



**Smith, B., Gailitis, L., & Bowen, D. J. (2012).**

**A preliminary evaluation of Goldbridge adventure therapy substance abuse treatment program.  
Unpublished manuscript, Goldbridge Rehabilitation Services, Southport, Australia.**

Goldbridge Rehabilitation Services is a non-government, non-profit, residential Therapeutic Community Organisation based on the Gold Coast in Queensland, Australia. Goldbridge provides a range of assistance services for those in the Community who are concerned with the consequences of chronic and habitual licit and illicit drug use problems, and other compulsive behaviours and are dedicated to the resolution of such addictions.

Goldbridge is located in Southport on the Gold Coast. Goldbridge provides seven programs: Residential Therapeutic Community; Intake and Assessment; Adventure Therapy; Drug Court; Family Support Service; Transition to Community and After Care support.

Goldbridge utilises a Therapeutic Community model of treatment and recovery. The Therapeutic Community is the principle means for promoting personal change through self-help and mutual support. In a Therapeutic Community, residents and staff participate in the management and operation of the community through Group therapy, Experiential Learning, Psych- Education groups and Work Crews. Goldbridge is a member of the Australasian Therapeutic Communities Association.

The residential program runs for a period of 6 months and has a capacity to assist 28 residents. People need to have completed detoxification prior to entering the program. The target group is adults 21 to 65 years who are affected by co-occurring alcohol, other drug and mental health concerns.

In 2001, Goldbridge undertook their first adventure therapy program with clients at The Outlook Training and Resource Centre (Boonah, Australia). The second program was conducted in 2007. The positive feedback from these programs indicated that adventure therapy was complementary to the Therapeutic Community model utilised at Goldbridge. In May 2010, Goldbridge contacted The Outlook to discuss a long term partnership to support training for Goldbridge staff and ongoing Adventure Therapy programs for Goldbridge clients.

The philosophical nature of both the Therapeutic Community model and adventure therapy process complement each other: 1) 'Community As Method' focuses on everyone participating at some level, 2) 'Effective Recovery Living' utilises a range of different experiences, 3) 'Transference of Skills' utilises debriefing techniques, 4) 'Group Cohesion and Bonding' provides social development; and 5) 'Broadening Horizons' expands world views of how to have good clean fun.

### **Instrumentation**

In 2011, Goldbridge introduced pre and post psychometric testing of the adventure therapy program. Goldbridge utilises psychometric testing within their Therapeutic Community model and were keen to see what type of effect the ongoing adventure therapy components were having for clients in a range of areas. The psychometric instruments utilised by Goldbridge are standardised and widely recognized measures for what happens to people internally. Goldbridge utilises the same testing tools as standard measure of a client's progression through the program. The measures are available for use in the public domain and are self-reporting.

The measures utilised are:

- DTCQ – 8: Drug Taking Confidence Questionnaire. Measures how confident people are that they will be able to resist the urge to use.
- Kessler 10 (K-10): Measures the presence of current Mental Health issues. Doesn't necessarily diagnose, but identifies that something is not quite right (e.g., anxiety, depression).
- Psycheck – SRQ: Self reporting Questionnaire Identifies possibility of pre-existing Mental Health issues. Analyses which behaviours are new or if they were present before drug use.

- URICA Scale: University of Rhode Island Change Assessment. The URICA assesses motivation for change by providing scores on four stages of change: pre-contemplation, contemplation, action and maintenance.
- DASS – 21: Depression, Anxiety, Stress Scale. : Gives a total score and individual scores for each disorder. If the total score is high it reflects that the person is very uncomfortable within themselves.

## **Participants and Program**

Goldbridge undertook psychometric testing with 18 participants (11 females, 7 males; mean age = 38) who completed both parts of the adventure therapy cycle and all of the testing in 2011. See Appendix A for an outline of the program. Briefly, the cycle consists of three stages: two Adventure Therapy programs one month apart (Stage 1 and Stage 3), and an interim period (Stage 2). The first program is a two day program; the second is a three day program including an overnight base camp. In between the programs, survey respondents participated fully in the Residential Therapeutic Community program. Themes that came out of the first program are consolidated through the Therapeutic Community group processes. Psychometrics were completed pre and post both programs.

