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Executive Summary

The Outdoor Youth Programs Research Alliance (OYPRA) is an Australian group founded in 2009 with the aim of establishing quality evidence of the extent to which outdoor, camping and nature-based programs are associated with reliable improvements in resilience, learning and wellbeing among young people. In 2011, OYPRA undertook a survey of Australian providers of outdoor programs in which staff who worked on existing programs were asked to reflect on their current practice. The study set out to establish, for the first time, a comprehensive picture of the scope and diversity of outdoor youth programs on offer in Australia. Survey questions were designed to provide relatively objective, quantifiable measures of program characteristics and focused on features believed to be important for enhancing participant outcomes.

A number of key themes emerged from the data gathered. First, outdoor youth programs in Australia represent an incredible diversity of practice, varying on characteristics such as duration, participant group size, physical setting, activities used, staff-to-participant ratios, and program goals. However, despite this diversity, there are also important points of commonality across many programs. These aspects in common include the explicit use of personal challenge, activity and experience as a basis of learning, exposure to nature, guidance of participant experiences, and consideration of social context in the design of outdoor programs. Second, it was notable that practitioners in this field clearly identified personal and social development of participants as the most salient goals of their outdoor programs, over and above other possible goals such as curriculum education, environmental learning or technical skill enhancement. Further, practitioners proposed that the majority of young people actually derived these intended development benefits through their participation and involvement. Third, practitioners overwhelmingly based their evaluation of the outcomes of their work on informal forms of evidence, such as personal observation or anecdotal participant reports. Although such evidence is essential for the development of practitioner expertise, it is noteworthy that rigorous research is typically not identified as part of the basis for evaluating outcomes, clearly limiting the development of evidence based practice in this area.

This project seeks to ensure that the nation’s outdoor resources are fully utilised for the benefit of young people. No other opportunities are as readily available to youth as outdoor and camping programs that also address three of the most pressing priorities for young people in our community: mental wellbeing, physical activity and environmental awareness. Outdoor programs represent a largely untapped opportunity to promote emotional health and wellbeing. Rigorous development of the research base in this area will be critical to transforming the field to one of evidence based practice, so that the potential of these programs to maximise youth development and prevent negative outcomes for young people and the communities in which they live can be realised.
Introduction

The Outdoor Youth Programs Research Alliance (OYPRA) is an Australian group founded in 2009 with the aim of establishing quality evidence of the extent to which outdoor, camping and nature-based programs are associated with reliable improvements in resilience, learning and wellbeing among young people. In 2011, OYPRA commenced an online survey of Australian providers of outdoor programs, in which staff who worked on existing programs were asked to reflect on their current practice. The study set out to establish, for the first time, a comprehensive picture of the scope and diversity of outdoor youth programs on offer in Australia.

This report provides a summary of selected results and findings from the National Survey of Australian Outdoor Youth Programs.
Who is the Outdoor Youth Programs Research Alliance?

The Outdoor Youth Programs Research Alliance (OYPRA) is a new Australian group looking at documenting the benefits of outdoor programs for young people. The team includes representatives from the outdoor industry, the health research sector, government bodies, and non-profit community organisations.

Murdoch Childrens Research Institute, University of Melbourne,
Royal Children’s Hospital, Centre for Adolescent Health,
Sport & Recreation Victoria, Outdoor Education Group, YMCA,
Australian Camps Association, Operation Newstart, Outdoor Council of Australia,
Victorian Outdoor Education Association, People & Parks Foundation, Outward Bound Australia
Christian Venues Association, Outdoor Recreation Industry Council, Outdoor Educators’ Association of South Australia,
Outdoors WA, Recreation South Australia, Queensland Outdoor Recreation Federation,
Girl Guides Australia, Uniting Church Camping

The group was established in September 2009 with the aims of undertaking a program of research that will provide robust evidence of the extent to which outdoor, camping and nature-based programs are associated with reliable improvements in the resilience, learning and wellbeing of young people. Specifically, OYPRA seeks to provide new knowledge about what programs work, for which young people, and in terms of which outcomes.

The goal of the research Alliance is to develop a long-term program of high quality research that evaluates the potential benefits of outdoor, camping and nature-based programs on the resilience, learning and wellbeing of young Australians.

Why Are We Conducting This Research?

