

# The Relationship between Leisure Involvement of Remote Control Plane Activities and Leisure Benefits

郭濬鍊、邊瑞芬

E-mail: 360086@mail.dyu.edu.tw

## ABSTRACT

The purpose of this study was to analyze the relationship between the Leisure Involvement and Leisure Benefits of players' in remote control aircraft activities. The researcher applied questionnaire to collect data and the results provided government and leisure education with empirical reference to improving outdoor recreational activities in Taiwan. This study applied online and interview questionnaire survey, the polite and filed test of questionnaire were implemtment in January 2012. There were twenty players participated as subjects and their answers provided the researcher to revise the questionnaire. There were also three experts viewed and suggestion on the attitude scales on the Leisure Involvement and Leisure Benefits for reliability analysis. Finally the formal questionnaire completed by February 15, 2012, and data collected data by internet and face-to-face survey in March 2012. There were 361 online responses and 30 face-to-face interview in the survey. A total of 371 valid questionnaires (effective questionnaires rate: the effective rate of 98% of the online questionnaires, 53% of face-to-face visited.). This researcher used SPSS17.0 statistical software package for data analysis. In the sample of 371 cases that most of players are as middle class with college education and married men. The following findings provide an empirical study for understanding leisure behaviors of remote control aircraft players in leisure involvement and benefits. (A)There were two leisure involvement factors extracted: "Attractive" and "Lifestyle Center". In the ANOVA difference analysis, the demographic variables had informed that players were shown significant differences in the place of residence, frequency, time, and participation in society or a web community. (B) There were four leisure benefits factors extracted: the major of "Social Function", and followed by "Self-growth", "Out of Daily Life " and "Escaping from Reality". Leisure benefits had shown significant differences base on residence, income, participation times, the number of remote-controlled aircraft models, participation in the societies and the internet community. (C) An advanced regression analysis found that the impact of leisure involvemen on leisure benefits: 1. Players who reach the higher score in leisure involvement indicate to get the higher social benefits; 2. Players who reach the higher score in lifestyle center get more self growth ; 3. Players' leisure involvement has a positive impact on the Social Function as well as Self-growth, Out of Daily Life and Escaping from Reality. There are statistical significant impacts of Life Center to Self-growth and Escaping from Reality. In Taiwan, a lot of constraints on the dream of being an aviator. People in Taiwan can only play the remote control aircraft. This empirical research found that the recreational benefits of remote control aircraft provided various leisure benefits by different leisure involvement. Taiwan should open the sky and promot the remote control aircraft leisure activities, especially the development of aviation education , and arouse policy improvement.

