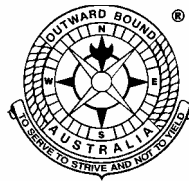


**The Impact of
Outward Bound Challenge Courses
on Disadvantaged Youth
Sponsored by Colonial Foundation[©]**



**James Neill
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March, 2001**

Important Information

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Declaration of Independent Viewpoint: I declare that the content of this report is a fair, independent and expert evaluation, based on the data collected, and that the interpretive viewpoints strive to be objective and balanced.

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The Impact of Outward Bound Challenge Courses on Disadvantaged Youth Sponsored by Colonial Foundation[©]

Executive Summary

The purpose of this report is to provide an independent evaluation of the impact of Outward Bound Australia (OBA) programs on young adults whose participation was sponsored by the Colonial Foundation. The participants were 16 socially and financially disadvantaged young Australians.

The participants' scholarship application forms and the reports submitted by the participants' referees were content analysed and a profile description was developed. The participants were males and females in their late teenage years or their very early 20's (average age = 19 years) who came from four different states of Australia. All participants were financially disadvantaged, had experienced social disadvantage (often through a disrupted family), were looking for full-time work or involved in further training, were showing initiative towards the betterment of their lives, but were being disadvantaged because of a lack of maturity (or lack of opportunity to develop) in their emotional and/or social skills. A common theme for wanting to participate in the Outward Bound program was the hope to get a clearer direction in life through practical learning and self-understanding experiences based in the outdoors.

The Outward Bound "Challenge Course" involved an extended 22-day outdoor expedition-based program which was designed to challenge participants physically, emotionally, socially and intellectually. The program was based on an experiential learning philosophy, in which a series of challenging goals related to an expedition were set, and group and personal performance was reviewed along the way. A key part of the program was the feedback and counselling received from group instructors. Importantly, the disadvantaged participants were involved in different groups and shared their Outward Bound experience with group members from many others walks of life. In addition, participants were all carefully screened and had to demonstrate that they were committed to improving their lives, including making a financial contribution towards their participation in the Outward Bound course.

Three sources of evidence were analysed in order to determine the impact of the Outward Bound programs on the disadvantaged participants:

- (i) Instructors' written reports;
- (ii) Participants' ratings of program quality;
- (iii) Changes in participants' perceptions of their personal effectiveness.

Overall, the instructors' end-of-program written reports showed that the participants were highly enthusiastic about the learning opportunities provided by Outward Bound, although many had to overcome significant social and personal challenges during the course. There were no cases in which the instructors reported negative outcomes. The major impacts appeared be:

- Increased self-confidence and more positive attitudes;
- Instructor and group feedback lead to improved behavioural maturity;
- Improved social, communication and leadership skills.

At the end of their Outward Bound experience participants were asked to complete a comprehensive 57-item questionnaire with 9 overall scales¹ to assess the quality and impact of the experience. The findings indicated a very high level of satisfaction with the Outward Bound experience, with an overall mean rating of over 7 (out of 8). The lowest rating given to any of the 9 overall scales by any participant was 4 out of 8, indicating an impressive consistency of quality. In response to a key statement, “The course was valuable for my personal growth and development”, 12 out of 14 participants indicated that this was ‘true’ or ‘definitely true’.

Participants’ perceptions of their personal effectiveness in a range of important areas of life were assessed on three different occasions – prior to arriving at Outward Bound, on arriving at Outward Bound, and at the end of the program². Results revealed a large, statistically significant, boost in participants’ self-perceptions in all areas. The strongest of the program effects were in the areas of Intellectual Flexibility (which can be interpreted as openness in thinking and accepting the ideas of others), Task Leadership (which can be interpreted as one’s capacity to successfully take on leadership roles) and Emotional Control (which can be interpreted as one’s capacity to remain calm in stressful situations). Compared to a large amount of previous research on the impact of outdoor education programs on disadvantaged participants, this Outward Bound program was more than twice as effective (Hattie, Marsh, Neill, & Richards, 1997).

A question remains about the long-term impacts of these Outward Bound programs for disadvantaged students and future evaluation studies should consider this question. On the optimistic side, a large summary of previous research has suggested that outdoor education sparks ongoing growth following the programs (Hattie, et al, 1997). On the pessimistic side, most of these participants were returning to their disadvantaged situations, without the positive support and encouragement they received during the program. Ongoing followup and support could be considered as part of future intervention strategies to help ensure the transferability of the learning.

An important point to note is that the careful screening process for the selection of recipients of the scholarship appears to have been crucial to the success of this project. In all cases it was evident that although the recipient was disadvantaged, each participant was involved in active efforts to improve his/her own life. The Outward Bound courses seem to have provided a positive, dynamic environment in which to allow the growth and development of these motivated individuals.

In conclusion, the scholarship investment in these 16 disadvantaged young people appears to have been wisely spent. In virtually all cases very notable positive effects were evident from instructor reports, participant feedback and changes in self-perceptions. From the available evidence it is clear that important outcomes have been achieved for young people whose disadvantaged circumstances have limited their opportunities in life.

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¹ Participant Evaluation of Instructor and Program Quality (PEIPQ) (Richards & Neill, 1994)

² Life Effectiveness Questionnaire (Neill, Marsh, Richards, 1997)

Introduction

Young People in Australia

The plight of young Australians is a significant issue in Australian society and has received considerable media attention over the past decade in particular. The focus is often on issues to do with unemployment, depression and suicide rates, lack of opportunities in rural areas, and drug-abuse. Underlying all of these problems is the fact that financially and socially disadvantaged young Australians have limited opportunities in which to experience their own strengths and weaknesses, develop confidence in their personal abilities, and to set clear directions for their future. In brief, this would seem to suggest that some different approaches are needed to support the development of young people as they struggle to find a place in the rapidly changing nature of Australian workplaces and lifestyles.

