Challenge seeking is an important component of children’s personal and academic development. Defined in this paper as a set of beliefs and behaviors that propels individuals to initiate and persist at difficult ventures, challenge seeking is a key indicator of mastery goal orientation. This orientation has been linked with a number of positive and adaptive behaviors. For instance, research shows that individuals who pursue mastery goals are more likely than others to value cooperation, seek help when confused, and use deeper learning strategies such as monitoring their comprehension and actively trying to integrate new information with prior knowledge. They are also more likely to negotiate decisional ambiguities and experience positive emotions (Dweck, 1986; Grant & Dweck, 2003; Senko, Hulleman, & Harackiewicz, 2011).

In Girl Scouts, challenge seeking is an essential element of leadership—a key to girls’ discovery of themselves and their worlds. In moving beyond their personal and interpersonal comfort zones, girls learn their strengths and values as well as ways to interact with others. Enabling girls to seek challenges in the world involves helping them to “develop positive attitudes toward learning, seek opportunities for expanding their knowledge and skills, set challenging goals, and take appropriate risks” (Girl Scouts of the USA, 2008, p. 28).

Despite the importance of challenge seeking, Girl Scouts have not typically reported high levels of this outcome. A recent national evaluation, for example,

Kallen Tsikalas and Karyn L. Martin

Girls’ Challenge Seeking
How Outdoor Exposure Can Support Girls in Taking Positive Risks

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found that only about 40 percent of Girl Scouts in grades 4–8 consistently endorsed positive responses, such as “agree” or “agree a lot,” to statements about taking positive risks (Tsikalas & Martin, 2014). These findings mirror those from other Girl Scouts of the USA studies (Tsikalas & Barnett, 2012). Compared to other Girl Scout leadership outcomes, such as developing a strong sense of self or cooperation and team building, girls are considerably weaker at challenge seeking.

Outdoor experiences often entail authentic tasks that have the potential to foster girls’ challenge seeking. For this reason, we used survey data to explore how the breadth and intensity of their exposure to outdoor activities affected Girl Scouts’ challenge seeking. Our findings have implications for practice not only for Girl Scouts but for any out-of-school time (OST) program committed to girls’ development.

The Outdoors as a Context for Developing Girls’ Challenge Seeking

Outdoor OST programs may play a special role in cultivating children’s challenge seeking, as nature often presents authentic and unavoidable challenges and risks (Kellert, 2005). Authentic challenges in the outdoors can be physical, cognitive, psychological, or social: negotiating a set of whitewater rapids, figuring out how to light a campfire in the rain, dealing with spiders, or taking the chance that others will judge you when you try a physically awkward activity, like rock climbing. These challenges frequently require young people to become more self-aware and to cooperate, communicate, and solve problems (Rickinson et al., 2004). However, due to increased technology use, structured activities, and parental protectiveness, young people in general—and especially girls—may be less likely to spend time outdoors, so that they have fewer opportunities to experience such authentic challenges.

According to Bohnert, Fredricks, and Randall (2010), exposure in OST programming (also referred to as youth “involvement”) has multiple dimensions. Breadth refers to the number of different activities or activity contexts in which young people participate. Intensity refers to how often the young people participate in the programming. Engagement relates to the youths’ level of investment—whether behavioral, emotional, or cognitive—in the program (Bohnert et al. 2010).

Each of these dimensions produces benefits in slightly different ways. For example, breadth may provide young people with opportunities to try on different roles and identities (Hansen, Larson, & Dworkin, 2003) or to rotate through different peer groups and find where they feel they best belong (Fredricks & Eccles, 2005). Intensity, on the other hand, may give them opportunities to build skills and self-efficacy within a domain (Bohnert et al., 2010; Larson & Verna, 1999) and to develop high-quality, supportive relationships with adults.