Keywords : Leisure Involvement、Leisure Benefits、Remote Control Plane

## Table of Contents

中文摘要 iii 英文摘要 v 誌謝辭 viii 目 錄 ix 表目錄 xi 圖目錄 xiii 第一章 緒論 1 第一節 研究緣起 1 第二節 研究動機 5 第三節 研究目的 9 第二章 文獻探討 10 第一節 遙控飛機休閒活動 10 第二節 休閒涉入 15 第三節 休閒效益 22 第三章 研究方法 33 第一節 研究架構 33 第二節 統計假設 34 第三節 研究對象 34 第四節 研究工具 36 第五節 資料處理與分析 37 第六節 預試問卷的項目分析與信度分析 38 第四章 研究結果與討論 47 第一節 遙控飛機玩家之抽樣調查所得資?分析 47 第二節 遙控飛機玩家之休閒涉入分析 54 第三節 遙控飛機玩家之休閒效?分析 64 第四節 遙控飛機休閒涉入與休閒效?迴歸預測 77 第五節 研究結果假設分析 80 第五章 結論與建議 82 第一節 研究結論 82 第二節 研究建議 86 參考文獻 89 附錄一 正式問卷 102 附錄二 國內有申請登記之飛行運動團體 107 附錄三 網路問卷張貼在飛行披薩網站的頁面 110 附錄四 網路問卷的頁面內容 111 表目錄 表 1-1 超輕型載具與遙控飛機的差異 4 表 1-2 各國遙控飛機法律之規範 8 表 2-1 各國遙控飛機頻率之規範 11 表 2-2 各種遙控飛機之差異比較 12 表 2-3 遙控飛機休閒活動參與內涵 15 表 2-4 不同領域的學者對休閒效益理論的論述 24 表 3-1 遙控飛機休閒涉入項目整體統計量 39 表 3-2 遙控飛機休閒效益項目整體統計量 40 表 3-4 遙控飛機休閒效益?表之因素分析 45 表 4-1 遙控飛機玩家人口背景特徵分析表 49 表 4-2 富春國小遙控飛機社團學生人口背景特徵分析表 50 表 4-3 遙控飛機玩家擁有的遙控飛機機型\*架數交叉表 52 表 4-4 遙控飛機玩家擁有的遙控飛機機型\*裝備花費交叉表 52 表 4-5 遙控飛機玩家擁有的遙控飛機機型\*經驗交叉表 53 表 4-6 遙控飛機玩家擁有的遙控飛機機型\*飛行地點交叉表 53 表 4-10 不同人口背景特徵在休閒涉入上之T檢定分析表 62 表 4-11 不同人口背景特徵在休閒涉入上之差異分析表 62 表 4-13 富春國小遙控飛機社團學生休閒效益之次數分配表 67 表 4-14 遙控飛機休閒效益因素分析表 70 表 4-17 休閒涉入與休閒效益間不同因子之相