Each year, hundreds of thousands of young people take part in outdoor camps and nature-based programs across Australia. These range from 1-day activities to week-long residential camps, and multi-week outdoor expeditions. Australia-wide, millions of dollars are invested annually by secondary schools, community youth groups and not-for-profit organisations in the provision of outdoor experiences for teens. It is clear from experiences reported by outdoor program providers, as well as by young people, their parents and teachers, that outdoor and camping programs have the potential to enrich lives. Benefits have been described in psychosocial, emotional, physical, spiritual and educational domains and include promotion of self-confidence, social inclusion and participation, resilience, self-efficacy, relationship building, interpersonal communication, decision making and leadership skills. Notwithstanding their popularity, however, the impact of these programs is poorly understood. While participants and providers recount many benefits, the evidence to support these impressions is frequently limited to anecdotal reports or low quality data. Additionally, little is known about the key ingredients of outdoor experiences that might contribute to positive outcomes, or about which participants might benefit most. Further research is needed to help more clearly establish the benefits of outdoor programs and youth camps, and to identify their most important elements. This work is critical for guiding continuous improvements within the sector, and to maximise potential benefits for participants. Findings from this research will also enhance the capacity of government and the outdoor sector to influence future policy, improve current practice and develop pathways to more effective participation in outdoor activity.
In spite decades of program development and delivery both within Australia and abroad, along with substantial research efforts, key questions still remain largely unanswered within the field. Through its program of planned research activities, OYPRA seeks to examine these and other questions.

<table>
<thead>
<tr>
<th>Key Research Questions</th>
<th>Does participation in structured outdoor, camping and nature-based programs promote resilience, learning and wellbeing in young people?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>If so, which young people show the greatest benefits?</td>
</tr>
<tr>
<td></td>
<td>What features of these programs are associated with the greatest benefits?</td>
</tr>
<tr>
<td></td>
<td>How enduring are any observed benefits?</td>
</tr>
</tbody>
</table>

**What is OYPRA Doing?**

OYPRA has developed a program of research to establish Australian evidence of the benefits of outdoor and nature-based programs for young people. Ultimately we would like to identify effective ways of promoting resilience, learning and wellbeing among young people though outdoor programs. The planned research program comprises three distinct, but related, phases.

**Phase One: National Audit of Outdoor Programs**
This study seeks to establish what types of outdoor programs are provided nationally, who takes part and what benefits are sought.

**Phase Two: Effects of Existing Programs**
A large study will be undertaken of the experiences of young people participating in existing structured outdoor and nature-based programs.

**Phase Three: Evaluation Study**
We will undertake one of the first ever studies to formally evaluate the impact of structured outdoor and nature-based programs on young people’s resilience, learning and wellbeing, using a large community sample and employing a randomised controlled trial design (RCT).

This report presents a summary of selected results from Phase One of the research program, the National Survey of Australian Outdoor Youth Programs. Phases two and three will build on findings from this work and will be initiated as a next step in our three-phase research program.
National Survey of Australian Outdoor Youth Programs

In 2011, OYPRA commenced an online survey of Australian providers of outdoor programs, in which staff who worked on existing programs were asked to reflect on their current practice. The study set out to establish, for the first time, a comprehensive picture of the scope and diversity of outdoor youth programs on offer. Survey questions were designed to provide relatively objective, quantifiable measures of program characteristics and were divided into two sections: one for those involved in delivering outdoor programs directly to young people, and one for those managing and overseeing outdoor youth programs. Questions focused on program characteristics and features believed to be important for enhancing participant outcomes, such as program goals, structure, intended benefits and social context. Unique to this survey is its reference to the ChANGeS Framework (Williams, 2009\(^1\)), a model that identifies five key components of outdoor programs believed to be critical for enhancing participant outcomes (see Appendix 1).

**Survey Structure**

Survey questions were designed to elicit information about the structure and format of programs being delivered, the characteristics of program participants and program staff, and the perceived outcomes and benefits to participants. The survey comprised two parts. Part 1 was for those working directly with participants in actually delivering an outdoor program, and asked them to think about a specific, recent (last 6 months) outdoor program on which they worked as a leader. The questions in this part of the survey related to what actually took place on that specific outdoor program. Part 2 of the survey was for those whose work involved overseeing, coordinating or managing staff and outdoor programs. The questions in this part of the survey asked respondents a range of general questions about the typical outdoor programs offered by their organisation.

Questions in both part 1 and part 2 of the survey were grouped into sections focusing on a particular theme. Part 1 comprised 7 sections; Part 2 comprised 6 sections (see Table 1 for more details). The number of primary questions presented in Part 1 was 38, with 36 presented in Part 2 (note that the actual number of questions asked was greater, as many questions included sub-parts).

Table 1
Structure of OYPRA National Survey of Outdoor Youth Programs

<table>
<thead>
<tr>
<th>PART 1</th>
<th>Questions for program leaders about one specific outdoor program.</th>
<th>No. of Questions (incl. sub-parts)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SECTION A: Program Basics</td>
<td>11 (19)</td>
<td></td>
</tr>
<tr>
<td>SECTION B: Activities</td>
<td>3 (12)</td>
<td></td>
</tr>
<tr>
<td>SECTION C: Outdoors</td>
<td>3 (7)</td>
<td></td>
</tr>
<tr>
<td>SECTION D: Participants</td>
<td>5 (22)</td>
<td></td>
</tr>
<tr>
<td>SECTION E: Program Leaders</td>
<td>1 (6)</td>
<td></td>
</tr>
<tr>
<td>SECTION F: Program Description</td>
<td>3 (12)</td>
<td></td>
</tr>
<tr>
<td>SECTION G: About You and Your Organisation</td>
<td>12 (12)</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>38 (90)</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PART 2</th>
<th>General questions for program managers about their organisation, programs and participants.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SECTION A: About Your Organisation</td>
<td>6 (6)</td>
</tr>
<tr>
<td>SECTION B: About Your Programs</td>
<td>7 (26)</td>
</tr>
<tr>
<td>SECTION C: About the Benefits</td>
<td>5 (15)</td>
</tr>
<tr>
<td>SECTION D: Participants</td>
<td>4 (5)</td>
</tr>
<tr>
<td>SECTION E: Staff at Your Organisation</td>
<td>7 (26)</td>
</tr>
<tr>
<td>SECTION F: About You</td>
<td>7 (7)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>36 (85)</strong></td>
</tr>
</tbody>
</table>