We were interested in how girls’ outdoor exposure in Girl Scouts contributed to their challenge seeking. Our study focused primarily on the breadth and intensity of girls’ involvement in Girl Scout outdoor programming. We also wanted to understand whether socioeconomic status (SES) and self-esteem affected girls’ outdoor experiences or challenge seeking. We thought, for example, that girls of lower SES might have fewer opportunities to get outdoors, both in Girl Scouts and in general. Similarly, we thought that girls with lower self-esteem might be less likely to participate in the outdoors and seek challenges, because doing so might threaten their self-esteem even further. Figure 1 illustrates our emerging conceptual model.

Research Methods

The data and analyses reported in this paper are part of a larger study investigating girls’ outdoor experiences in Girl Scouts and the role of these experiences in supporting leadership development, environmental stewardship, and customer satisfaction.

Context

Outdoor programming in Girl Scouts is distinctive in both its goals and offerings. While other outdoor programs for youth may be designed to improve fitness or develop environmental knowledge, Girl Scout programming is fundamentally about developing girls of courage, confidence, and character who make the world a better place. Developing leadership involves engaging girls in three processes: learning by doing, cooperative learning, and girl-led activities (James & Bastian-Archibald, 2009).

Additionally, Girl Scout programming exposes girls to a variety of outdoor activities, ranging from short-term, casual outdoor experiences to more intense, multi-day experiences. Activities are offered in a single-gender environment that emphasizes friendships.

Design and Participants

The study employed a cross-sectional research design in which girls were surveyed online at a single time point in the spring of 2012. Research participants were recruited from an online panel of Girl Scouts nationwide. The
Nearly 3,000 Girl Scouts (N = 2,862) responded to our survey, yielding a response rate of 40 percent. Representing 16 states, 84 percent of these girls were white, 6 percent African American, and 7 percent Hispanic. Respondents ranged in age from 8 to 14 years, with a mean of 10.8 years. All were enrolled in grades 4–8; 56 percent were Junior Girl Scouts, in grades 4 or 5, and 44 percent were Cadette Girl Scouts, in grades 6–8. Developmentally, Juniors are in Eccles’ (1999) middle childhood phase; they are broadening their social worlds by spending less time under parental supervision and more time with peers and other adults. They are also becoming increasingly aware of their competence. Typically, they are optimistic and enthusiastic about learning (Eccles, 1999). Cadettes have entered early adolescence, a more tumultuous phase with greater potential for both positive and negative outcomes. These older girls are able to think more abstractly, and issues of identity and autonomy may dominate their social interactions (Eccles, 1999).

Community type was determined based on girls’ zip codes: 36 percent of respondents were classified as living in urban areas, 40 percent in suburban areas, and 24 percent in rural areas. About one-quarter (27 percent) indicated that their mothers had less than a college education; these girls were classified as having lower SES. Another 26 percent were identified as higher SES.

Figure 1. Conceptual Model

**Outdoor Context**
- Breadth and intensity of exposure to:
  - Outdoor activities and contexts
  - Authentic challenges related to unpredicted events and novel circumstances
- Opportunities to:
  - Make mistakes
  - Explore different identities
  - Explore different peer groups
  - Develop skills
  - Improve self-efficacy
  - Strengthen relationships

**Girl Scout Context**
- Socially supportive context:
  - Friendship
  - Adults who encourage, validate, and provide access to opportunities
  - Praise for effort and teamwork
  - Mastery prioritized
- Single-gender context:
  - Fewer ego threats
  - No gender-based stereotype threat
- Repeated opportunities to:
  - Learn by doing
  - Improve skills
  - Help others learn
  - Lead

**Other Factors: Socio-Economic Status, Self-Esteem**
Surprisingly, in our sample, lower SES girls were more likely to live in rural, rather than urban, areas.

Based on survey items, about one-quarter (24 percent) of girls were categorized as having low self-esteem. These girls did not possess the self-esteem developmental asset defined by criteria of the Search Institute (P. C. Scales, personal communication, May 24, 2013), whose survey items we used with permission (Search Institute, 2012). Self-esteem was not associated with any demographic characteristics—race, ethnicity, or SES. It was, however, negatively associated with age: Younger girls reported higher self-esteem.

