recommendations will be made about ways to promote healthy body image and overall physical and mental health among adolescents. This research thus has both theoretical and practical value.

Methods

1. Research Framework

As described above, this research investigates factors influencing body image among adolescents including personal traits, body mass index (BMI), and parental and peer influence, and measures variations of body image scores with respect to background variables and personal trait groups. The following framework was made based on an analysis of related literature and the goals of this research.

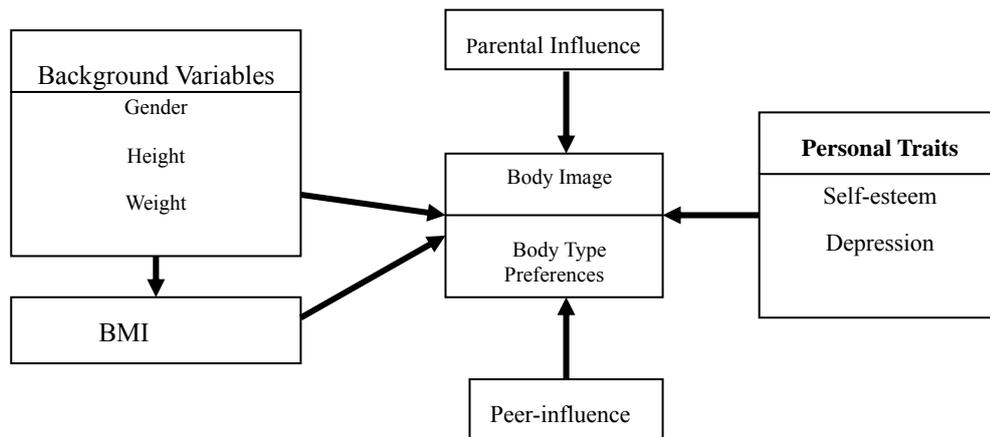


Figure 1 Research Framework

From the research framework above we see that the background variables used in this research are gender, height, and weight, as well as BMI. Other factors influencing body image include parental and peer influences, and personal trait variables self-esteem and depression.

2. Research Subjects

This research studied male and female students in the first through third years of vocational high school in central Taiwan. To facilitate cooperation and honest responses, research surveys stated: "Your responses will be used solely for academic research purposes, and will be kept strictly confidential. Please answer honestly." The survey was conducted over a two week period and given by teachers in their classrooms. A total of 205 surveys were returned. After elimination of invalid surveys, 180 valid surveys remained. The final sample group included 90 males and 90 females (50% each).

3. Research Tools

In order to achieve the goals set out above and determine whether or not the hypotheses hold, the following tools were used to collect data: (1) basic inventory; (2) personal trait inventory; (3) parental influence inventory; (4) peer influence inventory; (5) body image inventory; and (6) figure rating scale. Each is described below.

(1) Basic Inventory

The basic inventory includes information on gender, age, grade in school, actual height and weight, and desired height and weight. BMI was calculated according to the formula $BMI = \text{weight (kg)} / \text{height}^2 (\text{cm}^2)$. Subjects were classified as overweight or underweight based on the height and weight standards for adolescents established by the Executive Yuan Department of Health. Normal height range for boys is 166 cm. - 177.5 cm, and for girls 154 cm. - 164.5 cm. Normal weight range is 55 kg. – 71 kg. for boys and 45.9 kg. – 58 kg. for girls. Normal BMI values are 19.2 - 23.7 for boys and 18.3 - 22.7 for girls. Values outside this range are considered over or underweight (Executive Yuan Department of Health, 2007).

(2) Personal Trait Inventory

The personal trait inventory used included scales for self-esteem and depression which were created by the author.

1. Self-esteem Inventory: Reference was made to the Self Esteem Scales of Rosenberg (1965), Tiggemann (2005), and Young, Clopton, & Bleckley (2004). There were 5 reversed items, questions 3, 5, 8, 9, and 10, with the rest being positively worded. Four possible responses were offered: 1 = strongly disagree; 2 = disagree; 3 = agree; 4 = strongly agree. The highest possible score is 40 points, with higher scores indicating higher levels of self-esteem and lower scores representing lower self-esteem. Factor analysis revealed 2 factors, with an explained variance of 49% and Cronbach's α of 0.759 and 0.701. The overall internal consistency reliability of the scales was 0.791, indicating good uniformity between the two scales. These scales have relatively high construct validity and reliability.

2. Depression Inventory: The depression inventory was formulated by the author based on the Beck Depression Inventory (Beck, Steer, & Garbin, 1988). Numerous studies have shown that the original scale has a high degree of reliability and validity (Beck, Steer, & Garbin, 1988). The inventory has 10 questions each of which had four responses scored 0 - 3. The maximum possible score is 30. The KMO value of a sample was 0.732, indicating very few common factors among the variables. Therefore a factor analysis was not done. The internal consistency reliability of the inventory was 0.640.

(3) Parental Influence Inventory

This scale is a modification of the Social Influence Model proposed by Keery, van den Berg, & Thompson (2004). It contains 43 questions covering three factors: peer, parental, and media influence. Sixteen questions concern parental influence, primarily investigating parent's attitudes and opinions about their children's appearance, weight, and health. Points are awarded as follows: 1 = strongly disagree; 2 = disagree; 3 = agree; and 4 = strongly agree. The highest possible score is 64, with higher scores indicating a higher degree of parental influence over the body image of their adolescent children. A factor analysis revealed factor loadings of 0.45 and above, all of which were retained. KMO value of a sample was 0.825, indicating common factors among the questions. The factor analysis also revealed explained variance of 66% for the four variables. The Cronbach's α of the four subscales were between 0.807 and 0.871, and internal consistency reliability was 0.890, indicating very good internal consistency. This scale possesses good construct validity and reliability.

(4) Peer Influence Inventory

This inventory was likewise a modification of the Societal Influence Model created by Keery, van den Berg, & Thompson (2004). The inventory contains 13 questions covering the attitudes and opinions of the subject's peers with regard to appearance, weight, and health. The inventory contains 3 reversed items, numbers 3, 4, and 5, with the remainder being positively worded. Four response options were given: 1 = strongly disagree; 2 = disagree; 3 = agree; 4 = strongly agree. The highest possible score is 52, with higher scores indicating a stronger peer influence over body image. The KMO value of a sample was 0.684, indicating very few common factors and eliminating the need for a factor analysis. Internal consistency reliability was 0.767.

(5) Body Image Inventory

A modification of the Body Attitudes Questionnaire of Ben-Tovim & Walker (1991) was used. The original inventory was multidimensional and contained 44 questions assessing six different dimensions: feeling fat, attractiveness, disparagement, salience, lower body fatness, and strength. The scores of the sub-inventories and the inventory as a whole reveal the subject's attitude towards his or her body. After modification the inventory contained a total of 14 questions in two dimensions, namely "emphasis on body shape" and "perception of physical appearance".

There was 1 reversed item, number 11, with the remainder being positively worded. There were four possible responses to each question: 1 = strongly disagree; 2 = disagree; 3 = agree; 4 = strongly

agree. The maximum possible score was 52, higher scores representing a higher level of dissatisfaction with the body. The KMO value of a sample was 0.817, indicating the existence of common factors. A factor analysis revealed a total of two factors, with factor loading of 0.45 or above for all factors in all 14 questions, and an explained variance of 44%. Reliability analysis shows that the two sub-inventories have Cronbach's α of 0.834 and 0.604 respectively.

(6) Figure Rating Scale

The figure rating scale used in this research is a modification of the figure rating scale in Stunkard, Sorenson, & Schlusinger (1983). The original scale contained nine figures designed to measure body image and body type. The images numbered 1 through 9 grow in size linearly (boys in Fig. 2, girls in Fig. 3).

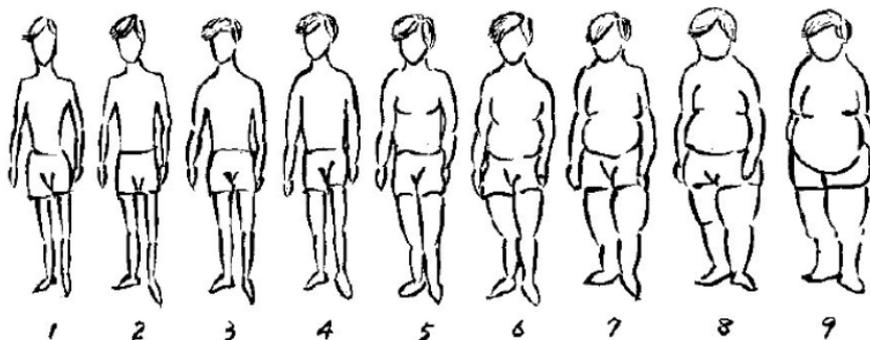


Figure 2 Boy's Figure Rating Scale

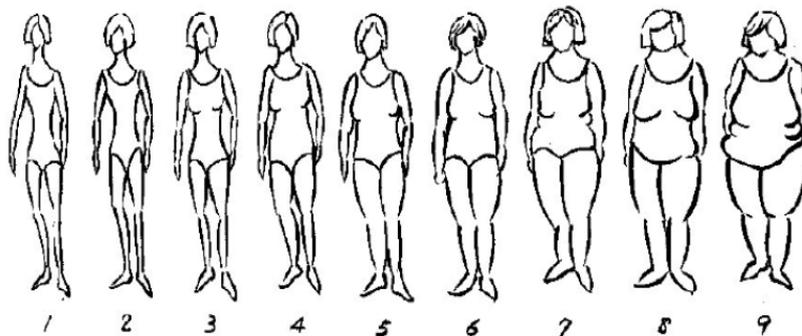


Figure 3 Girl's Figure Rating Scale

This figure rating scale has three main questions for the subject to answer: 1. In your opinion, you most resemble figure (); 2. You believe your actual shape to be most like (); 3. You would like your shape to resemble (). This inventory is designed to measure the discrepancies between body type ideals, awareness, and preferences, and whether or not agreement exists between them (Reiss, 2001).

4. Research Procedure

In August 2007 the inventories to be used in this research were compiled and preliminary editing was done. This was followed by a preliminary testing period involving 60 vocational high school students from central Taiwan. The data collected in the preliminary testing was used as the basis for the factor analysis and reliability testing.

Formal testing was entrusted to high school teachers, with questionnaires filled out in the classrooms. Timing of data collection was coordinated with the vocational high school and covered a period of two weeks. After collection was complete the invalid inventories were eliminated and the data was entered into a computer. SPSS software was used to carry out statistical analysis.

5. Statistical Analysis

The primary statistical methods used include: 1. Factor Analysis: used to determine the factor structure of each major inventory. 2. t-Test: the t-test was used to analyze gender-based differences in BMI and body image scores, as well as differences in body image scores between lower BMI groups and higher BMI groups (abnormally high and low). 3. Pearson Correlation Analysis: used to test the correlation significance in the overall score of body image factors with regard to BMI value, parental influence, peer influence, self-esteem, and depression. 4. Stepwise Regression: used to test the predictive value of gender, BMI, parental influence, peer influence, self-esteem, and depression with respect to body image.

Results and Discussion

1. Correlation between Primary Variables and Body Image

The primary goal of this research was to investigate the impact of each primary variable on adolescent body image. First the relationship between the primary variables and adolescent body image scores was determined. Primary variables included self-esteem, depression, parental influence, peer influence, and BMI. Table 1 presents a correlation matrix showing the correlation between body image and self-esteem, depression, parental influence, peer influence, and BMI.

Table 1 Correlation Matrix for Body Image and Self-esteem, Depression, Parental Influence, Peer Influence, and BMI

	Mean	SD	Body Image	Self esteem	Dep.	Parental Influence	Peer Influence	BMI
Body Image	34.77	5.59	1.000					
Self-esteem	27.89	3.80	-0.297 ***	1.000				
Depression	3.86	2.84	0.232 ***	-0.529***	1.000			
Parental Infl.	32.84	7.44	0.316 ***	-0.109	0.056	1.000		
Peer Influence	28.82	4.54	0.422 ***	-0.236**	0.086	0.221**	1.000	
BMI	21.10	3.53	0.417 ***	0.128	-0.076	0.264***	0.010	1.000

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Table 1 indicates a strong negative correlation between self-esteem and body image ($r = -0.297, p < 0.001$); a strong positive correlation between depression and body image ($r = 0.232, p < 0.001$); a strong positive correlation between parental influence and body image ($r = 0.316, p < 0.001$); a strong positive correlation between peer influence and body image ($r = 0.422, p < 0.001$); and a positive correlation between BMI and body image ($r = 0.417, p < 0.001$). Aside from body image, the only variable that showed a significant correlation with BMI was parental influence ($r = 0.264, p < 0.001$); the others showed no significant variation.

2. Primary Variables and Regression Forecasting of Body Image

In order to test the predictive value of each primary variable with respect to body image, gender was added to the variables given in the above matrix. Statistical analysis was done using stepwise regression. Predictor variables included gender, self-esteem, depression, parental influence, peer influence, and BMI. The criterion variable was adolescent body image score. Results are given

in Table 2.

Table 2 Multiple Regression Analysis of Primary Variables with Respect to Body Image

Variable	Multiple Correlation Coeff. (R)	Deterministic Cumulant (R squared)	Deterministic Variance (R squared)	F value	β coeff.	t value
Peer Infl.	0.422	0.178	0.173	38.549	*** 0.327	5.675 ***
BMI	0.591	0.349	0.341	47.383	*** 0.498	8.699 ***
Self-esteem	0.646	0.417	0.407	41.937	*** -0.236	-4.043 ***
Gender	0.680	0.462	0.450	37.569	*** 0.224	3.832 ***

*** $p < 0.001$.

Table 2 shows that of the six predictor variables used in the regression, four were significant. The multiple correlation coefficient was 0.680, and combined explained variance was 0.462, indicating that the four variables can jointly predict 46.2% of the variance in adolescent body image. Taken separately, peer influence had the highest predictive power, explaining 17.8% of the variance, followed by BMI (17.1%), self-esteem (6.8%), and gender (4.5%). The standardized regression equation is given by: body image = 0.327×peer influence + 0.498×BMI - 0.236×self-esteem + 0.224×gender.

3. Testing Group Variance in Adolescent Body Image

This research also investigated group variance in body image, particularly the differences in body image between groupings based on self-esteem (high vs. low), depression (high vs. low), parental influence (high vs. low), and peer influence (high vs. low). Table 3 gives the results of this group variance testing.

Table 3 Body Image Scores for High/Low Score Groupings of Each Variable

Variable	High Group		Low Group		t-Test
	M	SD	M	SD	
Self-esteem	33.11	4.89	37.20	4.54	4.644 ***
Depression	35.55	6.08	33.92	4.95	1.654
Parental Infl.	37.21	5.07	33.18	5.72	3.834 ***
Peer Infl.	36.79	5.95	32.51	5.23	4.179 ***
BMI	38.26	5.33	31.44	5.19	5.947 ***

*** $p < 0.01$.

Table 3 shows that apart from depression, groupings based on all other primary variables show significant variance in body image. Self-esteem had a t-value of 4.66 ($p < 0.001$), and it is clear from that table that subjects with higher self-esteem had lower body image scores. Students with higher self-esteem cared less about their bodies, consistent with the findings presented in Tables 1 and 2. From parental influence ($t = 3.834$, $p < 0.001$), peer influence ($t = 4.179$, $p < 0.001$), and BMI ($t = 5.947$, $p < 0.001$) we see that the greater the concern from parents and peers, the larger the differences between the high and low scoring groups. BMI value exhibits the same variance.

4. Desired Height and Weight, and Body Type Preferences among Adolescents

To determine desired height, weight, and body type among adolescents, subjects were queried regarding desired height and weight. Results are given in Table 4.

Table 4 Desired Height and Weight among Adolescent Boys and Girls

Desire to be:		Boys		Girls		Total	
		#	%	#	%	#	%
Height	shorter	4	4.4	7	7.8	11	6.1
	same	2	2.2	7	7.8	9	5.0
	taller	84	93.3	76	84.4	160	88.9
	Total	90	100.0	90	100.0	180	100.0
Weight	heavier	24	26.7	8	8.9	32	17.8
	same	11	12.2	9	10.0	20	11.1
	lighter	55	61.1	73	81.1	128	71.1
	Total	90	100.0	90	100.0	180	100.0

Table 4 shows that 93.3% of boys want to be taller, as do 84.4% of girls, indicating that taller stature is prized by today's youth. Only a small minority wanted to be shorter or to remain the same height. Both boys and girls expressed a desire to lose weight, 61.1% of boys and 81.1% of girls. Over 10% also expressed a desire to gain weight (26.7% of boys and 8.9% of girls). Very few subjects wanted to maintain current weight.

Test subjects were also provided with figures (fig. 2 and fig. 3) and asked to select those corresponding to their actual body type and their desired body type. Results are given in Table 3.

Table 5 Actual and Desired Body Type among Adolescent Boys and Girls

Body Type	Actual Body Type		Desired Body Type	
	#	%	#	%
1	1	0.6	1	0.6
2	18	10.0	14	7.8
3	43	23.9	98	54.4
4	52	28.9	44	24.4
5	34	18.9	19	10.6
6	18	10.0	4	2.2
7	10	5.6	0	0.0
8	4	2.2	0	0.0
9	0	0.0	0	0.0
Total	180	100.0	180	100.0

Table 5 shows that for both boys and girls, "actual body type" corresponded most often to figure 3 (N = 43, 23.9%) and figure 4 (N = 53, 28.9%), while "desired body type" corresponded most often to figure 3 (N = 98, 54.4%) and figure 4 (N = 44, 24.4%). Thus for both actual and ideal body types adolescents preferred tall and slender figures. This suggests that most of today's adolescents desire "slim figures".

5. Summary and Discussion

The results presented above show that an inverse correlation exists between self-esteem and body image scores. Adolescents with higher self-esteem generally have stronger self confidence, value themselves, and are not swayed by the words of others. Therefore increasing self-esteem among adolescents may help prevent excessive concern about physical appearance and anxiety about personal status. Scholars often recommend promoting academic achievements, providing more opportunities for success, increasing interpersonal interaction, and promoting athletic skills as

ways to strengthen self-esteem (Huang, 2004). This research also discovered a positive correlation between depression and body image, indicating that people with poor body image are prone to feelings of melancholy and unhappiness. Adolescence is a time of egocentrism often characterized by the imaginary audience and personal fable (Santrock, 2007). Adolescents can be overly sensitive and overly concerned about other people's reactions. Teachers and parents should therefore try to be empathetic towards adolescents, giving them approval and encouragement. Both parental influence and peer influence were shown to have positive correlations with body image, with very clear differences between the high and low scoring groups. Parents and peers play a very important role in the formation of adolescent body image, something that parents should be aware of. Positive correlation was also found between BMI and body image. Tables 4 and 5 also indicate that some adolescents are in fact overweight; thus physical fitness and weigh loss programs may be necessary in order to promote improved body image among adolescents.

