

# 青少年氣質、自我調節與學習成就之研究

吳承津、謝智玲

E-mail: 9800858@mail.dyu.edu.tw

## 摘要

本研究問題是探討青少年氣質(Temperament)、自我調節(self-regulation)與學習成就(academic achievement)之關係。研究樣本為台灣1200位國中三年級的學生。研究工具氣質是使用氣質量表Temperament Questionnaire EAS，自我調節使用自我調節量表Self-Regulatory Scale，學習成就是使用基測總分為指標。本研究發現(1)青少年氣質、自我調節與學習成就有顯著相關；(2)青少年氣質之社交性與青少年之自我調節與學習成就成正相關；(3)氣質之活動量、情緒性與青少年自我調節與學習成就呈負相關。而有關預測效果方面，(4)氣質中的情緒性可以負向預測自我調節與學習成就；(5)氣質中的活動量以及情緒性可以負項預測青少年學習成就；(6)自我調節正項預測學習成就。有關中介效果方面，(7)青少年之自我調節為氣質中情緒性與學習成就之中介變項獲得支持。

關鍵詞：青少年(adolescence)、氣質(temperament)、自我調節(self-regulation)、學習成就(academic achievement)

## 目錄

內容目錄 中文摘要 . . . . .	iii 英文摘要 . . . . .
iv 誌謝辭 . . . . .	vi 內容目錄 . . . . .
vii 表目錄 . . . . .	ix 圖目錄 . . . . .
x 第一章 緒論 . . . . .	1 第一節 研究動機與目的 . . . . .
1 第二節 研究問題 . . . . .	5 第三節 研究假設 . . . . .
6 第四節 名詞解釋 . . . . .	6 第二章 文獻探討 . . . . .
8 第一節 氣質之內涵 . . . . .	8 第二節 自我調節 . . . . .
18 第三節 氣質、自我調節與學習成就之關係 . . . . .	25 第三章 研究方法 . . . . .
34 第一節 研究架構 . . . . .	34 第二節 研究對象 . . . . .
36 第三節 研究工具 . . . . .	37 第四節 資料分析 . . . . .
42 第四章 分析與結果 . . . . .	44 第一節 調查樣本的結構分析 . . . . .
44 第二節 描述性統計分析 . . . . .	45 第二節 第四節 青少年氣質、自我調節與學習成就之相關情形分析 . . . . .
46 第三節 青少年氣質、自我調節與學習成就之預測 . . . . .	46 第四節 中介情形 . . . . .
47 第五章 討論與建議 . . . . .	53 第一節 討論 . . . . .
53 第二節 建議 . . . . .	69 參考文獻 . . . . .
63 附錄 . . . . .	83 表目錄 表 2-1 自我調節理論整理表 . . . . .
	20 表 2-2 學習功能之自我調節理論整理表 . . . . .
	23 表 2-3 氣質與自我調節關係表 . . . . .
	27 表 3-1 氣質項目分析表 . . . . .
	39 表 3-2 自我調節向自我調節項目分析表 . . . . .
	41 表 4-1 樣本人數分配及百分比分析表 . . . . .
	45 表 4-2 青少年氣質、自我調節與學習成就平均數與標準差分析表 . . . . .
	45 表 4-3 各研究變項間之平均數、標準差及積差相關 . . . . .
	47 表 4-4 氣質對學習成就之迴歸分析摘要表 . . . . .
	48 表 4-5 自我調節對學習成就之迴歸分析摘要表 . . . . .
	48 表 4-6 氣質對自我調節之迴歸分析摘要表 . . . . .
	49 表 4-7 自我調節在氣質對基測總分學習成就 . . . . .
	階層迴歸分析表 . . . . .
	51 表 4-8 自我調節在氣質對學習成就間的中介效果摘要表 . . . . .
	51 表 5-1 各項假設考驗主要結果摘要表 . . . . .
	53 圖目錄 圖 3-1 研究架構圖 . . . . .
	34 圖 3-2 中介變項要件圖 . . . . .
	35 圖 4-1 氣質在情緒性與自我調節之間的中介效果圖 . . . . .
	51

## 參考文獻

- 一、中文部分 David, R. (2002), 發展心理學(王雪貞, 林翠湄, 連廷嘉, 黃俊豪譯)。台北:學富,(原文於2002年出版)。 Goleman, D. (1996), EQ(Emotional intelligence)(張美惠譯), 台北市:時報文化,(原文於1996年出版) William, B. C. (1999), 瞭解孩子的天生氣質,(呂素