**Measures**

From the online survey, we calculated scores for challenge seeking, exposure to outdoor activities, self-esteem, and perceptions of the effect of Girl Scouting.

**Challenge Seeking**

Index scores were computed to assess challenge seeking. These scores represented the mean of four items for Cadettes and of three items for Juniors. Representative items were “I avoid doing things that are hard for me” and “I like to try new things, even though I might not do them well at first.” Girls responded using Likert scales of agreement, frequency, or similarity.

**Outdoor Exposure: Intensity and Breadth**

We measured the frequency of girls’ participation in the past year in more than twenty different Girl Scout outdoor activities, including walking outdoors, field trips to outdoor places, camping, outdoor cooking, canoeing or kayaking, horseback riding, archery, and volunteering for environmental causes. From these data, we created a simple, three-level factor of intensity: (a) monthly participation in any outdoor activity in Girl Scouts, (b) occasional participation, and (c) no outdoor involvement during the past year.

We assessed breadth in two ways: (a) the number of different outdoor activities in which girls participated at least once during the year and (b) the number of different activity contexts that girls experienced. We defined four activity contexts according to their level of adult directedness—or, conversely, girl autonomy—and opportunities for girls to encounter authentic challenges:

- **Casual context.** Outdoor activities such as walking outdoors, playing outdoors, and outdoor field trips involve low adult direction and offer girls high autonomy. Because these casual activities are often relatively unstructured, they provide girls with some opportunity to encounter authentic challenges. For example, girls may have to deal with bugs or natural obstacles during their outdoor excursions.

- **Service context.** Outdoor activities such as volunteering for environmental causes and learning about conservation involve moderate adult direction and offer girls ample opportunity to initiate and participate in projects. The level and type of challenge inherent in the service context vary based on the projects: Some service projects, like trail maintenance, may present considerable physical challenge. Others, like assessing water quality and determining causes of pollution, might be cognitively and socially challenging.

- **Camping context.** Camping-related activities include not only camping but also outdoor cooking, hiking, and backpacking. They require moderate to high levels of adult direction. During specific skill-building portions of camping, such as learning to build a fire, girls may have low autonomy. However, most of the time girls are autonomous and immersed in nature, thereby increasing their opportunities to encounter challenges ranging from coping with unpredictable weather to finding their way in the dark.

- **Directed activity context.** This context includes higher-risk activities such as archery, horseback riding, canoeing or kayaking, swimming, and ropes or challenge courses set up in specific locations. To participate in these activities, girls need special equipment and the supervision of trained, experienced adults. For safety reasons, the behaviors of girls are highly regulated, and girls must act within the parameters of the activity. Although the activities themselves may be physically, psychologically, or socially challenging, girls have little autonomy in directing their own experiences.

**Self-Esteem**

A self-esteem index score was computed as the mean of four items borrowed from the self-esteem subscale of the Search Institute’s (2012) positive identity measure. An example item is “All in all, I am glad to be me.” Girls responded using a five-point agreement scale; another option was “I don’t know/don’t want to say.” Based on Search Institute criteria (P. C. Scales, personal communication, May 24, 2013), we divided girls into two groups: those who did and did not achieve a minimum score on the self-esteem index.

**Perceptions of the Effect of Girl Scouting**

Using a six-point agreement scale, girls rated the extent to which Girl Scouting improved various aspects of their
lives, including their health, confidence, leadership, and academic skills. Representative items were “Because of Girl Scouts, I learned to do things that I thought I couldn’t do” and “Girl Scouts helped me recognize my strengths.”

Procedures
To understand the data, we used descriptive statistics, correlations, hierarchical regression analyses, and thematic coding of comments. We analyzed data separately for Juniors and Cadettes. To interpret findings and develop actionable insights from the study, we worked with an advisory group that included Girl Scout staff and external advisors.

Results: Outdoor Exposure and Challenge Seeking
After analyzing results on challenge seeking and on the intensity and breadth of exposure to outdoor activities, we then investigated the extent to which outdoor exposure explained differences in girls’ challenge seeking.