Conclusions and Implications

1. Conclusions

The primary goal of this research was to investigate primary factors influencing adolescent body image, their effects and group differences. Test subjects were 180 vocational high school students from central Taiwan. Evaluative tools included a basic inventory, personal trait inventory (including self-esteem and depression), parental influence inventory, peer influence inventory, body image inventory, and figure rating scale. Statistical analysis was done using Pearson correlation, stepwise regression, and t-testing. The following important findings were made: (1) Adolescents with high self-esteem had lower body image scores; (2) Parental influence and peer influence showed positive correlation with body image scores; (3) Depression has a marked positive correlation with body image; (4) BMI is also positively correlated with body image; (5) Peer influence, BMI, self-esteem, and gender have significant predictive value with respect to adolescent body image; (6) Body image varied significantly between groups with high and low self-esteem, parental influence, peer influence, and BMI; (7) Most adolescents would like to grow taller and lose weight; (8) Given nine body types to choose from, subjects' "actual" body type tended toward nos. 3 or 4, while "ideal" body type tended towards no. 3, a tall slender figure. These findings indicate that the variables under investigation all have significant influence on adolescent body image; self-esteem however is inversely proportional to body image; thus, increasing adolescent self-esteem is extremely important. The findings also showed that depression is not a strong predictive factor for adolescent body image. A cause/effect analysis was not performed however, and more research is needed into the relationship between depression and body image. BMI value is considered a reliable way to test whether or not a person is overweight, and this research found that adolescents with high BMI (potentially overweight) are more concerned about their own body image. It was also found that peers have considerable influence, in agreement with the work of other adolescent researchers (Der-Hsiang Huang, 2004; Santrock, 2007; Smolak & Stein, 2006). Peer influence must not be overlooked in efforts to promote physical and mental wellbeing among adolescents.

2. Implications

Recommendations concerning education and counseling strategies are based on the aforementioned findings. It was discovered that although parental influence over body image is not as strong as peer influence, it is still an important factor. Parents should be involved in the daily lives of their adolescent children, ensuring balanced nutrition, adequate sleep, regular exercise and appropriate recreational activities in order to promote healthy physical and mental development (Huang, 2004). Eating a variety of foods and avoiding foods that are greasy, deep fried, high in sugar, and high in fat will help adolescents maintain desirable body types, and help create positive body image. Schools should provide similarly nutritious foods, allowing classmates and peers to

mutually encourage healthy eating and exercise habits and share correct body images. In addition, counseling should be given to those with negative body images and high levels of depression, and weight loss plans should be developed. Teachers and parents should empathize with and show concern for adolescents, expressing approval and encouragement. These are important ways to promote healthy growth and development, the formation of desirable body type and body shape, and the establishment of positive body image.

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HAWAII INTERNATIONAL CONFERENCE
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Co-sponsored by: Wednesday, September 17, 2008

University of Louisville –
Center for Sustainable
Urban Neighborhoods
Der-Hsiang Huang
Graduate Institute of Professional Development for Education
Da-Yeh University

New Horizons in
Education – The Journal
of Education, Hong Kong
Teachers' Association

Pepperdine University -
Graduate School of
Education and
Psychology

California State
University, East Bay -
Educational Leadership
Program

Dear Der-Hsiang Huang,

Congratulations! The Hawaii International Conference on Education is pleased to inform you that your submission, "BODY IMAGE AND RELATED FACTORS OF ADOLESCENTS IN TAIWAN", has been accepted for presentation at the 2009 Hawaii International Conference on Education to be held from January 4 to January 7, 2009 in Honolulu, Hawaii. The decision to accept your submission was based on a review process.

The exact time and room of your session will be specified in the final program. The final program will be available at http://www.hiceducation.org/program_edu.htm by December 2008. Please note that everyone who participates in the conference must register. If we do not receive your registration or an e-mail by November 23, 2008 indicating you plan on attending the conference, we will automatically schedule you for a poster session. For more information about hotel reservations, tour programs, and registering see www.hiceducation.org

Your submission will be published in the proceedings if you follow the enclosed instructions. We encourage you to purchase your air tickets, reserve your hotel rooms, and submit your registration fee as soon as possible if you have not done so. If you have co-authors, please inform them of this acceptance and the enclosed materials.

Your Submission ID Number is "1593". Please refer to this number on all correspondence.

Congratulations on the acceptance of your proposal! Your participation will help make the 2009 Hawaii International Conference on Education a great success.

Andrew Burge



Conference Coordinator
Hawaii International Conference Coordinator

國科會補助專題研究計畫項下出席國際學術會議心得報告

日期：99_年_2_月_15_日

計畫編號	NSC 97-2629-H-212-001-MY2		
計畫名稱	政治排斥女性？或女性排斥政治？——女性青少年權力意識、政治興趣、政治偏好、政治活動及相關因素之研究		
出國人員姓名	黃德祥	服務機構及職稱	大葉大學師資培育中心教授
會議時間	2010年2月4日 (Thursday)至2月5日 (Friday)	會議地點	Flamingo Hotel in Las Vegas, Nevada, U. S. A.
會議名稱	(中文)2010 美國行為與社會科學學會國際學術研討會 (英文)2010 Conference of The American Association of Behavioral and Social Sciences		
發表論文題目	(中文)台灣青少年吃檳榔的次級文化、上癮模式與心理歷程 (英文)Chewing Betel Nut and its Subculture, Addiction Model and Psychological Processes of Adolescents in Taiwan		
發表論文題目	(中文)台灣國中學生家庭社會資本與學業成就之研究 (英文)Family and Social Capital and Academic Achievements of junior High School Students in Taiwan		

發表論文 題目	(中文)台灣教師之集體效能、自我效能、專業發展與社會歸屬感 (英文)Collective Teacher Efficacy, Self Efficacy, Professional Development, and Social Belongingness in Taiwan
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2010 年出席國際學術研討會報告

出席國際學術研討會報告

報告人：黃德祥

會議名稱：2010 美國行為與社會科學學會國際學術研討會(2010 Conference of The American Association of Behavioral and Social Sciences)

開會日期：2010 年 2 月 4 日(Thursday)至 2 月 5 日(Friday)

開會地點：Flamingo Hotel in Las Vegas, Nevada, U. S. A.

一、參加會議經過

2010 美國行為與社會科學學會國際學術研討會(2010 Conference of The American Association of Behavioral and Social Sciences)於 2010 年 2 月 4 日(Thursday)至 2 月 5 日(Friday)在 Las Vegas, Nevada 的 Flamingo 飯店舉行。本學術研討會係由美國頗負盛名的「美國行為與社會科學學會」(The American Association of Behavioral and Social

Sciences，簡稱 AABSS）所主辦，今年與第十三屆年會合併舉行。美國行為與社會科學學會（AABSS）主要係由美國教育、心理、人類學、經濟、政治、社會、犯罪防治等行為與社會科學相關領域的四年制大學教授及行政主管所組成，由於會員主要為大學教授，因此本學會的學術氣息濃厚，今年的學會主席係 Dr. Norma Winston，她現任佛羅里達坦帕大學（Tampa University, Florida）「政府、歷史與社會學系」（Department of Government, History and Sociology）社會學教授，她是華盛頓大學博士，專供家庭與社會及性別不公議題，除了擔任美國行為與社會科學學會（AABSS）主席外，同時也是美國應用與臨床社會學會及應用社會學學會委員(the Commission on Applied and Clinical Sociology and the board of the Society for Applied Sociology)。本年年會中 Dr. Norma Winston 也上台期勉會員繼續努力、貢獻社會，尤其歡迎我們國外學者與研究生的參與。年會午餐時邀請 Dr. Theophilus Herrington, Dean of the Barbara Jordan-Mickey Leland School of Public Affairs at Texas Southern University 作專題演講，講題是：“Barbara C. Jordan and George “Mickey” Leland: Advocates for the Common Good”。餐會場合氣氛融洽，個人也認識來自瑞士及其他國家的多位學者。

個人今年共有三篇論文被2010美國行為與社會科學國際學術研討會接受口頭論文發表，分別是（一）台灣青少年吃檳榔的次級文化、上癮模式與心理歷程(Chewing Betel Nut and its Subculture, Addiction Model and Psychological Processes of Adolescents in Taiwan)，本文共同作者係國立台中教育大學諮商與應用心理系教授兼人文暨藝術學院院長魏麗敏教授；（二）台灣國中學生家庭社會資本與學業成就之研究(Family and Social Capital and Academic Achievements of junior High School Students in Taiwan)，本文共同作者係國立台中教育大學諮商與應用心理系教授兼人文暨藝術學院院長魏麗敏教授與台

中縣宜欣國小洪潔稜老師；（三）台灣教師之集體效能、自我效能、專業發展與社會歸屬感(Collective Teacher Efficacy, Self Efficacy, Professional Development, and Social Belongingness in Taiwan)，本文共同作者係輔英科大鄭進丁教授與正修科大吳百祿教授。

二、與會心得

個人第一篇論文的研究對象為台灣中部地區有嚼食檳榔經驗或目前正嚼食檳榔的國中生，探討其嚼食檳榔的次級文化、形成模式與心理歷程，並對此提供相關的處遇計畫。本研究採用訪談與觀察的質性研究的方法，對受試者的訪談內容作逐字稿分析，並觀察紀錄訪談過程中受試者的口語與行為表現，透過對資料的描述、分析和詮釋等方式，真實的呈現訪談的內容，本研究得到以下幾項重要的結論：（一）國中生開始嚼食檳榔的動機多數為好奇心，且又受同儕的影響，導致開始接觸檳榔產生嚼食檳榔的行為。（二）父母親對於自身的孩子是否有嚼食檳榔的情況並非皆知情，而家中的兄弟姊妹對於同輩間是否有嚼食檳榔的情況大多數不知情，當父母親知情的情況下大都會取用勸誡的方式，兄弟姊妹的反應則較不一致，有的會勸誡有的則沒反應，老師的態度則較一致以責罵的方式管教學生。（三）對於檳榔的稱呼會因民族性的不同而有相異之處，當國中生嚼食檳榔時，會感覺自己與其他的同學有不一樣之處（如感覺自己是老大等）。國中生的金錢來源多數為零用錢，而檳榔來源的管道則較多樣如朋友、同學、部落等。（四）受訪者大都知道嚼食檳榔的後果，多數有想過要戒除吃檳榔的行為，希望獲得的管道多數為老師、父母親、朋友，少數為不知道要如何戒除吃檳榔的行為。（五）戒除檳榔的方式有：希望老師與朋友提醒不要吃檳榔；父母親限制零用錢、勸誡等。綜合研究結果，本研究建議學校、老師、家長以及衛生主管機關相關的建議，避免國中生有嚼食檳榔的現象並提昇其健康，加強正向的健康行為。本論文發表時吸引眾多與會學者的興趣，紛

紛舉手發問，問題包括：檳榔在台灣是否合法？吃檳榔的心理與上癮歷程與抽菸及喝酒有何關係？台灣吃檳榔如此普遍，政府單位與學校教育有何對策？如何輔導吃檳榔的青少年？相關問題均由個人一一回答。

個人第二篇論文主要在探討國中學生家庭與社會資本對國中學生學業成就之影響。本研究共有受試國中學生 445 人，本研究主要是以自編的問卷，調查並蒐集所需的資料，命名為「我的生活經驗量表」。問卷包含三個部份，分別為：「基本資料」、「我的生活經驗量表一」、「我的生活經驗量表二」。「基本資料」包含受試者的性別、自評在班上的功課等級與人際關係等級、父母親的教育程度與父母親的職業。「我的生活經驗量表(一)」是在測量受試者和父母親的關係。「我的生活經驗量表(二)」測量受試者家長和老師、其他家長以及朋友的關係。本研究之主要發現有：(一)不同背景變項的國中學生在家庭內社會資本，大部分的層面上並無顯著差異。(二)不同背景變項的國中學生在家庭外社會資本，大部分的層面上並無顯著差異。(三)國中學生的家庭內社會資本與學業成就有顯著相關；家庭外社會資本與學業成就有顯著相關。其中國中學生的家庭內社會資本與學業成就有顯著相關，其次，國中學生的家庭外社會資本與學業成就大部分無顯著相關。(四)國中學生的家庭社會資本對學業成就具有顯著的預測力。本研究根據研究發現，建議家長須不斷學習先求自我成長、家長帶領子女接受文化洗禮、重視親子間有效的聯繫、與學校班級家長和朋友保持良好關係。

個人第三篇論文主要探討台灣國中教師的集體效能、自我效能、專業發展與社會歸屬感之關係。本研究以台灣地區 340 位國中教師為研究對象，施以自編的「教師集體量表」、「教師自我效能量表」、「教師專業發展量表」與「教師歸屬感量表」，經統計分析

後發現：(一) 教師因是否擔任行政工作、性別與最高學歷之不同而在集體效能、自我效能、專業發展與社會歸屬感得分上有顯著差異。(二) 國中教師之集體效能、自我效能、專業發展與社會歸屬感有顯著相關。本研究根據研究發現對師資培育與教育實務提供各項建議。第二與第三篇論文同場發表，與會學者也發言踴躍，他們尤其對於台灣的教育制度、師資養成與學校狀況頗感興趣，相關提問都獲得圓滿解答。

三、建議

此次行為與社會科學國際學術研討會在 Las Vegas 召開，個人係第一次到 Las Vegas。該地雖是世界著名賭城，但是風景與豪華及炫麗造景仍讓個人大開眼界。個人論文發表除能提高台灣的能見度外，個人並認識頗多與會來自世界各國的學者。另外旁聽幾場其他國家學者的論文發表，也獲益良多。尤其加拿大 St. Thomas University 教授 Professor Ian Fraser 他發表了 Generation Y and the Use of Anecdote and Humor in the Classroom 與 Teacher's Anxiety 的研究，主要發現頗多可供國內參考，回國後個人並去函索取全文，Professor Ian Fraser 的主要論點有 Baby Boomers: 1946-1964, Generation Y: 1976-97 or 2000 - some say beyond Generation Y are vastly different in learning styles from Baby Boomers. Reliance on spoken word: Baby Boomers age 15 - 25000 word vocabulary. Generation Y age 15 - 10000 word vocabulary. Generation Y have shorter attention-spans and regularly engage in multitasking. Auditory- like to listen, debate and discuss. Visual- like visual media, such as power point, graphs, computers and television. Baby Boomers - 43% Auditory Generation Y - 47% Visual. 相關論點個人並於本校新學期之全校教師期初輔導知能研討會上報告，為全校教師同仁打氣。建議爾後相關單位能從寬補助教授出國參加學術研討會，因為對大學教授專業成長貢獻卓著。

總之，此次參與 2010 美國行為與社會科學國際學術研討會，發表論文對個人學術能力之成長及對國際學術社區有貢獻之外，並能增益所能，擴及當前服務的大學，真是獲

益良多。

四、攜回資料名稱及內容

2010 Conference of The American Association of Behavioral and Social Sciences 會議首
及光碟版

附錄一 2010 美國行為與社會科學國際學術研討會邀請函

5 October, 2009

Chin-Ting Cheng
Fooyin University
151 Chin-Shei Rd., Da-Liao Shang
Kaoshung County, TAIWAN

Dear Dr. Cheng:

This is to inform you that your paper, co-authored with Pai-Lu Wu and Der-Hsiang Huang entitled, "Collective Teacher Efficacy, Self Efficacy, Professional Development, and School Belongingness in Taiwan," has been accepted for presentation at the 13th Annual Meeting of the American Association of Behavioral and Social Sciences (AABSS.) The meeting will be held at the Flamingo Las Vegas in Las Vegas, Nevada, February 4-5, 2010.

You will be allowed a maximum of 15 minutes in which to deliver your presentation. Each conference room will be equipped with an overhead projector and a screen. Be prepared to bring your own equipment if you wish to use power point slides for your presentation.

Conference information, including details about the location, the registration form and information about publishing your work with the AABSS can be found on the organization's web site at "aabss.org". A preliminary program for the forthcoming meeting will be posted on the AABSS website in late November. Please note that to be included in the final conference program, your registration fee must be postmarked by December 11th. A registration form is included for your convenience.

A block of discounted rooms is being held at the Flamingo Las Vegas for Wednesday, February 3rd through Saturday, February 6th, 2010. To book your room at the discounted rate, phone 1-888-373-9855 and identify yourself as a participant at the AABSS conference.

The deadline for booking rooms at the discounted rate is January 4th, 2010.

I am pleased that you have chosen to participate at the AABSS conference. I look forward to meeting you at that time. In the meantime, should you need more information, please contact me at: Ph 813-974-7476: email wienker@cas.usf.edu.

Sincerely,
Curtis Wienker, Ph.D.,
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論文一

Chewing Betel Nut and its Subculture, Addiction Model and Psychological Processes of Adolescents in Taiwan

This research object of study has for the middle area chews the betel nut experience or at present is chewing the betel nut the middle school students, understood it chews the betel nut the secondary culture, forms the pattern and the psychological course, regarding this and provides the correlation place the pre-plan. In order to achieve above goal, this research uses the interview and the observation nature research method, to receives the trying interview content to make word by word the manuscript analysis, and observes in the record interview process the trying spoken language and the behavior performance, penetrates to ways and so on material description, analysis and annotation, real presents the interview the content, obtains following several important conclusions:

1. the middle school students starts to chew the food betel nut most the motive is a curiosity, also receives associates' influence to cause to start to contact the betel nut to produce chews the betel nut the behavior.
2. Parents regarding own child whether has chews the betel nut the situation all to know the circumstances of the matter by no means, but in family's brothers sisters regarding of the same generation between whether has chews the food betel nut the situation majority not to know the circumstances of the matter, when the parents know the circumstances of the matter in the situation the metropolis uses the way which expostulates, brothers sisters' response then is inconsistent, some can expostulate has had responded, then teacher's manner unanimously scolds the way teaches the student.
3. Can because of national characteristic different have the different place regarding the betel nut name, when the middle school students chews the betel nut, can feel oneself has the dissimilar place with other

schoolmates (for example to feel oneself is eldest child and so on). The middle school students' money originates most is a pocket money, but the betel nut originates then pipeline diverse like friend, schoolmate, tribe and so on.

