

**Regular Article**

# **The Life Significance of an Outward Bound Expedition: A Retrospective Study Up to 50 Years Later**

**Brad Daniel**

2nd Nature TREC (Training, Research, Education, Consulting)

**Andrew J. Bobilya**

Western Carolina University

**W. Brad Faircloth**

UNC Asheville

## **Abstract**

This cross-sectional retrospective study examined the life significance of participation in an Outward Bound (OB) wilderness expedition up to 50 years later to discover what participants learned, if their opinion about the experience had changed, whether the experience played a significant role in their lives subsequently, and its relative importance in comparison to other life experiences. Respondents ( $n = 180$ ) completed at least one OB expedition between 1967-2017; therefore, data represented 46 of the 50 years under investigation. Over 90% of respondents indicated that their OB course(s) had made a positive difference in their lives. Emergent themes indicated that their OB course: a) promoted greater confidence and courage, b) provided lessons and skills that were transferred to other life contexts, c) increased their self and social awareness, and d) helped them develop teamwork skills. These findings enhance our understanding of the long-term impact of OB and OB-type expeditions and support the notion that significant experiences are often used as reference points in a person's life story.

**KEYWORDS:** *Wilderness expedition, life narrative, autobiographical memory, significant life experience, Outward Bound, transference*

## **Introduction**

Many short-term impacts of outdoor programming and, more specifically, wilderness expedition experiences, have been identified, but relatively few studies have examined the long-term outcomes (i.e., 5 or more years) despite calls for more research (e.g., Allison et al., 2021; Daniel, 2003; Goldenberg et al., 2010; Hattie et al., 1997; Kellert, 1998; Sibthorp et al., 2008; Vogl & Vogl, 1990). Priest (1999) noted the need for studies that investigate “what transfers, how much of it, for how long, and because of what program elements or barriers” (p. 315).

Research on long-term outcomes explores if and how the lessons learned from these programs are transposed into other life contexts and whether any changes promoted by them are long-lasting or short-lived (Allison et al., 2021; Daniel, 2003; Ramirez & Allison, 2022; Sibthorp et al., 2008). One way to do this is by investigating the wilderness expedition experience through the lens of personal life history and significant life experiences (SLE) (Daniel, 2003, 2007). Significant life experiences are often used as reference points in a person's narrative or life story (Bruner, 1987; Chawla, 1998).

This cross-sectional retrospective study examined the long-term impact (i.e., life significance) of an Outward Bound (OB) course up to 50 years after the expedition. The study focused on identifying the significance of both the entire OB course (reported in this paper) and the individual expedition components (e.g., backpacking, camping, orienteering, climbing, canoeing, group expedition, solo, and a service project), which will be reported in a future paper.

## Significant Life Experiences

The theoretical framework of significant life experience (SLE) research seeks to understand the long-term importance of earlier life experiences and how past events continue to influence people's feelings, attitudes, beliefs, behaviors, or actions, through sampling and analyzing autobiographical memories (Chawla, 1998). Significant life experiences (SLEs) can be characterized as those events that play an enduring central role in a person's narrative or life story (Bruner, 1987). SLE research began in environmental education and involved asking questions about past influential experiences related to environmental education careers (Tanner, 1980). Daniel (2003) used a similar cross-sectional retrospective design to inquire about the long-term impact of an Outward Bound-type wilderness expedition by eliciting responses to open-ended questions about the significance of the experience. Significance in SLE research does not refer to statistical significance but rather to an experience that was meaningful, important, and perhaps formative (Chawla, 1998).

Some experiences are considered more significant when they occur rather than in retrospect. The significance of any one event may become diminished as the relative number of experiences increases throughout life (Neisser, 1982). For the experience to remain meaningful, particularly for it to become more significant, it must have had some extraordinary quality, some characteristic that separated it from the rest. Daniel (2003) identified multiple reasons why events are often classified as significant:

- It changed the participant in some way (perspective, behavior, or belief). This change may be mental, spiritual, physical, emotional, social, or some combination thereof.
- It constituted a new or extraordinary experience—outside the bounds of the normal routine.
- It provided something useful for the participant in the future, such as a reference point or life lesson.
- Specific meaning was derived from or attributed to it.
- It was thought to be caused by something other than by mere chance – God, a guiding force, or a higher power.
- The significance depended on the nature, magnitude, and/or timing of the experience.

## The Role of Memory in Retrospective Research

Within retrospective research, it is important to recognize that memories are reconstructive, not reproductive. Every time we reconstruct a memory, we introduce opportunities for the memory of that event to be modified from the actual event, as noted by Bartlett as early as 1932. The person recalling the experience is different than the one who experienced it (Rubin, 1988),

and recall can be influenced by several factors including current mood (Olafson & Ferraro, 2001), physiological state (Goodwin et al., 1969), physical/spatial location (Terry, 2017), availability of retrieval cues (Tulving & Pearlstone, 1966), time since the experience (Ebbinghaus, 1885/1964), emotional impact of the experience (Demiray & Freund, 2015; Nadel & Jacobs, 1998), and senescence (Nilsson et al., 2004).

New and existing information is constantly reinterpreted in light of subsequent knowledge, so the significance of one specific experience also may change (Neisser, 1982). Neisser (1982) noted that those experiences that tend to endure in memory:

...are perceived as strongly emotional at the time. Life's subsequent course must make the target event focal in recall. The event must be seen as a turning point, instrumental in later activities. The event must remain relatively unique, its image must not be blurred by subsequent occurrences of similar events (p. 89).

When the brain appraises an event as meaningful there is a pronounced increase in synaptic strength at the time of the experience (Siegel, 1999).

Several factors have been identified that may encourage accuracy of recall and retention including if the event holds great personal importance (Siegel, 1999) and if the experience was unique or rare in the person's life (Brewer, 1988; Finkenauer et al., 1998). The novelty of an experience also helps to increase the likelihood of recall much later in life (Healy et al., 2000). Research into the connections between brain physiology and memory suggests that emotionally arousing experiences, along with repeated experiences, have the greatest impact on the connections within the brain (Siegel, 1999). Additionally, stronger emotions can elicit greater vividness of recall (Reisberg & Heuer, 1992).