A fundamental quality that young people need to develop is a repertoire of effective life skills. These are skills such as how to manage their time, how to communicate with others, how to discipline one's self, how to think openly and listen to others ideas, how to work in a team, how to control one's emotions, how to take initiative, and how to have confidence in one's self and one's abilities. Unfortunately disrupted home lives and unsettling school-based experiences have contributed to a substantial proportion of young people feeling unsure about themselves, their own potential, and their life's direction.

On the positive side, there are many promising intervention programs which are being developed around Australia. These include government-funded job training, job experience programs as well as non-profit private organisations, and industry-initiated or industry-supported initiatives to help Australian youth.

Intervention Program: The Outward Bound Model

One of the best known programs for 'life training' is Outward Bound. Typically Outward Bound programs involve taking young people on challenging expedition-based programs for a period of several weeks. These programs have evolved over a period of 50 years to primarily focus on developing individual and group skills by exposing people to a graduated sequence of experiences which challenge the participants to find within themselves, and develop, qualities such as perseverance, determination, self-belief, accepting and receiving the support and feedback of others, communication, and community service.

The means by which these goals are achieved often involves adventure activities such as bushwalking, rafting, caving, rockclimbing, and so on, but even more important are goal setting sessions, counselling sessions with instructors, group feedback and debriefs, planning sessions, and spontaneous group interactions which combine to provide a highly positive environment for personal growth. The environment provided by these programs is often in stark contrast to the places from which at risk youths have spent much of their time.

The focus of the OBA 22-day Challenge Courses is on the personal development of participants via an intensive expedition-based program in which participants are encouraged to take responsibility for the conduct of most aspects of the program. Typical activities included expedition planning, food planning, ropes challenge courses, initiative tasks, navigation, bushwalking, communication skill sessions, goal setting, group debriefings, caving, rafting

and/or canoeing, rockclimbing and abseiling, solo (3 days alone), a final expedition without an instructor and a cross-country run.

The Outward Bound method is based on a philosophy of experiential learning, as depicted in Figure 1.

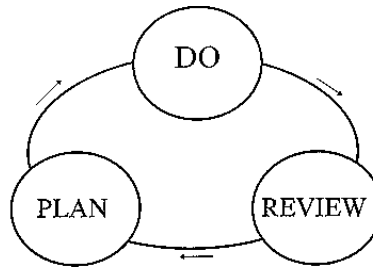


Figure 1. Experiential Learning Cycle (adapted from Kolb, 1984).

According to this approach, people learn best by doing something, reviewing their performance, and then planning how to do the task in future. By then doing the task or situation again, and continuing to review and plan future efforts, a powerful learning cycle within people is established. In the Outward Bound model, this experiential learning method is utilised in the context of highly challenging physical activities and associated social and personal challenges that are provoked in participants.

Another key to the Outward Bound experience is the presence of highly supportive, carefully trained facilitators who guide the group experience. Initially the instructors take more lead and control, but as the course progresses, the instructor plays a less direct role, allowing the group to run the expedition for themselves. In this way, participants see themselves tackling and solving complex issues and accomplishing expeditions which would have been well beyond their reach at the beginning of the program. Along the way, group development activities, debriefing of experiences, and individual feedback and counselling are facilitated by instructors so as to help ensure that each individual's experience is tailored to his/her personal goals³.

Impacts of Outward Bound Australia Programs

In a major study of research on the effects of outdoor education programs, involving a meta-analysis of 99 separate studies, representing over 10,000 participants, outdoor education programs were found to make notable long-term impacts on people's lives (Hattie, Marsh, Neill, & Richards, 1997). In particular, Outward Bound programs were identified as being significantly more impactful than other types of adventure education programs. The Outward Bound programs conducted by the Australian school provided the highest outcome of all programs, suggesting that this organisation offers one of the promising life skill intervention programs around the world⁴.

Much of the success of the OBA program effectiveness can be attributed to its past commitment to innovative program design based on educational and psychological theory coupled with a careful research and evaluation of the effects on participants. The combination of innovative

³ For a more detailed description of the educational purposes and methods of Outward Bound see Richards (1997).

⁴ For more detailed summaries of previous outdoor education and Outward Bound Australia research see Neill (1998) and Neill and Richards (1998).

educational principles and research evaluation in a non-profit organisation with a mission for enhancing the life skills of young people is rare.

A limitation of previous research on OBA programs, however, has been that specific outcomes for disadvantaged youths have not been investigated and identified. Hence one of the purposes of this report is examine the impacts of OBA programs for disadvantaged youths compared to other participants.

Scholarship Investment

One of the ironies about outdoor education is that those people who potentially stand to gain much from such experiences may be those who have been marginalised in some way by society. Through such social and economic disadvantage, many young people in particular are at risk of not fulfilling their potential in their personal and working lives.

Thus, there is an argument for investment by government and industry-partners in helping young people from disadvantaged backgrounds to gain access to learning opportunities. In theory, and at its most optimistic, a relatively small investment at a critical stage in a young person's development could help to spark within them a positive cycle of ongoing growth and development. At the very least, a satisfactory return for a scholarship participant should be that the person has a personally rewarding experience, that there is some evidence of self-improvement during the program, and that at least a small positive ongoing impact on the participants' results.