Challenge Seeking
As previously noted, girls scored relatively low on challenge seeking. The mean score for Juniors was 3.68 out of a possible 6. Only 31 percent met the threshold score we designated as indicating “positive progress” toward the outcome. Middle school girls fared slightly better: 43 percent of Cadettes made positive progress toward the challenge-seeking outcome, scoring a mean of 4.27 out of 6.

Despite these numbers, girls made numerous references in their comments to taking on and surmounting challenges, for example:

- “I was always afraid of camping. Sleeping outdoors was my worst fear. My troop had been planning a camping trip for a couple of months, and I was terrified when the day actually came. My wonderful troop leader and friends helped get me through it, and I realized that I really do love camping.” (13-year-old Girl Scout, Idaho)
- “At first I thought that climbing something so high would be very dangerous, but once I saw all the harnesses and had all of my friends with me, I saw that it was fine.” (13-year-old Girl Scout, California)
- “When we went camping we had to cook outdoors a lot. First I was very scared of the fire. Then I started to learn techniques on how to make sure you cook well, how to contain the fire…. We were also taught all the safety precautions we had to take.” (12-year-old Girl Scout, Florida)

Additionally, 63 percent of Cadettes and 55 percent of Juniors agreed or strongly agreed that “Because of Girl Scouts, I learned to do things I thought I could not do.” Whether or not the girls sought challenges in Girl Scouts, they clearly experienced and learned from them.

Though our data did not allow us to fully explore the discrepancies between girls’ ratings on challenge-seeking items and their comments, we did notice one pattern that might partially explain the differences. Comparison of girls’ comments with their ratings suggests that girls may have recognized physical and cognitive challenges, but not psychological challenges, as “things that are hard for me.” As the previous comments suggest, outdoor challenges for many girls in our sample involved overcoming fears. Thus, the girls may have successfully dealt with challenges—their own fears—that they did not recognize as challenges.

Outdoor Exposure
Nearly all girls in the study (97 percent) indicated having done at least one outdoor activity in Girl Scouts during the year. The activities they did most frequently were:

- Playing outdoors, for example, playing soccer or jumping rope
- Walking outdoors, for example, in a park or through the neighborhood
- Going on field trips to outdoor places, such as a farm, beach, or outdoor festival
- Camping overnight, including troop camping
- Volunteering for a cause related to the environment, for example, being part of a tree-planting, animal rescue, or clean-up day
- Cooking outdoors

Intensity
Nearly four out of 10 girls (39 percent, consisting of 41 percent of Cadettes and 38 percent of Juniors) participated on a monthly basis in outdoor activities in Girl Scouts. These girls tended to participate in the same types of outdoor activities as other girls, such as playing outdoors and going on outdoor field trips, but they did so much more often. About six of 10 girls (57 percent) participated in outdoor programming in Girl Scouts on an occasional basis.

Breadth
The average girl participated in eight different individual outdoor activities and three outdoor activity contexts in Girl Scouts at least once during the year. Tables 1 and 2 display data on girls’ participation in each activity context and overall.
These findings indicate that responding Girl Scouts were most likely to participate in casual, camping, and service-related outdoor activities; they were least likely to participate in directed activities. If they participated in only one context, it was most often casual or service-related. However, about one-fifth of girls (22 percent) who participated in just one activity context took part only in camping or directed activities.

**Differences Among Groups of Girls**

Girls’ participation in outdoor programming in Girl Scouts was related to their demographic characteristics and self-esteem. As expected, we found the most prominent differences between older and younger girls, with older girls participating in most outdoor activities more frequently. However, we also saw differences based on race, ethnicity, and self-esteem. Many of these differences clustered around the camping and directed activity contexts, in which girls of lower SES and girls of color tended to participate less. Rural girls were also less likely to participate in directed activities. Aside from age differences, girls in all demographic categories were equally likely to have participated in outdoor experiences at least monthly and to have engaged in casual and service-related contexts.