美譯)，台北：新迪文化，(原文於1997年出版)。王佩玲(1992)，兒童氣質理論之探討，臺北市立師範學院學報，23，397-413。王佩玲(1994)，家長知覺氣質發展的穩定和變化 - 六歲至十歲兒童追蹤研究，臺北市立師範學院學報，2，61-84。王佩玲(1999)，六位氣質類型幼兒的同儕關係，臺北市立師範學院學報，30，415-430。王佩玲(2002)，氣質發展的穩定性與父母覺知氣質的致變因素 - 六歲至八歲兒童追蹤研究，臺北市立師範學院學報，33，129 -150。白明靜(2007)，自我調節策略方案對國中生英語科自我調節輔導成效之研究，國立東華大學教育研究所未出版之碩士論文。江文慈(2004)，大學生的情緒調整歷程與發展特徵，教育心理學報，3(35)，249-268。宋踐(1993)，三個原始部落的性別與氣質，台北：遠流。李鶯喬，陳映雪，楊惠玲，楊斯棟(1995)，台北地區高中生氣質特徵，中華精神醫學，9(2)，54-63。李嵩義(2002)，空中大學學生自我調控學習策略與其學習滿意度之關係研究，國立高雄師範大學成人教育研究所未出版之碩士論文。吳武典(1983)，怎樣培養國民小學學生良好的氣質，國教世紀，18，10。吳明隆(2003)，統計應用與實務，台北：文魁資訊股份有限公司。吳美均(2006)，青少年親子互動、同儕互動、氣質與行為適應之研究，大葉大學教育發展研究所未出版之碩士論文。林佳敏(2005)，國小高年級學童性別、其所知覺的家庭功能及兒童氣質對兒童內話問題之影響，中原大學心理學系未出版之碩士論文。林慧姿，程景琳(2006)，國小六年級學童自尊、情緒調節與友誼之相關研究，教育心理學報，2(38)，177-193。高華強(1995)，青少年的情緒調適與教育，北縣教育，6，23-27。陳聖謨(1996)，兒童早期境遇與其氣質、社會能力關係之研究，幼兒教育年刊，9，181-212。陳湘琪(1999)，國小六年級學生數學自我調節學習與解題表現之關係，國立嘉義師範學院國民教育研究所未出版之碩士論文。陳玟伶(2001)，國小高年級兒童自我調整歷程之個案研究，台中師範學院成人教育研究所未出版之碩士論文。陳金定，劉焜輝(2003)，青少年依付行為與情緒調適能力之因果模式初探，教育心理學報，1(35)，39-58。陳品華(2006)，技職大學生自我調整學習的動機困境與調整策略之研究，教育心理學報，1(38)，37-50。張美麗(1991)，中部地區幼兒氣質特徵之研究，台中師院學報，5，47-77。張景媛(1991)，大學生認知風格、動機與自我調整因素、後設認知與學業成績關係之研究，教育心理學報，24，145-161。許世寬，賴明美，林正介，李采娟，陳偉德(2001)，中興新村幼兒園孩童之氣質研究，台灣家醫誌，11(2)，78-90。黃湘武(1993)，皮亞傑理論在科學教育上的應用研究，收於杜祖貽編，西方社會科學理論的移植與應用(pp. 53-62)，台北：遠流出版社。程炳林(1995)，目標層次與目標導向對大學生自我調整學習歷程之影響，教育心理學報，26，85-106。詹雨臻(2004)，國小高年級學童多元智能、行動控制、自我調節、人口變項與生活問題解決能力之關係，國立中山大學教育研究所未出版之碩士論文。鄭玉貴(2007)，青少年自我統合危機、自我調整與行為困擾之相關研究，國立成功大學教育研究所未出版之碩士論文。劉佩雲(1998)，兒童自我調節學習之研究，國立政治大學教育研究所未出版之博士論文。魏麗敏(1991)，自我規畫學習的理論與策略，中師輔導園地，19，13-14。魏麗敏(1996)，影響國小兒童數學成就之自我調節學習與情感因素分析及其策略訓練效果之研究，國立台灣師範大學教育心理與輔導研究所未出版之博士論文。魏麗敏(2001)，國中與高中學生家庭環境、學習投入狀況與自我調節學習及成就之研究，中華輔導學報，10，63-118。

二、西文部分

Abidin, R. R., Jenkins, C. L., & McGaughey, M. C. (1992). The relationship of early family variables to children's subsequent behavioral adjustment. *Journal of Clinical Child Psychology*, 21(1), 60-69.