One of the dilemmas in deciding how to target limited community development money is in deciding whether to invest in substantial efforts to enhance particular individual's lives or to spread investment across a community, making relative small contributions to lives of a larger number of individuals. Whatever the strategy, evaluation should be undertaken to determine the relative social capital achieved through the investment.

In other words we might ask, "For the financial investment, what are the individual and social dividends?" One of the difficulties in answering this question is that psychosocial dividends are more difficult to determine than economic ones. Hence it is necessary to employ appropriate research methodologies and expertise from social scientists.

Method

Participants

The participants in this study were 16 financially and socially disadvantaged young Australians (9 males and 7 females), with an average age of 19 years (range 17 to 22 years)⁵. There were four participants from each of four different states in Australia – South Australia, New South Wales, the Australian Capital Territory, and Queensland.

Their participation in 22-day Outward Bound Australia (OBA) Challenge Courses was made possible through sponsorship by the Colonial Foundation. Participants were involved in public-enrolment Challenge Courses. In other words, these scholarship participants were not placed in a single group of disadvantaged participants, but instead completed the Outward Bound course along with group members who were from a wide variety of backgrounds.

An important part of ensuring that scholarship recipients were genuinely committed to their self-improvement was that each person made at least some financial contribution to their experience. Applicants were strongly encouraged to contribute at least \$100 and to pay for their own travel to and from the course, as well as to pay for the clothes and gear they need for the course. Thus, participants all demonstrated their commitment by completing these preparations and contributions prior to their arrival.

The participants' scholarship application forms and accompanying referee reports were content analysed and a profile of the disadvantaged participants created. Generally speaking, participants could be characterised as being in their late teenage years or their very early 20's. This is a time in life which is particularly challenging for disadvantaged youths because they are usually struggling to make a transition from schooling (or job training) into work, and between living at home (or under care) into independence, and from emotional and/or social immaturity into personal maturity.

The participants were clearly financially disadvantaged, judging by their personal and referee reports (see Appendix A and C), and would have been unable to attend the OBA program without financial aid.

About half of the participants were living with a parent, although it was noticeable that most of the participants' parents were separated. Most of the participants were looking for full-time work and several were receiving government job search payments. However, most of the participants were also actively showing an interest in their self-betterment, by pursuing job-related training (such as through Green Corps), further education (such as completing Year 12 certificate or doing TAFE studies). In addition, there were several indications that participants were in some way being held back not only by their social disadvantage, but also by some aspect of their personal development, such as having discipline problems, difficulty communicating, and low self-confidence. These three aspects of personal growth were those most commonly identified by participants themselves, referees and particularly by the Outward Bound instructors involved with the participants.

A profile description of the participants was also offered by the OBA Enrolment Officer, Wendy Machin (pers.comm, 20/12/2001), who dealt directly with the scholarship recipients:

- all are disadvantaged financially;

⁵ Although there were 16 participants, complete data was not obtained for all of them, thus the sample sizes for particular analyses range between 12 and 14.

- some are confronting and working on major life challenges - drugs, homelessness, depression, etc.;
- all low self esteem, low self worth, etc.;
- some are committed to the environment and their own personal growth and, I think, trying to find "where" they fit in society.

In summary, the typical profile of participants was of young adults who had experienced social disadvantage through a disrupted family, were looking for full-time work, were showing initiative by pursuing further job-related training, but who were being undermined in their efforts to better themselves because of an immaturity in, or lack of opportunity to positively develop, their emotional and social life skills.

The reasons stated by participants for wishing to do an OBA course (see Appendix B) and by their referees (see Appendix C) reiterate this general profile and are summarised in Table 1. An overriding common theme was that participants hoped to get a clearer direction in life through practical learning and self-understanding experiences based in the outdoors.

Table 1

Major reason why each scholarship participant wanted to do an Outward Bound Challenge Course (from scholarship application forms) (N=13)

Reason
To further my experience in people relations, likes challenges, and a step towards the army;
To take part in exciting activities to increase confidence, motivation and potential.
To gain independence, leadership, social and confidence skills to help.
To participate in a challenging experience to develop strength of character and teamwork;
To learn bush skills, meet new people, and decide whether to pursue conservation ;
Opportunity to improve technical skills in outdoor recreation and will help in going to TAFE;
Opportunity for personal and social development, social skills, and practical experience;
To discover challenge outlook on life, enhance life skills and help find direction in life;
To get clearer idea of where my life is going through practical learning activities in the bush;
Need more self-esteem, motivation, self-understanding and help with social skills;
To have fun, get experience, learn to trust and work with strangers, and want to find a job;
To see what I am capable of, enjoy being outdoors;
To gain team building experience and prepare for the army;

Materials

Three sources of material were used to analyse the effects of the OBA programs on disadvantaged youths.

Instructor's Written Reports

As part of the normal scholarship evaluation process, the instructors of OBA participants who receive scholarships are required to submit a short written report at the end of the program. This report describes the instructor's observations of the participant and his/her progress during the course, and overall impacts.

Life Effectiveness Questionnaire (LEQ)

The LEQ is a self-report instrument designed to measure the effects of experiential education programs on the personal development of participants (Neill, Marsh, & Richards, 1997). The questionnaire measures 8 aspects of personal effectiveness, as shown in Table 2.