## REFERENCES

- 一、中文部分 Godbey, G. (2005), 休閒遊憩概論:探索生命中的休閒 (葉怡玲、吳崇旗、王偉琴、顏伽如、林禹良譯), 台北:品度。(原文於2003年出版)。王傳銘、黃秀雲、王詩淳(2000), 戶外活動中認真休閒的特色及行銷方面的運用(國科會, No. NSC892416H259013), 台北:行政院國家科學委員會。王敏華(2005), 自然公園使用者休閒效益與休閒滿意度之研究-以台北市富陽公園為例, 國立臺灣師範大學運動與休閒管理研究所未出版之碩士論文。行政院文化建設委員會(2010), 2008年文化統計, 台北:行政院文化建設委員會。行政院主計處(2010), 98年青少年狀況調查統計結果綜合分析 (線上資料), 來源: <http://www.stat.gov.tw/public/Data/072815595471.pdf>。交通部民用航空局(2011), 民用航空法 (線上資料), 來源: <http://www.caa.gov.tw/big5/content/index.asp?sno=600> (2011, January 20)。交通部民用航空局(2011), 超輕型載具管理辦法 (線上資料), 來源: <http://www.caa.gov.tw/big5/content/index.asp?sno=601> (2011, February 8)。李德治, 童惠玲(2009), 多變量分析, 台北:雙葉書廊。林欣慧(2002), 解說成效對休閒效益體驗之影響研究-以登山健行為例, 國立台灣師範大學運動與休閒管理研究所未出版之碩士論文。林宜蔓(2004), 游泳者持續參與在休閒效益與幸福感之研究, 國立雲林科技大學休閒運動研究所未出版之碩士論文。林宜蔓(2002), 游泳者持續參與在休閒效益與幸福成之研究, 國立雲林科技大學休閒運動研究所未出版之碩士論文。林一貞(2011), 自行車活動參與者休閒涉入與休閒效益之研究-以屏東縣自行車道為例, 國立屏東教育大學生態休閒教育研究所未出版之碩士論文。洪煌佳(2002), 突破休閒活動之休閒效益研究, 國立臺灣師範大學運動休閒與管理研究所未出版之碩士論文。洪佑賢(2011), 台中縣東豐自行車綠廊、后豐鐵馬道自行車騎乘者參與動機、滿意度與休閒效益關係之研究, 國立東華大學體育與運動科學研究所未出版之碩士論文。香港民航處(2010), 模型飛機放飛 (線上資料), 來源: [http://www.cad.gov.hk/chinese/model\\_aircraft.html](http://www.cad.gov.hk/chinese/model_aircraft.html) (2010, April 1)。姚代平(2005), 以休閒為動機之業餘戲劇參與者之態度、涉入與休閒效益之探討 - 以台北地區的大學戲劇社員為例, 大葉大學休閒事業管理研究所未出版之碩士論文。高俊雄(1995), 休閒利益三因素模式, 戶外遊憩研究, 8(1), 15-28。徐新勝(2007), 衝?活動?與者之休閒動機、涉入程?與休閒效?關係之研究, 國?中正大學運動與休閒教育研究所未出版碩士?文。許惠玲(2008), 參與登山健行之高齡者其休閒涉入、休閒效益及幸福感關係之研究-以高雄縣市郊山為例, 國立嘉義大學休閒事業管理研究所未出版碩士論文。?偉銘、??仁、曾鴻儒(2011, June 19), 怎麼飛?哪?飛?無「法」管, 自由電子報 (線上資料), 來源: <http://www.libertytimes.com.tw/2011/new/jun/19/today-so1-2.htm> 郭睿誠、蕭夙眉(2008, November 4), 遙控飛機衝600米, 撞進消防隊, 蘋果日報 (線上資料), 來源: [http://tw.nextmedia.com/appnews/article/art\\_id/31110552/IssueID/20081104](http://tw.nextmedia.com/appnews/article/art_id/31110552/IssueID/20081104) 陳中雲(2001), 國小教師休閒參與休閒效益與工作滿意之關係研究, 國立台灣師範大學運動休閒與管理研究所未出版之碩士論文。陳英傑、曾鴻儒、邱紹雯、吳仁捷(2008, July 4), 遙控飛機玩出事, 竟無主管機關, 自由電子報 (線上資料), 來源: <http://www.libertytimes.com.tw/2008/new/jul/4/today-life2.htm> 張嘉洲(2007), 中老年人休閒運動參與動機與效益之研究-以新竹地區太極氣功十八式運動為例, 國立臺灣師範大學體育學研究所未出版之碩士論文。曾德峰、鄭淑婷、邱紹雯(2008, July 4), 白馬飛場「禁飛」, 改闢河濱公園, 自由電子報 (線上資料), 來源: <http://www.libertytimes.com.tw/2008/new/jul/4/today-life4.htm> 黃帥通(2010), 連鎖健身俱樂部會員休閒涉入與休閒效益之研究-以台中地區為例, 國立臺灣體育運動大學休閒運動管理研究所未出版之碩士?文。黃俊英(1992), ?銷研究, 台?:華泰書局。?純菊(2004), 遊客?與台灣咖啡節的休閒動機、休閒效?與滿意?之相關研究, 國?雲?科技大學休閒運動研究所未出版之碩士?文。