**Role of Outdoor Exposure in Girls’ Challenge Seeking**

For older and younger Girl Scouts, both intensity and breadth of outdoor exposure are positively associated with challenge seeking and with girls’ perception that Girl Scouting helped them learn to do things they thought they could not do. Figure 2 displays outcomes by intensity. It shows a strong connection between the frequency of outdoor exposure and challenge seeking, especially for Cadettes.

When we examined breadth of outdoor exposure, we found that the number of outdoor activities and the number of different activity contexts were correlated with girls’ positive progress toward challenge seeking and their perception that “Because of Girl Scouts, I learned to do things that I thought I couldn’t do.” Breadth of outdoor exposure was most strongly linked to Junior Girl Scouts’ perceptions that they had overcome negative expectations of their abilities and had learned to do new things.

Indeed, when we take the analyses a step further and control for demographic and personality characteristics in regression models, we find that these two dimensions of outdoor exposure play different roles for Juniors and Cadettes. For Juniors, breadth of outdoor exposure, whether defined as the number of activities or the number of activity contexts, is a strong and significant contributor to challenge seeking. Intensity is only marginally significant. In contrast, for Cadettes, intensity is the most significant predictor of challenge seeking, and breadth is not at all significant.

For both groups of girls, self-esteem strongly influences challenge seeking, with higher self-esteem predicting greater challenge seeking. Demographic factors such as race, ethnicity, community type, and SES are not significant contributors.

### Table 1. Breadth of Girls’ Participation in Outdoor Activity Contexts in Girl Scouts

<table>
<thead>
<tr>
<th>Activity Context</th>
<th>Percentage of Girl Scouts Participating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Juniors</td>
</tr>
<tr>
<td>Casual context</td>
<td>92%</td>
</tr>
<tr>
<td>Camping context</td>
<td>82%</td>
</tr>
<tr>
<td>Service context</td>
<td>87%</td>
</tr>
<tr>
<td>Directed activity context</td>
<td>62%</td>
</tr>
</tbody>
</table>

### Table 2. Breadth of Exposure by Context

<table>
<thead>
<tr>
<th>Number of Different Outdoor Activity Contexts</th>
<th>Percentage of Girl Scouts Participating</th>
</tr>
</thead>
<tbody>
<tr>
<td>No contexts</td>
<td>3%</td>
</tr>
<tr>
<td>1 context</td>
<td>4%</td>
</tr>
<tr>
<td>2 contexts</td>
<td>11%</td>
</tr>
<tr>
<td>3 contexts</td>
<td>25%</td>
</tr>
<tr>
<td>4 contexts</td>
<td>57%</td>
</tr>
</tbody>
</table>
Understanding These Results

Three important questions emerge from these findings:

- Monthly involvement in the outdoors clearly contributes to challenge seeking, especially for middle school girls. However, only about 40 percent of girls participate in monthly outdoor activities through Girl Scouts. Why are the majority of girls not getting outdoors regularly?
- Why might breadth of outdoor exposure be more supportive of challenge seeking for fourth- and fifth-grade girls and intensity be more supportive for middle school aged Girl Scouts?
- How can we better support girls with low self-esteem through outdoor programming?

Intensity and the Lost Majority of Girls

What prevents the majority of girls (60 percent) from having monthly outdoor experiences in Girl Scouts? In the study, we did not directly probe for barriers to girls’ outdoor participation. We did, however, ask girls who never participated in outdoor activities through Girl Scouts—about 3 percent of the sample—to describe the activities they would like to do. These girls expressed interest in outdoor activities from scavenger hunts to hiking, swimming, and zip lining. Some girls also hinted that their troops might need help in prioritizing outdoor activities. For example, one 10-year-old said, “I would do ANYTHING. My troop doesn’t participate in that kind of stuff.” An 11-year-old Girl Scout said that she would do “many of the [activities] you listed. I do them on my own, because my troop has not organized any of this.”