Table 2
 Descriptions of The Life Effectiveness Questionnaire Scales (from Neill, Marsh, & Richards, 1997)

LEQ Scale	Description
Time Management	Optimum use of time.
Social Competence	Personal confidence and ability in social interactions.
Achievement Motivation	Motivated to achieve excellence and put the required effort into action to attain it.
Intellectual Flexibility	Adapt thinking and accommodate new information from changing conditions and different perspectives.
Task Leadership	Lead other people effectively when a task needs to be done and productivity is the primary requirement.
Emotional Control	Maintains emotional control when faced with potentially stressful situations.
Active Initiative	Likes to initiate action in new situations.
Self Confidence	Confidence in abilities and the success of actions.

Confirmatory factor analyses have demonstrated an excellent fit for the 24-item, 8-factor LEQ, indicating very good reliability and structural validity (Neill, Marsh, & Richards, 1997). The LEQ has been widely used as an evaluation tool in other investigations of outdoor education program effectiveness (Eagle, 1999; Neill, 1999a,b; Neill & Flory, 1999, 2000).

In this study participants completed the LEQ prior to arriving at OBA (Time 0), on the first day of the program (Time 1), and on the last day of the program (Time 2). Analysis of the differences in participants' responses between Time 1 and Time 2 provides an indication as to the strengths and weaknesses of the program's impact on the personal development of participants

Participant Evaluation of Instructor and Educational Quality (PEIPQ)

The PEIPQ-B is a 57-item questionnaire which measures several different facets of the quality of an outdoor education programs. This questionnaire is based on a well-recognised measure of student satisfaction in university settings by Marsh (Marsh, 1982). It contains eight areas of evaluation (Course Organisation, Course Effect on Personal Development, Course Value, Instructor as Educational Exemplar, Instructor/Participant Rapport, Instructor Abilities and Skills, Group Cooperation and Productivity, Group Relationships, Group General). Items are measured on an eight point scale, as follows:

1	2	3	4	5	6	7	8
definitely false	false	mostly false	more false than true	more true than false	mostly true	true	definitely true

An example item is "I learned a lot about myself during this course". Higher scores indicate more positive responses.

Results

Instructor Reports

The major themes from the instructor reports are presented in Table 3 and full details are included in Appendix D.

Table 3

Major themes of the Instructor Reports on individual participants ($N=13$)

Major Themes of Instructor Reports
1. Presented with low self-esteem/confidence; 2. Improved relationship building skills; 3. Began to let go of past, became more happy and participated more fully; 4. Felt more confident about going back to her home environment.
1. Appeared to have slight low confidence that effected her ability to communicate; 2. Gave a tremendous amount to challenges faced, well-organised and solid team player; 3. Made positive use of feedback about how she communicated when tired and frustrated; 4. At the end, expressed delight with herself and that she had boosted self-confidence.
1. Enthusiastic and open to any challenge; 2. Found the course to be the most amazing and eye-opening of his life.
1. Pushed in all aspects; 2. Received feedback on selfish behaviour, poor social skills and bad temper; 3. Learned lessons learned about self-awareness and improvements that need to be made; 4. The course allowed him to realise his potential and recognise his shortcomings.
1. Initially socially challenged; 2. Eagerly took on challenges; 3. Confidence, leadership and assertiveness improved; 4. Reflective person who gained a tremendous insight into her own character.
1. Developed from an antagonistic group member into a positive group member; 2. Showed a great deal of development and change in attitude.
1. Took on new challenges with a strong determination and commitment; 2. Caring and generous, helping and supporting of other group members.
1. Physically, the course was easy; 2. Showed leadership potential but found it difficult to take the reins and guide the group; 3. Fully involved in the course; 4. Awareness of individual needs increased and leadership performance improved.
1. Disparaging remarks towards women and inappropriate stories about issues in his life; 2. Group had more empathy after he'd told his life story; 3. Feedback helped him realise how to sensitize his social behaviour; 4. Gave maximum effort throughout.
1. Schoolboyish behaviours; 2. Group support helped him settle down; 3. Has a lot of motivation, but lacks skills - still has a long way to go; 4. Developed self-confidence and positive frame of mind.
1. Hugely successful experience; 2. Highly capable and committed, showed enormous amounts of determination; 3. Grew from shy, with low self-confidence to a budding leader, full of confidence.
1. Realised for himself that he could gain a great deal from completing the course; 2. Change was reflected in his positive attitude and his eagerness; 3. Pursued the development of his natural leadership skills; 4. Proud on completing the course and realised that attitude can make all the difference.
1. Hugely successful experience, threw herself into many new opportunities. 2. Helped her to realise what she can achieve through determination and courage.

In summary, the participants appeared to be highly enthusiastic about the learning opportunities, although many faced social and personal challenges during the course. The major impacts of the OBA programs, according to the instructor reports were:

- Increased self-confidence and more positive attitudes;
- Instructor and group feedback leading to improved behavioural maturity;
- Improved social, communication and leadership skills.

Whilst there were some indications by instructors that participants' struggled to cope and use the opportunities provided by the course, the overall impression appeared to be that significant and valuable learning was achieved. There were no cases in which the instructors reported negative outcomes.

Participant Evaluations

The ratings for nine categories indicating the quality of the educational experience as measured by the PEIPQ are presented in Table 4 and Figure 2.