## **Results**

There were 18 participants who provided pre and post data. Descriptive statistics (means and standard deviations), and effect sizes (Cohen's d) and variance were calculated for each of the measures. Table 1 outlines the changes between the beginning of the first program and end of the second program (i.e., the full cycle) for the 18 participants. Figure 1 depicts the changes for K10, Depression, Anxiety, Stress, Psycheck and Readiness to Change, while Figure 2 depicts changes for Resisting Urges.

An effect size is a simple, standardised statistic for measuring how much change occurred between the pre and post-testing. This provides advantages over traditional testing because the effect size is more descriptive. For example, a negative effect size indicates a reduction in scores, an effect size of zero means no change, and a positive effect size indicates improvement. A guide to interpreting effect sizes is provided in Table 2. The effectiveness of Goldbridge's adventure therapy program cycle for clients with substance use problems is demonstrated in survey results that show positive improvements on all measures.

When looking at how much change occurred between T1 and T4, particularly impressive were the very outstanding result for K10, very high results for Depression and Stress, and above average result for anxiety. An average result was found for Psycheck, and a below average result was found for Readiness to Change. Preliminary results therefore indicate that linking both the Therapeutic Communities and adventure therapy models together have been positive for clients.

Goldbridge is committed to continuing with adventure therapy programs and will do a full review in 2013/2014. The following will be looked at throughout the next couple of years:

- Analysing outcomes utilising different adventure therapy activities.
- Analysing data in line with a Control group.
- Continue pre and post testing to gather more data.
- Publish a report after 2/3 years.
- Explore the possibility of independent analysis.
- URICA Scale: minimal change at this time. Thus, continue to analyse and utilise this as a target topic during debriefs.
- Keep tracking retention rates of the program focusing on retention in the first four weeks.

## **Contact details**

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Table 1

*Mean, Standard Deviations and Effect Sizes (N = 18)*

	Time 1	Time 2	Time 3	Time 4	Effect Size	
					T1 to T2	T1 to T4
K10*	20.833 (8.305)	18.944 (9.013)	16.278 (7.044)	15.611 (5.392)	.218 [.057]	.716 [.070]
Depression*	8.889 (9.029)	8.444 (10.071)	6.889 (8.897)	4.778 (6.477)	.046 [.056]	.510 [.063]
Anxiety*	8.778 (9.681)	7.778 (8.809)	5.333 (8.175)	6.000 (6.325)	.108 [.056]	.326 [.059]
Stress*	14.389 (9.960)	15.000 (9.610)	13.111 (9.029)	9.444 (7.816)	-.062 [.056]	.545 [.064]
Resist Urges**	520.000 (158.077)	551.111 (193.083)	552.222 (198.244)	603.333 (179.967)	.175 [.056]	.490 [.062]
Psycheck*	2.889 (3.142)	2.833 (3.519)	2.556 (3.518)	2.167 (2.526)	.017 [.056]	.250 [.057]
Readiness to Change**	1.361 (.340)	1.694 (.780)	1.389 (.343)	1.417 (.343)	.492 [.062]	.164 [.056]

\*Lower post scores signify improvement.

\*\*Higher scores signify improvement

Standard deviations are provided in circular brackets ( )

Variance is provided in square brackets [ ]

T1: Stage 1- Start of day one

T2: Stage 1- End of day two

T3: Stage 3- Start of day one

T4: Stage 3- End of day three

Table 2

*Outdoor Education Effect Size Descriptors<sup>1</sup>*

Effect Size	Amount of Change Descriptors
Below 0	No change
0 to 0.055	Doubtful
0.055 to 0.165	Below average
0.165 to 0.275	Average
0.275 to 0.385	Above average
0.385 to 0.495	High
0.495 to 0.605	Very high
0.605 to 0.715	Outstanding
0.715 to 0.825	Very outstanding
0.825 to 0.935	Exceptional
Above 0.935	Very exceptional

<sup>1</sup> Based on: Neill, J. T. & Richards, G. E. (1994). *A research evaluation of the development outcomes of Young Endeavour's ten day sail training voyages during 1993*. Canberra, Australia: Australian Outward Bound Foundation.

