

# Youth Development through Service to Nature

## *A Study of Student Conservation Association Programs*

### Introduction

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Student Conservation Association (SCA) members grow through their program experiences to become more deeply committed to conservation and civic engagement and to exhibit critical skills and strengths that are fundamental to success in the 21st century, according to a new study by Search Institute. The research also finds that members' positive development is cultivated by promoting strong youth-adult relationships and by creating a team climate where members are both challenged and supported.

SCA partnered with Search Institute to assess the impact of intensive conservation experiences on members' personal development and readiness for school, work, and engaged civic life. Drawing on pre- and post-program metrics from 484 National and Community Crew members<sup>1</sup>, the data suggest important ways SCA members change over the course of their conservation experience.

### Findings

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#### **Members deepen their commitment as conservation leaders.**

Climate change, drought, deforestation, and loss of biodiversity—these are just a few of the large

environmental issues facing our planet that will demand many kinds of conservation leadership to address. It will require conservationists conducting research; developing policies and programs; doing what they can in their own lives to conserve natural resources; and, affecting the behaviors of those in their spheres of influence.

Developing conservationists to lead these efforts begins with young people. Adolescence and young adulthood are critical times for developing what some call an “environmental identity” (Matsuba & Pratt, 2013; Thomashow, 2002). Adolescents see the world through “fresh eyes” that come with increased autonomy (Zimmer-Gembeck & Collins, 2003) and an increased capacity for cognitive complexity (Smetana & Villalobos, 2009), which allows them to explore, interact, and understand the world and issues around them in new ways.

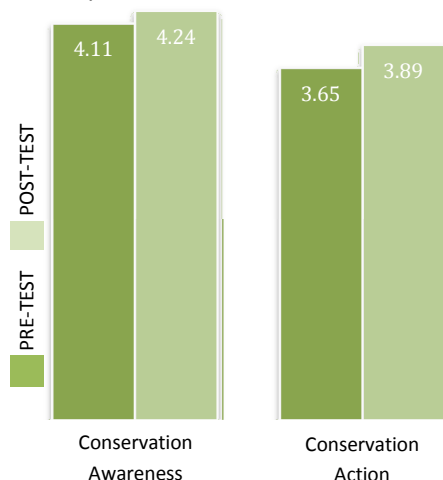
In this study, SCA National and Community Crew members showed significant positive change on seven dimensions of conservation leadership over the course of their SCA experience:

- conservation awareness
- connectedness to nature
- environmental responsibility
- conservation action
- critical analysis of environmental issues
- conservation cultivation
- exploration of conservation careers.

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<sup>1</sup> For a detailed overview of findings across all four of the SCA programs, see: Syvertsen, Sullivan, & Wu (2016).

**Display 1.** Mean levels of selected conservation leadership measures.



While, in absolute terms, these changes were small, they were consistently significant. These results suggest that the conservation and environmental immersion experiences created by SCA programs may significantly alter the way members think about and interact with the natural world. Early qualitative interviews (while not yet confirmed with quantitative data) with SCA alumni indicate that, at least for some members, this deepened commitment to conservation is not short-lived.

**I'm just more environmentally minded. You learn how to *think* about how the things you do impact others, how they're going to impact future generations.**

— SCA Alumni

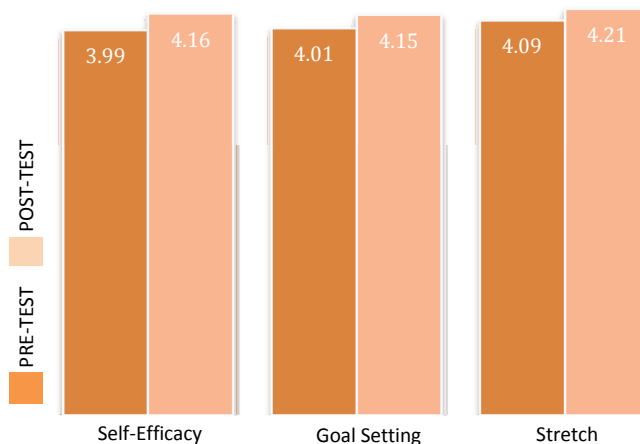
This finding aligns with existing evidence on the important role of early environmental identity formation in shaping behaviors and decisions throughout adolescence and emerging adulthood (Horwitz, 1996). In fact, recent studies of young environmental activists reveal that their awareness of their environmental identity in adolescence heavily influenced their decisions about career paths in early adulthood (Matsuba & Pratt, 2013).