溫瑞麟(2008, Jaunary 14), 「直升機」變血滴子, 發燒友爆頭命危, 香港文匯報 (線上資料), 來源: <http://paper.wenweipo.com/2008/01/14/HK0801140005.htm> 溫瑞麟(2011, Jaunary 3), 模型「墜機」, 擊傷印傭, 香港文匯報 (線上資料), 來源: <http://paper.wenweipo.com/2011/01/03/HK1101030033.htm> 蔡靜婷(2011), 參與Cosplay的休閒動機、休閒涉入 與休閒效益關係之研究, 大葉大學管理學院碩士在職專班未出版之碩士?文。劉盈足(2005), 公務員週末之休閒涉入與其休閒滿意度關係之探討 以彰化地區鄉鎮市公所為例, 私立大葉大學休閒事業管理研究所未出版之碩士論文。盧心炎(2003), 舞蹈休閒活動參與歷程之研究, 國立臺灣師範大學體育研究所未出版碩士論文。二、英文部分 Ajzen, I. (1991). Benefits of Leisure: A Social Psychological Perspective. In B. L. Driver, P. J. Brown, & G. L. Peterson (Eds.), Benefits of Leisure (pp. 411-418). Stage College, PA: Venture Publishing. Alcorn, A. L. (2009). Flying into modernity: model airplanes, consumer culture, and the making of modern boyhood in the early twentieth century. History & Technology, 25(2), 115-146. Allen Lawrence R. (1991). Benefits of Leisure: Benefits of Leisure Services to Community Satisfaction. In B. L. Driver, P. J. Brown, & G. L. Peterson (Eds.), Benefits of Leisure (pp. 331-350). Stage College, PA: Venture Publishing. Arai, S. M. & Pedlar, A. M. (1997). Building communities through leisure: Citizen participation in a healthy communities initiative. Journal of Leisure Research, 29(2), 167~183. Bammel, G., & Burrus-Bammel, L. L. (1992). Leisure and human behavior. Dubuque, IA: Wm. C. Brown. Banaka, W. H., Young, D. W. (1985). Community coping skills enhanced by an adventure camp for adult chronic psychiatric patients. Hospital and Community Psychiatry. 36(7), 746-748. Barnett, L. A. (1991). Benefits of Leisure: Developmental Benefits of Play for Children. In B. L. Driver, P. J. Brown, & G. L. Peterson (Eds.), Benefits of Leisure (pp. 423-430). Stage College, PA: Venture Publishing. Bixler, R. D., Floyd, M. E., & Hammatt, W. E. (2002). Environmental Socialization: Qualitative Tests of the Childhood Play Hypothesis. Environment and Behavior, 34(6), 795-818. Bloch, P. H. (1981). An exploration into the scaling of consumer's involvement with a product class. Advances in Consumer Research, 7, 61-65. Bloch, P. H., & Bruce, G. D. (1984). The Leisure Experience and Consumer Products: An Investigation of Underlying Satisfactions. Journal of Leisure Research, 16(I), 74-88. Bright, A. D. (2000). The role of social marketing in leisure and recreation management. Journal of Leisure Research, 32(1), 12-18. Bryant, H. (1979). Conflict in the great outdoors. Alabama: Alabama University Press. Burch, Jr., William, R., & Hamilton-Smith, E. (1991). Benefits of Leisure: Mapping a New

