A Brief Report on the Short-term Changes in the Personal Effectiveness of Young Adult Gay, Lesbian, Bisexual and Transgendered Participants in a 2002 Colorado Outward Bound School Program

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Executive Summary

To date, very little attention has been paid to providing outdoor education programs to meet the particular developmental needs of young adult people who are gay, lesbian, bisexual, or transgendered (GLBT). An exception has been a series of three programs conducted by the Colorado Outward Bound School in 2000 (9 participants), 2001 (12 participants) and 2002 (14 participants). Program evaluations of the 2000 and 2001 programs found very high levels of change in personal effectiveness between the beginning and end of the programs. The current report examined the outcomes of the 2002 program and found trends towards positive change in all eight areas of personal effectiveness, with three statistically significant changes and statistically significant, moderate overall change. The strongest areas of change were for Self Confidence and Time Management. Unlike the 2000 and 2001 results, the 2002 results did not find substantial changes in Task Leadership. Some variations in the size of program outcomes can be expected when comparing small groups, nevertheless given the more moderate outcomes for the 2002 program it would be prudent for a close examination of course reports and participant feedback to be conducted to help support the interpretation of the quantitative results presented in this report. The very high results of the 2000 and 2001 programs, plus the moderate results of the 2002 program, together support the value of providing tailored outdoor education experiences to support the personal development of young adults whose well-being may and personal life effectiveness may be at risk.
An underlying philosophy of the adventure education movement could be expressed as “development by challenge with support”. In other words, by guiding groups of people through a series of incremental challenges in a novel, stimulating environment and by providing high levels of personal and social support, healthy opportunities for personal development are created.

Kurt Hahn, the founder of the Outward Bound schools saw Outward Bound programs as being capable of igniting an ongoing process of growth and development within each individual. Some fifty years later, Hahn’s claims have been well supported by meta-analytic summaries of hundreds of quantitative research studies examining the effects of outdoor education programs (Cason & Gillis, 1994; Hans, 2000; Hattie, Marsh, H. W., Neill & Richards, 1997; Marsh, P. E., 1999; Neill & Richards, 1998; Neill, 2002). These studies indicate that, on average, adventure education programs have small to moderate positive effects on the lives of participants and that these effects are long lasting. However, there is a wide range in the effectiveness of different types of outdoor education programs, with Outward Bound programs having been clearly identified as having very strong outcomes (Hattie, et al., 1997).

Outward Bound programs are also notable for their history of adaptive programming. Particularly in recent decades there have been increased efforts to provide programming for groups who have been traditionally marginalized in their access to the potential benefits of outdoor education programs and outdoor recreation activities. Some notable programs have been developed specifically for meeting the needs of women, youth at risk, survivors of cancer, Vietnam veterans, and people who have physical and mental disabilities. In many cases, the Outward Bound schools have been at the forefront of pioneering programs for such groups. It still remains a significant challenge for outdoor education, however, to continue to the diversification of its programming efforts and to provide more opportunities for the participation of people from minority groups, including people of all ages, cultures and social groups.

To date, very little attention has been paid to providing outdoor education programs which meet the particular developmental needs of young adult people who are gay, lesbian, bisexual, or transgendered (GLBT). This is somewhat surprising, particularly given the heightened public awareness of difficulties and challenges faced by GLBT youth, including a substantially higher likelihood of suffering from depression and committing suicide.

Several recent searches of the available literature have failed to identify the existence of any outdoor education programs which are specifically designed to meet the need of GLBT people. The exception to this is a program that has been running since 2000 at the Colorado Outward Bound School, funded by the Gill Foundation. Program evaluations of the previous two programs by Neill and Flory (2000) and Neill (2001) indicated very high levels of change in psychosocial competence as measured by pre-post administration of the Life Effectiveness Questionnaires (LEQ; Neill, Marsh, & Richards, 1997).