## Members score higher on key thriving indicators.

A major focus for applied youth development in recent decades is the idea of *thriving* (Benson & Scales, 2009; Bundick, Yeager, King, & Damon, 2010; Lerner, 2004). Thriving is the core, animating force of forward, positive, and responsive development (Benson & Scales, 2011); it is an orientation, not a static condition. In previous research, young people who exhibited components of a strong thriving orientation were more likely than their peers who did not to be leaders, care for the social good, be civically engaged, be less involved with alcohol and other drugs, have mastery goals at school, exert more effort on school work, achieve higher grades, and have more hopefulness and positive views of their futures (Ben-Eliyahu, Rhodes, & Scales, 2014; Benson & Scales, 2009; Scales, Benson, & Roehlkepartain, 2011).

In the present study, SCA members showed significant, positive gains on six of seven indicators of thriving: self-awareness, self-efficacy, goal setting, stretch or pushing themselves beyond their comfort zone, finding a spark or deeply motivating personal interest, and purpose. No meaningful change was measured on members' 'genuine desire to learn,' although members scored high on this measure at the outset of the program making measurable change less likely.

**Display 2.** Mean levels of selected thriving measures.

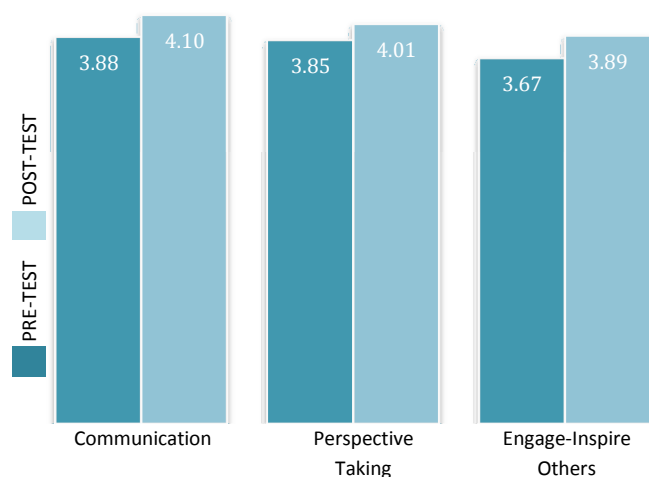


Movement on these thriving indicators suggests the SCA experience may help members create an increased awareness of who they are, and what they can (and could) do. It suggests that the SCA experience can be catalytic in setting young people on a positive path to thriving.

### Members learn critical 21st century skills.

The national conversation about how we best prepare young people for school, work, and civic life has begun to shift from the *No Child Left Behind* era's narrow emphasis on academic standards to a more balanced approach that recognizes the other skills young people need to do well and contribute to the 21st century global economy (Ananiadou & Claro, 2009; Farrington et al., 2012; Heckman & Kautz, 2013; Lippman, Ryberg, Carney, & Moore, 2015; National Scientific Council on the Developing Child, 2015; Seider, Gilbert, Novick, & Gomez, 2012). Importantly, this conversation calls attention to the skills required to lead and collaborate with others. These skills include communicating clearly and openly with others, working across differences, teamwork, perspective taking, and the ability to engage and inspire others.

**Display 3.** Mean levels of selected 21st century skill measures.



Opportunities to develop these skills are inherently woven into the design of SCA programs as members work together to solve problems and conserve the area around them. The study found that growth in each of these 21st century skills is evident across the course of the SCA experience. (One exception was working across differences, which was high at program entry, and remained unchanged.)

In qualitative interviews, SCA members and alumni emphasized how they would carry forward the tangible consensus-building, communication, and leadership skills they learned through the program.