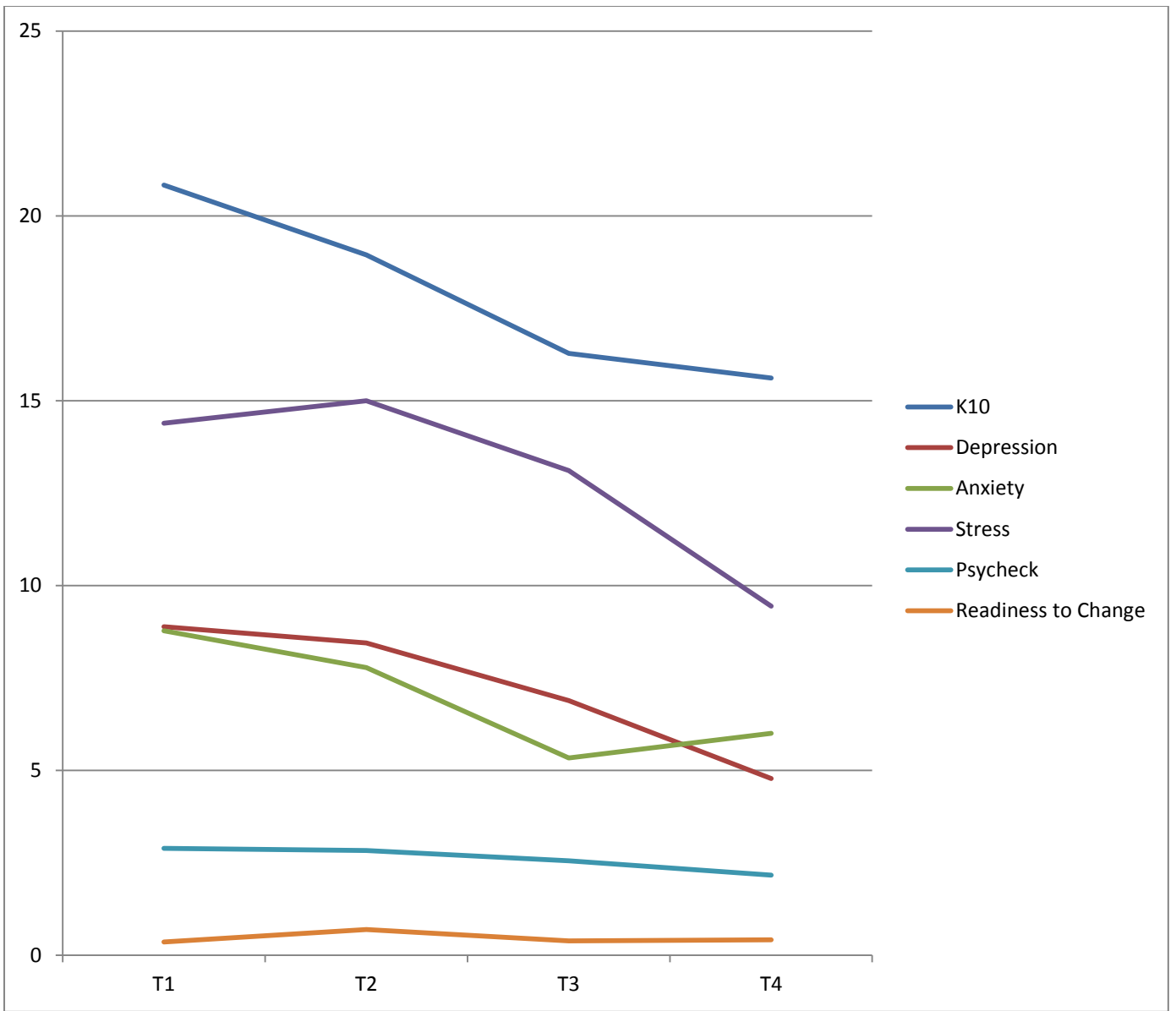


Figure 1. Mean change scores for K10, Depression, Anxiety, Stress, Psycheck and Readiness to Change (T1-T4).