Frontier:Identifying, Measuring, and Valuing Social Cohesion Benefits Related to Nonwork Opportunities and Activities. In B. L. Driver, P. J. Brown, & G. L. Peterson (Eds.), *Benefits of Leisure* (pp. 369-382). Stage College, PA: Venture Publishing. Cobb, E. (1977). The ecology of imagination in childhood. New York: Columbia University Press. Crain, W. (1997). How Nature Helps Children Develop. *Montessori Life*, 9(2), 41-43. Csikszentmihalyi, Mihaly. & Kleibe, D. A. (1991). Benefits of Leisure: Leisure and Self-Actualization. In B. L. Driver, P. J. Brown, & G. L. Peterson (Eds.), *Benefits of Leisure* (pp. 91-102). Stage College, PA: Venture Publishing. Deci, E. L., & Ryan, R. M. (1991). A motivational approach to self: Integration in personality. In R. Dienstbier (Ed.), *Nebraska Symposium on Motivation: Vol. 38. Perspectives on motivation* (pp. 237-288). Lincoln: University of Nebraska Press. Degaspari, J. (2003). Look, Ma, No Pilot!. *Mechanical Engineering*, 125(11), 42. Dimanche, F., Havitz, M. E., & Howard, D. R. (1991). Testing the involvement profile scale in the context of selected recreational and touristic activities. *Journal of Leisure Research*, 23(1), 51-66. Driver, B. L., Brown, P. J., & Peterson, G. L. (1991). Research on leisure benefits: an introduction to this volume. In B. L. Driver, P. J. Brown, & G. L. Peterson (Eds.), *Benefits of leisure* (pp. 3-12). State College, PA: Venture Publishing. Dustin, D. L. & Goodale, T. L. (1997). The social cost of individual benefits. *Parks & Recreation*, 32(7), 20-22. Dustin, D. L., McAvoy, L. H., & Goodale, T. L. (1999). The Benefits Equation.