Allport, G. W. (1961). *Pattern and Growth in Personality*. New York: Holt, Rinehart, and Winston.

Auerbach, J. (2000). Dopamine D4 receptor, serotonin transporter genotypes and temperament in early childhood. *Biological Psychiatry*, 47(8), 15-51.

Baker. (1995). Assessment of teaching and learning in literature based classrooms. *Journal of Personality and Social Psychology*, 11(4), 359-371.

Bandura, A. (1977). *Social learning theory*. Englewood Cliffs. New Jersey: Prentice-Hall.

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

Barkley, R. A. (1997). Behavioral Inhibition, Sustained Attention, and Executive Functions: Constructing a Unifying Theory of ADHD. *Psychological Bulletin*, 121(1), 65-94.

Barkley, R. A. (2003). Issues in the diagnosis of attention deficit hyperactivity disorder in children. *Brain and Development*, 25(2), 77-83.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.

Birch, R. (1999). The treatment and prognosis of major nerve injury in the adult upper limb. *Journal of Personality and Social Psychology*, 28(3), 265-276.

Boeakers, M. (1999). Self-regulation learning: Where we are today. *International Journal of Educational Research*, 31, 445-457.

Bowlby, J. (1985). *Attachment and loss: Attachment*. New York: Basic Books.

Boyce, W. T., & Ellis, B. J. (2005). Biological sensitivity to context: An evolutionary developmental theory of the origins and functions of stress reactivity. *Development & Psychopathology*, 17, 271-301.

Bronson, M. B. (2000). *Self-regulation in early childhood: Nature and nurture*. New York: Guilford.

Buss, A. H., & Plomin, R. (1984). Temperament: Early developing personality traits. Hillsdale, New Jersey: Lawrence Erlbaum.

Calkins, S., Johnson, M. C., & Smith, C. L. (1999). Emotional reactivity and emotional regulation strategies as predictors of social behavior with peers during toddlerhood. *Social Development*, 8, 310-334.

Calkins, S., & Fox, N. (2002). Self-regulatory processes in early personality development: A multilevel approach to the study of childhood social withdrawal and aggression. *Development and Psychopathology*, 14, 477 – 498.

Camahalan, F., & Marsha, G. (2006). Effects of Self-Regulated Learning on Mathematics Achievement of Selected Southeast Asian Children. *Journal of Instructional Psychology*, 33(3), 194-205.

Carey, W. B. (1997). Coping with children's temperament. New York: Basic Books.

Carey, W. B. (1999). Problems in diagnosing attention and activity. *Pediatrics*. *Journal of Instructional Psychology*, 103, 664-667.

Carver, C. S., & Scheier, M. F. (1982). Control theory: A useful conceptual framework for personality-social, clinical, and health psychology. *Psychological Bulletin*, 92(1), 111-135.

Caspi, A., Henry, B., McGee, R. O., Moffitt, T. E., & Silva, P. A. (1995). Temperamental origins of child and adolescent behavior problems: From age 3 to 15. *Child Development*, 66, 55-68.

Colder, C. R., Mott, J. A., & Berman, A. S. (2002). The interactive effects of infant activity level and fear on growth trajectories of early childhood behavior problems. *Development and Psychopathology*, 14, 1-23.

Cole, P. M., Zahn-Waxler, C., & Smith, K. D. (1994). Expressive control during a disappointment: Variations related to preschoolers' behavior problems. *Developmental Psychology*, 30, 835 – 846.

Cole, P. M., Zahn-Waxler, C., Fox, N. A., Usher, B. A., & Welsh, J. D. (1996). Individual differences in emotion regulation and behavior problems in preschool children. *Journal of Abnormal Psychology*, 105, 518 – 529.

Cole, P. M., Martin, S. E., & Dennis, T. A. (2004). Emotion

regulation as a scientific construct: Methodological challenges and directions for child development research. *Child Development*, 75, 317-333.

Derryberry, D. (1995). Temperament and Response Processing: Facilitatory and Inhibitory Consequences of Positive and Negative Motivational States. *Journal of Research in Personality*, 29(1), 59-84.

Derryberry, D. (2002). Anxiety-Related Attentional Biases and Their Regulation by Attentional Control. *Journal of Abnormal Psychology*, 111(2), 225-236.

Diamond, (2003). Thaumasite in Orange County, Southern California: an inquiry into the effect of low temperature. *Cement & Concrete Composites*, 25(8), 1161.