4. The participant knew mostly chews the food betel nut the consequence, has most had thought must give up eats the betel nut the behavior, hoped obtains the pipeline for teacher, the parents, the friend, minority for did not know most how has to give up eats the betel nut the behavior. Gives up the betel nut the way to include: Hoped teacher and the friend reminds do not want to eat the betel nut; The parents limit the pocket money, expostulate and so on.

The synthetic study result, this research suggested the school, teacher, the guardian as well as the hygienic manager machine tube correlation suggestion, avoids the middle school students having chews the food betel nut the phenomenon and promotes its health, strengthens the forward healthy behavior.

論文二

Family and Social Capital and Academic Achievements of junior High School Students in Taiwan

I. Introduction

Research Motivation

The earliest living environment after a person is born is his or her family, which is the first place for children's socialization. A family has different functions to satisfy individuals' diverse needs. Although a family's functions will change following society movements, a family as a whole has the functions of production, love, sex, economy, protection, education, and recreation, etc (Hwang DH, 2002). Scholars in the psychiatric analysis field have emphasized the effect of children's living experience in the early ages to an individual's lifelong growth. An equal parent-child relationship in a family, a democratic family atmosphere, and parents and children's responsibilities can promote a normal development and growth of a parent-child relationship. In Erikson's social development theory, an individual's development is distinguished to eight processes. In the development of the main social and interpersonal relationship, five processes are originated from a family. Thus, the importance of a family is felt.

A child has to enter kindergarten to study when he or she is three years old in Taiwan, because their parents worry that their children will lose in the beginning. A regular school education starts when he or she is six. These nine years of mandatory education are influential to students' development. Starting from the first grade, parents and teachers teach their children to take things seriously and to have good grades. Due to the change of era, the change of family structure, and the decline of pregnancy ratio, the amounts of children in a family are decreasing. Hence, children's statuses are increasing continuously (Hwang DH, 2002). Parents

tend to put more emphasis on children's education, especially on academic achievements.

It is said that "there is no occupation better than being a scholar." This is social public's opinion of education. In the process of Taiwan's economic booming, the social floating initiated from education is affirmed by everyone. Hence, academic achievement's level of emphasis is getting higher. Parents have high expectation to their children's education and consider that high educational background means high salary in the modern society of emphasizing on diplomas.

A family environment always is an important factor to decide what type of education an individual can receive. Parents have different recognitions on education due to diverse family environments. Different family values supply diverse learning resources. Hence, academic achievements and an individual's future occupational development are different. In Huey Zhen, Yuang (2008) and Jodl (2001)'s research, parents' educational values can predict children's acknowledgement behavior and children's future occupational development.

The importance of family on children's academic achievement and continuous education doesn't abate through the development of industrialization. The class difference still exists due to family background. Bandura (1997) thinks that a student's successful experience in school is influential to his or her future leaning and living. For the most parents in Taiwan, there is an equal sign linking successful experience, high ranking schools, high scores, continuous education, and good future together. Hence, academic achievements always become an indicator to value a student's good or bad performance by people.

But, due to the change of social type, dual-earner couples, single parent family, and grand-parents raised family are gaining. After-school education like day-care becomes a major issue. To solve this problem, cram school, day-care school, and talent and skill school have come out enormously. Children are not forwarding home happily after school, but oppositely been picked up by day-care schools. Family members waiting outside of a school have been replaced by different teachers (Liu Ruai Mei, 2008).

Although, a family is not the only place for raising and taking care of children and a child's personality development isn't contributed by parents only. But, a family is an individual's earliest place to get education. Parents are children's first teachers. Walberg (1984) points out that a person until he or she is eighteen years old, 13% of their time is at school and 87% of their time is at home. This figure indicates the importance of family education. A family can satisfy children's diverse needs and parents are the main suppliers for satisfying these needs. A family's parent and education functions have been replaced. Relatively, children's personality, values, and living habits will also be affected greatly. The time of getting together for communication between parents-children is little and parents-teachers are even worse. Most of parents' time is focused on their work. The only thing they ask for their children is good grades. Few input of family capital to get well

academic achievements is difficult for children. Hence, no matter how social type changes, if parents use the same physical and mental efforts like working on families, it is helpful for children's each area of development.

Parents participate in school education has become an absolute trend. The purpose is not only for improving school education's efficiency, but also for upgrading children's learning effect. When parents participate, a free market mechanism will begin. Each school competes with each other to attract students and this makes schools upgrade their efficiency. Furthermore, after parents participate in school education, interactions with teachers will gain. Through interactions with teachers can understand children's learning behavior at school and assist timely. Also, this way can understand children's acting behavior at school and give complements and corrections on time. Because participating in school activities can let children have a feeling of respect, this makes them be more confident and improves their behavior's self-constraint and studies' self-discipline (鄭招興, 2007; Fejgin, 1995). Parents learn knowledge and information by educating children through talking to teachers and other parents at school. 翟本瑞 (2002)'s research mentions that each parent will expect to upgrade children's education quality after the society becomes wealthy gradually. Although the same caring for children's education, parents from different background face different situations.

The idea of social capital mainly emphasizes on group identification, norm, interpersonal relationship and influence of internet to individuals, families, and communities. Bourdieu (1986) is the first scholar who analyzes social capital structurally. Coleman (1988,1990) thinks that the social capital theory means when an individual acts, resource built by relationships with others or organizations only exists in the relationship with actors and others. Actors can treat this kind of relationship and structure as resource and has an influence on actors' capability and effectiveness. And, this relationship cannot be replaced and occupied. Recently, social capital has been emphasized. The two reasons are first, social capital emphasizes on the positive side of interpersonal relationship and social interactions. Second, social capital expands the traditional cognitive and framework of the "capital" idea. Also, it is emphasized that this kind of incorporeal capital which is not related to materials can be an important resource of power and influence. The effectiveness of this kind of resource is even higher than physical capital. Under the limited children situation in a family, each child is treated preciously, parents and teachers all greatly emphasize on children's development (黃德祥, 2002). In this research, the emphasizing points are focusing on children in a family, how parents utilize family social capital to supply children a well family environment, to assist timely for children's well interpersonal relationship and academic achievements, and to upgrade their confidence for a smoother future on the long learning journey.

2. Research Hypotheses

According to the above research questions, this research points out the following research hypotheses:

- (1) There is a significant difference of junior high school students' different background (variable) to inner-family social capital.
 1. There is a significant difference of junior high school students' different gender to inner-family social capital.
 2. There is a significant difference of junior high school students' different level of self-evaluation school work to inner-family social capital.
 3. There is a significant difference of junior high school students' different level of self-evaluation interpersonal relationship to inner-family social capital.
 4. There is a significant difference of junior high school students' different family social and economical level to inner-family social capital.
- (2) There is a significant difference of junior high school students' different background (variable) to outer-family social capital.
 1. There is a significant difference of junior high school students' different gender to outer-family social capital.
 2. There is a significant difference of junior high school students' different level of self-evaluation school work to outer-family social capital.
 3. There is a significant difference of junior high school students' different level of self-evaluation interpersonal relationship to outer-family social capital.
 4. There is a significant difference of junior high school students' different family social and economical level to outer-family social capital.
- (3) There is a significant relationship of junior high school students' inner-family social capital and academic achievements.
- (4) There is a significant relationship of junior high school students' outer-family social capital and academic achievements.
- (5) Junior high school students' inner-family social capital is predictive to academic achievements.
- (6) Junior high school students' outer-family social capital is predictive to academic achievements.

(7) There is a significant difference of different roles in family social capital

3. Phrase Interpretation

(1) Inner-family social capital

Inner-family social capital means the relationship between parents and children or the interaction relationship between children and other members. But, it is the interaction between parents and children that influences more (Coleman, 1990). The operating definition uses Coleman's definition of family social capital in this research. Inner-family social capital means the relationship between parents and children. This research evaluates inner-family social capital through the following indicators: first, parents' cultural assistance on children's studies; second, parents-children feelings; third, parents' assistance on children's studies, which is symbolic by urging; fourth, parents' trust on children's studies; fifth, parents-children communication; sixth, parents' expectation on children's studies.

(2) Outer-family social capital

The idea of outer-family social capital is simplified as parents and others' relationship in communities or working places (何瑞珠, 1998). The operating definition uses Coleman's definition of family social capital in this research. Outer-family social capital means the relationship between parents and other adults, especially the relationship between parents and teachers, parents and other students' parents, and parents and friends. This research evaluates outer-family social capital through the following indicators: first, communication between parents and teachers; second, exchanging information between parents and other students' parents; third, education sharing between parents and friends.

(3) Academic achievements

Academic achievements use the subject classification of the basic competence test as standards, like the five Chinese, English, Math, Society, and Science subjects. Each school firstly transfers grades to class's T value and uses the T value to run statistical analysis.

II. Methodology

1. Research Object

This research formally and conveniently uses the questionnaires. There are total 15 classes as samples, including 3 junior high school classes in Taichung City, 3 junior high school classes in Taichung County DaLi City, 5 junior high school classes in Taichung County Taiping City, and 4 junior high school classes in Zhonghua County. There are total 500 students and use the "my living experience evaluation" questionnaire. The 517 formal

questionnaires called “my living experience scale“are initiated. There are 461 returning questionnaires and the returning ratio is 89.17%. Deducting 6 incomplete questionnaires and the effective samples are 445, meaning the ratio of effectiveness is 96.53%. In the effective samples, in terms of gender, the ratio of male and female is around half and half. Male is 47.64% and female is 52.36%. In terms of the level of self-evaluation of studies, the level of self-evaluation of interpersonal relationship, and family’s social and economical status, all turn out a bell shape normal distribution curve, meaning the sampling is very successful.

2. Research Method

This research mainly uses the self created questionnaires to evaluate and collect data. It is named the “my living experience scale”. There are three parts in this questionnaire, which are basic data, my living experience scale one, and my living experience scale two. Basic data includes the gender of the one who is tested, the level of self-evaluation class performance, the level of interpersonal relationship, and parents’ education background and occupation. My living experience scale one evaluates the relationship between the one who is tested and his or her parents. My living experience scale two evaluates the relationship between the person (who is tested)’s parents and teachers, other parents, and friends.

3. Research Framework

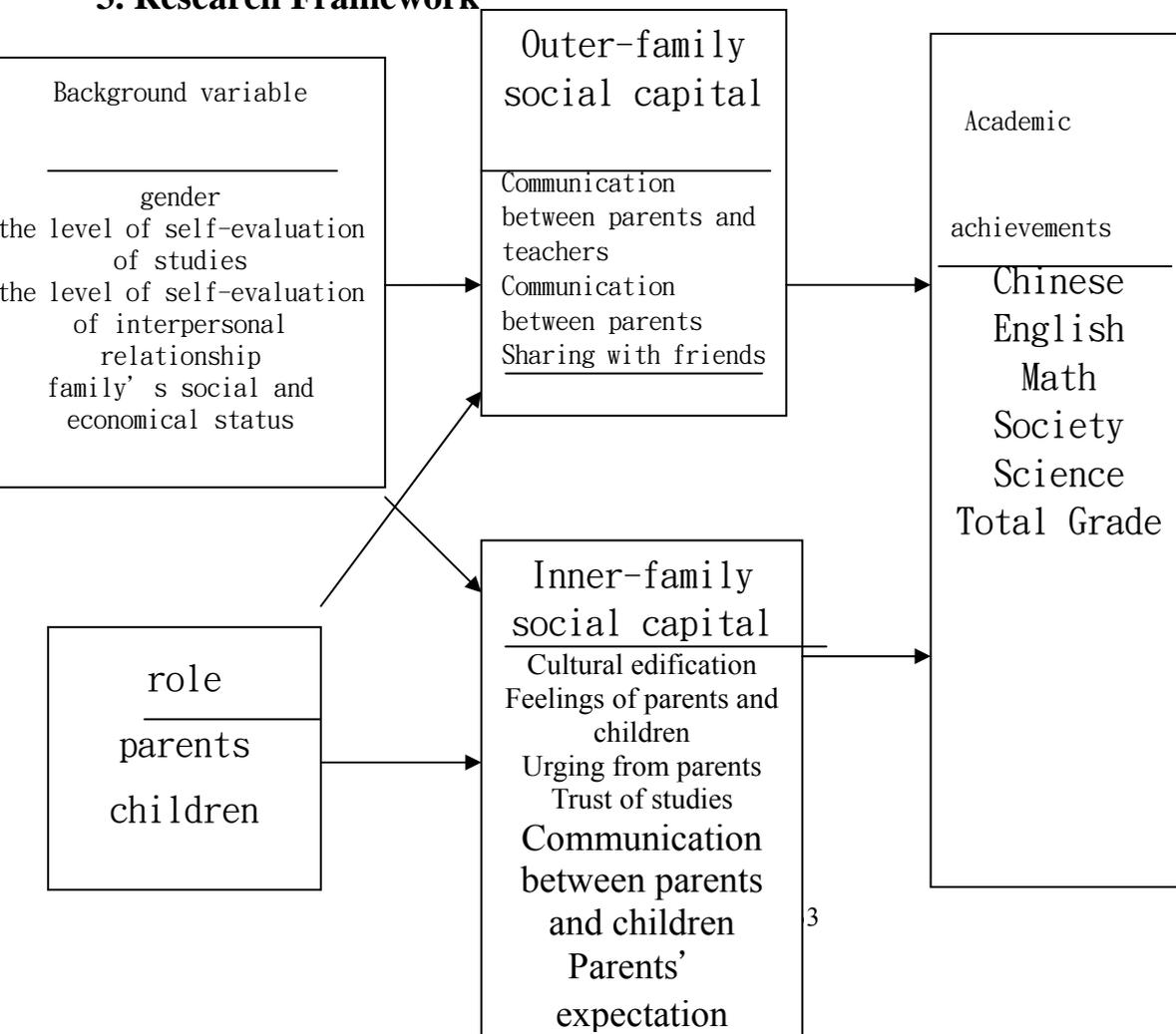


Figure 2-1: Research Framework

4. Research Method-Reliability Analysis

After factor analysis, to test the questionnaires' reliability and appropriateness, this research uses the Cronbach α coefficients as indicators to test each scale's inner consistence. The higher the α efficient, the higher each scale's inner consistence.

In the second part, after reliability analysis of "my living experience scale one" 's questions, each α coefficient is listed in the following: the total scale, $\alpha=.955$; cultural edification, $\alpha=.893$; feelings of parents and children, $\alpha=.908$; urging from parents, $\alpha=.867$; trust of studies, $\alpha=.881$; communication between parents and children, $\alpha=.848$; and parents' expectation, $\alpha=.732$. The six Cronbach α coefficients are above .70 and the total scale's Cronbach α coefficient is .955.

In the third part, after reliability analysis of "parents' living experience" 's questions, each α coefficient is listed in the following: the total scale, $\alpha=.885$; communication between parents and teachers, $\alpha=.886$; communication between parents, $\alpha=.825$; and sharing with friends, $\alpha=.703$. The three Cronbach α coefficients are above .70 and the total scale's Cronbach α coefficient is .885, meaning the scale's reliability is well.

5. Data Processing

The SPSS 12.0 edition software is used to run further data management and analysis to test each research hypothesis. The statistical method used in this research is the following:

(1) Frequency distribution and the % ratio

To understand testing samples' basic data distribution and analyzes "my living experience scale one" and "my living experience scale two" 's % ratio of each question's answer.

(2) Independent-Samples *t* Test

To test the difference of junior high school students' different background (variable) on their academic achievements such as each subject and total grade, the table of inner-family social capital's total amount and each level, and the table of outer-family social capital's total amount and each level in this research, and to answer hypothesis (1)1., hypothesis (1)4., hypothesis (2)1., hypothesis (2)4., and hypothesis (7).

(3) One-way ANOVA

To test the difference of junior high school students' different background (variable) on their inner-family social capital and outer-family social capital and the whole academic

achievements and each level in this research, and to answer hypothesis (1)2., hypothesis (1)3., hypothesis (2)2., and hypothesis (2)3.. If the testing result by using ANOVA is significant, then Scheffé is later used to compare.

(4) Person Product-moment Correlation Method

To discuss the relationship between inner-family social capital, outer-family social capital, and academic achievements in this research, and then answer hypothesis (3) and hypothesis (4).

(5) Multiple Regression

To test the prediction of junior high school students' different background (variable) on their each level's inner-family social capital and outer-family social capital and academic achievements, and to answer hypothesis (5) and hypothesis (6).

III. Results and Discussion

1. To analyze the difference of junior high school students' different background (variable) on the table of the total amount of inner-family social capital and each level.

The background variable in this research includes four items which are gender, self-evaluation of different school work level, self-evaluation of different interpersonal level, and family's social and economical level. The difference of junior high school students' different background (variable) on inner-family social capital is discussed separately.

This chapter distinguishes junior high school students' inner-family social capital to six levels to consider which are cultural edification, feelings of parents and children, urging from parents, trust of studies, communication between parents and children, and parents' expectation. It is described in the following:

- (1) To test the difference of junior high school students' different gender on the table of the total amount of inner-family social capital and each level.

Table1: Junior high school students' different gender on the table of the total amount of inner-family social capital and each level-the independent sample's testing analysis.

level	gender	<i>N</i>	<i>M</i>	<i>SD</i>	<i>T</i> value
Cultural edification	male	212	30.94	7.56	-.30
	female	233	31.16	7.67	
Feelings of	male	212	30.87	6.34	-1.00

parents and children	female	233	31.49	6.68	
Urging from parents	male	212	24.58	6.12	.46
	female	233	24.31	6.29	
Trust of studies	male	212	16.32	3.83	-1.57
	female	233	16.91	4.13	
Communication between parents and children	male	212	24.20	5.39	
	female	233	26.35	5.69	-4.08*
Parents' expectation	male	212	16.05	2.87	-1.49
	female	233	16.45	2.89	
the table of the amount of inner-family	male	212	142.95	25.56	
	female	233	146.67	26.60	-1.50

* $p < .05$.