**I think my communication with my peers and superiors is a lot better than it was. I don't think I ever thought about my communication with anyone being good or bad. But after being a leader with my peers it's like, 'Okay, I've gotta step this up.' You have to make things more clear and explain the small and the big pictures.**

— SCA Member

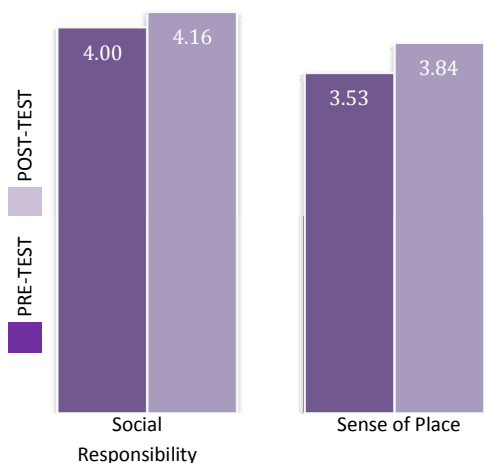
### Members become more civically engaged.

Democracy thrives when all members of the community are actively involved in the discussion and redress of important social and political issues. Studies of youth development programs suggest they are important training grounds for promoting increased responsibility for self and for others (Salusky et al., 2014). Existing research also suggests that when adolescents and emerging adults espouse values like social responsibility, they are more likely to be engaged in their communities (e.g., Alisat et al., 2014; Matsuba et al., 2012; Pancer, Pratt, Hunsberger, & Alisat, 2007). In adult samples, these values have also been shown to positively predict a range of prosocial behaviors such as voting (Caprara et al., 2006), political activism (Mayton & Furnham, 1994), and community service (Pratt, Hunsberger, Pancer, & Alisat, 2003).

SCA contributes to members' civic values and engagement in important ways. Over the course of their conservation experiences, SCA members demonstrated significant increases in three affective aspects of civic engagement:

- sense of place—a strong connection to their community
- transcendent awareness—consciousness of the larger world
- social responsibility—sense of obligation to contribute to the greater good.

**Display 4.** Mean levels of selected civic engagement measures.



These data demonstrate the role SCA plays in helping members develop a keen sense of place and an increased awareness of the interconnectedness of the natural world; both of which are antecedents to engaged civic life (Matsuba & Pratt, 2013).

### SCA programs intentionally promote members' positive development.

What is it about the SCA experience that contributes to positive development across different measures described above? Search Institute assessed members' experience of four key SCA practices:

- building strong youth-adult relationships
- creating a space where members feel like they matter

- implementing known best practices of high-quality youth development programs
- engaging members in active reflection.

These practices were identified as transformative in the qualitative data generated in the early phases of the SCA-Search Institute partnership. They are also backed by a deep well of empirical research on qualities of positive developmental settings (e.g., Hatcher & Bringle, 1997; Larson, Eccles, & Gootman, 2004; National Research Council, 2002; Pekel et al., 2015).

Honestly, these people have become my family in a way. And it's really great to have like dinner with the same people every night and like talk about our days—even though like we're all doing the same things. Like, somebody might have...did something with mulch you didn't do, and like share something about it.

— SCA Member

The association between the experiences of these best practices in SCA programs and member outcomes are marked. When their SCA experiences were defined by strong youth-adult relationships and a team climate that prioritized challenge and support, members were more likely to experience a range of conservation mindset and skill, thriving, leadership and interpersonal, and civic-oriented outcomes. For example, members who experienced *stronger youth-adult relationships* in SCA were twice as likely to report high levels of goal setting and teamwork at the end of their program. Likewise, members who developed a *strong sense of mattering* through their SCA experience were four times more likely to report high levels of both stretching themselves beyond their comfort zones and conservation leadership.

Each of these practices contributes uniquely to SCA members' positive developmental outcomes. However, at their core, all of these practices are *relational*. Getting another person to open up to deeply reflecting on an experience or a problem requires a sense of trust that it is safe to share one's ideas openly with others, knowing that those ideas will be both heard and respected.

The same is true for mattering. Mattering is deeply rooted in relationships, and everyday exchanges whereby people come to feel valued and known by those around them. Relationships are the critical active ingredient of strong youth development programs (Li & Julian, 2011; Liang & Rhodes, 2007; Pekel et al., 2015). Getting them right requires intentionality and continuous effort.

## Discussion

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Over their SCA experience, members experienced significant changes on valuable attitudes, behaviors, and skills required for school, work, and civic life.