Previous Findings for The Colorado Outward Bound School Programs for Gay, Lesbian, Bisexual and Transgendered Young Adults

In 2000 and 2001, the Colorado Outward Bound School conducted a nine day mountaineering program for 9 and 12 GLBT young adults respectively from Colorado, USA. The goals of the program were developing leadership and self-awareness, experiencing community with other...
GLBT youth, exposing participants to a diverse range of cultures, perspectives and people, and giving voice to GLBT youth concerns. An evaluation of the pre-post changes in participants’ perceptions of their personal effectiveness indicated statistically significant positive change in each of eight areas investigated and a very high overall amount of change (Effect size = 1.22, N = 9, in Neill & Flory, 2000; Effect size = 1.12, N = 12, in Neill, 2001). Positive changes were found in all eight areas of personal effectiveness measured by the LEQ-H, with the most profound effects in the area of Task Leadership, which is the extent to which an individual perceives that he/she can lead other people effectively when a task needs to be done and productivity is the primary requirement. Particularly strong effects were also observed for participants’ effectiveness in their Time Management and in their Self Confidence. The current research evaluation report focuses on the impact of a third COBS program for 14 GLBT young adults, conducted in 2002.

Method

Participants
Participants in this study were eight females, five males and one transgendered person, ranging in age from 15 to 26 years (M = 21.4, SD = 2.0).

Design
Participants were asked to complete ratings of their self-perceived personal effectiveness in eight key areas before and after the program using the “Life Effectiveness Questionnaire”, version H (LEQ-H) (Neill, Marsh & Richards, 1997). The LEQ has been extensively developed over a period of 15 years as a tool for measuring the amount of change in personal effectiveness skills as a result of intervention programs (see Appendix A for descriptions of the eight LEQ-H scales).

A strength of this program evaluation design is that the difference between participants’ pre and post self-assessments can be compared for each of the eight distinct areas of life effectiveness and these changes can also be compared to previous outcomes for COBS GLBT programs and typical results for other outdoor education programs. The pre-post design is appropriate for gaining a quantitative estimate of the immediate impacts of the program. However, several cautions about this pre-post design include: a) the need for follow-up assessments to determine longer-term benefits; b) the need to gather comparative data about other similar interventions for the target group in order to help determine the relative efficacy of the COBS GLBT program; c) an awareness that improvements in actual personal effectiveness may not directly equate to the self-perceived ratings of personal effectiveness, although the enhancement of self-perceptions in itself is a desirable goal, particularly in populations vulnerable to low self-perceptions of self-value and self-competence, and d) qualitative observations and course reports by program staff and participants should be used to help interpret the quantitative LEQ outcomes.

Program
The 2002 COBS GLTB Youth Leadership Program was a ten day mountaineering program for 14 Colorado GLBT youth with the goals of developing leadership and self-awareness, experiencing community with other GLBT youth, exposing participants to a diverse range of cultures, perspectives and people, and giving voice to GLBT young adult concerns. The program aimed to create an atmosphere in which GLBT young adults could have a wilderness experience in which they could explore and share their feelings and beliefs about sexual orientation and gender identity.

The general goals of Outward Bound involve developing in students the necessary leadership skills and self-confidence to become responsible, contributing members of their communities.
Outward Bound program methods involve the use of adventurous activities in wilderness areas through which students are engaged in building new skills through facing challenges and problem solving tasks. These experiences provide critical opportunities for developing self-confidence, discovering one’s self, and for providing service to others. The following were the stated goals of the GLBT Youth Leadership Course:

1. **Personal Leadership** - to enhance and expand one’s self-concept.
2. **Teamwork** - to enhance communication, cooperation, and sense of community.
3. **Risk-taking** - to take risks inherent in participation in a COBS course within a group that is safe and supportive of all aspects of one’s identity.
4. **Identity Exploration** - to explore one’s GLBT identity more fully, and to have the opportunity to dialog with other GLBT youth in a safe setting.
5. **Environmental Awareness** - to instill a greater appreciation for and understanding of the natural environment.
6. **Learning** - to instill an attitude of curiosity, experimentation, and participation in experiential learning.
7. **Philosophy and Values** - to provide situations and experiences which can focus, test and refine personal philosophies of life and values. Participation in the Outward Bound way of life will stimulate students to examine, articulate and reevaluate their own basic beliefs.
8. **Enjoyment** - to provide participants with an opportunity to explore the natural world and have some fun.

**Results & Discussion**

The pre-post results for the changes in personal effectiveness as measured by the LEQ-H are presented in Table 1 (Appendix C) and Figure 1 (Appendix D). In terms of statistical significance, three out of eight LEQ scales changed positively (compared to all eight in 2000 and six out of eight in 2001). A more important indicator, given the small sample size, is the overall effect size (for an explanation of effect size see Appendix B). The overall 2002 COBS GLBT program ES for changes in personal effectiveness was .37, indicating a moderate level of personal change. This result was lower than the very high ES of 1.22 in the 2000 program and 1.12 in the 2001 program.