Survey Methods

Following the development of survey questions, a draft questionnaire was piloted with a small number of field staff involved in delivering outdoor youth programs. Feedback was sought from this group as to the relevance, interpretability and ease of responding to the various questions presented. A number of modifications were made to the survey as a result of this feedback. The final survey was then translated into a web format for online completion.

Recruitment of survey participants commenced in June 2011. Any individual or organisation currently involved in delivering or coordinating outdoor youth programs within Australia was eligible to participate. Providers of outdoor youth programs included not-for-profit groups, schools, private businesses, youth groups and welfare agencies. Individuals completing the survey were representatives of these providers and included managers, program leaders, teachers, field staff, and recreation officers. Program participants (children and youth) were not surveyed as part of this study.

Emails were sent from members of the OYPRA Steering Committee and other supporting organisations to an initial list of prospective participants (individuals) and known program providers (organisations), inviting their participation. Contact details of individuals and organisations were drawn from existing member databases held by Steering Committee members and supporting organisations. Snowball techniques were also employed to increase participant numbers. In this method, existing research participants were encouraged to inform their own colleagues and contacts of the study and to invite their participation.

Sample

As the survey was anonymous and individual responses were not tracked, it was not possible to determine whether any individual completed the survey more than once - though this seems unlikely. As such, all completed responses were treated as unique entries. Conversely, response patterns in collected data suggested that a number of incomplete surveys were ‘false starts’ – i.e. individuals who commenced, but did not complete, the survey, only to return subsequently to complete the survey in full. As such, surveys less than approximately 50% complete (fewer than 6 out of 11 pages complete for Part 1, and fewer than 4 out of 7 pages for Part 2) have been removed from analyses to minimise the likelihood of including duplicates in the final sample. Investigation for potential biases revealed no significant differences between those retained for subsequent analyses and those responses dropped due to missing data. As such, the surveys retained for analyses can still be considered representative of the original sample.

Table 2
Response Profile of Survey Participants

<table>
<thead>
<tr>
<th></th>
<th>Part 1</th>
<th>Part 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>total responses received</td>
<td>239</td>
<td>227</td>
</tr>
<tr>
<td>complete responses (retained)</td>
<td>195</td>
<td>166</td>
</tr>
<tr>
<td>incomplete responses (dropped)</td>
<td>28</td>
<td>50</td>
</tr>
<tr>
<td>incomplete responses (imputed)</td>
<td>16</td>
<td>11</td>
</tr>
<tr>
<td>final sample</td>
<td>211</td>
<td>177</td>
</tr>
</tbody>
</table>

A small number of respondents filled in more than 50% of the survey but still had incomplete responses, leaving some survey questions unanswered. Data imputation methods were employed in these instances to maximise useable data. The final sample on which all analyses are based therefore comprises 211 responses for Part 1 (6 or more pages of the survey completed) and 177 responses for Part 2 (4 or more pages completed) (see Table 2).
Survey participants were recruited from across Australia and represented outdoor organisations from all states. The proportion of organisations from each state was broadly representative of 2011 state populations, with the exceptions of NSW (which was slightly under-represented) and Victoria (which was slightly over-represented) (see Figure 1).

![Proportion of Responses by State](image)

**Figure 1.** Proportion of outdoor organisations represented by survey respondents according to state.

The geographical locations of outdoor programs surveyed tended to cluster around major capital cities and coastal areas (see Figure 2). Program locations were plotted on the basis of postcodes provided by survey respondents (up to 3 could be nominated).

![Geographical location of main administrative site/s for surveyed outdoor programs](image)

**Figure 2.** Geographical location of main administrative site/s for surveyed outdoor programs.
Results

Given the large number of questions asked in the National Survey, results presented in this summary report are selective. Survey findings are organised below according to key themes and questions of interest.

A general comment about findings from the survey is warranted prior to presenting results. While there are many similarities across outdoor and nature-based youth programs in Australia, a clear picture emerging from this study is that outdoor programs are very diverse. As a case in point, when we asked respondents to tell us how long their programs run for we received responses ranging from ‘less than one day’ to ‘over 365 days’. While the average (mean) duration of programs was 12 days, we know that this figure is not an accurate reflection of what typically happens in the field. Calculation of the mean is strongly influenced by those few programs running for extended periods. As the graph below shows (see Figure 3) a small number of respondents listed programs lasting 100 or more days, however, programs running between 1 and 5 days were far more common.