DiPietro, J. A. (2008). Prenatal origins of temperamental reactivity in early infancy. *Early Human Development*, 84(9), 569-575.

Eisenberg, N., Fabes, R. A., Bernzweig, J., Nyman, M., & Pinuelas, A. (1994). The relations of emotional and regulation to children's anger-related reactions. *Child Development*, 65, 109-128.

Eisenberg, N. (2000). Dispositional Emotionality and Regulation: Their Role in Predicting Quality of Social Functioning. *Journal of Personality and Social Psychology*, 78(1), 136-157.

Fleming, J. E., & Offord, D. R. (1990). Epidemiology of childhood depressive disorders: a critical review. *Journal of the American Academy of Child and Adolescent Psychiatry*, 29, 571-580.

Fletcher, P. C. (1996). Brain regions involved in implicit processing of facial emotion. *Journal of Personality and Social Psychology*, 3(1), 235.

Flory, L. (2003). The Relation Between Attention Deficit Hyperactivity Disorder and Substance Abuse: What Role Does Conduct Disorder Play. *Clinical Child & Family Psychology Review*, 6 (1), 1-16.

Gallagher, (2002). The effects of familiarity, orthographic neighbourhood density, letter-length and graphemic complexity on children's reading accuracy. *British Journal of Psychology*, 93(2), 269.

Ge, X., Best, K. M., Conger, R. D., & Simons, R. L. (1996). Parenting behaviors and the occurrence and co-occurrence of adolescent depressive symptoms and conduct problems. *Developmental Psychology*, 32, 717-731.

Goldsmith, H. H., Campos J. J., & Bradshaw, D. L. (1987). Attachment, temperament, and social referencing: Interrelationships among three domains of infant affective behavior. *Infant Behavior and Development*, 10(2), 223-231.

Goldsmith, H. H. (1989). Developmental genetics of temperament. *Biological Psychiatry*, 25(7), 211.

Goldsmith, H. H., & Lemery, K. S. (1999). Developmental Models of Infant and Childhood Temperament. *Developmental Psychology*, 35(1), 189-204.

Guerin, D. W., & Gottfried, A. W. (1994). Temperamental consequences of infant difficultness. *Infant Behavior and Development*, 17(4), 413-421.

Guerin, D. W. (2007). Temperamental task orientation: Relation to high school and college educational accomplishments. *Learning and Individual Differences*, 17(3), 220-230.

Gumora, G., & Arsenio, W. F. (2002). Emotionality, Emotion Regulation, and School Performance in Middle School Children. *Journal of School Psychology*, 40(5), 395-413.

Halverson, Jr. (1988). Family – School Context: Parent and Teacher Agreement on Child Temperament. *Journal of Consulting and Clinical Psychology*, 56(4), 573-577.

Heather, A., Henderson, Theodore, D., & Wachs, (2007). Temperament theory and the study of cognition – emotion interaction across development. *Developmental Review*, 27, 396-427.

Jacques, T. (1986). Influence of gentle birth delivery procedures and other perinatal circumstances on infant temperament: Developmental and social implications. *The Journal of Pediatrics*, 108(1), 134-136.

Jones, S. D. (1998). Differential maternal treatment of twins: Does temperament make a difference. *Infant Behavior and Development*, 21, 382.

Kagan, J., Snidman, N., Zentner, M., & Peterson, E. (1999). Infant temperament and anxious symptoms in school age children. *Development and Psychopathology*, 11, 209-224.

Keogh, B. K. (2003). Understanding child temperament can have far-reaching impact on behavior and quality of life. *The Brown University Child and Adolescent Behavior Letter*, 19(10), 1-4.

Klein, (1998). Resolved: Mania Is Mistaken for ADHD in Prepubertal Children. *Journal of the American Academy of Child & Adolescent Psychiatry*, 37(10), 1091.

Kopp, C. B. (1982). Antecedents of self-regulation: A developmental perspective. *Developmental Psychology*, 18(2), 199-214.

Kosnina, A. M. (2007). Self-regulated learning and academic achievement in Malaysian undergraduates. *International Education Journal*, 8(1), 221-228.

Kuhl, J. (1987). Action control: The maintenance of motivational states. In F. Halisch & J. Kuhl(Eds.), *Motivation, intention, and volition*(pp. 279-291). New York: Springer-Verlag.