Because everything Girl Scouts do outdoors must be supported by an adult, these results speak indirectly to the role of adult volunteers and their preparation to lead outdoor activities. To get outdoors more regularly, Girl Scouts need adult volunteers who encourage and promote outdoor experiences. Anecdotal data suggest that adult volunteers in Girl Scouts have high expectations of outdoor activities, believing that they need to be perfect. The volunteers’ expectations seem related to a lack of confidence in their ability to anticipate and troubleshoot problems that might arise outdoors and to perceptions that consequences of missteps are more severe outdoors than elsewhere. Fear of not providing a perfect and memorable outdoor activity can discourage volunteers and therefore lead them to discourage girls’ participation in the outdoors.

Because of its noncompetitive, no-grades context, Girl Scouts gives girls a chance to try something new without fear that others will judge them. It is thus uniquely positioned to provide girls the benefits of outdoor experiences—even those that are less than perfect. Communicating to volunteers and parents that casual outdoor experiences are effective ways of giving girls opportunities to build competencies and try new things may be the key that opens the gates for more
regular outdoor involvement. Experiences such as playing and walking outdoors and taking outdoor field trips do not demand specialized equipment or training, but they may provide girls with a positive context in which to experience authentic outdoor challenges and learn to do things they thought they couldn’t do.

The Role of Intensity and Breadth of Outdoor Exposure for Older and Younger Girls

Why does it appear that breadth is more important to the development of challenge seeking for younger girls and intensity is more important for older girls? The answer may reflect both age-related program factors and social or psychological developmental trajectories.

With regard to program factors, younger Girl Scouts are offered less varied outdoor opportunities than girls in sixth grade and higher. For example, activities such as archery, hiking, kayaking, low ropes courses, and overnight tent camping are often first available to girls in the fourth grade; more challenging high ropes courses, backpacking, and outdoor cooking competitions begin in the sixth grade. Beyond sixth grade, girls may be offered two-week long camping or backpacking trips that require planning and skills development. Similarly, girls in fourth grade may participate in a town-wide or community-organized environmental service event, but girls in higher grades may take the lead in planning such a service event.

Additionally, for most Juniors, participation in outdoor activities is heavily regulated by adult volunteers. These adults must, themselves, acquire training and develop confidence in the outdoors. As Juniors and their volunteers gain experience and competence in a variety of outdoor contexts, the doors open for more intense involvement. Within a few years, as girls reach Cadette age, they have learned how to navigate program requirements and access outdoor activities. The adult volunteers, who generally advance with their troops, have also gained experience in navigating programmatic and personal obstacles to outdoor participation and may be better equipped to facilitate. Additionally, older girls who have acquired preferences for participating in certain activities may have forged relationships with adults other than their troop leaders who support their outdoor participation.

Program factors like these may encourage younger girls to engage in a broad sampling of outdoor activities—ones both they and their troop leaders can enjoy without an extensive commitment of time and training. Experiencing such a breadth of activities provides Junior Girl Scouts with opportunities to encounter multiple challenges and gain confidence in negotiating them. In contrast, older girls, who have tasted a variety of outdoor activities and gained rudimentary skills, are encouraged to deepen their involvement in a few activities. The types or level of challenges they encounter with more intense participation may demand more sophisticated responses. Learning to be more strategic in surmounting challenges—for example, employing both individual and team approaches—may help these girls continue to grow in their challenge seeking.

Developmentally, Junior Girl Scouts are becoming aware of and concerned about their competence; successful experiences in a wide range of activities can provide them with a positive sense of their competence (Eccles, 1999). Most want to try new things to learn what they might enjoy and where they might excel. As girls try these novel activities, they begin to develop challenge-seeking skills: They learn to ask for help, accept that they can learn from mistakes, set challenging goals for themselves, see talented peers as sources of inspiration, and understand that progress means taking on challenges and getting better at them. Hence, breadth of outdoor participation builds beliefs and attitudes essential for challenge seeking.