From the above table, there is a significant difference of different gender's students on the communication between parents and children variable. There is no significant difference on the cultural edification, feelings of parents and children, urging from parents, trust of studies, trust of studies, and the table of the total amount of inner-family variables. Among the significant level variables, from the average, in the communication between parents and children level, female junior high school students ($M=26.35$) is above male junior high school students ($M=24.20$).

This research conclusion is the same as Muller (1998), and Ho and Willams (1996). In Ho and Willams (1996)'s research, it is discovered that in a family, female is more often to discuss living experience with parents. To discuss what happened at schools, communication with parents and children is more often. Muller (1998) the same uses the NELS data base and the 12766 students as samples. There is a research focusing on the eighth and tenth grades students' parents' participation and the relationship with math testing grades. The result is that parents are more often to discuss what happened at schools with female which means there is a lot of communication between parents and children.

(2) The difference analysis of the table of the total amount of self-evaluation different school work level to inner-family social capital and each level.

Table2: The ANOVA analysis of the total amount of junior high school students' self-evaluation of different school work level variable to inner-family social capital and each level.

level	The source of variance	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>
Cultural edification	Between level	1406.44	4	351.61	6.37***
	Inner level	24306.27	440	55.24	
Feelings of parents and children	Between level	357.44	4	89.36	2.12
	Inner level	18531.94	440	42.12	
Urging from parents	Between level	605.36	4	151.34	4.04**
	Inner level	16484.19	440	37.46	
Trust of studies	Between level	375.44	4	93.86	6.15***
	Inner level	6716.12	440	15.26	
Communication between parents and children	Between level	283.95	4	70.99	2.25
	Inner level	13867.45	440	31.52	
Parents' expectation	Between level	162.01	4	40.50	5.05***
	Inner level	3531.75	440	8.03	
the table of the total amount of inner-family	Between level	15158.07	4	3789.52	5.78***
	Inner level	288369.58	440	655.39	

** $p < .01$. *** $p < .001$.

Besides, from the Table 2 ANOVA analysis, in the cultural edification level, self-evaluation different school work level of junior high school students, $F=6.37$, $df=444$, $p < .001$. In the urging from parents level, $F=4.04$, $df=444$, $p < .01$.

In the trust of studies level, $F=6.15$, $df=444$, $p < .001$. In the parents' expectation, $F=5.05$, $df=444$, $p < .001$. And, in the table of the total amount of inner-family level, $F=5.78$,

$p < .001$. All the above are statistically significant. The feelings of parents and children and the communication of parents and children levels are not statistically significant.

Table3: The average, standard deviation, and the afterwards comparison result of the total amount of junior high school students' self-evaluation of different school work level variable to inner-family social capital and each level.

level	The level of self-evaluation school work	<i>N</i>	<i>M</i>	<i>SD</i>	The Scheffé method of afterwards comparison
Cultural edification	(1) not very good	18	26.06	6.99	(4) > (2)
	(2) not good	77	28.90	7.57	(4) > (1)
	(3) average	279	31.24	7.39	
	(4) good	60	33.78	7.15	
	(5) very good	11	34.64	9.68	
Urging from parents	(1) not very good	18	21.28	5.32	(3) > (2)
	(2) not good	77	22.48	6.20	
	(3) average	279	25.00	6.06	
	(4) good	60	25.07	6.08	
	(5) very good	11	25.82	8.39	
Trust of studies	(1) not very good	18	14.06	4.15	(4) > (2)
	(2) not good	77	15.52	3.83	(4) > (1)
	(3) average	279	16.73	3.85	
	(4) good	60	18.03	4.00	
	(5) very good	11	18.55	4.95	
Parents' expectation	(1) not very good	18	14.61	3.58	(5) > (3)
	(2) not good	77	15.79	3.16	(5) > (2)
	(3) average	279	16.29	2.78	(5) > (1)
	(4) good	60	16.73	2.56	
	(5) very good	11	19.00	1.26	

the table of the total amount	(1) not very good	18	130.39	24.06	(4)>(2)
	(2) not good	77	136.58	26.87	(4)>(1)
	(3) average	279	145.99	24.97	
	(4) good	60	152.03	25.82	
	(5) very good	11	160.45	33.26	

The research shows that in the cultural edification, trust of studies, and the inner-family table of the total amount levels, the average of the students who self evaluates school works “good” is higher than those who self evaluates school works “not good” and “not very good”.

In the urging from parents level, the average of the students who self evaluates school works “average” is higher than those who self evaluates school works “not good”.

In the parents’ expectation level, the average of the students who self evaluates school works “very good” is higher than those who self evaluates school works “average”, “not good”, and “not very good”.

(3) The difference analysis of the table of the total amount of self-evaluation different interpersonal relationship level to inner-family social capital and each level.

Table4: the ANOVA analysis of the total amount of junior high school students’ self-evaluation of different interpersonal relationship level variable to inner-family social capital and each level

level	The source of variance	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>
Cultural edification	Between level	588.76	4	147.19	2.58*
	Inner level	25123.95	440	57.10	
Feelings of parents and children	Between level	214.16	4	53.54	1.26
	Inner level	18675.22	440	42.44	
Urging from parents	Between level	311.42	4	77.86	2.04
	Inner level	16778.13	440	38.13	
Trust of studies	Between level	79.53	4	19.88	1.25
	Inner level	7012.03	440	15.94	

Communication between parents and children	Between level	549.75	4	137.44	4.45**
	Inner level	13601.65	440	30.91	
Parents' expectation	Between level	33.23	4	8.31	1.00
	Inner level	3660.53	440	8.32	
the table of the total amount of inner-family	Between level	7384.87	4	1846.22	2.74*
	Inner level	296142.78	440	673.05	

* $p < .05$. ** $p < .01$.

Besides, from the table 3 ANOVA analysis, it is found that in the 「Cultural edification」 level, junior high school students' self-evaluation different interpersonal relationship, $F=2.58$, $df=444$, $p < .05$; In the 「Communication between parents and children」 level, $F=4.45$, $df=444$, $p < .01$ and the table of the total amount of inner-family », $F=2.74$, $df=444$, $p < .05$ are all statistically significant. And, in the 「Feelings of parents and children」, 「Urging from parents」, and 「Trust of studies」 levels, are all not statistically significant.

Table 5: The average, standard deviation, and the afterwards comparison result of the total amount of junior high school students' self-evaluation of different interpersonal relationship level variable to inner-family social capital and each level.

level	Different level of self-evaluation interpersonal relationship	<i>N</i>	<i>M</i>	<i>SD</i>	The Scheffé method of afterwards comparison
Cultural edification	(1) not very good	7	28.71	5.56	
	(2) not good	14	27.00	8.11	
	(3) average	242	30.76	7.36	
	(4) good	143	32.37	8.04	
	(5) very good	39	29.90	7.00	

Communication between parents and children	(1) not very good	7	19.00	5.86	(4) > (1)
	(2) not good	14	24.57	6.27	
	(3) average	242	25.41	5.69	
	(4) good	143	26.13	5.29	
	(5) very good	39	23.26	5.39	
the table of the total amount of inner-family	(1) not very good	7	129.29	20.00	
	(2) not good	14	134.86	30.00	
	(3) average	242	144.64	25.44	
	(4) good	143	148.98	27.09	
	(5) very good	39	137.97	23.98	

The research is found that in the 「Communication between parents and children」 level, the average of the students who self evaluates interpersonal relationship “good” is higher than those who self evaluates interpersonal relationship “not very good”.

(4) The difference analysis of the table of the total amount of junior high school students’ families’ different social and economical status to inner-family social capital and each level.

Table6: junior high school students’ different families’ social and economical status on the table of the total amount of inner-family social capital and each level-the independent sample’s testing analysis

level	The family’ social and economical status	<i>N</i>	<i>M</i>	<i>SD</i>	<i>T</i> value
Cultural edification	High social and economical status	159	32.84	7.53	3.74***
	Low social and economical status	286	30.06	7.48	
Feelings of parents and children	High social and economical status	159	31.40	6.73	.49

		Low social and economical status	286	31.08	6.41	
		High social and economical status	159	25.48	6.64	
Urging parents	from	Low social and economical status	286	23.86	5.88	2.67**
		High social and economical status	159	17.01	4.21	
Trust of studies		Low social and economical status	286	16.42	3.86	1.50
		High social and economical status	159	25.34	6.13	
Communication between parents and children	and	Low social and economical status	286	25.31	5.37	.05
		High social and economical status	159	16.35	3.19	
Parents' expectation		Low social and economical status	286	16.21	2.70	.50
		High social and economical status	159	148.42	27.36	
the table of the total amount of inner-family		Low social and economical status	286	142.94	25.28	2.13*

* $p < .05$. ** $p < .01$. *** $p < .001$.

From the above table, students who have different families' social and economical status, the 「Cultural edification」, 「Urging from parents」, and 「total grade」 levels are statistically

significant. In the 「Feelings of parents and children」, 「Trust of studies」, 「Communication between parents and children」, and 「Parents expectation」 levels are not statistically significant. Among the variables which are significant, from the average, the average of high social and economical family's 「Cultural edification」 is ($M=32.84$), which is statistically significant than low social and economical status family ($M=30.06$); High social and economical status family's average ($M=25.48$) on the 「Urging from parents」 level is statistically higher than low social and economical family ($M=23.86$); the average ($M=148.42$) of the high social and economical family's 「the table of the total amount of inner-family」 is statistically significant than low social and economical family ($M=142.94$).

(5) Conclusion

To synthesize the above research, different background's junior high school students' inner-family social capital testing is analyzed as the following Table 7.

Table 7: The testing and analyzing table of the table of the total amount of different background variables junior high school students' inner-family social capital and each level.

level	gender <i>T</i> value	Self-evaluation different school work level <i>F</i> value	Self-evaluation interpersonal relationship level <i>F</i> value	Family's social and economical status <i>T</i> value
Cultural edification	-.30	6.37***	2.58*	3.74***
Feelings of parents and children	-1.00	2.12	1.26	.49
Urging from parents	.46	4.04**	2.04	2.67**
Trust of studies	-1.57	6.15***	1.25	1.50
Communication between parents and children	-4.08*	2.25	4.45**	.05
Parents' expectation	-1.49	5.05***	1.00	.50
the table of the	-1.50	5.78***	2.74*	2.13*

total amount of
inner-family

* $p < .05$. ** $p < .01$. *** $p < .001$.

From the above table, 「Cultural edification」 and 「the table of the total amount of inner-family」 on the self-evaluation different school work level, self-evaluation different interpersonal relationship level, and family's social and economical status three background variables are statistically significant ; 「Trust of studies」 and 「Parents' expectation」 on the self-evaluation different school work level back ground variable are statistically significant ; 「Urging from parents」 on the self-evaluation different school work level and family's social and economical status back ground variable is statistically significant ; 「Communication between parents and children」 on gender and self-evaluation different interpersonal relationship level back ground level is statistically significant.

2. The difference analysis of the table of the total amount of junior high school students' different background variables to inner-family social capital and each level.

In this research, back ground variables include four items like gender, self-evaluation different school work level, self-evaluation different self-evaluation interpersonal relationship level, and families' social and economical status. In the following, the difference situation of the table of the total amount of junior high school students' different background variables to outer-family social capital and each level is discussed separately.

This chapter will distinguish junior high school students' outer-family social capital to three levels to consider which are communication between parents and teachers, parents' exchange, and friends' sharing. It is described in the following:

(1) The difference analysis of the table of the total amount of junior high school students' different gender to outer-family social capital and each level.

Table 8: Junior high school students' different gender on the table of the total amount of outer-family social capital and each level-the independent sample's testing analysis.

level	ender	<i>N</i>	<i>M</i>	<i>SD</i>	<i>T value</i>
Communication of parents and teachers	male	212	13.56	3.83	3.27***
	female	233	12.34	4.01	
Parents' exchange	male	212	16.06	5.20	2.37*
	female	233	14.92	4.92	
Friends' sharing	male	212	10.52	2.80	-.85
	female	233	10.74	2.77	

The table of the male	212	40.13	9.96	
total amount of female	233	38.00	9.84	2.27*
outer-family				

* $p < .05$. *** $p < .001$.

From the above table, students who have different gender, there is a significant difference in communication between parents and teachers, parents' exchange, and the table of the total amount of outer-family social capital. There is no significant difference in the level of friends' sharing. Among the variables which are significant, from the average, male junior high school students' average ($M=13.56$) is higher than female ($M=12.34$) on the communication between parents and teachers level. Male junior high school students' average ($M=16.06$) is higher than female ($M=14.92$) on the parents' exchange level. Male junior high school students' average ($M=40.13$) is higher than female ($M=38.00$) on the table of the total amount of outer-family social capital level.

2. The difference analysis of the table of the total amount of self-evaluation different school work level to outer-family social capital and each level.

Table 9: the ANOVA analysis of the total amount of junior high school students' self-evaluation of different school work level variable to outer-family social capital and each level

level	The source of variance	SS	df	MS	F
Communication of parents and teachers level	Between	32.66	4	8.17	.52
	Inner level	6970.43	440	15.84	
Parents' exchange level	Between	52.36	4	13.09	.51
	Inner level	11398.20	440	25.91	
Friends' sharing level	Between	95.94	4	23.99	3.16*
	Inner level	3343.08	440	7.60	
The table of the total amount of outer-family	Between	308.70	4	77.17	.78
	Inner level	43602.20	440	99.10	

* $p < .05$.

Besides, from the above Table 9 ANOVA analysis, it is known that in the level of friends' sharing, there is a significant difference among junior high school students' self-evaluation of different school work level ($F=3.16$, $p < .05$). There is no significant difference in the communication between parents and teachers, parents' exchange, and the table of the total amount of outer-family social capital.

Table10: The average, standard deviation, and the afterwards comparison result of the total amount of junior high school students' self-evaluation of different school work level variable to outer-family social capital and each level.

level	Self-evaluation of school work level	<i>N</i>	<i>M</i>	<i>SD</i>	The Scheffé method of afterwards comparison The Scheffé method of afterwards comparison
Friends' sharing	(1) not very good	18	8.56	2.83	(4) > (1)
	(2) not good	77	10.65	2.65	(3) > (1)
	(3) average	279	10.65	2.79	
	(4) good	60	11.18	2.68	
	(5) very good	11	10.64	2.91	

The research finds out that in the level of friends' sharing, those students who self-evaluates their school work as “good” and “average”, their grades are better than those who self-evaluate their school work as “not very good”.

(3) The difference analysis of the table of the total amount of self-evaluation different interpersonal relationship level to outer-family social capital and each level

Table 11: The ANOVA analysis of the total amount of junior high school students' self-evaluation of different interpersonal relationship level variable to outer-family social capital and each level.

level	The source of variance	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>
Communication of parents and teachers	Between level	81.68	4	20.42	1.30
	Inner level	6921.41	440	15.73	

Parents' exchange	Between level	60.77	4	15.19	.59
	Inner level	11389.80	440	25.89	
Friends' sharing	Between level	41.70	4	10.43	1.35
	Inner level	3397.32	440	7.72	
The table of the total amount of outer-family	Between level	359.05	4	89.76	.91
	Inner level	43551.84	440	98.98	

Besides, from the above Table 11 ANOVA analysis, it is known that junior high school students who self-evaluate different interpersonal relationship level, the communication between parents and teachers, parents' exchange, friends' sharing, and the table of the total amount of outer-family social capital are not statistically significant.

(4) The difference analysis of the table of the total amount of junior high school students' different families' social and economical status to outer-family social capital and each level.

Table 12: Junior high school students' families' social and economical status variable on the table of the total amount of outer-family social capital and each level-the independent sample's testing analysis.

level	The family' social and economical status	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i> value
Communication of parents and teachers	High social and economical status	159	13.30	4.22	1.52
	Low social and economical status	286	12.71	3.82	

Parents' exchange	High and economical status	social	159	15.84	5.58	1.18
	Low and economical status	social	286	15.25	4.77	
Friends' sharing	High and economical status	social	159	10.73	3.01	.53
	Low and economical status	social	286	10.58	2.65	
The table of the total amount of outer-family	High and economical status	social	159	39.87	11.07	1.29
	Low and economical status	social	286	38.54	9.25	

From the above table, students who have different families' social and economical status, the level of communication between parents and teachers, parents' exchange, friends' sharing, and the table of the total amount of outer-family social capital are not statistically significant.

(5) Conclusion

To synthesize from the above research, different back ground's junior high school students' inner-family social capital testing analysis is categorized in the following Table 4-20.

Table 13: The testing and analyzing table of the table of the total amount of different background variables junior high school students' outer-family social capital and each level.

Level	gender	Self-evaluation		
		Self-evaluation different school level	work relationship level	Families' social and economical status
	<i>t</i> value	<i>F</i> value	<i>F</i> value	<i>t</i> value
Communication of parents and teachers	3.27***	.52	1.30	1.52
	2.37*	.51	.59	1.18
Parents' exchange	-.85	3.16*	1.35	.53
	2.27*	.78	.91	1.29

* $p < .05$. *** $p < .001$.

In the communication between parents and teachers, parents' exchange, and the table of the total amount of outer-family social capital levels, the gender variable is significant. Male students' average is higher than female's. Male students in their junior high school period are the age of crude and impetuous. Parents are more severe to boys than girls on behavior discipline. Also, to boys' communication barrier is severer than to girls. Parents thus always ask help from teachers to assist them for children's behavior discipline. They also learn from other parents to let their sons get through the emotional and unstable junior high school period. In the friends' sharing level, there is a significant difference on the self evaluation of different school work level.

3. The analysis of the relationship between junior high school students' academic achievements and the table of the total amount of inner-family social capital and each level.

The following is the analysis of the relationship between junior high school students' academic achievements and the table of the total amount of inner-family social capital and each level. The Pearson method is used to analyze the correlation between each level.

Academic achievements are separated to the following five subjects like Chinese, English, Math, Society, and Science and the total grades. And, inner-family social capital is distinguished to cultural edification, feelings of parents and children, urging from parents, trust of studies, communication between parents and children, parents' expectation, and the table of the total amount of inner-family. The analyzed result is shown in the following Table 14.