Kupersmidt, J. B., Coie, J. D., & Dodge, K. A. (1990). The role of poor peer relationships in the development of disorder. *Journal of Abnormal Psychology*, 49(1), 28-54.

Lawton, W. J., & John, S. (2002). Effect of a Behavioral Self-Regulation Intervention on Patient Adherence in Hemodialysis. *Health Psychology*, 21(4), 393-397.

Luszczynska, A., Diehl, M., Guti\_erez-Do~na, B., Kuusinen, P., & Schwarzer, R. (2004). Measuring one component of dispositional self-regulation: attention control in goal pursuit. *Personality and Individual Differences*, 37, 555-566.

Martin, R. P. (1984). A longitudinal study of temperament and its correlates in the first 12 months. *Infant Behavior and Development*, 7(3), 285-298.

Martin, R. P., Drew, K. D., Gaddis, L. R., & Mosely, M. (1988). Prediction of elementary school achievement from preschool temperament: three studies. *School Psychology Review*, 17, 125-137.

Martin, R. P. (1994). Interactive effects of student temperament and instruction method on classroom behavior and achievement. *Journal of School Psychology*, 32(2), 149-166.

Maszk, P., Eisenberg, N., & Guthrie, I. K. (1999). Relations of children's social status to their emotionality and regulation: A short-term longitudinal study. *Merrill-Palmer Quarterly*, 45, 468-492.

McClowry, S. G., Giangrande, S. K., Tommasini, N. R., Clinton, W., Foreman, N. S., & Ferketich, S. (1994). The effects of child temperament, maternal characteristics, and family circumstances on the maladjustment of school-age children. *Research in Nursing & Health*, 17, 25-35.

Moilanen, K. (2006). Infant motor development and adult cognitive functions in schizophrenia. *Schizophrenia Research*, 81(1), 65-74.

Nelson, S. R. (1992). Enhanced Surgical Exposure for the High Extracranial Internal Carotid Artery. *Journal of Personality and Social Psychology*, 6(5), 467-472.

Nelson, B. (1999). Modeling the prediction of elementary school adjustment from preschool temperament. *Journal of Personality and Social Psychology*, 26(4), 687-700.

Nelson, D. A., Robinson, C. C., & Hart, C. H. (2005). Relational and physical aggression of preschool-age children: Peer status linkages across informants. *Early Education and Development*, 16, 115-139.

Norman, A. (1988). The procrastination of everyday life. *Journal of Research in Personality*, 22(2), 197-212.

Olson, S. L., Bates, J. E., Sandy, J. M., & Schilling, E. M. (2002). Early developmental precursors of impulsive and inattentive behavior: From infancy to middle childhood. *Journal of Child Psychology and Psychiatry*, 43, 435-448.

Papalia, D. E. (1992). The study of adult cognition from a Piagetian perspective. *Intellectual development*, 45, 141-160.

Petersen, A. C., Compas, B. E., Brooks-Gunn, J., Stemmler, M., Ey, S., & Grant, K. E. (1993). Depression in adolescence. *American Psychologist*,

48, 155-168. Piaget, (1964). Classification of disciplines and interdisciplinary connexions. *International Social Science Journal* , 16(4), 553-570.

Pintrich, P. R. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, 82, 33-40.

Pintrich, P. R. (1996). Disciplinary Differences in Self-Regulated Learning in College Students. *Contemporary Educational Psychology*, 21(4), 345-362.

Pintrich, P. R. (2003). Current issues in achievement goal theory and research. *Journal of Personality and Social Psychology*, 39(4-5), 319-337.

Plomin, R., & Rowe, D. C. (1977). A twin study of temperament in young children. *Journal of Psychology*, 97, 107-113.

Plomin, R. (1988). Multivariate analysis of cognitive and temperament measures in 24-month-old adoptive and nonadoptive sibling pairs. *Personality and Individual Differences*, 9(1), 95-100.

Plomin, R. (1998). Parent Ratings of EAS Temperaments in Twins, Full Siblings, Half Siblings, and Step Siblings. *Journal of Personality and Social Psychology*, 68(4), 723-733.

Posner, M. I., & Rothbart, M. K. (2000). Developing mechanisms of self-regulation. *Development and Psychopathology*, 12, 427-441.

Prior, M., Smart, D., Sanson, A., & Oberklaid, F. (2000). Does shyinhibited temperament in childhood lead to anxiety problems in adolescence? *Journal of the American Academy of Child and Adolescent Psychiatry*, 39, 461-468.