Much research on memory has focused on its accuracy or verity (Neisser, 1988), which has been found to decrease over time (Ross, 1997). Neisser (1988) discussed a useful distinction between the verity of memory (i.e., the accuracy of recall) and the utility of memory (i.e., how memory is used to accomplish some present end in relation to the meaning constructed around it). While verity has received much attention and discussion, the utility of memory is an important part of retrospective research since meaning still can be attributed to or constructed around experiences that are recalled inaccurately (Neisser, 1988). Events that can serve as turning points, anchoring events, or guides for future behavior are more likely to be remembered over time (Pillemer, 2001). Past experiences serve as a resource for interpreting present events and for responding to them (Daniel, 2003; Liddicoat & Krasney, 2014; Neisser, 1988), and in this way, the participants' autobiographical memories represent how they have contextualized that event and placed it within the framework of their life narrative (McAdams, 2001).

The primary goal of the current study was to understand the relative importance of an Outward Bound wilderness expedition experience in participants' life stories as expressed in their own words—not to evaluate the accuracy of their recall.

### **Long-Term Retrospective Studies on Wilderness Expedition Experiences**

Although relatively few studies have looked at the wilderness expedition experience within the larger framework of personal life history, several long-term retrospective studies have investigated the life significance of various types of expeditions including youth/school expeditions that include adventure activities and wilderness expedition experiences (Allison, 2021; Asfeldt & Hvenegaard, 2014; Daniel, 2003, 2007; Gassner et al., 2006; Ramirez & Allison, 2022; Takano, 2010; Wigglesworth & Heintzman, 2017, 2020). These studies generally support the notion that outdoor programs often have positive long-term impacts on participants' lives such as increased self-confidence, sense of accomplishment, and ability to meet and overcome challenges (Allison et al., 2021; Goldenberg et al., 2010).

Daniel (2003) studied participants in an Outward Bound-type program and found that 90% considered the long-term impact of the overall experience to be significant in their lives. Contributing factors included the novelty and/or uniqueness of the expedition experience, the timing of the event in their life, the natural setting, and the tendency to use lessons and memories in later life experiences. Gassner et al. (2006) concluded that Outward Bound Singapore's 21-day challenge course had a significant long-term impact on past participants' personal and professional life many years after the experience. In a study by Takano (2010) on youth expedition participants, 99% said their experience was significant, and 96% noted that it had influenced their lives. More recently, Wigglesworth and Heintzman (2020) found that interpersonal and social skills were often used in other contexts long after a summer outdoor course experience and Allison et al. (2021) concluded that a wilderness expedition can be a "life-changing" experience, assuming it is well organized. Lessons learned are often revisited later in life, such as stepping out of comfort zones and/or meeting challenges (Allison et al., 2021), and the significance of the event often increases as it is connected to other life events (Daniel, 2003, 2007). Cañas (2020) studied a youth expedition experience using Self-Determination Theory as a framework and found that the positive influence on participants' lives is likely due to the fulfillment of three basic psychological needs—autonomy, competence, and relatedness, factors that could promote optimal functioning across the lifespan.

These studies constitute a relatively small but growing body of retrospective research on the life significance of various outdoor program experiences. While Daniel's 2003 study focused on an OB-type program, no known SLE research has been conducted with alumni of OB specifically investigating the life significance of participation in an OB wilderness expedition. Therefore, the purpose of this study was to discover what participants remembered about their OB experience(s) up to 50 years post-expedition, what they learned, and whether it played a significant role in their lives subsequently.

## Methods

Qualitative methods help explore and identify factors that give a wilderness expedition significance since they provide rich, "context-based" information drawn from the informants' experiences (Creswell & Creswell, 2018). People construct and interpret their accounts of events in which they participate. Qualitative research seeks to clarify how individuals make sense of their lives, their experiences, and their structures of the world through intentionally selecting informants best suited to answer the research question (Creswell & Creswell, 2018).

This study used a cross-sectional retrospective survey design based on Daniel's 2003 study of an OB-type expedition to sample the autobiographical memories of OB participants going back to the first courses in the United States (up to 50 years later). This approach allowed participants to reflect upon their OB experiences and to describe their significance, if any, in response to several open-ended questions (Marshall & Rossman, 2016). A retrospective approach was chosen because it "provides the researcher with a larger sample than one would ordinarily have in this type of research, a greater ability to examine effects over longer periods of time, and data from many kinds and ages of people" (Kellert, 1998, p. 14). Chawla (1998) noted that retrospective approaches are important for identifying the type of formative events that longitudinal research should monitor.

## Participants

Participants were chosen based on criterion sampling (Creswell & Creswell, 2018). All participants completed one or more Outward Bound courses between 1967 and 2017. A stratified random sample (by course year and sex) was selected from the North Carolina Outward Bound School (NCOBS) database, which also included some course participants from other OB USA schools. The courses varied by type, length, and location. The databases were previously

integrated resulting in alumni from other OB USA schools being listed in the NCOBS alumni database. Overall, 72% of the survey respondents had taken an NCOBS course while 28% completed courses at other OB schools. After attempting to eliminate those with incorrect contact information, 762 potential respondents remained. Respondents ( $n=180$ ; 24% response rate) represented 46 different years of the possible 50-year span (Table 1). The results of this study were not intended to be representative of a broader population of OB participants.