Table 14: the analysis of the relationship between junior high school students' academic achievements and the table of the total amount of inner-family social capital and each level

subject	Cultural edification	Feelings of parents and children	Urging from parents	Trust of studies	Communication between parents and children	Parents' expectation	the table of the total amount of inner-family social capital
Chinese	.15**	.09*	.07	.19**	.06	.12*	.14**
English	.22**	.12*	.16**	.18**	.12*	.14**	.20**
Math	.20**	.09	.12*	.12**	.03	.05	.14**
Society	.16**	.07	.07	.15**	.03	.07	.12*
Science	.21**	.14**	.10*	.17**	.05	.09	.17**
total	.22**	.11*	.12**	.19**	.06	.11*	.18**

* $p < .05$. ** $p < .01$.

(1) The relationship analysis between cultural edification and academic achievements

The analytic result shows that each subject of academic achievements like Chinese, English, Math, Society, and Science and the total grades and the level of cultural edification is positively and significantly related. The correlation is .15, .22, .20, .16, .21, .22.

From 陳曉佳 (2004) 's research, the data is used from the TEPS data base, in the 2001 investigation, the accumulative result of cultural edification from female junior high school students is higher than male students. The more the accumulative result, the more it is effective to academic grades gradually.

(2) The relationship analysis between feelings of parents and children and academic achievements

The analytic result shows that each subject of academic achievements like Chinese, English, Science, and total grades and the level of feelings of parents and children are positively and significantly related. The coefficients are .09, .12, .14, .12.

(3) The relationship analysis between urging from parents and academic achievements

The analytic result shows that each subject of academic achievements like English, Math, Science, and total grades and the level of urging from parents are positively and significantly related. The coefficients are .16, .12, .10, .12.

(4) The relationship analysis between trust of studies and academic achievements

The analytic result shows that each subject of academic achievements like Chinese, English, Math, Society, Science, and total grades and the level of trust of studies are positively and significantly related. The coefficients are .19, .18, .12, .15, .17, .19.

(5) The relationship analysis between communication between parents and children and academic achievements

The analytic result shows that the subject of academic achievements like English and the level of communication between parents and children are positively and significantly related. The coefficient is .12.

(6) The relationship analysis between parents' expectation and academic achievements

The analytic result shows that each subject of academic achievements like Chinese, English, and total grades and the level of parents' expectation are positively and significantly related. The coefficients are .12, .14, .11.

Hence, when parents expect their children to have well academic achievements, the stronger the faith, and the better the children's behavior. Hao and Burns (1998)'s research analyzes the difference of Asian immigrants and American students' academic achievements, one of the main factors to have a difference of each country's students' academic achievements is the difference of social capital. Chinese and Korean immigrants students have a high quality and frequency exchanges with their parents during their learning process, and increases parents' expectation to education. Thus, children's academic achievements are increased. 楊慧珍(2008)'s research has the same result that parents' expectation to children's education can directly affect children's academic grades.

Parents always use their selves' roles demonstration, convey of expectation, and values and experience to let their children learn and realize parents' values and faiths. And, this affects children's learning achievements (Sigel,1992 ; Belt & Peterson,1991) . Parents' achievements related faiths also affect their children's achievements related faiths (Jodel, Michael, Malanchuk, Eccles, & Sameroff,2001) . The result reflects the following in the questionnaires: "parents always say that they wish me to enter a good university in the future", "parents expect me to be a meaningful person in the future", and "I carry the great responsibility to fulfill parents' hopes". To earn parents' happiness and fulfill parents' expectation of entering a good university and be a meaningful person, children, children in the emotion of cherishing, respecting, and revering to parents, they will remind themselves their academic achievements to fulfill their parents' hopes.

(7) The relationship analysis between the table of the total amount of inner-family and academic achievements

The analytic result shows that each subject of academic achievements like Chinese, English, Math, Society, Science, and total grades and the level of the table of the total amount of inner-family are positively and significantly related. The coefficients

are .14, .20, .14, .12, .17, .18.

4. The analysis of the relationship between junior high school students' academic achievements and the table of the total amount of outer-family social capital and each level

In the following, the relationship between junior high school students' academic achievements and the table of the total amount of outer-family social capital and each level will be discussed. And, the Pearson method will be applied to analyze to understand each level's correlation.

Academic achievements are separated to the following five subjects like Chinese, English, Math, Society, and Science and the total grades. And, outer-family social capital is distinguished to three levels like communication between parents and children, parents' exchange, and friends' sharing and the table of the total amount of outer-family social capital. The analytic result is shown in the following Table 15.

Table 15: the analysis of the relationship between junior high school students' academic achievements and the table of the total amount of outer-family social capital and each level

subject	communication between parents and children	parents' exchange	friends' sharing	the table of the total amount of outer-family social capital
Chinese	-.07	-.09	.10*	-.04
English	-.06	-.02	.19**	.02
Math	-.01	.03	.09	.04
Society	-.07	-.06	.12*	-.03
Science	-.01	.01	.11*	.03
total	-.05	-.02	.14**	.01

* $p < .05$.

(1) The relationship analysis between communication between parents and children and academic achievements

The analytic result shows that each subject of academic achievements like Chinese, English, Math, Society, Science, and total grades and the level of communication between parents and children are not significantly related.

(2) The relationship analysis between parents' exchange and academic achievements

The analytic result shows that each subject of academic achievements like Chinese, English, Math, Society, Science, and total grades and the level of parents' exchange are not significantly related.

(3) The relationship analysis between friends' sharing and academic achievements

The analytic result shows that each subject of academic achievements like Chinese, English, Society, Science, and total grades and the level of friends' sharing are positively and significantly related. The coefficients are .10、.19、.12、.11、.14.

(4) The relationship analysis between the table of the total amount of outer-family social capital and academic achievements

The analytic result shows that each subject of academic achievements like Chinese, English, Math, Society, Science, and total grades and the level of the table of the total amount of outer-family social capital are not significantly related.

5. The predictive analysis of junior high students' each level of inner-family social capital and academic achievements

This chapter mainly discusses the predictive function of junior high students' each level of inner-family social capital and academic achievements. Hence, in this research, each level of inner-family social capital is the predictive variable. And, the five subjects of the basic competence test are Chinese, English, Math, Society, Science, and academic total grades are the dependent variables to run multiple regression analysis.

(1) The predictive analysis of junior high school students' inner-family social capital to the Chinese subject grade

To use each level of inner-family social capital as the predictive variable, and its effect on the academic subject like the Chinese subject grade to run multiple regression. The result is shown in Table 16.

Table 16: The multiple regression analysis table of junior high school students' inner-family social capital to the Chinese subject grade

Input variable	Un-standardized coefficient		Standardized coefficient	tvalue
	<i>B</i>	Standard estimate error	β	
Cultural edification	.20	.09	.15	2.11*

Feelings of parents and children	-.09	.11	-.06	-.82
Urging from parents	-.18	.11	-.11	-1.57
Trust of studies	.55	.17	.22	3.25***
Communication between parents and children	-.15	.12	-.08	-1.21
Parents' expectation	.27	.20	.08	1.36

Reference: $F = 4.25^{***}$; $R = .23$; $R^2 = .06$

* $p < .05$. *** $p < .001$.

The research result shows that there is a predictive function of junior high school students' inner-family social capital to the Chinese subject grade ($F = 4.25, p < .001$). Each level of inner-family social capital totally can explain 6% ($R^2 = .06$) of the Chinese subject grade of the academic achievement. Thus, inner-family social capital is effective to the Chinese subject grade of the academic achievement. To further analyze data, we can understand inner-family social capital's cultural edification ($\beta = .15, t = 2.11, p < .05$) and trust of studies ($\beta = .08, t = 3.25, p < .001$) can positively predict junior high school students' Chinese subject grade of the academic achievement. This means that the more junior high school students' cultural edification and the stronger of trust of studies, the better performance of the Chinese subject grade. Also, the predictive power of trust of studies is higher than cultural edification. Other levels' predictive power to Chinese subject grade of the academic achievement is not significant.

(2) The predictive analysis of junior high school students' inner-family social capital to the English subject grade

To use each level of inner-family social capital as the predictive variable, and its effect on the academic subject like the English subject grade to run multiple regression. The result is shown in Table 17.

Table 17: The multiple regression analysis table of junior high school students' inner-family social capital to the English subject grade

Input variable	Un-standardized coefficient	Standardized coefficient	tvalue
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	<i>B</i>	Standard estimate error	<i>β</i>	
Cultural edification	.27	.09	.21	2.97**
Feelings of parents and children	-.13	.11	-.09	-1.12
Urging from parents	-.05	.11	-.03	-.47
Trust of studies	.32	.17	.13	1.90
Communication between parents and children	-.01	.12	-.01	-.12
Parents' expectation	.16	.20	.05	.82

Reference: $F = 4.67^{***}$; $R = .25$; $R^2 = .06$

** $p < .01$.

The research result shows that there is a predictive function of junior high school students' inner-family social capital to the English subject grade ($F = 4.67, p < .001$). Each level of inner-family social capital totally can explain 6% ($R^2 = .06$) of the English subject grade of the academic achievement. Thus, inner-family social capital is effective to the English subject grade of the academic achievement. To further analyze data, we can understand inner-family social capital's cultural edification ($\beta = .21, t = 2.97, p < .01$) can positively predict junior high school students' English subject grade of the academic achievement. This means that the more junior high school students' cultural edification, the better performance of the English subject grade. Other levels' predictive power to English subject grade of the academic achievement is not significant.

(3) The predictive analysis of junior high school students' inner-family social capital to the Math subject grade

To use each level of inner-family social capital as the predictive variable, and its effect on the academic subject like the Math subject grade to run multiple regression. The result is shown in Table 18.

Table 18: The multiple regression analysis table of junior high school students' inner-family social capital to the Math subject grade

Input variable	Un-standardized coefficient		Standardized coefficient	tvalue
	<i>B</i>	Standard estimate error	β	
Cultural edification	.30	.09	.23	3.26***
Feelings of parents and children	-.00	.11	-.00	-.03
Urging from parents	-.04	.11	-.03	-.35
Trust of studies	.21	.17	.08	1.21
Communication between parents and children	-.20	.12	-.11	-1.68
Parents' expectation	-.05	.20	-.01	-.23

Reference: $F = 3.71^{***}$; $R = .22$; $R^2 = .05$

*** $p < .001$.

The research result shows that there is a predictive function of junior high school students' inner-family social capital to the Math subject grade ($F = 3.71, p < .001$). Each level of inner-family social capital totally can explain 5% ($R^2 = .05$) of the Math subject grade of the academic achievement. Thus, inner-family social capital is effective to the Math subject grade of the academic achievement.

To further analyze data, we can understand inner-family social capital's cultural edification ($\beta = .23, t = 3.26, p < .001$) can positively predict junior high school students' Math subject grade of the academic achievement. This means that the more junior high school students' cultural edification, the better performance of the Math subject grade. Other levels' predictive power to Math subject grade of the academic achievement is not significant.

(4) The predictive analysis of junior high school students' inner-family social capital to the Society subject grade

To use each level of inner-family social capital as the predictive variable, and its effect on the academic subject like the Society subject grade to run multiple regression. The result is shown in Table 19.

Table 19: the multiple regression analysis table of junior high school students' inner-family social capital to the Society subject grade

Input variable	Un-standardized coefficient		Standardized coefficient	tvalue
	<i>B</i>	Standard estimate error	β	
Cultural edification	.27	.09	.21	2.90**
Feelings of parents and children	-.08	.11	-.06	-.74
Urging from parents	-.16	.11	-.10	-1.40
Trust of studies	.43	.17	.17	2.54*
Communication between parents and children	-.17	.12	-.10	-1.45
Parents' expectation	.11	.20	.03	.53

Reference: $F = 3.62^{**}$; $R = .22$; $R^2 = .05$

* $p < .05$. ** $p < .01$.

The research result shows that there is a predictive function of junior high school students' inner-family social capital to the Society subject grade ($F = 3.62$, $p < .01$). Each level of inner-family social capital totally can explain 5% ($R^2 = .05$) of the Society subject grade of the academic achievement. Thus, inner-family social capital is effective to the Society subject grade of the academic achievement.

To further analyze data, we can understand inner-family social capital's cultural edification ($\beta = .23$, $t = 3.26$, $p < .001$) and trust of studies ($\beta = .09$, $t = 2.90$, $p < .01$) can positively predict junior high school students' Society subject grade of the academic achievement. This means that the more junior high school students' cultural edification and the stronger of trust of studies, the better performance of the Society subject grade. Also, the predictive power of cultural edification is higher than trust of studies. Other levels' predictive power to Society subject grade of the academic achievement is not significant.

(5) The predictive analysis of junior high school students' inner-family social capital to the Science subject grade

To use each level of inner-family social capital as the predictive variable, and its effect on the academic subject like the Science subject grade to run multiple regression. The result is shown in Table 20.

Table 20: the multiple regression analysis table of junior high school students' inner-family social capital to the Science subject grade

Input	Un-standardized coefficient		Standardized coefficient	tvalue
	<i>B</i>	Standard estimate error	β	
Cultural edification	.34	.09	.26	3.72***
Feelings of parents and children	.07	.11	.05	.64
Urging from parents	-.20	.11	-.12	-1.68
Trust of studies	.29	.17	.12	1.69
Communication between parents and children	-.24	.12	-.14	-2.00
Parents' expectation	.13	.20	.04	.68

Reference: $F = 5.19^{***}$; $R = .26$; $R^2 = .07$

*** $p < .01$.

The research result shows that there is a predictive function of junior high school students' inner-family social capital to the Science subject grade ($F = 5.19$, $p < .001$). Each level of inner-family social capital totally can explain 7% ($R^2 = .07$) of the Science subject grade of the academic achievement. Thus, inner-family social capital is effective to the Science subject grade of the academic achievement.

To further analyze data, we can understand inner-family social capital's cultural edification ($\beta = .26$, $t = 3.72$, $p < .001$) can positively predict junior high school students' Science subject grade of the academic achievement. This means that the more junior high school students' cultural edification, the better performance of the Science subject grade.

Other levels' predictive power to Science subject grade of the academic achievement is not significant.

(6) The predictive analysis of junior high school students' inner-family social capital to the academic total grades

To use each level of inner-family social capital as the predictive variable, and its effect on the academic total grades to run multiple regression. The result is shown in Table 21.

Table 21: the multiple regression analysis table of junior high school students' inner-family social capital to the academic total grades

Input variable	Un-standardized coefficient		Standardized coefficient	tvalue
	B	Standard estimate error	β	
Cultural edification	.33	.09	.25	3.57***
Feelings of parents and children	-.06	.11	-.04	-.57
Urging from parents	-.13	.11	-.08	-1.19
Trust of studies	.10	.17	.16	2.38*
Communication between parents and children	-.18	.12	-.10	-2.00
Parents' expectation	.14	.20	.04	.68

Reference: $F = 5.19^{***}$; $R = .26$; $R^2 = .07$

*** $p < .01$.

The research result shows that there is a predictive function of junior high school students' inner-family social capital to academic total grades ($F = 5.19, p < .001$). Each level of inner-family social capital totally can explain 7% ($R^2 = .07$) of the academic total grades. Thus, inner-family social capital is effective to the academic total grades.

To further analyze data, we can understand inner-family social capital's cultural edification ($\beta = .25, t = 3.57, p < .001$) and trust of studies ($\beta = .16, t = 2.38, p < .05$) can positively predict junior high school students' academic total grades. This means that the

more junior high school students' cultural edification and the stronger of trust of studies, the better performance of the academic total grades. Also, the predictive power of cultural edification is higher than trust of studies. Other levels' predictive power to the academic total grades is not significant.

This research uses each level of junior high school students' inner-family social capital and each subject of academic achievements and total grades to run multiple regression analysis. The result shows that each level of junior high school students' inner-family social capital is effective to each subject of academic achievements and total grades. This means that each level of junior high school students' inner-family social capital and each subject of academic achievements and total grades are related. All the t values from Table 4-24 to 4-29 are synthesized in the following Table 4-30.

Table 22: the table of the multiple regression t values of each level of inner-family social capital and each subject of academic achievements and total grades

Input variable	Chinese	English	Math	Society	Science	total
Cultural edification	2.11*	2.97**	3.26***	2.90***	3.72***	3.57***
Feelings of parents and children	-.82	-1.12	-.03	.74	.64	-.57
Urging from parents	-1.57	-.47	-.35	-1.40	-1.68	-1.19
Trust of studies	3.25***	1.90	1.21	2.54*	1.69	2.38*
Communication between parents and children	-1.21	-.12	-1.68	-1.45	-2.00	-2.00
Parents' expectation	1.36	.82	-.23	.53	.68	.68

* $p < .05$. ** $p < .01$. *** $p < .001$.

After comparing the table of the t values of junior high school students' inner-family social capital and each subject of academic achievements and total grades, the further analysis shows that the cultural edification of inner-family social capital in each subject, its t values are positively and significantly related. This means that cultural edification has a predictive power to all junior high school students' each subject of academic achievements. In other words, if a junior high school student can get more cultural edification in his or her family, academic achievements can also be better. There is an old Chinese proverb, which says, "You would

rather teach him how to catch fish than just give him fish”. Therefore, it is better to teach students how to use tools to get what he or she wants than just stuff things, which adults think useful knowledge, in students’ brains.

And, the trust of studies in inner-family social capital is significant to the two Chinese and the Society subject of academic achievements. This means that trust of studies has a significant prediction of power to the Chinese and Society subjects. Parents’ encouragement, praise, and trust to students will let students read and learn more actively. Those students who like to learn will have good performance.

To synthesize from the above, the major discover in this research is that parents need to provide tools and methods to teach students how to use these tools and resources well, this affects the most to junior high school students’ academic achievements. Assisting students own learning blind spots can let them selves improve their weaker subjects. What parents need is to cherish their children to strengthen children’s confidence. To let children feel happy to learn and then enjoy learning. As long as you want to learn, you will have excellent academic achievements.

6. The predictive analysis of junior high students’ each level of outer-family social capital and academic achievements

This chapter mainly discusses the predictive function of junior high students’ each level of outer-family social capital and academic achievements. Hence, in this research, each level of outer-family social capital is the predictive variable. And, the five subjects of the basic competence test are Chinese, English, Math, Society, Science, and academic total grades are the dependent variables to run multiple regression analysis.

(1) The predictive analysis of junior high school students’ outer-family social capital to the Chinese subject grade

To use each level of outer -family social capital as the predictive variable, and its effect on the academic subject like the Chinese subject grade to run multiple regression. The result is shown in Table 23.