Figure 3. Histogram showing how many days programs ran for. The average (mean) of 12 days is elevated due to a small number of very long programs.

A more useful way of summarising this information is to look at the median value, rather than the mean. The median is the value lying in the middle of all responses (i.e. half the values fall below the median and half lie above it). In the example of program duration above, the median was 4 days and represents a more meaningful summary of the data. For this reason when we report survey results below, we will generally report minimum and maximum values, along with the median value.

For each of the major research themes we describe below, we present relevant questions as asked in the survey, along with summary findings and comments. Pie charts can be read in a clockwise direction with the first-listed category shown with an arrow.
Outdoor Providers

1. What type of organisation do you work for?

- the largest proportion (39%) of outdoor organisations represented were from the not-for-profit sector
- approximately one fifth of organisations surveyed were from the education sector
- outdoor providers in the health sector were the smallest group represented

2. In what way/s is your organisation funded to deliver the outdoor programs?

- almost half of outdoor providers surveyed were funded through fee-for-service (i.e. participants pay)
- government support (federal, state & local) accounted for approximately one quarter of funding
3. Approximately **what proportion** of the work carried out by your organisation is related to providing outdoor programs?

- over two thirds of organisations surveyed provided outdoor programs as their primary or sole work focus

4. On average, how many **programs per year** does your organisation deliver?

- the number of programs delivered in a typical year by outdoor providers varied greatly
- approximately three quarters of surveyed providers delivered 150 program or less per year
- the typical number of programs delivered per year was approximately 50
**Programs**

1. For **how many days** did the program run?

   ![Bar chart showing the distribution of program durations.]
   
   - **min:** 1 day
   - **max:** 365 days
   - **median:** 4 days

2. Did the program include one or more **overnight stays**?
   
   Yes = 88%
   
   No = 12%

3. Approximately **how many nights** in total did participants spend in each of the following types of accommodation?

<table>
<thead>
<tr>
<th>Accommodation Type</th>
<th>min</th>
<th>max</th>
<th>median</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) permanent buildings (cabins, bunkhouses, “hard-top”, etc)</td>
<td>0</td>
<td>96</td>
<td>2</td>
</tr>
<tr>
<td>ii) semi-permanent tents or other temporary accommodation</td>
<td>0</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>iii) hiking tents</td>
<td>0</td>
<td>60</td>
<td>3</td>
</tr>
<tr>
<td>iv) bivouac or other forms of simple shelter</td>
<td>0</td>
<td>96</td>
<td>1</td>
</tr>
</tbody>
</table>

- the duration (number of days) of programs delivered varied greatly across respondents
- over 80% of respondents indicated that their programs ran for 7 days or less
- the typical program duration was between 3 and 5 days
- most programs included one or more overnight stays
- hiking tents were the most common form of overnight accommodation, followed by permanent buildings (cabins or bunkhouses)
4. When describing to others the **main purpose** or goals of the program, **how important** would you say are each of the following?

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Not at all important</th>
<th>Of low importance</th>
<th>Moderately important</th>
<th>Very important</th>
<th>Extremely important</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) fun, enjoyment and recreation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) learning new technical outdoor skills (e.g. campcraft, paddling, abseiling)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) learning in, about, and for the environment (e.g. environmental appreciation, human-nature relationships, ecology, sustainability)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) learning about regular classroom subjects (e.g. maths, English, geography, science)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) personal development (e.g. improving self esteem, confidence, independence, wellbeing)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f) social development (e.g. improving relationships, group cooperation, teamwork)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g) addressing problem behaviours (e.g. poor school attendance, drug use, depression)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- respondents typically nominated more than one main purpose of their outdoor programs
- most respondents indicated that fun and enjoyment were key goals
- learning about classroom subjects was considered the least important purpose
- promoting **personal development** and **social development** were clearly endorsed as the most important goals of outdoor programs
- the goal of addressing problem behaviours elicited the greatest variability amongst respondents
Activities

1. Thinking about the adventure activities included in your program, please indicate how much time participants were involved in each of the following.

- bushwalking was nominated as the outdoor activity occupying the greatest number of days on camp
- campcraft, canoeing, mountain biking and environmental activities were the next most popular activities employed
- several activities were rarely used, including snorkelling, SCUBA, snow play and fishing/hunting
2. How frequently were **adventure activities** included as an essential part of the program?

3. Our program included:
   a) experiences the participants found **physically** challenging (e.g. carrying a backpack; paddling a canoe; being in inclement weather).
b) experiences the participants found **socially** or **emotionally** challenging (e.g. talking in front of the group; being a group leader; self-doubt during adventure activities).

c) experiences the participants found **mentally** challenging (e.g. making decisions; problem solving; working things out for themselves).