**Table 1**  
*Participant Demographics by Year*

Database Trip Year	Total Respondents	Male Respondents	Female Respondents	No Sex ID
1967	0			
1968	3	3		
1969	2	2		
1970	0			
1971	4	3	1	
1972	5	2	2	1
1973	1			1
1974	1	1		
1975	1	1		
1976	1	1		
1977	2	1	1	
1978	2	2		
1979	3	2		1
1980	3	2	1	
1981	5	4	1	
1982	3	3		
1983	2	1	1	
1984	3	3		
1985	3	2	1	
1986	9	5	4	
1987	7	3	4	
1988	3		3	
1989	4		3	1
1990	3	1	2	
1991	5	4	1	
1992	6	3	3	
1993	6	3	3	
1994	4	2	2	
1995	2	2		
1996	8	4	3	1
1997	0			
1998	6	1	4	1
1999	4	2	1	1
2000	3		3	
2001	2		1	1
2002	4	1	3	
2003	3	2	1	
2004	3	2	1	

**Table 1 (cont.)**

2005	2		2	
2006	3	2	1	
2007	4	1	1	2
2008	3	2	1	
2009	3	2	1	
2010	3		3	
2011	0			
2012	6	3	2	1
2013	3	2	1	
2014	5	1	4	
2015	6	1	5	
2016	7	3	3	1
2017	9	5	4	
<b>TOTAL</b>	<b>Total Respondents</b>	<b>Male Respondents</b>	<b>Female Respondents</b>	<b>No Sex ID</b>
	180	90	78	12

To examine the likelihood of response and/or self-selection bias, a random sample of non-respondents (one per year) was selected, and two attempts were made to interview them to discover 1) if they received the survey link and/or mailing; 2) If they did, why they chose to not participate; and 3) whether they considered their OB experience to have been positive, negative, or neutral. It was hoped that these follow-up interviews would help inform an understanding of both the accuracy of the contact information and whether those who had positive experiences were more inclined to respond. However, attempts to contact non-respondents were unsuccessful. Thirty-three non-respondents had a voicemail with an incorrect name, a disconnected number, or a person answered and said it was the wrong number. Seventeen voicemail prompts had the person's name or did not say a name, and the researcher left a message.

## Survey Design

The survey consisted of open- and closed-ended questions designed to explore what OB expedition participants remembered about their experiences and to what extent, if any, the expedition played a role in their long-term personal growth. The open-ended questions invited narrative responses and many respondents provided detailed stories, examples, and descriptions.

The current study focused on participant responses to four open-ended questions that were modified from Daniel (2003): a) What were the most important takeaways for you (if any) from your Outward Bound course(s)?, b) Did your Outward Bound course(s) make a difference in your life in any way?, c) Has your opinion of what your Outward Bound course(s) meant to you changed or remained the same since completing the course(s)?, and d) How influential was/were your Outward Bound course(s) on your growth and development when compared to other life experiences? Study participants were asked to explain and provide examples for each of the questions.

## Data Collection

The primary researcher collected data in the summer of 2019 using SurveyMonkey.™ Multiple points of contact took place including a pre-notice, a notice and description of the study with the survey link, a mail notice for those with mailing addresses, and several reminder

emails for those with email addresses. The instructions gave respondents the option of requesting a printed survey by regular mail and seven requested one. The primary researcher entered mail responses into SurveyMonkey™ manually.

## Data Analysis

The surveys were coded and analyzed for content using the constant comparative method (Corbin & Strauss, 1990) to allow emerging themes to be compared with new data and modified accordingly. The process of collecting, coding, and reporting the data allowed for emergent themes to be categorized (Strauss & Corbin, 1998). The themes were then refined until theoretical saturation was reached and no new themes emerged. Representative participant comments were selected to illustrate each theme. Two independent researchers coded the responses. An additional researcher coded 20% of the responses to check intercoder reliability with at least an 80% agreement for each question (range 83-92%). The use of an intercoder helped increase the trustworthiness of the findings (Creswell & Creswell, 2018).

## Results

The findings indicate that the OB participants represented in this study valued their experiences highly. A majority of participants' accounts referenced lessons learned that are still useful. Respondents were invited to report a full range of experiences from their OB participation. This could have included traumatic experiences; however, none were reported by this sample. The results are presented by each question asked of the participants and include a description of the emergent themes and representative participant quotes. The themes discussed in this paper emerged across all responses. A future paper will explore similarities and differences in the responses according to course length, participant age, the year the course was taken, and other relevant categories.

## Important Takeaways

When asked what their most important takeaways were from their OB course, the following themes emerged: a) increased awareness, b) appreciation for nature, c) increased group development and teamwork skills, d) sense of accomplishment, e) relationship development, f) openness to new and unfamiliar challenges, and g) the influence of the OB course structure and teachings.

Participants spoke about their general increased awareness including their capabilities, leadership skills, and awareness of others, and that their OB course served as a reference point for their life. A participant said,

The most important takeaway from my Outward Bound course was that I rarely seek self-improvement and growth without a nudge, and Outward Bound was that large nudge that helped me learn about growing boundaries, interpersonal communication with teammates, and setting healthy habits centered around order, strength, and strength of mind. (Female, 2016)

Another participant reflected,

Perhaps the biggest takeaway was that NCOBS challenged the concept I had about how people viewed me. I was fresh out of HS [high school] when I participated and HS was not easy for me. I had a host of problems at home which resulted in a host of behavioral issues. I thought most everyone viewed me as a mix of trouble and aggression. The time I spent at NCOBS changed that. I came to see that people saw me as patient, kind and generous. It changed how I thought about myself. (Male, 1984)

Participants also mentioned how their experience gave them an increased appreciation for nature and activities they could do outdoors. One participant said,

My Outward Bound course opened my mind to the importance of environmental stewardship and preservation...the course increased my appreciation of nature, which made me want to engage in stewardship activities to help preserve the environment. (Male, 2006)

Group development and teamwork skills were also significant takeaways, including an increase in one's adaptability, flexibility, cooperation, and group reliance. One participant commented that her most significant takeaways were "Learning to trust others that I was not close to [and] learning the value of teamwork" (Female, 1988).

