

Summary Information from Cason and Gillis's (1994) Meta-Analysis

Cason, D. R. (1993). *A meta-analysis of adventure programming with adolescents*. Master of Science, Georgia College & State University, Milledgeville, GA.

Cason, D. R., & Gillis, H. L. (1994). A meta-analysis of outdoor adventure programming with adolescents. *Journal of Experiential Education*, 17(1), 40-47.

Abstract

Adventure practitioners asked to justify their work with adolescent populations have no one study to point to that statistically sums up major findings in the field. Whether it be a school board, treatment facility, or funding agency, one study is needed which can combine statistics from many studies into a format to show overall effectiveness of adventure programming. This study used the statistical technique of meta-analysis to demonstrate that adolescents who attend adventure programming are 62% better off than those who do not. While combining various populations and outcomes resulted in an overall effect that could be considered small by some accounts, the study did point to major problems with current research and offers some direction for future researchers to explore.

Author/ Year	Focus	Client Group	No. of Studies	No. of effects	No. of Participants	ES Baseline (Base-pre)	ES Program (Pre-Post)	ES Follow-Up (Post-FU)
Cason (1993, 1994)	Adventure Education	Adolescents	43	147	11,238	-	.31	-

Studies Included in Meta-Analysis (N=43)

References

- Adams, W. D. (1969). *Survival training: Its effect on the self concept and selected personality factors of emotionally disturbed adolescents*. Doctor of Philosophy, Utah State University, Logan, UT.
- Andrew, S. H. (1977). *An evaluation of two stress-challenge programs for delinquent youth*. Master of Science, Southern Illinois University, Carbondale, IL.
- Bacon, S. B. (1987). *The career beginnings Outward Bound Component: An empirical evaluation*. Greenwich, CT: Outward Bound USA.
- Callahan Jr., R. C. (1989). *Academic and therapeutic potential of the Sierra II process: An evaluation of an adapted Outward Bound diversion program for adjudicated juvenile delinquents*. Doctor of Philosophy, Old Dominion University, Norfolk, VA.
- Carter, J. D. (1980). *A comparative study of two training programs in Florida for delinquent youths: Eckerd Wilderness Camping and State Training Schools*. Doctor of Education, Florida State University, Tallahassee, FL.
- Chiles Jr., A. M. (1984). *Antecedents and outcomes of male delinquents referred to the Utah State Developmental Center or survival training*. Doctor of Philosophy, Brigham Young University, Provo, UT.

- Clifford, E., & Clifford, M. (1967). Self-concepts before and after survival training. *British Journal of Sociology and Clinical Psychology*, 6, 241-248.
- Dickinson, R. D. (1979). *A study to determine self-concept change through a program of wilderness skill development*. Unpublished manuscript, University of Colorado, Boulder, CO.
- Fersch, E., & Smith, M. (1973). Project Adventure - Year II. Final quantitative evaluation for 1972-1973. Hamilton, MA: Project Adventure.
- Gass, M. A. (1986). *The effects of a wilderness orientation program on incoming students to a university setting*. Doctor of Philosophy, University of Colorado, Boulder, CO.
- Gibson, P. M. (1981). *The effects of, and the correlates of success in, a wilderness therapy program for problem youth*. Doctor of Philosophy, Columbia University, New York.
- Gillis, H. L., & Simpson, C. A. (1991). Project choices: Adventure-based residential drug treatment for court-referred youth. *Journal of Addictions and Offender Counseling*, 12(1), 12-27. doi: 10.1002/j.2161-1874.1991.tb00077.x
- Heaps, R. A., & Thorstenson, C. T. (1974). Self-concept changes immediately and one year after survival training. *Therapeutic Recreation Journal*, 8(1), 60-63.
- Hendy, C. M. (1975). *Outward Bound and personality: 16 PF profiles of instructors and ipsative changes in male and female students 16-19 years of age*. Doctor of Philosophy, University of Oregon, Eugene, OR.
- Hileman, M. A. (1979). *An evaluation of an environmental stress-challenge program on the social attitudes and recidivism behavior of male delinquent youth*. Master of Arts, Southern Illinois University, Carbondale, IL.
- Kelly, F. J., & Baer, D. J. (1968). *Outward Bound schools as an alternative to institutionalization for adolescent delinquent boys*. Boston, MA: Outward Bound.
- Kraus, I. W. (1982). *The effectiveness of wilderness therapy with emotionally disturbed adolescents*. Doctor of Psychology, Georgia State University, Atlanta, GA.
- Lee, R. E., & Schroder, H. M. (1969). Effects of Outward Bound training on urban youth. *The Journal of Special Education*, 3(2), 187-205.
- Maizell, R. S. (1988). *Adventure-based counseling as a therapeutic intervention with court-involved adolescents*. Doctor of Psychology, Pace University, New York.
- Martin, P. B. (1983). *The effect of an outdoor adventure program on group cohesion and change in self-concept*. Doctor of Philosophy, Boston College, Chestnut Hill, MA.
- Munn, W. D. (1983). *The impact of a brief therapeutic wilderness experience on locus of control and self-esteem of handicapped adolescents*. Doctor of Education, University of Northern Colorado, Greeley, CO.
- Nurenberg, S. J. G. (1985). *Psychological development of borderline adolescents in wilderness therapy*. Doctor of Philosophy, Smith College, Northampton, MA.
- Quimby, T. R. (1983). *The effect of Project Adventure on selected affective and psychomotor outcomes*. Doctor of Education, Boston University, Boston, MA.
- Richards, G. E., & Richards, M. F. J. (1981). *Outward Bound Bridging Course 1981: An investigation and evaluation of an Outward Bound Remedial Programme*. Sydney, Australia: The Australian Outward Bound Foundation.
- Sachs, J. J., & Miller, S. R. (1992). The impact of a wilderness experience on the social interactions and social expectations of behaviorally disordered adolescents. *Behavioral Disorders*, 17(2), 89-98.
- Sakofs, M., & Schuurman, D. (1991). *Assessing the impact of the Wilderness Alternative for Youth Program: An Outward Bound programme for adjudicated youth*. Greenwich, CT: Corbam Resources.
- Smith, M. A. W. (1972). *An investigation of the effects of an Outward Bound experience on selected personality factors and behaviors of high school juniors*. Doctor of Philosophy, University of Oregon, Eugene, OR.
- Smith, M. L., Gabriel, R., Schott, J., & Padia, W. L. (1975). *Evaluation of the effects of Outward Bound*. Unpublished manuscript, University of Colorado, Boulder, CO.