- a clear majority reported that the inclusion of adventure activities on the program was considered essential
- experiences on camp often involved participants in physical, social/emotional, and mental challenges; of these, physical and mentally challenging experiences were most common
**Participants**

Even though program participants (young people) themselves were not surveyed as part of this study, a number of questions asked respondents to provide basic descriptive details of the young people typically taking part in their programs.

1. Approximately **how many participants** took part in the program?

![Histogram of number of program participants](image1)

- **min:** 6
- **max:** 999
- **median:** 40

2. What would you estimate was the **average age** of participants? (years)

![Histogram of average age](image2)

- **min:** 7
- **max:** 35
- **median:** 14
3. How many participants were boys and how many were girls?

- the number of participants taking part in programs varied greatly between providers, though the typical number was approximately 40
- the typical age of participants taking part in outdoor programs was 14 years, with over 80% falling between 10 and 16 years
- the majority of programs included a mix of boys and girls
- a greater number of programs included a higher proportion of boys than girls
- approximately 20% of programs were single-sex only.
Staff

1. How many program leaders (staff) were directly involved in delivering the program?

![Histogram showing the distribution of the number of program leaders. The minimum is 1, the maximum is 50, and the median is 5.]

2. Overall, for how long have you worked in the outdoor education/recreation/camping sector?

![Pie chart showing the distribution of years worked. 46% less than 6 months, 20% 6 months to 1 year, 25% 1 to 2 years, 4% 2 to 5 years, 4% 5 to 10 years, 1% 10 to 20 years, 0% more than 20 years.]
3. How many program leaders were **male** and how many were **female**?

- programs typically included five members of staff, but this ranged from 1 to 50
- more than three quarters of respondents have 5 years or more experience in the outdoors sector
- the majority of programs included a mix of male and female staff
- a greater number of programs included a higher proportion of male than female staff
- approximately 15% of programs were delivered by staff of one gender only
Benefits

1. What proportion of participants on the program do you believe actually experienced the following benefits? (The earlier question similar to this asked about the goals of the program)

- most respondents indicated that they believe participants experience a number of benefits through involvement in the outdoor programs
- the majority of respondents indicated that almost all young people experience fun and enjoyment; this was the outcome with greatest agreement amongst providers
- learning about classroom subjects was considered the least likely outcome for participants
- benefits relating to personal development and social development were suggested for the majority of participants; over 80% of respondents believed that most all or most young people benefited in this way
2. What evidence do you have of the benefits experienced by participants on this program?

![Bar chart showing evidence sources]

3. Do you believe any participants experienced negative outcomes as a result of their involvement in the program?

   Yes = 24%
   No = 76%

- a clear majority of survey respondents rely on informal and anecdotal evidence as a basis of understanding participant benefits
- less than 7% of surveyed providers make use of robust research methods to examine participant outcomes
- approximately one quarter of respondents reported that at least some participants can experience negative outcomes on camp, including homesickness, tiredness, disliking activities, minor injuries, social conflict, and physical discomfort
**Key Program Components**

An important focus of this research was to examine the extent to which surveyed programs incorporated specific elements believed to help promote participant outcomes. Part 1 of the survey (completed by those working directly with young people on an outdoor program) included a series of questions based on the ChANGeS framework (Williams, 2009). The ChANGeS framework identifies five key areas that are thought to positively influence participant outcomes: Challenge, Activity, Nature, Guided experience, Social milieu.

We were interested to see to what degree these five areas featured across the outdoor programs surveyed. A total of 45 questions (9 for each of the five ChANGeS components) were asked. Results for each area are presented next.

**Challenge**

*Challenge* aspects of an outdoor program describe experiences in which participants are extended and have their abilities and personal resources stretched in demanding and stimulating ways. Participants are encouraged to proactively discover and harness their abilities in the pursuit of goals and tasks that may appear at first to lie beyond their reach. Examples of program components might include: challenging tasks and activities; problem solving; experiencing risk and novelty; decision making.

Nine questions were asked of respondents relating to *Challenge components* incorporated into their outdoor programs. Questions typically asked how frequently a particular *Challenge* component was included in the program (e.g. How frequently did your program include experiences the participants found socially or emotionally challenging (such as talking in front of the group; being a group leader; self-doubt during adventure activities)?). Responses were given on a four-point scale ranging from *not at all* (1) to *almost always* (4).

Combining results across all nine *Challenge* questions shows that:

- all programs incorporated some aspects of *Challenge* (i.e., no program scored the minimum cumulative value of 9, corresponding to rating each item “not at all”).
- the mean response was 3.0, indicating that *Challenge* components were typically incorporated “often” across all programs
- the frequent inclusion of multiple *Challenge* components was common, with more than half of all respondents indicating that all or most *Challenge* components listed were “often” incorporated into their program
- a small number of respondents (approximately 5%) indicated that all types of *Challenge* described in the 9 questions were incorporated in their programs “almost always”
Activity
The ChANGeS domain of Activity captures the action-orientation and experiential nature of outdoor adventure and camping programs. Participants are actively engaged in a vibrant learning environment and experience mental, emotional, and behavioural immersion. Examples of program components might include: experiential learning; genuine responsibility; adventure activities; experiencing success and mastery; physical, emotional, mental and social involvement.