Table 23: the multiple regression analysis table of junior high school students’ outer -family social capital to the Chinese subject grade

Input variable	Un-standardized coefficient		Standardized coefficient	
	<i>B</i>	Standard estimate error	β	<i>t</i> value
Communication	-.12	.15	-.05	.77

between parents and teachers				
Parents' exchange	-.31	.13	-.16	-2.42*
Friends' sharing	.72	.20	.20	3.64***

Reference: $F = 5.60^{***}$; $R = .19$; $R^2 = .04$

* $p < .05$. *** $p < .001$.

The research result shows that there is a predictive function of junior high school students' outer-family social capital to the Chinese subject grade ($F = 5.60, p < .001$). Each level of outer-family social capital totally can explain 4% ($R^2 = .04$) of the Chinese subject grade of the academic achievement. Thus, outer-family social capital is effective to the Chinese subject grade of the academic achievement.

To further analyze data, we can understand outer-family social capital's parents' exchange ($\beta = -.16, t = -2.42, p < .05$) can negatively predict junior high school students' Chinese subject grade of the academic achievement. And, friends' sharing ($\beta = .20, t = 3.64, p < .001$) can positively predict junior high school students' Chinese subject grade of the academic achievement. This means that the more intense of junior high school students' parents' exchange, the worse performance of the Chinese subject grade. But, more friends' sharing causes the better performance of the Chinese subject grade. Also, the predictive power of friends' sharing is higher than parents' exchange. The predictive power of the communication between parents and teachers level to Chinese subject grade of the academic achievement is not significant.

(2) The predictive analysis of junior high school students' outer-family social capital to the English subject grade

To use each level of outer-family social capital as the predictive variable, and its effect on the academic subject like the English subject grade to run multiple regression. The result is shown in Table 24.

Table 24: The multiple regression analysis table of junior high school students' outer-family social capital to the English subject grade

Input variable	Un-standardized coefficient	Standardized coefficient	tvalue
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	<i>B</i>	Standard estimate error	β	
Communication between parents and teachers	-.27	.15	-.11	-1.80
Parents' exchange	-.17	.13	-.09	-1.36
Friends' sharing	.98	.19	.28	5.05***

Reference: $F = 9.15^{***}$; $R = .24$; $R^2 = .06$

*** $p < .001$.

The research result shows that there is a predictive function of junior high school students' outer-family social capital to the English subject grade ($F = 9.15$, $p < .001$). Each level of outer-family social capital totally can explain 6% ($R^2 = .06$) of the English subject grade of the academic achievement. Thus, outer-family social capital is effective to the English subject grade of the academic achievement.

To further analyze data, we can understand outer-family social capital's friends' sharing ($\beta = .28$, $t = 5.05$, $p < .001$) can positively predict junior high school students' English subject grade of the academic achievement. This means that the more junior high school students' outer-family social capital's friends' sharing, the better performance of the English subject grade. Other levels' predictive power to English subject grade of the academic achievement is not significant.

(3) The predictive analysis of junior high school students' outer-family social capital to the Math subject grade

To use each level of outer-family social capital as the predictive variable, and its effect on the academic subject like the Math subject grade to run multiple regression. The result is shown in Table 25.

Table 25: The multiple regression analysis table of junior high school students' outer-family social capital to the Math subject grade

Input variable	Un-standardized coefficient	Standardized coefficient	<i>t</i> value
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	<i>B</i>	Standard estimate error	β	
Communication between parents and teachers	-.15	.16	-.06	-.98
Parents' exchange	.03	.13	.02	.26
Friends' sharing	.39	.20	.11	1.93

Reference: $F=1.64$; $R = .11$; $R^2 = .01$

The research result shows that there is no predictive function of each level's outer-family social capital to the Math subject grade of the academic achievement.

(4) The predictive analysis of junior high school students' outer-family social capital to the Society subject grade

To use each level of outer-family social capital as the predictive variable, and its effect on the academic subject like the Society subject grade to run multiple regression. The result is shown in Table 26.

Table 26: The multiple regression analysis table of junior high school students' outer-family social capital to the Society subject grade

Input variable	Un-standardized coefficient		Standardized coefficient	<i>t</i> value
	<i>B</i>	Standard estimate error	β	
Communication between parents and teachers	-.20	.15	-.08	-1.33
Parents' exchange	-.22	.13	-.11	-1.70
Friends' sharing	.74	.20	.21	3.77***

Reference: $F = 5.54^{***}$; $R = .19$; $R^2 = .04$

*** $p < .001$.

The research result shows that there is a predictive function of junior high school students' outer-family social capital to the Society subject grade ($F = 5.54, p < .001$). Each level of outer-family social capital totally can explain 4% ($R^2 = .04$) of the Society subject grade of the academic achievement. Thus, outer-family social capital is effective to the Society subject grade of the academic achievement.

To further analyze data, we can understand outer-family social capital's friends' sharing ($\beta = .21, t = 3.77, p < .001$) can positively predict junior high school students' Society subject grade of the academic achievement. This means that the more junior high school students' outer-family social capital's friends' sharing, the better performance of the Society subject grade. Other levels' predictive power to Society subject grade of the academic achievement is not significant.

(5) The predictive analysis of junior high school students' outer-family social capital to the Science subject grade

To use each level of outer-family social capital as the predictive variable, and its effect on the academic subject like the Science subject grade to run multiple regression. The result is shown in Table 27.

Table 27: the multiple regression analysis table of junior high school students' outer-family social capital to the Science subject grade

Input variable	Un-standardized coefficient		Standardized coefficient	tvalue
	B	Standard estimate error	β	
Communication between parents and teachers	-.09	.16	-.03	-.55
Parents' exchange	-.11	.13	-.06	-.83
Friends' sharing	.56	.20	.16	2.81**

Reference: $F = 2.66^*$; $R = .13$; $R^2 = .02$

* $p < .05$. ** $p < .01$.

The research result shows that there is a predictive function of junior high school students' outer-family social capital to the Science subject grade ($F=2.66, p<.05$). Each level of outer-family social capital totally can explain 2% ($R^2 = .02$) of the Science subject grade of the academic achievement. Thus, outer-family social capital is effective to the Science subject grade of the academic achievement.

To further analyze data, we can understand outer-family social capital's friends' sharing ($\beta = .16, t=2.81, p<.01$) can positively predict junior high school students' Science subject grade of the academic achievement. This means that the more junior high school students' outer-family social capital's friends' sharing, the better performance of the Science subject grade. Other levels' predictive power to Science subject grade of the academic achievement is not significant.

(6) The predictive analysis of junior high school students' outer-family social capital to the academic total grades

To use each level of outer-family social capital as the predictive variable, and its effect on the academic total grades to run multiple regression. The result is shown in Table 28.

Table 28: the multiple regression analysis table of junior high school students' outer-family social capital to the academic total grades

Input variable	Un-standardized coefficient		Standardized coefficient	tvalue
	B	Standard estimate error	β	
Communication between parents and teachers	-.19	.15	-.08	-1.26
Parents' exchange	-.17	.13	-.09	-1.30
Friends' sharing	.77	.20	.21	3.89***

Reference: $F=5.39^{***}$; $R = .19$; $R^2 = .04$

*** $p < .001$.

The research result shows that there is a predictive function of junior high school students' outer-family social capital to academic total grades ($F=5.39, p<.001$). Each level

of outer-family social capital totally can explain 4% ($R^2 = .04$) of the academic total grades. Thus, outer-family social capital is effective to the academic total grades.

To further analyze data, we can understand outer-family social capital's friends' sharing ($\beta = .21$, $t=3.89$, $p<.001$) can positively predict junior high school students' academic total grades. This means that the more junior high school students' outer-family social capital's friends' sharing, the better performance of the academic total grades. Other levels' predictive power to the academic total grades is not significant.

This research uses junior high school students' outer-family social capital and each subject of academic achievements and total grades to run multiple regression analysis. The result shows that junior high school students' outer-family social capital is effective to each subject of academic achievements and total grades. This means that outer-family social capital and each subject of academic achievements and total grades are related.

Table 29: The table of the multiple regression t values of each level of outer-family social capital and each subject of academic achievements and total grades

Input variable	Chinese	English	Math	Society	Science	total
Communication between parents and teachers	.77	-1.80	-.98	-1.33	-.55	-1.26
Parents' exchange	-2.42	-1.36	.26	-1.70	-.83	-1.30
Friends' sharing	3.64***	5.05***	1.93	3.77***	2.81***	3.89***

*** $p<.001$.

After comparing the table of the t values of junior high school students' outer-family social capital and each subject of academic achievements and total grades, the further analysis shows that in each subject except Math, the outer-family social capital's friends' sharing, t values are positively and significantly related. This means that friends' sharing has a significant power of prediction to each subject of junior high school students' academic achievements. In other words, if junior high school students' parents can let students find an excellent role model to learn from, their academic achievements also can have a better performance. In 黃懷德 (2008)'s research, it is mentioned that "role model learning" is an important step of Bandura's social learning theory. *When we see others earn rewards because of learning, we will take a reference for self actions.*

To synthesize from the above, the major discover in this research is that the most influential to junior high school students' academic achievements is to know how to accept or reject educational problems discussed by parents and friends. To get a beneficial educational method for students to learn from discussions and to know what kind of academic trouble students will face and ask for help from friends' experiences.

6. The difference analysis of junior high school students' parents and children's families' social capital

This research will separately discuss the difference situation of the table of the total amount of parents and children's families' social capital and the average of each level. This chapter will compare the difference of the table of the total amount of parents and children's families' social capital and the average of each level in the following.

(1) The difference analysis of the table of the total amount of inner-families' social capital and the average of each level

First, different roles like parents and children are independent variables. And, separately, the table of the total amount of inner-families' social capital and the average of each level are dependent variables to run independent sample t test. To test the difference of different junior high school students' roles in the table of the total amount of inner-families' social capital and each level, and to list all the averages and standard deviations in Table 4-38.

Table 30: the independent sample testing analysis of different roles in the table of the total amount of inner-families' social capital and each level

level	role	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i> value
Cultural edification	children	445	31.02	7.62	-5.03***
	parents	445	33.69	8.18	
Feelings of parents and children	children	445	31.19	6.52	-4.13***
	parents	445	33.02	6.69	
Urging from parents	children	445	24.47	6.12	-7.60***
	parents	445	27.56	5.98	
Trust of studies	children	445	16.67	3.92	-5.77***
	parents	445	18.03	3.08	
Communication between parents and children	children	445	25.37	5.52	-3.67***
	parents	445	26.67	5.05	

Parents' expectation	children	445	16.29	2.78	.35
	parents	445	16.23	2.59	
The table of the total amount of inner-family	children	445	145.02	25.91	-5.88***
	parents	445	155.14	25.46	

*** $p < .001$.

In each level of inner-families' social capital and the total amount table, the averages of parents are all higher than children. Thus, parents always feel "I have already given children a lot", "I already taken care of them a lot", "I have already been strict to them", "I have already always praised children than blamed", and "I always spend a lot of time to communicate with them, but children don't feel the same". On the level of parents' expectation, there is no significant difference of parents and children's averages.

(2) The difference analysis of the table of the total amount of parents and children's outer-families' social capital and the average of each level

First, different roles like parents and children are independent variables. And, separately, the table of the total amount of outer-families' social capital and each level are dependent variables to run independent sample t test. To test the difference of different junior high school students' roles in the table of the total amount of outer-families' social capital and each level, and to list all the averages and standard deviations in Table 4-39.

Table 31: the independent sample testing analysis of different roles in the table of the total amount of outer-families' social capital and each level

level	role	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t</i> value
Communication between parents and teachers	children	445	12.95	3.92	-3.54***
	parents	445	13.88	3.95	
Parents' exchange	children	445	15.50	5.02	-1.17
	parents	445	15.78	4.57	
Friends' sharing	children	445	10.66	2.74	1.17
	parents	445	10.46	2.27	
The table of the	children	445	39.10	9.77	-1.49

total amount of outer-family	parents	445	40.03	8.90
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*** $p < .001$.

On the level of communication between parents and teachers, there is a significant difference of parents and children's averages. Parents' averages are significantly higher than children's. There is no significant difference on other levels.

IV. Conclusion and Suggestion

1. Conclusion

(1) About different background variable's junior high school students' inner-family social capital, there is no significant difference on most levels

On the level of cultural edification, there is a significant difference on self-evaluation different schoolwork level. The average of those students who self-evaluate schoolwork level "good" is significantly higher than those who self-evaluate schoolwork level "not good" and "not very good". On the level of different self-evaluation of interpersonal relationship, there is a great difference, but there is no especially huge difference among each level. There is a significant difference on the aspect of family's social and economical status. A student who has a high family social and economical status, cultural edification is significantly higher than those whose family social and economical status is low. The gender variable to cultural edification is not significantly different.

On the level of feelings of parents and children, there is no significant difference on four background variables, which are different gender, different self-evaluation schoolwork level, different self-evaluation interpersonal level, and different family social and economical status.

On the level of urging from parents, there is a significant difference on different self-evaluation schoolwork level. The average of students who self-evaluate schoolwork level "average" is significantly higher than those whose self-evaluate schoolwork level "not good".

On the level of family social and economical status, there is a significant difference. Students who have a high family social and economical status, urging from parents is significantly higher than those students whose family social and economical status is low. The gender and different interpersonal relationship level variables have no significant difference on urging from parents.

On the level of trust of studies, there is a great difference on the self-evaluation different schoolwork level. The average of those students who self-evaluate schoolwork level "good" is significantly higher than those who self-evaluate schoolwork level "not good" and "not very good". There is significant difference on family social and economical status. Students who have a high family social and economical status, urging from parents is significantly higher than those students whose family social and economical status is low. The gender and different

interpersonal relationship level variables have no significant difference on urging from parents.

On the level of communication between parents and children, the significant difference of gender, the average of female is significantly higher than male. There is also a significant difference on the different interpersonal relationship self-evaluation level. The average of those students who self-evaluate interpersonal relationship level “good” is significantly higher than those who self-evaluate interpersonal relationship level “not very good”. The self-evaluate different schoolwork level and the family social and economical status variables have no significant difference on the communication between parents and children.

On the level of parents’ expectation, there is a significant difference on self-evaluation different schoolwork level. The average of those students who self-evaluate schoolwork level “very good” is significantly higher than those who self-evaluate schoolwork level “average”, “not good”, and “not very good”. The gender, different self-evaluation interpersonal relationship level, and family social and economical status variables have no significant difference on communication between parents and children.

On the table of the total amount of inner-family social capital, there is a significant difference on the level of self-evaluation different schoolwork. The average of those students who self-evaluate schoolwork level “good” is significantly higher than those who self-evaluate schoolwork level “not good” and “not very good”. There is also a significant difference on different interpersonal relationship self-evaluation level, but there is no especially huge difference among each level. There is also a significant difference on the family social and economical status. Students who have a high family social and economical status, the table of the total amount of the inner-family social capital is significantly higher than students whose family social and economical status is low. The gender variable has no significant difference on the table of the total amount of the inner-family social capital.

(2) About different background variable’s junior high school students’ outer-family social capital, there is no significant difference on most levels

On the level of communication between parents and teachers, there is a significant difference on gender. The average of male is higher than female. The three variables self-evaluation different schoolwork level, self-evaluation different interpersonal relationship level, and family different social and economical status have no significant difference on the communication between parents and teachers level.

On the level of parents’ exchange, there is a significant difference on gender. The average of male is higher than female. The three variables self-evaluation different schoolwork level, self-evaluation different interpersonal relationship level, and family different social and economical status have no significant difference on the parents’ exchange level.

On the level of friends' sharing, there is a significant difference on self-evaluation different schoolwork level. The average of those students who self-evaluate schoolwork level "good" is significantly higher than those who self-evaluate schoolwork level "not good". The average of those students who self-evaluate schoolwork level "average" is significantly higher than those students whose self-evaluate schoolwork level "not good". The three variables gender, self-evaluation different interpersonal relationship level, and family different social and economical status have no significant difference on the friends' sharing level.

On the table of the total amount of outer-family social capital, there is a significant difference on gender. The average of male is higher than female. The three variables self-evaluation different schoolwork level, self-evaluation different interpersonal relationship level, and family different social and economical status have no significant difference on the table of the total amount of outer-family social capital.

(3) Junior high school students' inner-family social capital is significantly related to academic achievements; outer-family social capital is significantly related to academic achievements

1. Junior high school students' inner-family social capital is significantly related to academic achievements

The grade of the Chinese subject and cultural edification, feelings of parents and children, trust of studies, communication between parents and children, parents' expectation, and the table of the total amount is significantly and positively related.

The grade of the English subject and cultural edification, feelings of parents and children, urging from parents, trust of studies, communication between parents and children, parents' expectation, and the table of the total amount is significantly and positively related.

The grade of the Math subject and cultural edification, urging from parents, trust of studies, and the table of the total amount is significantly and positively related.

The grade of the Society subject and cultural edification, trust of studies, and the table of the total amount are significantly and positively related.

The grade of the Science subject and cultural edification, feelings of parents and children, urging from parents, trust of studies, and the table of the total amount are significantly and positively related.

The grade of the total grade and cultural edification, feelings of parents and children, urging from parents, trust of studies, parents' expectation, and the table of the total amount are significantly and positively related.

This result shows that inner-family social capital has taken an important step of academic achievements. If students want to have well academic achievements, except children's own

talent and motivation, parents' providing of children's quality cultivation, support, encouragement, and trust are all motivation sources of children's academic achievements. Furthermore, textbooks are not the only knowledge source. It is necessary to teach children to read a wide variety of books and not limiting children's knowledge origin. To read books not taught in class is not a waste of time for children, but to learn broad aspects of knowledge. It is not only helpful to current academic behavior, but also provides students a way for future job finding and interests finding.

2. Junior high school students' outer-family social capital is mostly not significantly related to academic achievements

There is a significant relationship of the grades of the Chinese, English, Society, Science, and the total grade and outer-family social capital's friends' sharing

This result shows that a learnable role model is important to junior high school students. But, junior high school students put too much emphasis on classmates. Sometimes, one will blindly accept any group's invitation in order not to be isolated. Parents in order not to let children be influenced from their classmates and satisfy children's needs of classmates in this process. The best way is to help find friends their selves. Accidentally, their own children and the self-searching friends become good friends. Therefore, in the meetings of parents and friends, don't dismiss your children. To let each other's children imitate and learn from each other can increase parents and children's intimate feelings through adults' meetings and then family meetings.