Table 4
Participant Evaluation Ratings of Course, Instructor and Group Quality

	<i>N</i>	Mean	Std. Deviation	Min.	Max.
Course Organisation	14	7.2	.6	6.2	8.0
Course Effect	14	7.1	1.1	4.0	8.0
Instructor Exemplar	14	7.5	.5	6.8	8.0
Instructor Rapport	14	7.4	.5	6.5	8.0
Instructor Skills	14	7.4	.6	5.8	8.0
Instructor General	14	7.6	.5	7.0	8.0
Group Cooperation	13	6.9	.6	6.0	7.8
Group Relationships	13	7.2	.9	5.0	8.0
Group General	13	7.1	1.3	4.0	8.0

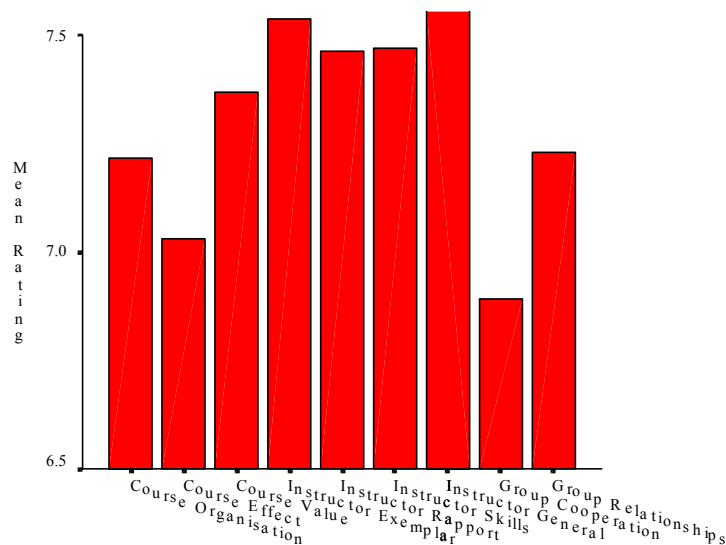


Figure 2. Mean Ratings of Course, Instructor and Group Quality (*N*~13).

Overall, these ratings suggest a very high level of satisfaction with the Outward Bound experience. Given that the top of the scale is 8, all except one of the scales (Group Cooperation) received a very high rating, averaging above 7. The ratings of instructor quality were the highest, followed by ratings of the course quality, followed by ratings of group cooperation and group relationships. The lowest rating given to any PEIPQ measurement scale by any participant was 4 out of 8, indicating an impressive consistency of quality in all areas for all participants.

One particular question in the PEIPQ was considered to be particularly pertinent to the aims and objectives for the disadvantaged participants: “The course was valuable for my personal growth and development”. The responses to this question are shown in Table 5. All participants believed it was at least ‘more true than false’ that the course had been valuable for their personal growth and development, with 12 out of 14 participants agreeing that it was ‘true’ or ‘definitely true’ that this was the case.

Table 5
Participant responses to "The course was valuable for my personal growth and development"

	Frequency	%
More true than false	1	7
Mostly true	1	7
True	4	29
Definitely true	8	57
Total	14	100

Life Effectiveness Changes

The descriptive statistics for the pre-course (Time 0), first day (Time 1) and last day (Time 2) self-assessments of personal life effectiveness for the participants with complete data are shown in Table 6. For all eight areas of personal effectiveness, there are positive increases at Time 2. The statistical significance of these changes was assessed with paired samples *t*-tests and indicated by asterisks. Despite the small sample, virtually all indicators of change were significant.

A more descriptive measure of change is provided by effect sizes (ESs) which are standardised measures of the mean difference between two points in time (see Neill & Richards, 1998 for more detailed explanation). In brief, a negative ES indicates a negative shift in self-perceptions, 0 indicates no change, and a positive ES indicates growth. An ES of .2 is considered a small change, .5 moderate, and .8 a large change (Cohen, 1977).

Based on these well-accepted guidelines for the measurement of change, the results of the current study indicate an impressive result with an average ES between Time 1 and 2 being .71 (see second last column of Table 6) and between Time 0 and Time 2 being .86 (see last column of Table 6). This result can be compared with the average change for other outdoor education programs for disadvantaged youth of .33 (Hattie, et al, 1997), and suggests that the OBA programs were over twice as effective as other outdoor education intervention programs for these types of participants.

Table 6
 Descriptive statistics, Effect Sizes (in bold), and statistical significance of change for the Life Effectiveness Questionnaire (LEQ) scales (N=13)

LEQ Scale	Time 0 Mean (SD)	Time 1 Mean (SD)	Time 2 Mean (SD)	T1-2 ES	T0-2 ES
Time Management	5.15 (1.51)	5.46 (1.33)	6.51 (1.21)	.84 *	1.09 *
Social Competence	5.79 (1.81)	5.77 (1.29)	6.77 (1.48)	.86 *	.84 *
Achievement Motivation	6.59 (1.22)	6.59 (1.26)	7.31 (0.83)	.73 *	.73 *
Intellectual Flexibility	6.26 (1.10)	6.41 (1.11)	7.26 (0.89)	.87 *	1.03 *
Task Leadership	5.10 (1.48)	5.41 (1.27)	6.36 (1.65)	.76 *	1.01 *
Emotional Control	5.59 (1.36)	5.97 (1.23)	6.74 (1.33)	.62 *	.93 *
Active Initiative	6.59 (1.50)	6.74 (1.36)	7.23 (1.39)	.41 *	.54
Self-Confidence	6.18 (1.70)	6.36 (1.33)	7.00 (1.42)	.57 *	.73
Average LEQ	5.91 (1.22)	6.09 (1.00)	6.90 (1.03)	.71 *	.86 *

Note. * $p < .05$, based on paired-sample t -tests

The strongest of the program effects appeared to be in the areas of Intellectual Flexibility (openness in thinking and accepting the ideas of others), Task Leadership (capacity to successfully take on leadership roles) and Emotional Control (capacity to remain calm in stressful situations).