[Article]. *Parks & Recreation*, 34(1), 32. Easley, A.T. (1991). Benefits of Leisure: Programmed, Nonclinical Skill Development Benefits of Leisure Activities. In B. L. Driver, P. J. Brown, & G. L. Peterson (Eds.), *Benefits of Leisure* (pp. 145-160). Stage College, PA: Venture Publishing. Ellis, T., & Richardson, G. (1991). Benefits of Leisure: Organizational Wellness: A Life Cycle Perspective. In B. L. Driver, P. J. Brown, & G. L. Peterson (Eds.), *Benefits of Leisure* (pp. 303-329). Stage College, PA: Venture Publishing. Fesenmaier, D. R., & Johnson, B. (1989). Involvement-based segmentation: Implications for travel marketing in Texas. *Tourism Management*, 10(4), 293-300. Fjortoft, I., & Sageie, J. (2000). The Natural Environment as a Playground for Children: Landscape Description and Analysis of a Natural Landscape. *Landscape and Urban Planning*, 48(1/2), 83-97. Froelicher, V. F., & Froelicher, E. S. (1991). Benefits of Leisure: Cardiovascular Benefits of Physical Activity. In B. L. Driver, P. J. Brown, & G. L. Peterson (Eds.), *Benefits of Leisure* (pp. 59-72). Stage College, PA: Venture Publishing. Garvey, W. (2011). The Show Goes On. *Aviation Week & Space Technology*, 173(23), 53-53. Greist, J. H., Eischens, R. R., Klein, M., & Faris, J. W., (1979a). Antidepressant running. *Psychiatric Annals*. 9(3), 23-33. Greist, J. H., Klein, M. H., Eischens, & R. R., et al. (1979b). Running as a treatment for depression. *Comprehensive Psychiatry*. 20(1), 41-54. Gunter, B. G., & Gunter, N. C. (1980). Leisure Styles: A Conceptual Framework for Modern Leisure. *Sociological Quarterly*, 21(3), 361-374. Haggard, L. M. & Williams, D. R. (1991). Benefits of Leisure: Self-Identity Benefits of Leisure Activities. In B. L. Driver, P. J. Brown, & G. L. Peterson (Eds.), *Benefits of Leisure* (pp. 103-119). Stage College, PA: Venture Publishing. Havitz, M. E., & Dimanche, F. (1990). Propositions for testing the involvement construct in recreational and tourism contexts. *Leisure Sciences: An Interdisciplinary Journal*, 12(2), 179 - 195. Havitz, M. E., & Dimanche, F. (1997). Leisure involvement revisited: conceptual conundrums and measurement advances. *Journal of Leisure Research* 29(3), 245-278. Havitz, M. E., & Dimanche, F. (1999). Leisure involvement revisited: Drive properties and paradoxes. *Journal of Leisure Research*, 31(2), 122-149. Holmes, R., III (1991). Benefits of Leisure: Creation and Recreation: Environmental Benefits and Human Leisure. In B. L. Driver, P. J. Brown, & G. L. Peterson (Eds.), *Benefits of Leisure* (pp. 393-403). Stage College, PA: Venture Publishing. Huddleston, S., Mertesdorf, J., & Araki, K. (2002). Physical activity behavior and attitudes toward involvement among physical education, health and leisure services pre-professionals. *College Student Journal*, 36(4), 555-573. Johnson, R. L. & Brown, T. C. (1991). Benefits of Leisure: Beneficial Economic Consequences of Leisure and Recreation. In B. L. Driver, P. J. Brown, & G. L. Peterson (Eds.), *Benefits of Leisure* (pp. 385-391). Stage College, PA: Venture Publishing. Kyle, G., Graefe, A., Manning, R., & Bacon, J. (2003). An examination of the relationship between leisure activity involvement and place attachment among hikers along the Appalachian trail. *Journal of leisure research*, 35, 249-273. Kyle, G., Graefe, A., Manning, R., & Bacon, J. (2004). Effect of Activity Involvement and Place Attachment on Recreationists' Perceptions of Setting Density. *Journal of Leisure Research*, 36(2), 209-231. Kyle, G. T., & Mowen, A. J. (2005). An examination of the leisure involvement - agency commitment relationship. *Journal of Leisure Research*, 37(3), 342-363. Laurent, G., & Kapferer, J. N. (1985). Measuring Consumer Involvement Profiles. *Journal of Marketing Research*, 22(1), 41-53. Levitt, L. (1991). Benefits of Leisure: Recreation for the Mentally Ill. In B. L. Driver, P. J. Brown, & G. L. Peterson (Eds.), *Benefits of Leisure* (pp. 161-177). Stage College, PA: Venture Publishing. MacNeil, R. D., & Teague, M. L. (1987). Aging and leisure: vitality in later life. Englewood Cliffs, NJ: Prentice Hall. Madrigal, R., Havitz, M. E., & Howard, D. R. (1992). Married couples' involvement with family vacations. *Leisure Sciences*, 14(4), 287 -301. Mannell, R. C., & Kleiber, D. A. (1997). A Social Psychology of Leisure. Stage College, PA: Venture Publishing. Mannell, R. C., & Stynes, D. J. (1991). A retrospective: the benefits of leisure. In B. L. Driver, P. J. Brown & G. L. Peterson (Eds.), *Benefits of leisure* (pp. 461-473). Stage College, PA: Venture Publishing. McDonald, B. L. & Schreye, R. (1991). Benefits of Leisure: Spiritual Benefits of Leisure Participation and Leisure Settings. In B. L. Driver, P. J. Brown, & G. L. Peterson (Eds.), *Benefits of Leisure* (pp. 73-89). Stage College, PA: Venture Publishing. McIntyre, N. (1989). The Personal Meaning of Participation: Enduring Involvement. *Journal of Leisure Research*, 21(2), 167-179. McIntyre, N., & Pigram, J. J. (1992). Recreation specialization reexamined: The case of vehicle-based campers. *Leisure Sciences*, 14(1), 3-15. McPherson, B. D. (1991). Benefits of Leisure: Aging and Leisure Benefits: A Life Cycle Perspective. In B. L. Driver, P. J. Brown, & G. L. Peterson (Eds.), *Benefits of Leisure* (pp. 423-430). Stage College, PA: Venture Publishing. Moore, R. C. (1986). The Power of Nature Orientations of Girls and Boys Toward Biotic and Abiotic Play Settings on a Reconstructed Schoolyard. *Children's Environments Quarterly*, 3(3), 52-69. Moore, R. C. (1996). Compact Nature: The Role of Playing and Learning Gardens on Children's Lives. *Journal of Therapeutic Horticulture*, 8, 72-82. Moore, R. C., & Wong, H. H. (1997). Natural learning: the life history of an environmental schoolyard : creating environments for rediscovering nature's way of teaching. Berkeley, CA: MIG Communications. Mull, R. F., Bayless, K. G., & Ross, C. M.