Nine questions were asked of respondents relating to Activity components incorporated into their outdoor programs. Questions typically asked how frequently a particular Activity component was included in the program (e.g. How frequently did your program feature activities and experiences that were used as a practical way for participants to learn new skills and knowledge?). Responses were given on a four-point scale ranging from not at all (1) to almost always (4).

Combining results across all nine Activity questions shows that:
- components related to the Activity domain were more frequently incorporated into outdoor programs than those related to Challenge (above)
- the mean response was 3.3, indicating that Activity components were typically incorporated “often” across all programs
- more than three quarters of respondents indicated that all or most Activity components listed were “often” incorporated into their program
- the question given the highest rating by all respondents (most rating it “almost always”) asked how frequently the main method used to teach participants new skills was learning through experience?

![Cumulative Activity Score](image-url)
Nature

Consideration of Nature components in outdoor and camping programs refers not only to their physical setting, but also highlights a range of influential factors related to the natural environment. Through their involvement in outdoor programs, participants can experience open space, fresh air, natural light, freedom from distraction, absence of excessive artificial stimulation, solitude, and natural aesthetics (sights, sounds and smells of nature). Examples of program components might include: remote or wilderness settings; experiencing natural consequences; unfamiliar environments; and simple living.

Nine questions were asked of respondents relating to Nature components included in their outdoor programs. Questions typically asked how frequently a particular Nature component was included in the program (e.g. How frequently did your program include a particular Nature component?). Responses were given on a four-point scale ranging from not at all (1) to almost always (4).

Combining results across all nine Nature questions shows that:

- as with previous ChANGeS domains, all respondents indicated that their programs included at least some elements of Nature
- in contrast with Challenge and Activity components, Nature components featured less frequently in the outdoor programs surveyed, with some respondents showing close to the lowest possible score
- the mean response was 2.8, indicating that Nature components were typically incorporated “often” across most programs
- programs varied far more in the extent to which Nature components were included compared with Challenge or Activity components
- the question given the highest rating by all respondents (with two-thirds rating it “almost always”) asked how frequently young people on the program were expected to leave at home their mobile phones, mp3 players, computer games or other personal technologies.
Guided Experience

Elements in outdoor programs relating to the *Guided experience* domain relate to the critical role that facilitators and leaders play in influencing program outcomes through their input in guiding participant experiences. Beyond simply taking part in a series of outdoor activities, participants derive meaning and context from their experiences through guidance and reflection. Examples of relevant program components might include: goal setting; facilitated reflection; use of metaphor; processing or debriefing.

As with previous domains, nine questions were asked of respondents relating to *Guided experience components* included in their outdoor programs. Questions typically asked how frequently a particular *Guided experience* component was included in the program (e.g. How frequently were staff on the program expected to discuss with participants the connections or links between camp experiences and their everyday lives (e.g. by finding relevance to school, home, and/or work life)?). Responses were given on a four-point scale ranging from *not at all* (1) to *almost always* (4).

Combining results across all nine *Guided experience* questions shows that:
- programs varied in the degree to which they incorporated *Guided experience* components to a similar extent seen with *Challenge* components (above)
- a clear majority of programs included *Guided experience* components at least some of the time
- the mean response was 3.0, indicating that *Guided experience* components were typically incorporated “often” across most programs
- the question given the highest rating by all respondents (with more than three quarters rating it “often” or “almost always”) asked how frequently staff on the program were expected to help participants work towards personal goals?

![Cumulative Guided experience Score](chart.png)
Social Milieu
The final ChANGeS domain is Social milieu and relates to the social and cultural environment, settings and surroundings in which participants are immersed during a program. Participants both influence and are influenced by the social context through experiences of group-living with peers, establishing meaningful relationships, practising new ways of relating to others, and social skill development. Examples of program components might include: small-group work; relationship with leaders; direct and immediate social feedback; group dynamics; social modelling.

The survey included nine questions relating to Social milieu components included in respondents’ outdoor programs. Questions typically asked how frequently a particular Social milieu component was included in the program (e.g. How frequently did you program include group activities requiring team work, cooperation, mutual support and communication?). Responses were given on a four-point scale ranging from not at all (1) to almost always (4).

Combining results across all nine Social milieu questions shows that:
- survey respondents reported that Social milieu components were featured in their programs with similar frequency to Guided experience components and Challenge components (above)
- the majority of respondents indicated that several Guided experience components were included in their programs “often” or “almost always”
- the mean response was 3.1, indicating that Social milieu components were typically incorporated “often” across most programs
- the question given the highest rating by all respondents (with more than 90% rating it “often” or “almost always”) asked how frequently program leaders were expected to show by example (model) appropriate ways of interacting with others, solving problems and resolving difficulties?
**Implications**

While the research focuses on Australian camps and programs, we expect that the new methods we have developed and the findings we report will be of great interest and relevance to outdoor practitioners, camp operators, policy makers and researchers from other countries.