Another student reflected on her experiences learning to work as a team,

The most important takeaways from my Outward Bound experience were being able to accomplish anything when you work as a team. We all had different roles each day and we counted on each other, if one person didn't do their role, it affected everyone... (Female, 2016)

Participants reported a sense of accomplishment that included pride, self-confidence, and related self-acceptance, edgework (the idea that I can do more than I thought I could), perseverance, courage, and self-reliance. Reflecting on their accomplishment, a participant recounted her experience as a 50-year-old student,

[I] grew up in a Black middle class family in Philadelphia 80 years ago. [I was] sheltered [as an] only child. [I attended an] all girls high school and college. [I] went to Nantucket with family every summer but was warned by a doting mother to never go in the ocean above the knees, so [I] had a well-protected but fairly limiting childhood. So, to imbibe the adventuresome Outward Bound spirit while serving on the NC Outward Bound board years ago and commit to go kayaking off the coast of North Carolina (which my grandparents had fled to go north on the heels of the Wilmington race riot of 1898) was a big, scary deal at age 50. The memory of the sense of pride, accomplishment, and camaraderie of our group of older women stays with me... (Female, 1998)

Relationship development was significant for many OB alumni and included subthemes like a sense of camaraderie, communication skills, patience, trust, and empathy.

There is no simple answer. I did a 30-day course in NCOBS. My time in that course laid a foundation for me on how to work with others whose social circles were different from my own. It helped me appreciate nature in a way I had not before I took it, and I think it instilled a different level of confidence and perspective in me. Much of those experiences took years to germinate, but I think I carry them with me to this day. (Male, 1995)

Participants who completed an Outward Bound course also recognized the importance of challenge and found themselves being more open to new and unfamiliar challenges which included risk, uncertainty, and adventure.

...I could write a book on the benefits of my OB experience....At the time it was the only school I could find that taught rock climbing. After OB, eventually, I became a mountaineering guide and guided all over the world. With hundreds of first ascents of countless climbs. I was a damaged angry young man when I arrived at OB. Looking for the scam I was sure everyone was a part of. When it dawned on me that the workers and instructors were genuinely good people. It brought me to tears and gave me faith in humanity that I really needed at the time. (Male, 1981)

Reflecting on the impact of their Outward Bound experience on their ability to be open to new and unfamiliar challenges, another participant commented,

I attended an Outward Bound course the summer before I went to high school. I felt that it brought me out of my comfort zone in many ways and prepared me for dealing with unexpected situations. I felt that I was able to connect in a meaningful way with the other attendees and I valued this immensely as someone who had struggled in social situations. I also found it to be valuable in the simple fact that I have so many vivid memories of certain moments during the course. Even though it was only a limited exposure to being in the woods and camping out, I recall feeling connected to the world in a unique and important way. So, to summarize many things briefly, my most important takeaways were how much I was forced to challenge myself, the people I got to interact with, the vivid memories, and feeling one with the earth and the woods. I also feel that at Outward Bound I had so much uninterrupted time to think about myself and who I was in the world and who I wanted to become and how I wanted to be...(Female, 2014)

Finally, participants mentioned the influence of the structure of their OB course and related teachings including developing tenacity, a service orientation, and the ability to live in the moment. Regarding tenacity, a participant stated:

NCOB 1968 gave me lifelong confidence in myself, knowing that no task was too difficult to achieve. I was 21 and needing direction. I was the 6th and last man to climb Tablerock for 8 miles with 70 lbs. of rock on my back. This has stayed with me forever. (Male, 1968)

It is clear that when prompted to consider their “most important takeaways,” OB participants who had completed a course as recent as the previous year through those who were now reflecting 50 years later were able to comment on the relative significance and positive value that their experience held and how that experience had impacted their life in the years since OB.

## **If It Made a Difference**

When asked if their Outward Bound course(s) had made a difference in their life in any way, just over 90% indicated that their OB course(s) had made a positive difference in their lives. Five percent said it had not made a difference and five percent were unsure. They were asked to explain why they did/did not think it had made a difference. The themes mentioned most often in the responses were a) sense of accomplishment resulting in increased self-confidence; b) increased self-awareness of individual strengths, characteristics, and limitations; and c) a shift in perspective whereby they saw life, people, and/or situations in new ways.

Many participants said that they were proud of completing the course and of what they accomplished. This increased sense of accomplishment enhanced their self-confidence. This emerged as the most common theme. One participant reflected 47 years later,

I believe doing OB when I was 17 was and still does make a difference in my life. Because of what I experienced, I went forward with solid self-confidence, the knowledge that I could physically and mentally endure more than I thought possible. I've been able to live a fuller life because OB gave me the strong foundation to build upon. (Female, 1972)

Another participant shared,

I learned to trust myself, challenge myself, and to deal with fear. These lessons have been immensely helpful throughout my personal and professional life. Facing unique

circumstances allowed me to trust my abilities, and this has been extremely helpful as I have navigated unforeseen circumstances. I learned to quickly assess situations and determine the best course of action at the time, as well as to realize that such decisions need to be constantly re-evaluated. (Female, 1987)

The responses included many references to increased self-awareness of individual strengths, characteristics, and limitations. One respondent described how the OB course increased their self-awareness by stating,

It serves as an important, and easily memorable moment in my past that I can reference now and into my future. It made a difference by allowing me to experiment (within the vacuum of a group of strangers, who I had never met nor had garnered any reputation with) with the intrinsic values I defined myself by at the time, and ones that I thought (if put into practice) would equate to some sense of fulfillment and self-worth. And through this experiment, and reflecting on it, I can more effectively gauge my personal progress in terms of introspection, self-awareness, and emotional contentedness. By having a week of toting values that I thought were important, such as being funny and surface-level with everyone, not discussing any emotional content, and striving to be "well-liked" by everyone, while (back then) was rewarding in itself, it has become an important moment of self-reflection for me. (Male, 2016)

Many respondents indicated that their perspectives had changed as a result of their OB course experience. This shift in perspective was most often related to self, others, and life in general. A 1999 participant said,