For Cadettes, who may have already located their activity niches, refining skills and mastering tasks may be more important to their self-efficacy and identities. These, in turn, may motivate the girls to continue seeking challenges and honing associated competencies, such as goal setting. Developing stronger and deeper relationships with peers and adults through regular participation in an outdoor activity or context may also be appealing. Such relationships can gently encourage girls to push themselves further and higher. Intensity of
outdoor participation therefore builds the relationships, social strategies, and help-seeking beliefs and skills that propel these girls toward greater challenge seeking.

**Supporting Girls Who Have Low Self-Esteem**

Girls with low self-esteem scored lower than girls with higher self-esteem on challenge seeking, and they rated Girl Scouts as having less effect on them. For these girls, however, some experiences in Girl Scouts stood out as being especially supportive of leadership. In particular, when girls with low self-esteem experienced high-intensity (monthly) outdoor exposure in Girl Scouts or when they felt Girl Scouts afforded them opportunities to become healthier, take on leadership roles, or help other girls learn, they reported levels of challenge seeking on par with girls who had higher self-esteem. More frequent outdoor participation may boost girls’ feelings of competence by providing them with opportunities to practice and improve skills as well as to strengthen social relationships.

**Limitations**

Because this study employed a cross-sectional research design, there are limits to the conclusions we can draw. In particular, we cannot make definitive statements about causality; we cannot claim that participating in outdoor programming necessarily caused Girl Scouts to seek more challenges in their lives. Furthermore, by using an online survey and panel, we run the risk of over-representing girls who have regular and reliable Internet access. Our sample, for example, did include a higher proportion of white girls than was present in the Girl Scout membership at large in participating councils.

The study did not address engagement or the duration or consistency of involvement. Girl Scouting is designed as a 13-year program (K–18). We assume that Juniors and Cadettes have varying levels of engagement and perhaps consistency; that is, they may be more involved some years than others. However, we could not assess these factors with these data and this methodology. Another factor we could not address is how adult directedness (as opposed to girl autonomy) and opportunities to experience authentic challenges contributed to girls’ outcomes. Finally, we did not investigate cultural or family factors that may have influenced girls’ outdoor participation and challenge seeking. Future longitudinal and more nuanced research of Girl Scouts and the outdoors may consider these factors.

**Implications**

This research has many implications for practice.

**Program Design and Implementation**

Findings from the study suggest some immediate steps to enhance girls’ challenge seeking. For girls in fourth and fifth grades, breadth of experiences may deliver the most benefit to challenge seeking. For older girls, opportunities to experience intensity in one or more activity contexts may lead to the most benefit. OST programs might implement the following practices to promote girls’ challenge seeking:

- Provide girls with opportunities to get outdoors at least once a month, in the style of Girl Scouts
- Promote casual outdoor activities—playing outdoors, walking outdoors, going on outdoor field trips—as ways both to get girls outdoors and to help adults feel more comfortable with facilitating less-than-perfect outdoor experiences
- Emphasize Girl Scout processes—learning by doing, cooperation and team building, and girl leadership—to increase the effect of outdoor experiences for all girls, but especially those with low self-esteem

**Volunteer Preparation**

Because adult volunteers are often the gatekeepers of outdoor experiences, Girl Scouts and other OST programs need volunteers who value and encourage girls’ participation in outdoor activities. Organizations may need to focus on increasing the value of outdoor participation for adult volunteers and decreasing its social and emotional costs by:

- Immersing volunteers in fun, adult-oriented outdoor experiences that progress from easier to more challenging in order to help them develop friendships as well as skills
- Providing volunteers with outdoor training or experiences alongside girls, for example, in situations where girls and adults participate in separate activity tracks but come together to share their experiences
- Educating volunteers about the benefits to girls of outdoor exposure—including those detailed in this report

To reduce the costs of participation, especially those related to low confidence, discomfort, and inconvenience, organizations might provide adult volunteers with easy access to the stories of other volunteers who demonstrate how to attain outdoor proficiency and who inspire persistence even when things don’t go perfectly. Another way to increase participation is to provide external facilitators or other adults specifically trained to lead troop camping or other outdoor activities.
References