Summary and Conclusions

Overall, the instructor reports, the evaluations of program quality, and the changes in self-perceptions all concurred to indicate that a very positive experience had taken place. It was notable, from the instructor reports, that this positive experience had not occurred easily, with most participants going through considerable personal and social struggles during the course. However, the positive, supportive atmosphere provided by Outward Bound groups and the expertise of empathic instructors helped to ensure that all participants developed significantly during the program.

Instructors reported increases in self-confidence, positive attitudes, social skills, communication skills and leadership skills. Some caution should be applied to these reports, however, because the instructors were given little guidance on how to write their reports on the participants. Since the instructors knew that the material would be used to give feedback to the sponsoring organisation they may have overemphasized positive outcomes. Another issue was that instructors wrote varying amounts about each participants. In future, it is recommended that a more structured instructor reporting system be used.

With regard to participants' ratings of their Outward Bound experience, the results were unquestionably positive. In fact, there was little evidence of any dissatisfaction at all with any part of the program by any of the participants. Twelve out of fourteen participants rated the effect of the course on their personal growth and development as 7 (true) or 8 (definitely true) out of 8. The particular value of these results is that they give the most direct indication of the quality of the participants' experiences from their own point of view.

The participants seemed to all feel that the challenging, supportive, well-honed program offered by the Outward Bound Challenge Course had helped them to grow in their confidence and belief in their capabilities. This is a quality which is often chronically low for those from disadvantaged backgrounds. A caution should also be applied to these results since at the end of a difficult experience, people may be more likely to have a euphoric feeling which can result in 'halo effects' and inflated ratings. In this study, however, the results were so overwhelming positive that it would seem unlikely that they could be wholly accounted for by temporary euphoric feelings.

One of the best recognised methods for the assessment of intervention programs is to measure participants before and after the program. The "Life Effectiveness Questionnaire" was administered three times in this study. Statistical analyses indicate a highly positive shift in all facets of personal life effectiveness for the participants. These results indicated that the Outward Bound programs in this study were more than twice as effective as other outdoor education-based programs for people from disadvantaged backgrounds (Hattie, et al, 1997).

The question must remain, however, about what long-term impacts these Outward Bound programs will have had on these participants lives. In this respect there is cause for both pessimism and optimism. On the pessimistic side is the reality that these participants came from disadvantaged backgrounds and were often returning to disadvantaged situations with little money, same relationships, and no immediate job prospects. To what extent participants were able to maintain the positive effects of the Outward Bound program following their return to their everyday lives is unknown.

On the optimistic side are the findings from a large summary of previous outdoor education research (Hattie, et al, 1997) which found, contrary to the cautions offered here, that there were

ongoing positive growth effects following outdoor education programs. In other words, one of the particular advantages of this form of challenging, yet supportive intervention, is that a spark for growth and development can be lit within individuals and that they are then more able to create around themselves a more dynamic, positive environment for their own development and growth. Nevertheless, it is recommended that ongoing followup and support of disadvantaged participants should be considered as part of future intervention strategies to enhance the transferability of the learning. In addition, followup assessment of the program impacts should be conducted.

An important point to note is that the careful screening process for the selection of recipients of the scholarship appears to have been crucial to the success of this project. In all cases it was evident that although the recipient was disadvantaged, each participant was also involved in active efforts to improve his/her own life. The Outward Bound courses, then, seem to have capitalised on these individuals' inherent drive to improve their lives. A further advantage of this intervention strategy is that the scholarship recipients were not treated as a separate group of disadvantaged individuals, but instead were involved in different public-enrolment Outward Bound programs and different groups.

In conclusion, the scholarship investment in these 16 disadvantaged young people appears to have been wisely spent. In all cases at least some positive effects of the program could be identified, and this is the minimum criteria by which the investment should be judged. In virtually all cases very notable positive effects were evident from instructor reports, participant feedback and changes in self-perceptions. The combination of the Outward Bound program design, instructor support, and individual's motivation, appear to have lead to enhanced personal confidence, and improved social and leadership skills. These are important outcomes for young people whose circumstances have limited their opportunities for such development.

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Appendices

Appendix A: Demographic profiles of participants who received and completed Colonial Foundation scholarships ($N=16$).

Age	Gender	Referee	State	Occupation	Education
17	Male	Triple Care	NSW	Unemployed	Yr 10
18	Male	Green Corps	QLD	Unemployed / student	?
18	Male	Private	ACT	Unemployed	?
18	Female	Green Corps	NSW	Student	?
19	Male	Green Corps	QLD	Landscape gardener (Cas.)	Yr 12
19	Male	Green Corps	NSW	Assistant Manager ^a	?
19	Male	Private	ACT	Cleaner (P/T)	Yr 12
19	Female	Green Corps	NSW	Unemployed	Yr 12
19	Female	Green Corps	QLD	Student	Yr 12
19	Female	Green Corps	SA	Bush regenerator (Cas.)	?
20	Male	Green Corps	SA	Unemployed	Yr 12
20	Male	Job Agency	ACT	Unknown	?
20	Female	Green Corps	SA	Adventurer	Yr 12
20	Female	Green Corps	QLD	In Detention	Yr 9
20	Female	Green Corps	SA	Unknown	?
22	Male	Community Service	ACT	Unemployed	Yr 12

Notes. ^a = This participant left her job soon after returning from the OBA program due to changes in the management structure.