This course changed the way I thought about everything. It has shaped who I am as a human being. It gave me the ability to understand what strength and courage I had even when I didn't think it was there. It gave me the ability to be compassionate and kind in every facet of my life. (Female, 1999)

Respondents reported being inspired and motivated to try new experiences, visit new locations, and trust and work with others more effectively. They also noted that their course had changed them in specific ways by helping them to become more patient, compassionate, empathetic, determined, and focused. The themes often overlapped in the responses. One student remarked,

I took the Outward Bound Outer Banks kayaking course before going into college. Not only did the course expose me to the outdoor elements, it also exposed me to the different cultures and backgrounds of the other people in the course. When I started freshmen year, I was able to feel confident in making friends with complete strangers and find some ways to relate to them. I was also able to find my voice and used it during meetings, classes, and social gatherings. Because of the solo day we completed on the course, I was able to feel comfortable in college being alone and away from family for a long time. I found a motivation to continue my education, not just with books, but with nature, the ecosystem, and the world. (Female, 2015)

The OB course experience was also characterized as a reference point in life as participants reflected on what they had learned when facing new situations, and overcoming fears, limitations, and challenges. A participant shared,

I consider Outward Bound to be the genesis of my personal growth story. It took the raw materials of my life, challenged me in so many ways, and produced something hard and tangible on the other end. It instilled in me a deep sense of service and a

kind of moral compass for who I really was. Over the years as I have gotten older I have revisited that experience time and again. Each time that I do I see new value and insight. Without NCOBS my life would be very different today, and I would not be who I am. It has made me a better, more kind and more thoughtful person in so many ways. (Male, 1996)

### **Change in Opinion of OB Experience**

When asked if their opinion of their Outward Bound course(s) had changed, just over 60% initially said they had a positive opinion of their OB experience and that it had not changed since taking their course. They were asked to explain why they thought it had/had not changed. One participant said,

It has not changed. It was worth the huge effort it took because it got me outside my routine and let me see myself in a new light allowing me self-acceptance and giving me space for new growth. I was happier after my OB experience and still think it was a life-changing experience. (Female, 1989)

Another participant commented on the usefulness of the experience by saying,

[My opinion is] Pretty much the same. As I have aged (67), I have thought many times how I probably wouldn't have had the strength to do some things. I was diagnosed with MS [Multiple Sclerosis] in 2003. My Outward Bound experience has given me the strength to keep moving forward and not surrender to it. (Female, 1972)

Thirty-one percent of the respondents said that their opinion had changed in that the meaning became richer and deeper over time as they connected and applied what they learned to other life situations. This was expressed in multiple ways. One student said,

The essential elements have not changed, but they have grown stronger and more complete. As I continue to use the lessons learned, the experience gains depth and importance. (Female, 1986)

Another participant described in more detail how it had deepened,

...it has changed, and in a more positive way...My Outward Bound course now means a point of reflection on a time and mental state when I valued concepts and ideals that I now know aren't truly what I think are important, and aren't what bring me more satisfaction, self-worth, and emotional contentment. (Male, 2016)

One participant said their opinion had, "changed in the sense that it [OB experience] continues to influence my personal growth and development. I am more accepting of the fact of my aging, the reduction in my physical strength and my willingness to accept my aging" (Female, 1987). Finally, one participant noted that,

While I always felt like it was a good and positive experience, in retrospect I see it as an important life event for me. Looking back, I can clearly see how far I have come, how much I've grown and how many obstacles I have overcome by thinking to myself, 'If I accomplished what I did at OB, I can definitely do this'. (Female, 2000)

### **Compared to Other Life Experiences**

When asked how influential they thought their Outward Bound course(s) were on their growth and development when compared to other life experiences, 19.3% of the respondents ranked their OB experience somewhere in their top 10 influential life experiences concerning personal growth and an additional 7.2% described it as their most influential experience. Many

of these statements were direct. For example, one participant responded, "Outward Bound was the single most influential experience in my entire life" (Female, 1988).

Other participants described their experience as "very influential" (27.4%), "somewhat influential and important" (16.3%), or "not very influential" (8.4%). Finally, 21.4% responded in ways that did not indicate how they would compare it to other life experiences.

Several themes emerged as to why the expedition experience was influential including a) the experience promoted greater confidence and courage, b) the experience occurred at a time related to their stage of development or a key life circumstance, and c) the experience provided life lessons and skills that were transferred to other life contexts. Various subthemes were mentioned including increased self-awareness, learning to overcome challenges, pushing outside of their comfort zone, and trying new things. Many of the narrative responses represented multiple themes.

Greater confidence and courage emerged as the most common theme. This was often due to facing and overcoming challenges, as noted by one participant, "When I was challenged and taken out of my comfort zone, I came home a stronger and more confident individual" (Female, 2014). Respondents described ways that their increased confidence and courage were used in other subsequent life situations. One participant reflected,

The physical and mental endurance challenges gave me the confidence to know not to ever give up. I won multiple sales awards over 30 years because I would always try to find a way to turn a no into a yes. I took corporate courses both physical and mental, but nothing compared to OB. (Male, 1969)

Another respondent mentioned,

Everything I've done since (attaining [sic] my black belt, becoming a Cub Scout leader and a Boy Scout Assistant Scoutmaster) was because my course gave me the confidence and strength to persevere no matter what the task ahead might place before me. (Female, 1998)

Many respondents said the course occurred at an important time in their lives for a variety of reasons. One participant stated,

My course was one of the top 3 most influential experiences of my adult life as related to being an impetus for growth and development. It was this because of the time it occurred in my life, where the course occurred in the world, what it taught me, and who I met as a result. (Female, 2013)

Other respondents described why the timing of the course was important and how they were different before and after the experience:

Before my Outward Bound course, I didn't have much independent life experience. I felt sheltered and afraid of the unknown and I was dependent on my mom for almost everything. After the course, I felt alive, and I felt like I was unstoppable, like I could go anywhere and do anything. After the trip I became much more active and continued to push myself out of my comfort zone to experience new places or new things on my own. (Female, 2015)