(1987). Recreational sports programming. *Journal of Leisure Research*, 21, 53-61. Orthner, D. K., & Mancini, J. A. (1991). Benefits of Leisure: Benefits of Leisure for Family Bonding. In B. L. Driver, P. J. Brown, & G. L. Peterson (Eds.), *Benefits of Leisure* (pp. 289-301). Stage College, PA: Venture Publishing.

Paffenbarger, Jr., Ralph, S., Hyde, R. T., & Dow, A. (1991). Benefits of Leisure: Health Benefits of Physical Activity. In B. L. Driver, P. J. Brown, & G. L. Peterson (Eds.), *Benefits of Leisure* (pp. 49-57). Stage College, PA: Venture Publishing.

Parry, D. C., & Shaw, S. M. (1999). The Role of Leisure in Women's Experiences of Menopause and Mid-Life. *Leisure Sciences*, 21(3), 205-218. Philipp, S. F. (1997). Race, gender, and leisure benefits. *Leisure Science*, 19, 191-207. Roggenbuck, J. W., Loomis, R. J., & Dagostino, J. V. (1991). Benefits of Leisure: The Learning Benefits of Leisure. In B. L. Driver, P. J. Brown, & G. L. Peterson (Eds.), *Benefits of Leisure* (pp. 195-213). Stage College, PA: Venture Publishing.

Rothschild, M. L. (1984). Perspectives on involvement: Current problems and future directions. *Advances in Consumer Research*, 11, 216-217.

Russell, R. V. (1987). The importance of recreation satisfaction and activity participation to the life satisfaction of age-segregated retirees. *Journal of Leisure Research*, 19(4), 273-283.

Seiger, L. H. & Hesson, J. (1990). Walking for fitness. Kerper Boulevard, Dubuque: Wm. C. Brown Publishers.

Selin, S. W., & Howard, D. R. (1988). Ego involvement and leisure behavior: A conceptual specification. *Journal of leisure research*, 20(3), 237 - 244.

Shank, J. W., Coyle, C. P., Boyd, R., & Kinney, W. B. (1996). A classification scheme for therapeutic recreation research grounded in the rehabilitative sciences. *Therapeutic Recreation Journal*, 30(3) 179 - 196.

Sherif, C. W. (1980). Social values, attitudes, and involvement of the self. In *Nebraska Symposium on Motivation: Current Theory and Research on Motivation* (Vol. 28; pp. 1-64). Lincoln, NE: University of Nebraska Press.

Sherif, C. W., Sherif, M., & Nebergall, R. E. (1965). Attitude and attitude change: The social judgment-involvement approach. Philadelphia: W. G. Saunders.

Sherif, M., & Cantril, H. (1947). The psychology of ego-involvements: social attitudes & identifications. New York: Wiley.

Sherif, M., & Hovland, C. I. (1961). Social judgment: Assimilation and contrast effects in reaction to communication and attitude change. New Haven, CT: Greenwood.

Sherif, M., & Sherif, C. W. (1967). Attitude, ego-involvement, and change. New York: John Wiley & Sons.

Stich, T. F. (1983). Experiential therapy. *Journal of Ex periential Education*. 5(3), 23-30

Stebbins, R. A. (1992). Amateurs, professionals, and serious leisure. Quebec, Canada :Mcgill-Queen University Press, 94-100.

Stebbins, R. A. (2001). Serious Leisure. Society, 38(4), 53-57.

Stone, R. N. (1984). The marketing characteristics of involvement. *Advances in Consumer Research*, 11, 210-215.

Ulrich, R. S., Dimberg, U., & Driver, B. L. (1991). Benefits of Leisure: Psychophysiological Indicators of Leisure Benefits. In B. L. Driver, P. J. Brown, & G. L. Peterson (Eds.), *Benefits of Leisure* (pp. 73-89). Stage College, PA: Venture Publishing.

United States Federal Aviation Administration. (1981). *Model Aircraft Operating Standards*. Washington, D.C. : Dept. of Transportation, Federal Aviation Administration

Verduin, J. R. (1984). Adults and their leisure : the need for lifelong learning / by John R. Verduin and Douglas N. McEwen. Springfield, Ill., U.S.A. : C.C. Thomas.

Wankel, L. M. & Berger, B. G. (1991). The Personal and Social Benefits of Sport and Physical Activity. In B. L. Driver, P. J. Brown & G. L. Peterson (Eds.), *Benefits of leisure* (pp. 121-144). Stage College, PA: Venture Publishing.

Wiley, C. G. E., Shaw, S. M., & Havitz, M. E. (2000). Men's and women's involvement in sports: an examination of the gendered aspects of leisure involvement. *Leisure Sciences*, 22(1), 19-31.

Zaichkowsky, J. L. (1985). Measuring the Involvement Construct. *Journal of Consumer Research*, 12(3), 341-352.