Appendix B: Reasons Stated by Colonial Foundation Scholarship Applicants for Wanting To Do an Outward Bound Australia Challenge Course (N=13).

Reason
<ol style="list-style-type: none"> 1. To further my experience in people relations; 2. I like challenges; 3. Another step towards the army
<ol style="list-style-type: none"> 1. To take part in exciting activities which I can gain experience from; 2. Increase my confidence and motivation; 3. To realise to myself that I have the potential to do anything
<ol style="list-style-type: none"> 1. Gain independence, leadership, social and confidence skills to help in everyday life and future studies
<ol style="list-style-type: none"> 1. A unique, enjoyable, experience which will challenge me; 2. Attracted by motto 'to serve, to strive and not to yield'; 3. Opportunity to develop strength of character and teamwork; 4. Help to gain employment
<ol style="list-style-type: none"> 1. Opportunity to learn bush skills; 2. Give me a better idea about whether to pursue conservation before enrolled in TAFE course; 3. Like working on a team and meeting new people
<ol style="list-style-type: none"> 1. Willing and enthusiastic outdoors person; 2. Opportunity to improve technical skills in outdoor recreation; 3. Future career desire is outdoor leadership; 4. Will help in going to TAFE
<ol style="list-style-type: none"> 1. Great opportunity for personal development; 2. Social skills; 3. Enjoy outdoor activities, particularly physically and mentally challenging; 4. Enhance environmental interest; 5. Practical experience for future jobs and study
<ol style="list-style-type: none"> 1. Help find direction in life; 2. Discover new skills; 3. See more of Australia; 4. Need challenge to enhance my outlook and life skills; 5. Only have casual work
<ol style="list-style-type: none"> 1. Enjoy being in the outdoors; 2. Gain a lot of satisfaction, confidence and focus from activities in the bush; 3. Did not gain a lot from classroom education; 4. Previous practical learning from Green Corps and Venturers has helped; 5. Hoping for clearer idea of where my life is going
<ol style="list-style-type: none"> 1. Loved Duke of Edinburgh's Award; 2. Would like to develop leadership skills for my management job; 3. Like to push self and hard work; 4. Need more self-esteem, motivation and self-understanding; 5. Would like help with friendships and relationships
<ol style="list-style-type: none"> 1. Sounds like fun; 2. Get experience and learn to work with people; 3. Learn to trust strangers; 4. Looking for work, can't get any for 2 years
<ol style="list-style-type: none"> 1. Enjoy being outdoors and involved in different physical skills; 2. Experiences like SES help build me as a person and have been helpful in everyday life; 3. The course would be amazing just to see what I am capable of
<ol style="list-style-type: none"> 1. Experience in team building and prepare for the army; 2. Enjoy outdoors and adventure sports

Appendix C: Reasons Stated in Support of Colonial Foundation Scholarship Applicants by their Referees (N=12).

Reason
<ol style="list-style-type: none"> 1. Has tried to the best of his ability to support himself (previous ward of state for 4 years) and his brother (ward of state). 2. Has been looking for work, however is still on social security. 3. Would provide an opportunity to apply for a job he has worked hard to achieve [army]. 4. Will do his best to achieve all goals on this course as he wants to make a better life for himself and his brother.
<ol style="list-style-type: none"> 1. Unique opportunity for self-development, self-esteem, confidence; 2. Limited opportunities for those from small country town and with financial difficulties
<ol style="list-style-type: none"> 1. Finished Year 12 and has spent 2 years looking for fulltime employment; 2. Has done babysitting and voluntary daycare/kindy work, then Green Corp program; 3. Living at home, supported by parents
<ol style="list-style-type: none"> 1. Living away from home, willing to work, difficulty finding employment; 2. Good worker, accepts small jobs; 3. Will take advantage of the opportunity and will enrich his life and give him a wider picture of his future and a confidence in his ability to successfully engage the challenges ahead
<ol style="list-style-type: none"> 1. Lives with parents, but is independent and receives no income, has applied for unemployment benefits; 2. Green Corps, but then unable to find work; 3. High regard for environment; 4. Would further his growth as a person
<ol style="list-style-type: none"> 1. Extremely enthusiastic; 2. Fitting for her interests and previous experiences and her love of the outdoors.
<ol style="list-style-type: none"> 1. Mature outlook, safe practice & intelligent thought; 2. Desire to participate in the course
<ol style="list-style-type: none"> 1. Only has casual work; 2. Father died 12 years ago; 3. Level-headed; 4. Striven to complete Yr12 & TAFE
<ol style="list-style-type: none"> 1. Familiar with outdoors; 2. Team oriented, valuable input; 3. Athletic ability, agility & even-temperedness allowed team to work well
<ol style="list-style-type: none"> 1. Keen to do whatever he can to develop his sense of self; 2. Willing; 3. Will benefit hugely from the interaction and relationship development skills
<ol style="list-style-type: none"> 1. Well-mannered, high level of enthusiasm; 2. As a result of past difficulties, has low self-confidence which directly affects his decision-making ability; 3. Identified as having learning difficulties which have also impacted on his social skills and ability to interact with others; 4. Would help to develop confidence 5. Would enhance his future employment opportunities
<ol style="list-style-type: none"> 1. Has always been full-time student, except 6 month traineeship; 2. Father died; 3. Committed to making her life better; 4. Active member of SES, Lions Youth of the Year, many local community volunteer roles; 5. The experience would further her many talents and she has the commitment to pass her skills on to others

Appendix D: Summaries of Instructor Reports on Individual Participants (N=13).