Another participant commented,

It was the genesis of my personal story. Everything else in my life pales in comparison to those 22 days. I felt and learned things on that trip that I cannot describe adequately in words. But when I read the writings of Edward Abbey and John Muir, I feel like they must have experienced something similar in their relationship to nature. It was NCOBS that inspired me to leave my home in OK when I was 20 and move west, pursue a degree in environmental studies and eventually begin a career in advocacy and

political organizing. It was that mountain top experience, seeing old growth forests next to clear cuts that spurred me to want to work and fight to protect the natural environment. Ironically once I engaged in that fight I realized that what I really found compelling was the impact that environmental degradation has on human individuals and communities. From there it was a natural transition into the Labor world. (Male, 1996)

Respondents provided accounts of one or more life lessons that they continued to use. Many of these lessons involved overcoming challenges. I experienced many events in my life that were considerably more challenging than my NCOBS experience. I got through or overcame them in part due to what I learned and experienced at NCOBS. (Male, 1979) Another respondent noted, "The Outward Bound course was more influential than other life experiences. When faced with a challenge, I remembered how I overcame obstacles and succeeded" (Female, 1991).

Finally, 8.4% said the course had not been that influential in comparison as stated, for example, by one participant:

I don't believe my Outward Bound course was truly that influential on my growth and development in comparison to my other life experiences. Although, I find it hard to quantify my "life experiences" or effectively find the metrics to gauge my "growth and development." The course falls into a catalogue of life experiences that I can reflect on, and use to compare my current values, self-awareness, and mental health against, but the experience in itself was not "influential" as a catalyst for growth in these areas. It serves as an excellent reference point, and its memorability is a testament to that, but my growth and development I feel doesn't come from positive experiences, but in analyzing the negative ones, as well as my consistent failures or "brick walls" I continually run into. After introspection regarding those experiences, I can take action to continue my growth and development towards being a healthier person. (Male, 2016)

Overall, many of the themes which emerged cut across responses to several or all of the open-ended questions. The results suggest that the majority of respondents in this study believed their OB expedition(s) to have been significant life events to varying degrees and for multiple reasons. A participant that completed their course in 1968 summarized its life significance:

Upon reflecting on 68 years of life experience Outward Bound is still in the top 3 influencers of my life. The other 2 are my father and the U.S. military. Not bad company. Although I've been fortunate enough to have had a number of unforgettable life experiences, most were "passing fancies". That is, the experience, (person, institution or whatever), didn't have much effect on the trajectory of my life. Outward Bound did. (Male, 1968)

## Discussion

This study adds to the literature on the long-term impacts of wilderness expedition programs on participants and more specifically for modified SLE methodology. The findings of this study support previous research that found that various types of wilderness expedition experiences often produce positive long-term effects such as increased self-awareness of strengths, characteristics, and limitations, confidence, appreciation for nature, teamwork skills, sense of accomplishment, relationship development, openness to new and unfamiliar challenges (e.g., Allison, 2021; Asfeldt & Hvenegaard, 2014; Cañas, 2020; Daniel, 2003, 2007; Dickson et al., 2008; Goldenberg et al., 2010; Hattie et al, 1997; Ramírez & Allison, 2022; Sibthorp et al., 2008; Takano, 2010; Wigglesworth & Heintzman, 2020). Similar to Goldenberg et al. (2010), the participants in the current study indicated that they transferred the value of being challenged, gaining new perspectives, and having new experiences to their lives post-expedition.

These findings also support the importance of the timing of the event with one's life stage (Daniel, 2003, 2007) since participants often mentioned that their expedition occurred during their formative years or after a major life event including divorce or the loss of a loved one. Many reported using the lessons and skills in subsequent personal and professional life (Allison et al., 2021; Daniel, 2003; Gassner et al., 2006; Goldenberg et al., 2010; Ramirez & Allison, 2022; Sibthorp et al., 2008; Wigglesworth & Heintzman, 2020), the value of learning to step out of comfort zones, pursue new experiences, and confront challenges (Allison, 2021) and the potential for the event's significance to increase as it is connected to other life events (Daniel, 2003, 2007). Finally, these results support Bruner's (1987) notion that significant experiences are often used as reference points in a person's narrative or life story. The theme of reference points emerged across responses to all four questions. In the participants' words, these reference points were described as turning points, pivotal experiences, seminal events, or life-changing experiences.

Participant responses were influenced by several factors, including time, emotional impact, perception, and context. The detailed nature of their responses also supports the idea that recall can be influenced by the time since the experience (Ebbinghaus, 1885/1964) and the emotional impact of the experience (Demiray & Freund, 2015; Nadel & Jacobs, 1998). Respondent comments indicated that the OB course experiences were often perceived as strongly emotional, served as turning or reference points, and provided lessons that were useful throughout life, all characteristics of events that endure in memory (Neisser, 1982; Pillemer, 2001; Siegal, 1999). Moreover, participant responses illustrated how they have contextualized their OB course experience and situated memories of the event within the framework of their life narrative (McAdams, 2001). Similar to Daniel (2003), some participants in this study described their OB experiences as significant but had trouble articulating specific ways that this experience had changed them while other participants had little to no trouble providing detailed accounts.

Ewert and Sibthorp (2009) noted that participants' prior knowledge and experience can serve as a confounding variable. While Daniel (2003) found that the life significance can be diminished by similar previous or subsequent wilderness expedition experiences, Wigglesworth and Heintzman (2020) reported that 33% of their sample still described their experience as significant. Participants in the current study that had previous and/or subsequent wilderness expedition experiences often described their course as somewhat less significant, suggesting that the uniqueness of the experience for these participants helped to determine how its significance was perceived in retrospect.