This moderately positive result for the 2002 program follows very impressive results the previous two COBS GLBT programs and underlines the need to continue monitoring program effectiveness. The results should be interpreted in the broader context of the typical effectiveness of outdoor education programs. In this respect the outcomes of the 2002 COBS GLBT program was above the average effects sizes reported in over one hundred other empirical outdoor education studies (ES = .34; see Neill, 2002), although for Outward Bound programs effect sizes are typically higher (Hattie, et al., 1997). The sample sizes for all the COBS GLBT program evaluations to date have been small, so variations in outcomes for the different groups can be expected and are not necessarily a cause for particular concern.

In the 2002 program results, the strongest effects were for Time Management (ES = .57), Social Competence (ES = .49), and Self Confidence (ES = .57). Notable effects were also found for Intellectual Flexibility (ES = .34) and Emotional Control (ES = .31). Interestingly, the effects for the 2002 program on Task Leadership (ES = .04) were negligible, in contrast to the very large changes reported for this dimension in 2000 and 2001.

To be clear, the current results show that there were trends indicating positive changes in all eight LEQ scales, with three of these changes being statistically significant, plus the overall effect size was significant and greater than what is reported on average for outdoor education personal
growth programs. It would be remiss, however, of the current report to not suggest that a close examination be conducted of any other reports from the 2002 program, particularly qualitative course reports by instructors and program coordinators, as well as the written or spoken comments of the program participants, to help develop an understanding of why the 2002 program effects were not as large as in previous years. It would also be desirable to continue tracking the self-perceptions of these young adults upon returning to their home environment in order to determine the longevity of the moderately positive effects.

Overall, the findings of this program evaluation continue to support the notion that carefully adapted outdoor education programs can be effective in addressing the development needs of minority groups such as GLBT young adults. The outstanding results from the 2000 and 2001 programs have been followed by moderately positive for the 2002 program. This third evaluation has provided valuable replication and helps to refine the understanding about what these programs can consistently achieve. The two most consistently strong outcomes have been for building Self Confidence and Time Management. It is also notable that positive change has been consistently reported for all the measured dimensions of personal effectiveness. The areas in which there has been least change (Intellectual Flexibility and Achievement Motivation) should not be of particular concern for the COBS GLBT program because these are also the areas in which least change has been reported in much larger samples of outdoor education participants (Neill, in progress).

In summary, the current evaluation found moderate positive changes in the self-perceived psychosocial competence of GLBT young adults who participated in the 2002 COBS program. It is clear from these results that the COBS GLBT programming offers valuable personal development experiences for young GLBT adults.
References


Appendix A: Descriptions of the Life Effectiveness Questionnaire scales

<table>
<thead>
<tr>
<th>LEQ Scales</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achievement Motivation</td>
<td>The extent to which the individual is motivated to achieve excellence and put the required effort into action to attain it.</td>
</tr>
<tr>
<td>Active Initiative</td>
<td>The extent to which the individual likes to initiate action in new situations.</td>
</tr>
<tr>
<td>Emotional Control</td>
<td>The extent to which the individual perceives he/she maintains emotional control when he/she is faced with potentially stressful situations.</td>
</tr>
<tr>
<td>Intellectual Flexibility</td>
<td>The extent to which the individual perceives he/she can adapt his/her thinking and accommodate new information from changing conditions and different perspectives.</td>
</tr>
<tr>
<td>Self Confidence</td>
<td>The degree of confidence the individual has in his/her abilities and the success of their actions.</td>
</tr>
<tr>
<td>Social Competence</td>
<td>The degree of personal confidence and self-perceived ability in social interactions.</td>
</tr>
<tr>
<td>Task Leadership</td>
<td>The extent to which the individual perceives he/she can lead other people effectively when a task needs to be done and productivity is the primary requirement.</td>
</tr>
<tr>
<td>Time Management</td>
<td>The extent that an individual perceives that he/she makes optimum use of time.</td>
</tr>
</tbody>
</table>
Appendix B: What is an Effect Size?

An effect size (ES) is a measure of ‘how much’ difference there is between peoples’ rating of themselves at two different points in time. In other words, the ES indicates the amount of change. An ES of 0 means no change, a negative ES means a lowering of perceptions, while a positive ES means an enhancement of perceptions. ESs are proportional, so an ES of .40 represents twice as much change as an ES of .20.