Robbins, S. T. (2006). The interest – major congruence and college success relation: A longitudinal study. *Journal of Vocational Behavior*, 69(1), 64-89.

Rothbart, M. K. (1984). Symposium: Developmental Perspectives on Infant Temperament. *Infant Behavior and Development*, 7, 311.

Rothbart, M. K. (1989). Temperament in childhood: a framework. In G. A. Kohnstamm, J. E. Bates & M. K. Rothbart (Eds.). *Temperament in childhood*. Chichester, UK: Wiley, 59-73; 187-247.

Rothbart, M. K., & Ahadi, S. A. (1994). Temperament and the development of personality. *Journal of Abnormal Psychology*, 103, 55-66.

Ruff, H. A., & Rothbart, M. K. (1996). Attention in early development: Themes and variations. New York: Oxford University Press.

Scarr, M. (1983). How People Make Their Own Environments: A Theory of Genotype Environment Effects. *Child Development*, 54(2), 424.

Schunk, D. H. (1991). Introduction to the Special Section on Motivation and Efficacy. *Journal of Educational Psychology*, 82(1), 3-6.

Schunk, D. H., & Zimmerman, B. J. (1998). Self-regulated learning: From teaching to self-reflective practice. New York: The Guilford Press.

Schunk, D. H., & Ertmer, P. A. (1999). Self-regulatory processes during computer skill acquisition: goal and self-evaluative influences. *Journal of Educational Psychology*, 91, 251-260.

Schwartz, C. E., Snidman, N., & Kagan, J. (1999). Adolescent social anxiety as an outcome of inhibited temperament in childhood. *Journal of American Academy of Child and Adolescent Psychiatry*, 38, 1008-1015.

Skinner, B. F. (1938). *The Behavior of Organisms: An Experimental Analysis* . New York: Appleton-Century.

Strelau, J. (1996). The regulative theory of temperament: current status. *Personality and Individual Differences*, 20(2), 131-142.

Thomas, A., Chess, S., Birch, H. G., Hertzig, M. E., & Korn, S. (1963). Behavioral individuality in early childhood. New York: New York University Press.

Thomas, A., Chess, S., & Birch, H. G. (1968). *Temperament and Behavior Disorders in Children*. New Yrk: New York University Press.

Thomas, A., & Chess, S. (1977). *Temperament and development*. New York: Brunner / Mazel.

Thomas, A., & Chess, S. (1984). Difficult temperament: Toward an integration of parental, clinical and research perspectives. *Infant Behavior and Development*, 7, 316.

Tremblay, R. E., Pihl, R. O., Vitaro, F., & Dobkin, P. L. (1994). Predicting early onset of male antisocial behavior from preschool behavior. *Archives of General Psychiatry*, 51, 732-739.

Hurk, V. D. (2005). Employment and Achievement in a Problem-Based Curriculum. *Higher Education in Europe*, 30(2), 229-236.

Wells, J. K. (1986). Presurgical Anxiety and Postsurgical Pain and Adjustment: Effects of a Stress Inoculation Procedure. *Journal of Consulting and Clinical Psychology*, 54(6), 831-835.

Wilson, R. S., Matheny, A. P. (1983). Assessment of temperament in infant twins. *Developmental Psychology*, 19(2), 172-183.

Windle, M. (1991). The difficult temperament in adolescence: associations with substance use, family support, and problem behaviors. *Journal of Clinical Psychology*, 47, 310-315.

Windle, M. (1992). Temperament and social support in adolescence: interrelations with depressive symptoms and delinquent behaviors. *Journal of Youth and Adolescence*, 21, 1-21.

Zelazo, P. D., Muller, U., Frye, D., & Marcovitch, S. (2003). The development of executive function. *Monographs of the Society for Research in Child Development*, 68, 11 – 27.

Zimmerman, B. J. (1986). Becoming a self-regulated learner: Which are the key subprocesses. *Contemporary Educational Psychology*, 11(4), 307-313.

Zimmerman, B., & Schunk, D. (1989). Self-regulated learning and academic achievement: Theory, research, and practice. New York: Springer.

Zimmerman, B. J. (1997). *Developmental Phases in Self-Regulation: Shifting From Process Goals to Outcome Goals*. *Journal of Educational Psychology*, 89(1), 29-36.

Zimmerman, B. J. (2001). Self-Regulation Training Enhances Dietary Self-Efficacy and Dietary Fiber Consumption. *Journal of the American Dietetic Association*, 101(9), 1006-1011.