(4) Junior high school students' family social capital has a significant predictive power to academic achievements

Junior high school students' inner-family social capital has a significant predictive power to each subject of academic achievements and total grades. The cultural edification level has the biggest predictive power to students' academic achievements, like each subject and total grade are both significant. The other trust of studies level also has a positive predictive power on the grades of Chinese, Society, and total grade subjects.

Junior high school students' outer-family social capital has a significant predictive power to each subject of academic achievements and total grades. The parents' exchange level has a positive predictive power to students' Chinese subject grade. The friends' sharing level has a positive predictive power to students' Chinese, English, Science subjects, and the total grades.

In sum, in junior high school students' living, family members and friends all are important. It is important to have family members' support and encouragement and friends' help and experience learning.

2. Suggestion

According to the literature review, research findings, and conclusion, this chapter focuses on parents, teachers, and education administrative organizations and future research directions. Suggestions are separately given to give reference to related people.

(1) Suggestions for parents

1. Parents have to constantly learn and ask for self-growing first

Parents can participate in community colleges more often. Through constant self-growing, can let you get in touch with newspapers and books, or, to participate in museums to increase your cultural capacity. The development of reading habit from parents can influence children to have a well reading habit.

2. Parents bring children to accept cultural influence

Parents can use holidays to bring children to bookstores and libraries to read new books and discuss the feelings after reading. Trough developing the above habit let children have reading habit unconsciously. To bring children to galleries and museums to see exhibits and enjoy art performances, not only to cultivate children's right and healthy recreation, but also can increase feelings of parents and children. Though pressure-less chatting can fulfill communication between parents and children. Also, knowledge learned from activities can be applied to acknowledge capability and learning of academic achievements. It is helpful to children's acknowledge learning and academic achievements.

3. To put emphasis on parents and children's effective connection

Social capital is invisible and can create next generation's human capital (Coleman, 1988). The more important is that the benefit created by social capital doesn't need to be paid by money, which can be afforded by each family. In the modern society of depression and busy life, parents need to put more emphasis on the investment of social capital to let children have well academic achievements. Parents can enhance the intimate connection between parents and children. For example, to use short dinner or snack time daily to turn off TV and begins easy conversation with children. To understand what children think can be familiar with the newest junior high school student's generation. Through conversation, parents shouldn't always talk about history and use a scold tone. Meanwhile, to be concerned with academic achievements, one should put emphasis on the difficulties of leaning and making friends rather than asking for achievements only to create pressure for children. The express of love, the acceptance of warmness, active listening, and mutual respect can maintain well parents and children relationship and effective discipline. Further, to put emphasis on one self's academic achievements.

4. To maintain good relationship with classmates' parents and friends

It is found in the research that the exchange of parents and teachers and participation in school activities, not only can understand children's school behavior, but also can let children know parents attention and have well performance on academic achievements. Hence, although parents are busy, once in a while to appear at school also can let children feel happy. Besides, parents' connection and maintaining friends' friendship are also important. Especially to find learning role model from friends' children to your selves' children. But, parents should notice that it is no need to let learning role model becomes the pressure of learning to be perfect.

(2) Suggestions for teachers

1. To manage parents' educational activities

A family is still the most influential place to students. Parents' words and behavior always affect children invisibly. Schools can use art activities and sport activities with written information to let parents understand children's in-school behavior and take this opportunity to take care of children's learning. For encouraging parents' participation to parents' occupational education, the way of encouragement can increase parents' participation ratio through teachers' suggestions about schools related preparation.

2. To connect parents actively

Some parents know how to use the way of communication between parents and teachers wisely to help children to learn. But, most parents feel embarrassed to get to school physically and trouble teachers. Therefore, if teachers actively connect with parents, not only can teach weaker position's parents to search for resources, but also can decrease frictions among parents.

3. To wisely use class meetings with parents

Annually, schools will all announce a class meeting with parents. Teachers can use this opportunity to introduce parents to each other. This can help parents to build up a class connection net and uses this connection net to assist each activity in class.

(3) Suggestions for schools

1. To manage a course for parents' occupational education

Parents pay a lot of attention on children's academic achievements, but, usually the opposite to school-hold activities. Therefore, schools can use the way of encouraging students. To let students go home and ask parents to attend schools physically to participate in courses.

The time of courses also needs to fit parents' schedules like, holidays or nights. The arrangement of courses needs to be more practical than just emphasizing on theory. The content also needs to be diverse to fit parents' different needs.

2. To use diverse ways to let parents understand how schools function

Schools can use the front door's electronic screen or school webpage to promote school activities. Parents can use this to understand schools' information and get students' learning information. The written journal information also is one of the promoting ways.

3. To build up class-owned books

Schools can assist classes to build up class-owned books. To use part of the books from the library and separate them into different book cases and to let each class can read. This can increase a great amount of reading opportunities and encourage students to write reading reports through the ways of encouragements.

論文三

Collective Teacher Efficacy, Self Efficacy, Professional Development, and School Belongingness in Taiwan

Abstract

The main purpose of this research is to investigate the relationships among collective teacher efficacy, self-efficacy, professional development and school belongingness of junior high school teachers in Taiwan. The research subjects are 340 junior high school teacher in 15 schools in western Taiwan. A survey questionnaire is designed for data collection from the survey participants. The Survey instrument mainly includes a Collective Teacher Efficacy Inventory, a Teacher Self-Efficacy Inventory, a Teacher professional Development Inventory, a School Belongingness Inventory, and a Basic Inventory for demographic information collection. This investigation is basically a pretest of the survey instrument. The data collected were than analyzed through descriptive analysis, reliability analysis, Pearson correlation, *t*-test, and factor analysis.

The main research findings include: The number of female research subjects is double to that of the male subjects. In this study, there are more junior high school teachers receiving their professional training from teacher education programs at general universities than those from normal universities. *t*-test analysis shows that the attitudes/opinions of the research subjects toward collective teacher efficacy, teacher self-efficacy,

teacher professional development, and teacher school belongingness varies significantly based on the differences of their possessing schooling administrative responsibility, gender, and the highest degree of education received. Additionally, the relationships among collective teacher efficacy, teacher self-efficacy, teacher professional development, and teacher school belongingness are positive and significant. Finally, the researcher then provides suggestions regarding policy making/implementation and the development of a survey inventory measuring extrinsic characteristics for future research based on the research findings.

Keywords: Collective Teacher Efficacy, Self-Efficacy, Professional Development, and School Belongingness

Introduction

This study mainly investigates relationships among collective efficacy, self-efficacy, professional development, and school belongingness of junior high school teachers in Taiwan. A questionnaire survey is the main research method for data collection. Research subjects include junior high school teachers in western Taiwan. This research contributes to teachers' school belongingness, and professional efficacy and development.

Self-efficacy, collective efficacy, professional development, and school belongingness are important variables in this research. The literature review of the research variables are described as follows :

Teacher Efficacy: Teacher efficacy is defined as the extent of a teacher's belief regarding his/her ability to influence students' performance (Berman, McLaughlin, Bass, Pauly, & Zellman, 1977). It is "teachers' belief or conviction that they can influence how well students learn, even those who may be difficult or unmotivated" (Guskey & Passaro, 1994, p.628). Henson (2001) states that general teaching efficacy means a teacher's ability to overcome negative obstacles/hindrances and to positively influence students' learning. In educational discussion regarding efficacy, "[t]he self-efficacy of teachers" "the sense of efficacy of teachers," and "the collective efficacy of the school" are the very common issues in relevant research.

Teacher Self Efficacy: Self-efficacy is generally defined as one's self-capacity belief of motivation and achievement in favorably accomplishing tasks (Bandura, 1986, 1997; Schell et al., 1995; Schunk & Miller, 2002). Bandura describes "self-efficacy belief" as individuals' self-evaluation/assessment on ability regarding the level of intended performance/attainment (Bandura, 1977). He also defined self-efficacy as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p.2).

Collective Teacher Efficacy: Collective teacher efficacy is "the perception of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students" (Goddard, Hoy, & Hoy, 2000, p. 480). Research often shows that collective teacher efficacy have positive effects on students' learning outcomes/academic achievements (Bandura, 1993; Goddard, 2001; Goddard et al., 2000; Goddard, Hoy, & LoGerfo, 2003). Bandura (2000) indicates that measuring/collecting individual teacher efficacy beliefs and individual teachers' evaluation/assessment of their group's capacity both to the school level are the two very

common ways for data collection on collective teacher efficacy.

Belongingness: Somers defines belongingness as “the need to be and perception of being involved with others at differing interpersonal levels ... which contributes to one’s sense of connectedness (being part of, feeling accepted, and fitting in), and esteem (being cared about, valued and respected by others)” (1999, p.16). Research shows people whose belongingness is taken away tend to lose self-esteem (Maslow, 1987) and gain more depression (Sargent et al., 2002), stress and anxiety (Anant, 1967). These people are also easily to be deprived of happiness and general well-being (Lakin, 2003).

Professional Development: Professional development generally means the development of one’s professional role. Teacher professional development is defined as teachers’ professional growth and increasing capacity in systematical review of his/her teaching itself via obtaining more experiences. The meaning of professional development is broader than that of “career development” or “staff development” (Glatthorn, 1995, p.41) It is not completely the same as “staff development” or “vocational training” although workshops or short-term courses often provide opportunities for teachers to increase special/specific knowledge. Villegas-Reimers (2003) indicates that teacher professional development not only benefits personal contentment/gratification but also positively affects teachers’ belief and practice, students’ learning, and educational revolution.

Literature on Relationships among Teachers’ Self-efficacy, Collective Efficacy, Professional

Development, and School Belongingness: Research indicates that teachers with strong efficacy generally tend to accept new ideas/concepts and to adopt/implement new teaching strategies in order to meet/satisfy the needs of students (Berman et al., 1977; Guskey, 1988, Stein & Wang, 1988). Teachers with higher degree of efficacy often show more teaching devotion (Allinder, 1994; Guskey, 1984 ; Hall et al., 1992) and have great teaching commitment (Coladarci, 1992; Evans & Tribble, 1986; Trentham et al., 1985). They also tend to continually contribute their careers to teaching professional (Burley, et al., 1991; Glickman, & Tamashiro, 1982).

Teachers’ self-efficacy is relate to the satisfaction of their professional development and both the ranking and competition of their schools (Trentham, Silvern, & Brogdon, 1985). Many studies have reported that self-efficacy belief of teachers affects recognition and attainment/accomplishment of their students (Moore & Esselman, 1992, 1994; Muijs & Rejnolds, 2001; Ross, 1992, 1998).

Additionally, teachers’ self-efficacy beliefs play a vital role in influencing and strengthening teachers’teaching/school commitment and job satisfaction (Caprara, Barbaranelli, Borgogni, Petitta et al, 2003; Caprara, Barbaranelli, Borgogni, & Steca, 2003). Strong self-efficacy enhances/increases teachers’ firm commitment toward their professional development and the cooperative/coordination relationships among parents and their colleague (Coladarci, 1992; Hoover-Dempsey, Bassler, & Brissie, 1992; Imants & Van Zoelen, 1995). Teachers with self-efficacy respect school regulations more, have more contribution to schooling, and often view a school as a system with capacity for its own tasks (Caprara, Barbaranelli, Borgogni, Petitta, & Rubinacci, 2003; Caprara, Barbaranelli, Borgogni, & Steca, 2003).

A higher degree of teacher efficacy is associated with a sound organizational environment and atmosphere (Hoy & Woolfolk, 1993) 、well-structured and positive schooling climate (Moore & Esselman, 1992), and better collective efficacy (Fuller & Izu, 1986; Newmann, Rutter & Smith, 1989). A study (Henson, 2000) reports that teaching efficacy is associated with cooperation/coordination among teachers. Other studies also support the significant influences of teacher efficacy on teaching motivation and

professional performance/outcome (Bandura, 1997; Ross, 1998; Tschannen-Moran & Woolfolk Hoy, 2001; Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998; Woolfolk & Hoy, 1990; Woolfolk, Rosoff, & Hoy, 1990; Woolfolk Hoy & Davis, 2006).

Additionally, a study reports that teachers with higher level of efficacy have stronger teaching commitment and better ability in planning and organizing programs/activities. Teacher with better efficacy are more open to new information/concepts and more willing to implement/experiment new pedagogical strategies to meet the needs of their students (Cousins & Walker, 1995a, b; Guskey, 1988; Stein & Wang, 1988). Additionally, they tend to have higher/stronger commitment toward their professional development and easily apply their professionalism into the constructive/beneficial influences on student learning outcomes and teacher self-efficacy (Ashton & Webb, 1986; Podell & Soodak, 1993; Tschannen-Moran & Woolfolk Hoy, 2001).

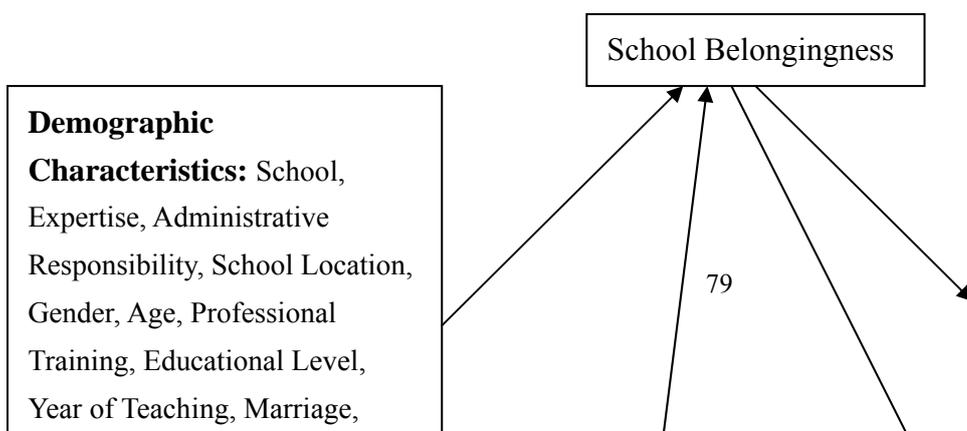
Therefore, based on the preceding description, the researcher then summarizes that both collective teacher efficacy and teacher self-efficacy are positively related to teacher professional development. Teacher self-efficacy is strongly associated with collective teacher efficacy. Teachers' senses of school belongingness have a strong relationship with collective teacher efficacy. Finally, teachers' senses of school belongingness also influence their senses of self-efficacy.

Methodology

This research studies the relationships among collective efficacy, self-efficacy, professional development, and school belongingness of junior high school teachers in western Taiwan. A questionnaire survey is the main research method for investigating the relationships among collective efficacy, self-efficacy, professional development, and school belongingness of the research subjects – junior higher school teachers in Taiwan. The researcher used cluster sampling method to invite junior high schools teachers to participate in the research. Data collected through the questionnaire survey are then analyzed via descriptive and inferential statistical methods

Research Framework:

Based on the literature review, the research designs the research framework as follows:



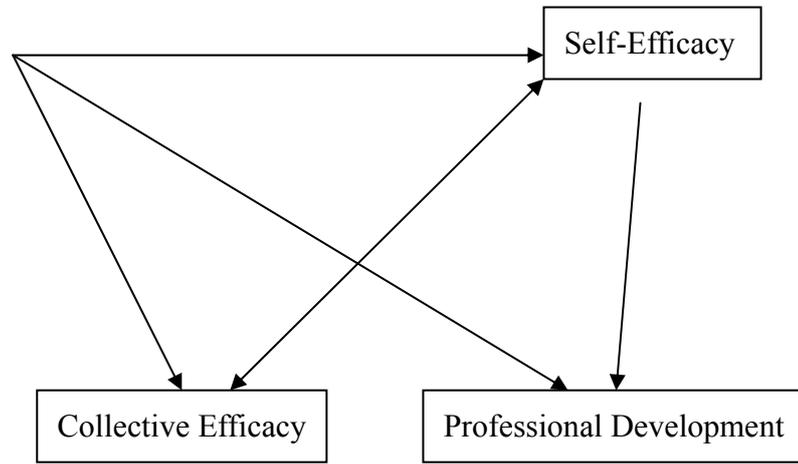


Figure1. Research Framework

Basically, the researcher assumes that demographic characteristics would influence collective teacher efficacy, teacher self-efficacy, teacher professional development, and teacher school belongingness of the research subjects. Teacher school belongingness affects junior high school teachers' self-efficacy and professional development. Additionally, teacher self-efficacy influences teacher professional development. Teacher school belongingness is strongly associated with collective teacher efficacy. Finally, teacher self-efficacy is also positively related to collective teacher efficacy.

Research Subjects

Teachers in 15 junior high schools in western Taiwan are the research subjects of this study. The researcher uses cluster sampling method to draw the research subjects to participate in the questionnaire survey. The overall research population is junior high school teachers in Taiwan and the sampling frame is the teachers in western Taiwan. The researcher distributed 500 copies of the survey questionnaire to the research subjects and the survey was administered near the end of 2008-9 academic year. Most of the survey participants filled out the research questionnaire within 3 weeks.

Three hundred forty of the 500 (68%) teachers, from fifteen junior high schools, in western Taiwan completed the questionnaire. This investigation is the pretest of the survey instrument. The results not only benefit research on teachers but also better the further development of the survey instrument. Finally, research ethics, such as confidentiality, and the researcher's responsibility for the privacy of the research subjects are strictly obeyed. Research findings are only reported via aggregated statistical data.

Research Procedure

The survey instrument of this research was first completed in June 2009. This investigation is the pretest of the new research inventory. The researcher distributed the questionnaire to 500 teachers at 15 junior high schools in western Taiwan at the end of June, 2009. The researcher also invited the survey participants to give suggestions and feedback for further modification of this research inventory. Most of the questionnaires were filled out and mailed back to the researcher by the end of July. The survey feed back sheets show that the faster average time for the research subjects to answer all item questions is between five

to ten minutes and that all of the subjects were able to fill out the questionnaire in about twenty minutes. After this data collection, the researcher used the Statistical Package for the Social Sciences (SPSS) to analyze the research data.