As stated earlier, one of the clear findings from the present study is that outdoor youth programs in Australia represent a great diversity of practice. This diversity is captured in factors such as program structure and composition, program duration, outdoor setting, activity-types, participant characteristics (including age, gender and more), staff training and experience, and outcomes sought. Nevertheless, despite this diversity, there are important points of commonality across many programs as well. These aspects of commonality are well captured by the ChANGeS framework, which appears to be a useful tool to identify the most important components of outdoor practice, and the features that jointly characterise outdoor, camping and nature-based programs offered to Australian youth.

The data set is rich, and addresses a range of issues that will be relevant to those working in the sector, as well as policy makers and planners. In our judgement, however, there were a number of themes that stood out. First was the fact that practitioners in this field clearly identified personal and social development of participants as the most salient goal of their work - over and above other potential outcomes of youth development programs, including traditional educational outcomes, and even skill development in terms of campcraft and other technical outdoors skills. This has major implications for the way in which such programs are to be evaluated. Furthermore, if practitioners are correct about this claim, then it suggests that these programs may have applications in areas where the personal and social developmental of young people may be a key factor, such as in the prevention of mental health problems and in maximising the wellbeing and functional outcomes (e.g. citizenship, vocational outcomes and community participation).

A second notable feature of the findings is that practitioners overwhelmingly based their evaluation of the outcome of their work on non-rigorous forms of evidence such as personal observation or anecdotal participant reports. Although we clearly do not wish to devalue such evidence, as it is the life blood of any practitioner’s expertise, it is notable that in most areas of professional practice it is considered vital to integrate such personal practice-based-evidence with evidence derived from rigorous outcome research in order to achieve evidence based practice. What is apparent in this domain is the relative dearth of practitioners who identify rigorous research as part of their basis for evaluating outcomes, a situation that is not surprising given the relatively small evidence base that exists in the research literature, and the lack of integration of more formal research designs and evaluation practices in the delivery of outdoor programs. This underlines what the OYPRA sees as a key gap in the evidence base available to practitioners, policy makers and planners.
The following conclusions and recommendations can be drawn from study results:

1. Outdoor programs are very diverse. As such, posing the question “Are outdoor programs effective?” is somewhat meaningless. Any examination of program outcomes must start with a clear and inclusive description of key characteristics and components of the delivered program.

2. In spite of their diversity, most programs still share a common set of core characteristics. Each program includes some components related to Challenge, Activity, Nature, Guided experience, and the Social milieu. Programs differ, however, both in the extent to which they incorporate each of these five domains, and by the means through which they do so. Characterising programs on these five dimensions may be a useful way of differentiating between them and comparing similarities and differences.

3. Personal and social development are key goals of many outdoor programs, and most providers believe that participants derive benefits in these areas. Future research might usefully focus on examining these areas in greater detail, and developing appropriate outcome measures (questionnaires). With the development of further evidence to substantiate these possible benefits, outdoor programs may be well positioned to play a pivotal role in promoting resilience and wellbeing amongst Australian youth.

4. While program providers have a rich and deep pool of anecdotal evidence that talks to important participant outcomes, very few are engaged in gathering empirical data using robust research methods. A greater balance of evidence is required. Establishing such evidence will help the sector more effectively demonstrate to a wide audience the potential benefits available to young people through outdoor programs and camping experiences.
What’s Next?
Having now completed the first of three phases of our planned research program, work is currently underway to commence Phase 2 and plan Phase 3 of the work. Research completed as part of our National Survey forms a critical step towards the next phase of our research, where we will turn our attention to examining the benefits of taking part in such programs. This next phase of work will involve directly evaluating the outcomes of specific programs for young people.

Phase 2: Development of a Study to Evaluate the Impact of Young People’s Participation in Outdoor Programs on Resilience, Learning and Wellbeing

Background The first phase of the OYP research described above provides essential information for Phase 2. In Phase 2, we will commence work that will seek to assess whether participation in outdoor programs is associated with improved resilience, learning and wellbeing. Using the data collected in Phase 1, we will identify programs that vary on key characteristics (e.g., goals, duration, nature of activity, type of participants) with the aim of collecting data from young people before and after their participation to rigorously identify self-reported benefits.

Undertaking a study that evaluates program impacts requires substantial long-term research funding (to cover the costs of collecting data from a large number of people, with repeated assessments over time). Therefore the component of Phase 2 proposed for 2012 is largely preparatory. We will be using the data collected from Phase 1 to develop a scientifically robust design for the impact study, and will seek funding from research funding sources to undertake this work.