- Steiger, H. J. (1986). *The effects of a group based wilderness adventure program on the moral reasoning, socio-moral attitudes, and self-esteem of adolescents*. University of Minnesota, Minneapolis, MN.
- Stewart, M. W. (1978). *Effects of the Connecticut Wilderness School on selected personality characteristics and attitudes of troubled youth*. Doctor of Philosophy, University of Utah, Salt Lake City, UT.
- Stimpson, D. V., & Pedersen, D. M. (1970). Effects of a survival training experience upon evaluation of self and others for underachieving high school students. *Perceptual and Motor Skills*, 31(1), 337-338. doi: 10.2466/pms.1970.31.1.337
- Stogner, J. D. (1979). *The effects of a wilderness experience on self-concept and academic performance*. Doctor of Philosophy, Virginia Polytechnic Institute and State University, Blacksburg, VA.
- Stremba, R. H. (1977). *A study of the relationship between participation in an Outward Bound program and changes to self-esteem and locus of control*. Doctor of Philosophy, Indiana University, Bloomington, IN.
- Svobodny, L. (1979). *Increasing self-concept through Outward Bound*. Paper presented at the Annual International Convention, Dallas, TX.
- Thomas, S. E. (1983). *The effects of course length on self-concept changes in participant of the Minnesota Outward Bound School Junior Program*. Doctor of Philosophy, State University of New York, Buffalo, NY.
- Thorstenson, C. T., & Heaps, R. A. (1973). Outdoor survival and its implications for rehabilitation. *Therapeutic Recreation Journal*, 7(1), 31-33.
- Walton, R. A. (1985). *Therapeutic camping with inpatient adolescents: A modality for training in interpersonal cognitive problem-solving skills*. Doctor of Philosophy, Saint Louis University, St Louis, MO.
- Weeks, S. Z. (1985). *The effects of Sierra II, an adventure probation program, upon selected behavioral variables of adolescent juvenile delinquents*. Doctor of Education, University Of Virginia, Charlottesville, VA.
- Wetmore, R. C. (1972). *The influence of Outward Bound school experience on the self-concept of adolescent boys*. Doctor of Philosophy, Boston University, Boston, MA.
- Williams, T. E. (1984). *The effects of a brief adjunctive physical challenge wilderness program on locus of control in adolescent substance abusers*. Oklahoma State University, Stillwater, OK.
- Winterdyk, J. A. (1980). *A wilderness adventure program as an alternative for juvenile probationers: An evaluation*. Master of Arts, Simon Frasier University, Surrey, BC.
- Wright, A. N. (1982). *Therapeutic potential of the Outward Bound process: An evaluation of a treatment program for juvenile delinquents*. Doctor of Philosophy, Pennsylvania State University, University Park, PA.

Note: This list of studies was obtained from Cason (1993). I was able to determine the references for 42 of the 43 studies. Identifying information for the unidentified reference is: Gillis, H. L. (1992), 88 participants with a mean age of 15.64. Program length was 42 days. Unfortunately Lee Gillis was unable to identify the reference of this study.