Survey Instrument

For the purpose of collecting research data, the researcher develops a survey instrument via adopting and modifying other researchers' existing applicable and very useful research instruments. This survey instrument mainly includes a Collective Teacher Efficacy Inventory, a Teacher Self-Efficacy Inventory, a Teacher School Belongingness Inventory, a Teacher Professional Development Inventory, and a Basic Inventory for demographic information collection from the research subjects. These inventories are briefly introduced as follows:

I Collective Teacher Efficacy Inventory

The Collective Teacher Efficacy Inventory in this research referenced and revised the Collective Teacher Efficacy Scale in research from Roger D. Goddard, Wayne K. Hoy, and Anita Woolfolk Hoy (2000). It contains 12 positively worded and 9 (No. 2, 5, 8, 12, 13, 14, 17, 20 & 21) reversed question items inquiring junior high school teachers' attitudes/opinions toward collective teacher efficacy at their current employed schools. It required the survey participants to assess/state their agreement with question items on a Likert scale (1 = completely disagree; 2 = strongly disagree; 3 = disagree; 4 = agree; 5 = strongly agree; 6 = completely agree). The reliability analysis shows that the internal consistency reliability (Cronbach α coefficient) of this scale is 0.509, indicating not good internal consistency. From factor analysis, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is 0.889, indicating the existence of common factors among the questions.

II Teacher Self-Efficacy Inventory

The Teacher Self-Efficacy Inventory mainly adopted and modified concepts from the Self Teacher Belief Scale created by Robert and Henson (2001). It contains 36 positively worded items measuring junior high school teachers' self-belief regarding their professional efficacy. Scores are assigned to the following responses on a Likert scale: 1= completely disagree; 2= strongly disagree; 3= disagree; 4= agree; 5= strongly agree; and 6= completely agree. A higher score shows a higher degree of teacher's self-belief of his/her professional and teaching efficacy. The internal consistency reliability (Cronbach α coefficient) of this scale is .975, indicating good internal consistency. The KMO measure of sampling adequacy is 0.962, indicating the existence of common factors among the questions. This scale possesses very good construct validity and reliability.

III. Teacher Professional Development Inventory

The Teacher Professional Development Inventory mainly adopts and revised concepts/questionnaires from the Factor Influencing Teaching-Choice (FIT-Choice) Scale (Watt & Richardson, 2007) and the Teacher Identity in Physicians Scale/Questionnaire (Starr, Haley, Mazor, Ferguson, Philbin, & Quirk, 2006). It includes 35 positively worded and 5 (No. 2, 3, 38, 39 & 40) reversed question items measuring junior high school teachers' attitudes/opinions on teacher professional development. It requires the research sample to assess their agreement with question items on a Likert scale: 1= completely disagree; 2= strongly disagree; 3= disagree; 4= agree; 5= strongly agree; and 6= completely agree. The internal consistency reliability (Cronbach α coefficient) of this scale is 0.939, indicating good internal consistency. The factor analysis

shows that the KMO measure of sampling adequacy is 0.950, indicating the existence of common factors among the questions. This scale also possesses very good construct validity and reliability.

IV. Teacher School Belongingness Inventory

The Teacher School Belongingness Inventory mainly adopts and modifies the Psychological Sense of School Membership (PSSM) Scale in Goodenow's research (1993). It contains 25 positively and 5 (No. 11, 13, 15, 25 & 27) negatively worded question items assessing junior high school teachers' agreement with question items regarding school belongingness. The same as the previous scales, questionnaire respondents' responses on a Likert scale are assigned to different scores: 1= completely disagree; 2= strongly disagree; 3= disagree; 4= agree; 5= strongly agree; 6= completely agree. A higher score shows a higher degree of school belongingness of junior high school teachers. The internal consistency reliability (Cronbach α coefficient) of this scale is 0.866, indicating good internal consistency. The KMO measure of sampling adequacy is 0.953, indicating the existence of common factors among the questions. This scale possesses good construct validity and reliability.

V. The Basic inventory

This inventory mainly investigates and collects the demographic information of the research subjects. It investigates research subjects' personal information regarding school name, teaching expertise, administrative responsibility, school location, gender, age, type of professional training, highest educational degree, year of teaching experience, marital status, the number of children, wage, parental education, and parental vocation. Teachers' type of professional training is mainly classified into traditional training at normal universities and newly training from teacher education programs at general universities, and others (very few research subjects belong to this category). Parental vocations are grouped into six categories based on professionalism.

Statistical Analysis

This research uses descriptive statistical analysis, factor analysis, t-Test analysis, reliability analysis, and Pearson correlation analysis to analyze the data collected from 340 teachers in 15 junior high schools in western Taiwan. Factor analysis is used to determine the factor structure of each major inventory. *t*-Test is used to analyze the variance of the research subjects' attitudes/opinions on collective teacher efficacy, teacher self-efficacy, teacher professional development, and teacher school belongingness based on their differences in possessing schooling administrative responsibility, gender, type of professional training, degree of education received, and marital status. Pearson correlation analysis is to test the correlation significance in the overall score of collective teacher efficacy, teacher self-efficacy, teacher professional development, and teacher school belongingness.

3. Results and Conclusions

I Demographic Characteristics

Three hundred forty of the 500 (68%) teachers in western Taiwan completed the questionnaire survey. The valid data show that 101 (29.7%) responders are male and 233 (68.5%) responders are female. The age range of the research participants is between 23 and 63 years old. 131 (38.5%) teachers' age ranges from 27 to 43 years old.

159 (46.8%) teachers received their professional training from normal universities. 168 (49.4%) teachers received training from teacher education programs at general universities. The ranges of the year of teaching experience for both current schools and overall personal junior high school career are the same, from

less than one to thirty-eight years. 259 (76.2%) of the junior high school teachers have less than 11 years teaching experience at current schools. 206 (57.6%) survey participants have less than 11 years junior high school teaching experience. The valid data collected show 214 (62.9%) research participants are married and 118 (34.7%) are still single.

II *t* -Test Analysis

This study also investigates group variance in collective teacher efficacy, teacher self-efficacy, teacher professional development, and teacher school belongingness based on with/without schooling administrative responsibility, gender, type of professional training, degree of education received, and marital status. Data analysis shows that the research subjects do not show significant differences in their attitudes/opinions toward the four main research variables based on their different marital status and professional training background. Therefore, the researcher only summarizes and describes the important statistical data and information based on the research subjects' differences of possessing schooling administrative responsibility, gender and the highest degree of education received as the following tables:

Table 1 Scores for Each Research Variable Based on With/Without Administrative Responsibility

Research Variable	Administrative Responsibility		With (Yes)		Without (No)		<i>t</i> -Test
	M	SD	M	SD	M	SD	
Collective Teacher Efficacy	3.65	0.22	3.62	0.25	3.62	0.25	0.996
Teacher Self-Efficacy	4.33	0.55	4.17	0.47	4.17	0.47	2.752 **
Teacher Professional Development	4.31	0.50	4.18	0.46	4.18	0.46	2.291 *
Teacher School Belongingness	4.10	0.41	4.00	0.36	4.00	0.36	2.140 *

Table 1 indicates that the research participants with/without junior-high schooling administrative responsibility show significant variance in attitude/opinion toward teacher self-efficacy ($t = 2.752, p < 0.01$), teacher professional development ($t = 2.291, p < 0.05$), and teacher school belongingness ($t = 2.140, p < 0.05$). A junior high school teacher with schooling administrative responsibility usually has a higher sense of teacher self-efficacy, teacher professional development, and teacher school belongingness. Additionally, teachers with schooling administrative responsibility have larger variance in attitude/opinion toward teacher self-efficacy, professional development, and school belongingness than those without the responsibility.

Table 2 Scores for Each Research Variable Based on Different Gender

Research Variable	Gender	Male		Female		<i>t</i> -Test
		M	SD	M	SD	
Collective Teacher Efficacy		3.71	0.30	3.60	0.20	3.884 ***
Teacher Self-Efficacy		4.39	0.55	4.14	0.46	4.267 ***
Teacher Professional Development		4.36	0.50	4.17	0.46	3.330 **
Teacher School Belongingness		4.15	0.41	3.99	0.36	3.511 **

Table 2 reports that both male and female research participants show significant variance in their attitude/opinion toward collective teacher efficacy ($t = 3.884, p < 0.001$), teacher self-efficacy ($t = 4.267, p < 0.001$), teacher professional development ($t = 3.330, p < 0.01$), and teacher school belongingness ($t = 3.511, p < 0.01$). A male junior high school teacher on average shows a higher score on agreement with

attitude/opinion toward collective teacher efficacy, teacher self-efficacy, teacher professional development, and teacher school belongingness. Additionally, male teachers in this research generally shows a larger variance in score regarding collective teacher efficacy, teacher self-efficacy, teacher professional development, and teacher school belongingness than female teachers.

Table 3 Scores for Each Research Variable Based on the Highest Degree of Education Received

Research Variable	Degree of Education		Bachelor		Master's Graduate		t-Test
	M	SD	M	SD	M	SD	
Collective Teacher Efficacy	3.65	0.25	3.57	0.20	2.641	*	
Teacher Self-Efficacy	4.21	0.49	4.20	0.53	0.105		
Teacher Professional Development	4.20	0.49	4.26	0.47	-0.910		
Teacher School Belongingness	4.05	0.40	4.00	0.38	1.069		

Table 3 states that the junior high school teachers with a bachelor degree and those with a Master's degree only show significant variance in their attitude/opinion toward collective teacher efficacy ($t = 2.641, p < 0.05$). A junior high school teacher with a bachelor degree averagely shows a higher score on agreement with attitudes/opinions toward collective teacher efficacy. Additionally, a teacher with a bachelor's degree generally shows, on average, a little larger variance in attitude/opinion toward collective teacher variance than those with a Master's degree.

IV. Correlation among Research Variables

One main purpose of this research is to investigate the relationships among the main research variables: Collective teacher efficacy, teacher self-efficacy, teacher professional development, and teacher school belongingness. Tables 4 shows the correlation matrix describing the pair correlations among these key research variables.

Table 4. Correlation Matrix for Collective Teacher Efficacy, Teacher Self Efficacy, Teacher Professional Development, and Teacher School Belongingness

	Mean	SD	Collective Efficacy	Self Efficacy	Professional Development	School Belongingness
Collective Efficacy	3.63	0.25	1.000			
Self Efficacy	4.22	0.51	0.366	***	1.000	
Professional Development	4.22	0.49	0.311	***	0.751	***
School Belongingness	4.03	0.38	0.314	***	0.688	***

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 4 reports the following information: There is a strong positive correlation between collective teacher efficacy and teacher self-efficacy (Pearson correlation coefficient = 0.366, $p < 0.001$). The correlation between collective teacher efficacy and teacher professional development (Pearson correlation coefficient = 0.311, $p < 0.001$) is strong and positive. Additionally, a strong positive correlation exists between collective teacher efficacy and teacher school belongingness (Pearson correlation coefficient = 0.314

$p < 0.001$). There is also a strong positive correlation between teacher self-efficacy and teacher professional development (Pearson correlation coefficient = 0.751, $p < 0.001$). A strong positive correlation also exists between teacher self-efficacy and teacher school belongingness (Pearson correlation coefficient = 0.688, $p < 0.001$). Finally, there is also a strong positive correlation between teacher professional development and teacher school belongingness (Pearson correlation coefficient = 0.755, $p < 0.001$).

Summary and Discussion

Based on the information from the Basic Inventory, one research finding shows that the number of the female research participant junior high school teacher is more than the double number of the male research participant. This information indicates that “junior high school teacher” is still a typical females’ job in Taiwan. Since the 1990s, an education policy was initiated to diversify the channels of teacher professional training in Taiwan. Therefore, in this research, the research subjects receiving professional training from teacher education programs at general universities are more than those from normal universities. About two-third of the research subjects are unmarried. The correlation analysis shows that there is positive correlation between each pair of the research variables: Collective teacher efficacy and teacher self-efficacy, collective teacher efficacy and teacher professional development, collective teacher efficacy and teacher school belongingness, teacher self-efficacy and teacher professional development, teacher self-efficacy and teacher school belongingness, and teacher professional development and teacher school belongingness.

Finally, through the reliability analysis of the items in the Collective Teacher Efficacy Inventory, the correlated item-total correlation shows that items 8, 9, 17, and 21 (factor loading < 0.3) are not homogeneous with the other items in the Inventory so it is better to get rid of these four items for the revision of the formal survey instrument. The factor loading of items 2 (0.351) and 21 (0.310) also did not perform well wherefore the researcher may need to consider modifying these items also. The Collective Teacher Efficacy mainly adopted and revised the Collective Teacher Efficacy Scale developed by Goddard, Hoy, and Hoy (2000). However, some items in this scale were not suitable for the survey in Taiwan. The researcher considered that this difference may be caused by the variation in culture and working environment in Taiwan. This also means that the responses of research subjects are different from those surveyed in the U.S. is mainly resulted from the different collective and external working environment.

Conclusions and Suggestions

This research finds that the four main research variables – collective teacher efficacy, teacher self-efficacy, teacher professional training, and teacher school belongingness – have positive strong correlation between/to each other. The research subjects with different marital status and background of professional training do not show significant group variance in their attitudes/opinions on the four main research variables. However, junior high school teachers with schooling administrative responsibility show significantly higher degree of self-efficacy than those without administrative responsibility. They also significantly show higher agreement with professional development and school belongingness. Additionally, male junior high school teachers on average show significantly higher degree/agreement of collective efficacy, self-efficacy, professional development, and school belongingness than female teachers. Furthermore, bachelor’s graduates show a significantly higher degree of collective teacher efficacy than Master’s graduates.

The researcher then provides suggestions for relevant research. First, because of the concerns regarding gender balance and research findings related to gender difference, policies should encourage more males to

pursue their career as a junior high school teacher. Second, the Collective Teacher Efficacy Inventory of the survey instrument is advised to be further investigated and modified because four of the twenty-one question items are not homogeneous with the other items in the same Inventory. Finally, teacher self-efficacy, teacher professional development, and teacher school belongingness measure the intrinsic attitudes of research subjects whereas collective teacher efficacy mainly assesses research subjects' attitudes/thoughts toward extrinsic factors. Therefore, for future research, a researcher should carefully adopt and employ an existing survey instrument and should avoid issues, such as cultural differences and variance in a survey environment, that could influence the reliability and validity of a survey instrument.

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附錄三 參加 AABSS 學術研討會活動剪影



AABSS 現任主席 Dr. Norma Winston



個人上場論文發表





無研發成果推廣資料

97 年度專題研究計畫研究成果彙整表

計畫主持人：黃德祥		計畫編號：97-2629-H-212-001-MY2					
計畫名稱：政治排斥女性？或女性排斥政治？——女性青少年權力意識、政治興趣、政治偏好、政治活動及相關因素之研究							
成果項目		量化			單位	備註（質化說明：如數個計畫共同成果、成果列為該期刊之封面故事...等）	
		實際已達成數（被接受或已發表）	預期總達成數（含實際已達成數）	本計畫實際貢獻百分比			
國內	論文著作	期刊論文	0	0	0%	篇	黃德祥、魏麗敏（2009）。影響女性青少年政治社會化之相關因素分析。發表於中山大學 2009 台灣教育研究學術研討會。之建構。Huang, D.-H., Wei, L.-M., & Yang, M.-C. (2009). Body Image and Related Factors of Adolescents in Taiwan. Paper presented at 2009 Hawaii International Conference on Education. Honolulu, Hawaii.
		研究報告/技術報告	0	0	0%		
		研討會論文	4	1	100%		
		專書	0	0	100%		
	專利	申請中件數	0	0	100%	件	
		已獲得件數	0	0	100%		
	技術移轉	件數	0	0	100%	件	
		權利金	0	0	100%	千元	
	參與計畫人力（本國籍）	碩士生	1	1	100%	人次	
		博士生	0	0	100%		
		博士後研究員	0	0	100%		
		專任助理	0	0	100%		

國外	論文著作	期刊論文	0	0	100%	篇	
		研究報告/技術報告	0	0	100%		
		研討會論文	4	1	100%		
		專書	0	0	100%	章/本	
	專利	申請中件數	0	0	100%	件	
		已獲得件數	0	0	100%		
	技術移轉	件數	0	0	100%	件	
		權利金	0	0	100%	千元	
	參與計畫人力 (外國籍)	碩士生	2	2	100%	人次	
		博士生	0	0	100%		
		博士後研究員	0	0	100%		
		專任助理	0	0	100%		

其他成果
(無法以量化表達之成果如辦理學術活動、獲得獎項、重要國際合作、研究成果國際影響力及其他協助產業技術發展之具體效益事項等，請以文字敘述填列。)

無

	成果項目	量化	名稱或內容性質簡述
科 教 處 計 畫 加 填 項 目	測驗工具(含質性與量性)	0	
	課程/模組	0	
	電腦及網路系統或工具	0	
	教材	0	
	舉辦之活動/競賽	0	
	研討會/工作坊	0	
	電子報、網站	0	
	計畫成果推廣之參與(閱聽)人數	0	

國科會補助專題研究計畫成果報告自評表

請就研究內容與原計畫相符程度、達成預期目標情況、研究成果之學術或應用價值（簡要敘述成果所代表之意義、價值、影響或進一步發展之可能性）、是否適合在學術期刊發表或申請專利、主要發現或其他有關價值等，作一綜合評估。

1. 請就研究內容與原計畫相符程度、達成預期目標情況作一綜合評估

達成目標

未達成目標（請說明，以 100 字為限）

實驗失敗

因故實驗中斷

其他原因

說明：

2. 研究成果在學術期刊發表或申請專利等情形：

論文： 已發表 未發表之文稿 撰寫中 無

專利： 已獲得 申請中 無

技轉： 已技轉 洽談中 無

其他：（以 100 字為限）

3. 請依學術成就、技術創新、社會影響等方面，評估研究成果之學術或應用價值（簡要敘述成果所代表之意義、價值、影響或進一步發展之可能性）（以 500 字為限）

入，兼採量化與質化研究法，探討女性青少年的政治發展過程，分析影響女性青少年政治社會化的重要影響因子及相關變項之關聯。本研究發現女性青少年的政治社會化程度不高，與政治有關的議題與活動都沒有受到積極鼓勵，父母及同儕也都不鼓勵未來從政。整體來看，女性青少年未來可能也難與男生在政治事務上相抗衡。建議學校應提高青少年，尤其女生的政治關心程度。本研究發展了多份評量工具，也有重要的研究發現，甚具理論與應用價值。本研究關切青少年女生的政治社會化歷程，也是全世界的首見，後續相關研究可以持續進行。