Various experts have offered suggestions about the ‘meaning’ of different ESs. For example it has been suggested that an ES of .50 is a change of practical significance while .25 is educationally significant (Wolf, 1986). Other authors have warned against global guides to interpreting ESs since it is necessary to know about who and what is being measured in order to make a genuine assessment about the value of a particular ES.

In practice, a small ES can be very impressive if, for example, the outcome is difficult to change (e.g. a personality construct) or if the outcome is very valuable (e.g. an increase in life expectancy). On the other hand, a large ES doesn’t necessarily mean that there is any practical value in the change, particularly if it isn’t related to the aims of the intervention (e.g. religious orientation).

For program evaluation purposes, it is most useful to compare ‘like with like’. For example, if a school-based outdoor education program aims to enhance students’ self-concepts then it should be compared with self-concept research on similar programs. On the other hand, it can also be useful to compare a program’s outcomes with other types of outdoor education, such as management training or special education programs, and also to other intervention techniques such as counseling and psychotherapy. Such comparisons can provide valuable feedback about a program’s relative strengths and weaknesses.

For further information on how to use effect sizes for outdoor education program evaluation see Neill and Richards (1998).
### Appendix C:
Table of Descriptive Results Showing the Amount of Change Reported by COBS GLBT 2002 participants for each of the Eight Dimensions of Personal Effectiveness

What is an Effect Size?

Table 1. Descriptive Life Effectiveness Questionnaire Statistics for COBS GLBT 2002 program ($N = 14$).

<table>
<thead>
<tr>
<th>LEQ Scale</th>
<th>Mean (SD) Time 1</th>
<th>Mean (SD) Time 2</th>
<th>Effect Size$^a$</th>
<th>$t$</th>
<th>sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Management</td>
<td>5.31 (1.44)</td>
<td>6.02 (1.30)</td>
<td>.57</td>
<td>2.27</td>
<td>*</td>
</tr>
<tr>
<td>Social Competence</td>
<td>6.12 (1.20)</td>
<td>6.69 (0.85)</td>
<td>.49</td>
<td>1.90</td>
<td>*</td>
</tr>
<tr>
<td>Achievement Motivation</td>
<td>6.95 (1.08)</td>
<td>7.19 (0.96)</td>
<td>.24</td>
<td>1.41</td>
<td></td>
</tr>
<tr>
<td>Intellectual Flexibility</td>
<td>6.26 (1.27)</td>
<td>6.60 (1.22)</td>
<td>.34</td>
<td>1.34</td>
<td></td>
</tr>
<tr>
<td>Task Leadership</td>
<td>6.62 (0.75)</td>
<td>6.67 (0.69)</td>
<td>.04</td>
<td>.20</td>
<td></td>
</tr>
<tr>
<td>Emotional Control</td>
<td>6.07 (1.66)</td>
<td>6.45 (1.45)</td>
<td>.31</td>
<td>1.23</td>
<td></td>
</tr>
<tr>
<td>Active Initiative</td>
<td>6.81 (1.20)</td>
<td>6.90 (0.86)</td>
<td>.08</td>
<td>.36</td>
<td></td>
</tr>
<tr>
<td>Self Confidence</td>
<td>6.57 (1.15)</td>
<td>7.21 (0.66)</td>
<td>.57</td>
<td>2.33</td>
<td>*</td>
</tr>
<tr>
<td>Overall LEQ</td>
<td>6.34 (0.48)</td>
<td>6.72 (0.48)</td>
<td>.37$^b$</td>
<td>2.50</td>
<td>*</td>
</tr>
</tbody>
</table>

Notes. $^*$ $p<.01$; $^*$ $p<.10$

$^a$ Effect Sizes (ESs) were computed as the difference between the means divided by the standard deviation derived from the normative database (Neill, Marsh, & Richards, 1997);

$^b$ Computed as the mean of the eight LEQ scale effect sizes.
Appendix D:
Graph Showing the Amount of Change Reported by COBS GLBT 2002 participants for each of the Eight Dimensions of Personal Effectiveness

![LEQ Scale Mean Effect Sizes](image)

**Figure 1**
Life Effectiveness Questionnaire Effect Sizes for the COBS GLBT 2002 Program