## Limitations

There were several limitations in this study. This research relied on the autobiographical memories of participants, which might not be accurate. The act of calling attention to one experience might have influenced its relative importance in their memory. However, since respondents were asked to recall self-referential, emotional, and potentially significant life experiences, confidence in the accuracy of their recall was increased (Demiray & Freund, 2015; McAdams, 2001). Finally, and as noted earlier, it is also possible that there was a self-selection bias among respondents. The research team attempted to address this by following up with a sample of non-respondents to investigate factors related to their nonresponse.

## Future Research Directions

Future SLE research on extended wilderness expedition experiences could examine how respondents' perceptions of life significance vary according to course length, the sequence of expedition components, participant characteristics, and/or the expedition location and mode(s) of travel. Additionally, longitudinal studies on outdoor expedition programs could examine how, when, and why the memories and significance of outdoor expedition experiences might change.

Future research may also explore the use of narrative inquiry and other narrative techniques to investigate important questions about how programs support identity processes over the lifespan. This approach might also help to reveal how the impact of outdoor programming, and more specifically wilderness expedition experiences, has changed over time. The current work was conducted using modified SLE methodology, but similar questions and data sets could and should be approached from multiple theoretical frameworks.

## Conclusion

Among the participants in this study, the life significance of an Outward Bound course was related to several identifiable factors including the novelty/uniqueness of the experience, its timing in participants' lives, and the extent to which the lessons were applied to subsequent life experiences. This study adds to our understanding of the long-term impacts of OB expeditions and similar programs. Additionally, these findings can inform expedition program design, staff training, program marketing, and future research on long-term impacts. For example, extended outdoor/ expedition program managers may want to include information from this and other retrospective studies in staff training as they attempt to connect their curriculum and standard operating procedures with potential long-term impacts. Staff, particularly novice field instructors, may benefit from a greater awareness of the documented, long-term impact of this type of programming as they approach designing specific courses. Additionally, programs that are increasingly challenged to advocate for the value of an extended wilderness expedition program may find these results beneficial in their marketing efforts as they try to translate the value of such experiences beyond the wilderness and specific program context. Finally, researchers might find this specific study and its design useful for replication in other program contexts as the field tries to continue to understand the long-term impacts of short-term program participation.

---

Acknowledgments: The authors would like to thank the administration and alumni of the North Carolina Outward Bound School, alumni from other Outward Bound USA schools, and Lauren Cannon for their assistance in this study.

## References

- Allison, P., Stott, T., Palmer, C., & Ramirez, M. J. (2021). Forty years on: Just how life changing are school expeditions? *Journal of Outdoor Recreation, Education, and Leadership*, 13(3), 4–20. <https://doi.org/10.18666/JOREL-2020-V13-I3-10674>
- Asfeldt, M., & Hvenegaard, G. (2014). Perceived learning, critical elements and lasting impacts on university-based wilderness educational expeditions. *Journal of Adventure Education & Outdoor Learning*, 14(1), 132–152. <https://doi.org/10.1080/14729679.2013.789350>
- Bartlett, F. C. (1995). *Remembering: An experimental and social study* (1932 original ed.). Cambridge University Press.
- Brewer, W. F. (1988). Memory for randomly sampled autobiographical events. In U. Neisser & E. Winograd (Eds.), *Remembered reconsidered: Ecological and traditional approaches to the study of memory* (pp. 21–90). Cambridge University Press.
- Bruner, J. (1987). Life as narrative. *Social Research*, 54(1), 11–32. <https://doi.org/10.1007/s10780-008-9039-2>
- Cañas, M. J. R. (2020). *The perceived long-term influence of youth expeditions on participants' lives* (Doctoral dissertation) The Pennsylvania State University.
- Chawla, L. (1998). Research methods to investigate significant life experiences: Review and recommendations. *Environmental Education Research*, 4(4), 383–397. <https://doi.org/10.1080/1350462980040403>

- Corbin, J., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology, 13*(1), 3–21. <https://doi.org/10.1007/BF00988593>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed-methods approaches* (5th ed.). Sage.
- Daniel, B. (2003). The life significance of a spiritually oriented Outward Bound-type wilderness expedition (Unpublished doctoral dissertation). Antioch University New England.
- Daniel, B. (2007). The life significance of a spiritually oriented, Outward Bound-type wilderness expedition. *Journal of Experiential Education, 29*(3), 386–389.
- Demiray, B., & Freund, A. M. (2015). Michael Jackson, Bin Laden and I: Functions of positive and negative, public and private flashbulb memories. *Memory, 23*(4), 487–506. <https://doi.org/10.1080/09658211.2014.907428>
- Dickson, T. J., Gray, T., & Mann, K. (2008). *Australian outdoor adventure activity benefits catalogue*. University of Canberra.
- Ebbinghaus, H. E. (1964). *Memory: A contribution to experimental psychology*. Dover (Original work published 1885; translated 1913). <https://dx.doi.org/10.5214%2Fns.0972.7531.200408>
- Ewert, A., & Sibthorp, J. (2009). Creating outcomes through experiential education: The challenge of confounding variables. *Journal of Experiential Education, 31*(3), 376–389. <https://doi.org/10.1177%2F105382590803100305>
- Finkenauer, C., Luminet, O., Gisle, L., El-Ahmadi, A., Van Der Linden, M., & Philippot, P. (1998). Flashbulb memories and the underlying mechanisms of their formation: Toward an emotional-integrative model. *Memory & Cognition, 26*(3), 516–531. <https://doi.org/10.3758/BF03201160>
- Gassner, M., Kahlid, A., & Russell, K. (2006). Investigating the long-term impact of adventure education: A retrospective study of Outward-Bound Singapore's classic 21-day challenge course. *Research in Outdoor Education, 8*, 75–93.
- Goldenberg, M., Soule, K., Cummings, J., & Pronsolino, D. (2010). Longitudinal participant outcomes associated with Outward Bound and National Outdoor Leadership School: A means-end investigation. *Research in Outdoor Education, 10*, 57–73. <https://doi.org/10.1353/roe.2010.0007>
- Goodwin, D. W., Powell, B., Bremer, D., Hoine, H., & Stern, J. (1969). Alcohol and recall: State-dependent effects in man. *Science, 163*(3873), 1358–1360. <https://doi.org/10.1126/science.163.3873.1358>
- Hattie, J., Marsh, H. W., Neill, J. T., & Richards, G. E. (1997). Adventure education and Outward Bound: Out-of-class experiences that make a lasting difference. *Review of Educational Research, 67*(1), 43–87. <https://doi.org/10.3102/00346543067001043>
- Healy, A. F., Havas, D. A., & Parker, J. T. (2000). Comparing serial position effects in semantic and episodic memory using reconstruction of order tasks. *Journal of Memory and Language, 42*(2), 147–167. <https://doi.org/10.1006/jmla.1999.2671>
- Kellert, S. R. (1998). *A national study of outdoor wilderness experience*. Yale School of Forestry and Environmental Studies and the Student Conservation Association.
- Liddicoat, K. R., & Krasny, M. E. (2014). Memories as useful outcomes of residential outdoor environmental education. *The Journal of Environmental Education, 45*(3), 178–193. <https://doi.org/10.1080/00958964.2014.905431>
- Marshall, C., & Rossman, G. B. (2016). *Designing qualitative research* (6th ed.). Sage.
- McAdams, D. P. (2001). The psychology of life stories. *Review of General Psychology, 5*(2), 100–122. <https://doi.org/10.1037%2F1089-2680.5.2.100>
- Nadel, L., & Jacobs, W. J. (1998). Traumatic memory is special. *Current Directions in Psychological Science, 7*(5), 154–157. <https://doi.org/10.1111%2F1467-8721.ep10836842>