Summary of Instructor Reports

1. On arrival, low self-esteem/confidence, holding on to negative thoughts about herself and her abilities from a past relationship;
 2. Achieved in physical challenge, quiet achiever/team member;
 3. Had difficulty after reaching camp in helping with the group chores; 4.
 4. Ability to communicate was her biggest stumbling block, tended to be silent in group discussions reverting to mumbling;
 5. The key to improving was in building relationships with individuals - group support for her improved;
 6. Gained confidence in leaps and bounds, became more communicative, involved in group tasks;
 7. Feedback encouraged her to let go of past and to have positive self-regard - she took this seriously and began smiling more and participating at all levels;
 8. Felt more confident going back to the same environment; revitalised and happy with the choices and decisions that were hers to make and that she could apply the same things learnt throughout the course to make a better future.
-

1. Gave a tremendous amount to physical, emotional, social and intellectual challenges faced;
 2. Appeared to have slight low confidence that effected her ability to communicate well and show leadership abilities;
 3. Personally well-organised, good time management, solid team player;
 4. Became respected by the group;
 5. Took up leadership opportunity and realised that she had enormous potential;
 6. Received constant feedback, with constructive suggestions for improvement, particularly how she communicated when tired and frustrated;
 7. Was accepting and made positive use of feedback;
 8. At the end, expressed delight with her performance and that she had boosted self-confidence for the future
-

1. Enthusiastic and open to any challenge;
 2. Found the course to be the most amazing and eye-opening of his life.
-

1. Pushed in all aspects;
 2. Feedback from fellow participants and instructor throughout the course on selfish behaviour, poor social skills and bad temper;
 3. Seemed to take this on board and showed glimpses of improvement at stages, but at other times let himself down;
 4. By end of course, shared a lot of personal information about himself with the group and regularly voiced his opinion in debriefs and discussions;
 5. Lessons learned about self-awareness and improvements that need to be made;
 6. The course allowed him to realise his potential and recognise his shortcomings that he is keen to improve on;
 7. Course has been beneficial
-

1. Eagerly took on challenges;
 2. Initially socially challenged by large number of Singaporeans in her group;
 3. Coped well physically;
 4. Very perceptive and able to understand all information;
 5. Confidence and leadership improved;
 6. Became more assertive in expressing her ideas and feelings;
 7. Feedback to her suggested she was a caring individual and team player;
 8. Reflective person who gained a tremendous insight into her own character
-

Summary of Instructor Reports continued...

1. Showed a great deal of development;
2. Was able to listen to feedback from both myself and the group and take it on board and change his behaviour appropriately;
3. Developed from an antagonistic group member with a negative attitude into a positive group member who was able to motivate others to achieve their goals;
4. Through the change in attitude, he learned a great deal about the power of the mind.

-
1. Incredibly strong team member;
 2. Took on new challenges with a strong determination and showed true commitment;
 3. Caring and generous, helping and supporting other group members;
 4. Able to plan and organise numerous group tasks, capable of leadership role

-
1. Physically, the course was easy for him;
 2. Showed leadership potential but found it difficult to take the reins and vocally guide the group towards their common goals;
 3. Fully involved in the course, always considerate, supportive and helpful to others (when he was aware of their needs);
 4. Awareness of individual needs increased and leadership performance improved

-
1. Social, supportive, encouraging group member initially;
 2. Disparaging remarks towards women and inappropriate stories about issues in his life and how he'd dealt with them violently - socially awkward;
 3. Group had more empathy after he'd told his life story;
 4. Feedback from instructor and group helped him to realise more about how to sensitize his stories to accommodate the audience and allow him to strengthen his relationship with others;
 5. Increased harmony between group and participants;
 6. Gave maximum effort throughout.

-
1. Keen, had a story to offload;
 2. Schoolboyish behaviours in reaction to the scope of the course and what was required of his abilities;
 3. Group support helped him settle down to the task at hand;
 4. Self-confidence went from strength to strength;
 5. Showed great compassion throughout the course;
 6. Has a lot of motivation, but lacks skills - his ability to concentrate improved, but still has a long way to go, especially listening to others and comprehending what they are saying;
 7. Needs help with reading and writing to assist in his CIT courses;
 8. Gained respect of the whole group - determination, courage, compassion, perseverance;
 9. Developed confidence and positive frame of mind

-
1. Hugely successful experience;
 2. Threw herself into many new opportunities;
 3. Highly capable and committed, showed enormous amounts of determination;
 4. Grew from a shy, quiet, group member with low self-confidence to a budding leader, full of confidence

-
1. An outstanding young man with a great deal of maturity and life experience even at this young age;
 2. Greatest challenge was committing to the course - there were several times when things were difficult and he wanted to leave the course;
 3. Advice was to take one step at a time;
 4. Realised for himself that he could gain a great deal from completing the course and made a solid commitment to doing so;
 5. Change was reflected in his positive attitude and his eagerness to give everything his best shot;
 6. He pursued the development of his natural leadership skills;
 7. Was proud on completing the course and his realisation that ones attitude can make all the difference.

-
1. Hugely successful experience, threw herself into many new opportunities.
 2. Helped her to realise what she can achieve through determination and courage.
-