The goals of Phase 2 in 2012 will be:

- Using the data collected in Phase 1, identify a number of outdoor programs provided to young people that are structured in ways likely to enhance participants’ resilience, learning and wellbeing
- From the range of programs identified and in consultation with the OYP Steering Committee, approach program providers for agreement to participate in the impact study
- Formalise the study design, measures, timelines and costs
- Submit applications for research funding from sources such as Australian Research Council (Linkage Grants Scheme)

Significance The long-term goal for the work undertaken in the second half of 2012 is to undertake a large-scale study of the impact of outdoor programs on young people’s resilience, learning and wellbeing.

It will be one of the first studies internationally to evaluate the impact of such programs using a scientifically robust design based on documented evidence of the diversity of real-world practice. Results will make a significant contribution to what is known about outdoor programs, both in Australia and internationally.

This phase builds on the data collected in the first study and the evidence of the OYP team’s established partnership and research ability. These are fundamental prerequisites for being able to successfully acquire the large-scale funding needed to conduct the impact study.

The work undertaken during this next period will provide the OYP research team with the best opportunity for attracting funding to the larger scale study. The outcomes will include a research design and measurement approaches that could be employed within the field for in-house evaluations should the longer term funding application be unsuccessful.
Phase Three: Evaluation Study

Phase three will undertake one of the first ever studies to formally evaluate the impact of structured outdoor and nature-based programs on young people’s resilience, learning and wellbeing, using a large community sample and employing a randomised controlled trial design (RCT). RCTs are considered by many to be the most powerful form of scientific evidence in the hierarchy of evidence that influences policy and practice in other areas, such as healthcare. This is because RCTs allow researchers to be confident that the benefits seen are really caused by the intervention and not by other factors or biases. For example, the National Health and Medical Research Council of Australia designated “Level I” evidence (the highest level) as that obtained from a systematic review of all relevant randomised controlled trials and “Level II” evidence as that obtained from at least one properly designed randomised controlled trial.

The key distinguishing feature of RCTs is that study participants, after assessment of eligibility and recruitment, but before the intervention to be studied begins, are randomly allocated to receive one or other of the alternative “interventions” under study. After randomisation, the two groups of participants are followed up in exactly the same way apart from their participation in the two alternative programs. The most important advantage of proper randomisation is that it minimises allocation bias, balancing both known and unknown factors that might influence outcomes. Other key features of high quality RCTs include appropriate statistical power (i.e., the study must be large enough to be able to detect important differences between the programs), minimising interventional contamination and operator bias (i.e., we must make sure that the outdoor intervention and the control intervention are really different in the way we think they are), and the use of blinded assessment of study measurements (i.e., the people doing the outcome evaluation should be unaware of which condition participants have been in whenever possible).

The precise design of this phase is currently being developed by the research team, and will be dependant upon the funding available. It will also be shaped by the findings from the first two phases, particularly in terms of the specific type of outdoor program, participants and outcomes to be evaluated. But the overall aim of Phase 3 is clear - to provide the highest level of evidence for (or against) the effectiveness of structured outdoor and nature-based programs for improving young people’s resilience, learning and wellbeing using the most rigorous and conclusive research design.
For further information about this report or the work of OYPRA:

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### Appendix 1

**ChANGeS Framework - summary** (developed by Dr. Ian Williams, 2009)

| **Challenge** | aspects of programs in which participants are extended and have their abilities and personal resources stretched in demanding and stimulating ways
| | components largely relate to processes that encourage participants to proactively discover and harness their abilities in the pursuit of goals and tasks that may appear at first to lie beyond their reach
| | e.g. challenging tasks and activities; problem solving; experiencing risk and novelty
| **Activity** | captures the action-orientation and experiential nature of adventure programs
| | participants are actively engaged in a vibrant learning environment and experience mental, emotional, and behavioural immersion
| | e.g. experiential learning; genuine responsibility; experiencing success and mastery; physical, emotional, cognitive and psychological involvement
| **Nature** | refers not only to the physical setting in which programs are conducted, but also highlights a range of related components intrinsic to the natural environment which are believed to play a role in facilitating positive change
| | specific qualities or components include open space, fresh air, natural light, freedom from distraction, absence of excessive artificial stimulation, solitude, and aesthetic features (sights, sounds and smells of nature)
| | e.g. wilderness setting; real/natural consequences; unfamiliar environments; simple living
| **Guided experience** | recognises the critical role that facilitators and leaders play in influencing program outcomes through their input in guiding participant experiences
| | includes aspects that help give meaning and context to participants' experiences, and suggests that there is more to programs than simply participating in a series of outdoor experiences
| | e.g. goal setting; facilitated reflection; use of metaphor; processing or debriefing
| **Social milieu** | relates to the social and cultural environment, settings and surroundings in which participants are typically immersed during a program
| | highlights the central importance of the social context with factors such as group-living with peers, establishing meaningful relationships, practising new ways of relating to others, and social skill development
| | e.g. small-group work and group development; relationship with leaders; direct and immediate social feedback; group dynamics

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