- Neisser, U. (1982). *Memory observed: Remembering in natural contexts*. W. H. Freeman and Company.
- Neisser, U. (1988). Commentary on "Vivid memories and the reminiscence phenomenon: The role of a self-narrative." *Human Development*, 31, 271–273.
- Nilsson, L. G., Adolfsson, R., Backman, L., de Frias, C. M., Molander, B., & Nyberg, L. (2004). Betula: A prospective cohort study on memory, health, and aging. *Aging Neuropsychology and Cognition*, 11(2–3), 134–148. <https://doi.org/10.1080/13825580490511026>
- Olafson, K. M., & Ferraro, F. R. (2001). Effects of emotional state on lexical decision performance. *Brain and Cognition*, 45(1), 15–20. <https://doi.org/10.1006/brcg.2000.1248>
- Pillemer, D. B. (2001). Momentous events and the life story. *Review of General Psychology*, 5(2), 123–134. <https://doi.org/10.1037%2F1089-2680.5.2.123>
- Priest, S. (1999). Research in adventure programming. In J. C. Miles & S. Priest (Eds.), *Adventure programming* (pp. 309–317). Venture Publishing.
- Ramírez, M. J., & Allison, P. (2022). The perceived long-term influence of youth wilderness expeditions in participants' lives. *Journal of Experiential Education*. Advance online publication. <https://doi.org/10.1177/10538259221096804>
- Reisberg, D., & Heuer, F. (1992). Remembering the details of emotional events. In E. Winograd & U. Neisser (Eds.), *Affect and accuracy in recall* (pp. 162–190). Cambridge University Press.
- Ross, M. (1997). Validating memories. In N. L. Stein, P. A. Ornstein, B. Tversky, & C. Brainerd (Eds.), *Memory for everyday and emotional events* (pp. 49–81). Lawrence Erlbaum.
- Rubin, D. C. (1988). Practical aspects of autobiographical memory. In M. M. Gruneberg, P. E. Morris, & R. N. Sykes (Eds.), *Practical aspects of memory* (pp. 253–256). John Wiley.
- Sibthorp, J., Paisley, K., Furman, N., & Gookin, J. (2008, January). *Long-term impacts attributed to wilderness education: Preliminary findings from NOLS*. Paper presented at the Coalition for Education in the Outdoors Ninth Biennial Research Symposium, Martinsville, IN.
- Siegel, D. J. (1999). *The developing mind: Toward a neurobiology of interpersonal experience*. The Guilford Press.
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research techniques and procedures for developing grounded theory* (2nd ed.). Sage.
- Takano, T. (2010). A 20-year retrospective study of the impact of expeditions on Japanese participants. *Journal of Adventure Education & Outdoor Learning*, 10(2), 77–94. <https://doi.org/10.1080/14729679.2010.505707>
- Tanner, T. (1980). Significant life experiences: A new research area in environmental education. *Journal of Environmental Education*, 11(4), 20–24. <https://doi.org/10.1080/00958964.1980.9941386>
- Terry, W. S. (2017). *Learning and memory: Basic principles, processes, and procedures*. Routledge.
- Tulving, E., & Pearlstone, Z. (1966). Availability versus accessibility of information in memory for words. *Journal of Verbal Learning and Verbal Behavior*, 5(4), 381–391. [https://doi.org/10.1016/S0022-5371\(66\)80048-8](https://doi.org/10.1016/S0022-5371(66)80048-8)
- Vogl, R. L., & Vogl, S. (1990). The effectiveness of wilderness education: A review and evaluation. In A. T. Easley, F. Passineau, & B. L. Driver (Eds.), *The use of wilderness for personal growth, therapy, and education* (pp. 157–164). USDA Forest Service Rocky Mountain Forest and Range Experiment Station, General Technical Report RM-193.
- Wigglesworth, J., & Heintzman, P. (2020). A qualitative study of the perceived significant life impacts of a university summer outdoor education course. *Journal of Adventure Education and Outdoor Learning*, 12(2), 385–397. <https://doi.org/10.1080/14729679>

Wigglesworth, J., & Heintzman, P. (2017). A qualitative study of the perceived life significance of a university winter outdoor education course. *Research in Outdoor Education, 15*, 72–92. <https://doi.org/10.1353/roe.2017.0004>