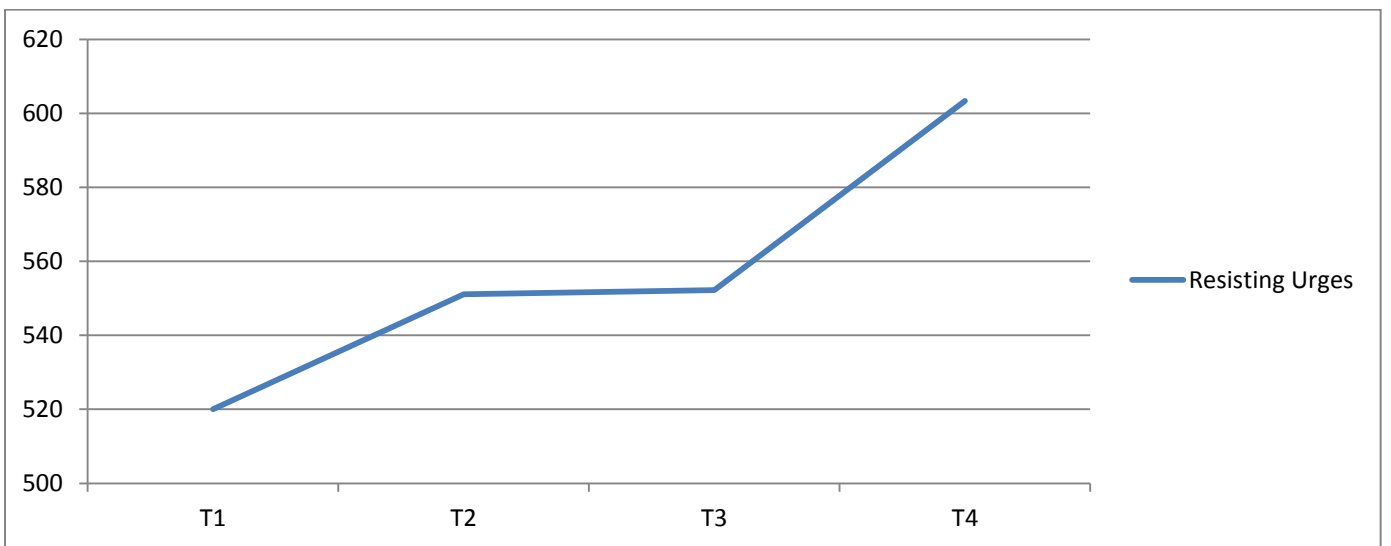


Figure 2. Mean change scores for Resisting Urges (T1-T4).

## Appendix A

### 2011 Goldbridge Adventure Therapy Program Cycle:

The following is a very brief outline of the Goldbridge adventure therapy program cycle. Debriefing occurred after each activity. The same staff facilitated activities on both programs.

#### **The program is completed in three stages:**

##### **Stage 1:** 4<sup>th</sup> and 5<sup>th</sup> October, 2011:

- Day 1:
  - Arrive at 'The Outlook'
  - Working Agreement
  - Mohawk Walk/ Whale Board
  - Debrief
  - Lunch
  - Low Ropes/Badge Making
  - Dinner
  - Evening meeting
  - Campfire
- Day 2:
  - Canoe Trip
  - Lunch
  - Whole Debrief
  - Back to Goldbridge

##### **Stage 2:** 6<sup>th</sup> October to 1<sup>st</sup> November, 2011:

Interim period:

In between Stage 1 and 3, learning was reinforced through Therapeutic Community process groups.

##### **Stage 3:** 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> November, 2011:

- Day 1:
  - Arrive at 'The Outlook'
  - Working Agreement
  - Junk Orchestra/Low ropes
- Day 2:
  - High Ropes/ Koala Climb
  - Lunch
  - Pack out for camp
  - Stories around camp fire
- Day 3
  - Hoop Pine early morning
  - Breakfast
  - Topic meeting
  - Lunch
  - Final debrief at 'The Outlook'
  - Back to Goldbridge