Without a comparison group, we cannot attribute change specifically to members' SCA experiences. This does not, however, make this change less real. *It's very real*. Using pre-/post-metrics, members reported consistent, significant positive change in how they think about themselves, their relationships with others, and their interactions with the environment.

It's clear from this research that SCA programs are doing more than building trails and conserving public spaces; they are developing a strong base of young, competent leaders for both the conservation movement and for the nation as a whole.

## Recommendations

The data suggest SCA may be instrumental in shaping the developmental trajectories of its members. To maintain this momentum, SCA must continue to invest in high-quality leader trainings

and develop experiential program activities for members.

These efforts should be guided by data on each of the identified best practices of high-quality programming, including generating a culture of mattering, engaging members in active reflection, and building strong youth-adult relationships. For example, although members generally reported experiencing positive member-leader relationships, they reported lower levels of inspiration and encouragement from their SCA leaders, and they reported fewer opportunities to have their opinions and ideas taken seriously. This perspective points to important growth opportunities for SCA, as research has shown the giving participants a voice in decision making can transform their involvement and elevate a program's impact (National Research Council, 2002).

Particular effort should be paid to the success of National Crew programs whose members report the most frequent experiences of each of the four best practices. Providing program leaders with focused training on these best practices should increase the likelihood that these practices are done consistently and with intention. SCA members would also benefit from an adapted version of these learning exercises.

From climate change to drought to deforestation to loss of biodiversity, the world faces a plethora of challenges that demand commitment and insight from each generation of conservation leaders. The findings from this study offer promising evidence that SCA programs are developing—and could do even more to develop—young leaders with the skills, attitudes, and commitment to step into those roles with energy, insight, and the tenacity to tackle these challenges for this and future generations.



## References

- Alisat, S., Norris, J. E., Pratt, M. W., Matsuba, M. K., & McAdams, D. P. (2014). Caring for the Earth: Generativity as a mediator for the prediction of environmental narratives from identity among activists and nonactivists. *Identity: An International Journal of Theory and Research*, 14(3), 177-194.
- Ananiadou, K., & Claro, M. (2009). *21st century skills and competences for new millennium learners in OECD countries* (OECD Education Working Paper #41). Paris, France: OECD Publishing.
- Ben-Eliyahu, A., Rhodes, J. E., & Scales, P. (2014). The interest-driven pursuits of 15 year olds: "Sparks" and their association with caring relationships and developmental outcomes. *Applied Developmental Science*, 18(2), 76-89.
- Benson, P. L., & Scales, P. C. (2009). The definition and preliminary measurement of thriving in Adolescence. *The Journal of Positive Psychology*, 4(1), 85-104.
- Benson, P. L., & Scales, P. C. (2011). Thriving and sparks. In R. Levesque (Ed.), *Encyclopedia of Adolescence* (pp. 2963-2976). New York, NY: Springer.
- Bundick, M. J., Yeager, D. S., King, P. E., & Damon, W. (2010). Thriving across the life span. *The Handbook of Life-Span Development* (pp. 882-923). New York, NY: Wiley.
- Caprara, G. V., Schwartz, S., Capanna, C., Vecchione, M., & Barbaranelli, C. (2006). Personality and politics: Values, traits, and political choice. *Political Psychology*, 27, 1-28. doi: 10.1111/j.1467-9221.2006.00447.x
- Farrington, C. A., Roderick, M., Allensworth, E., Nagaoka, J., Keyes, T. S., Johnson, D. W., & Beechum, N. O. (2012). *Teaching adolescents to become learners: The role of noncognitive factors in shaping school performance—A critical literature review*. Chicago, IL: Consortium on Chicago School Research.
- Hatcher, J. A., & Bringle, R. G. (1997). Reflection: Bridging the gap between service and learning. *College Teaching*, 45(4), 153-158.
- Heckman, J. J., & Kautz, T. (2013). *Fostering and measuring skills: Interventions that improve character and cognition* (No. w19656). Cambridge, MA: National Bureau of Economic Research.
- Horwitz, W. A. (1996). Developmental origins of environmental ethics: The life experiences of activists. *Ethics & Behaviour*, 6(1), 29-54.
- Larson, R., Eccles, J., & Gootman, J. A. (2004). Features of positive developmental settings. *The Prevention Researcher*, 11(2), 8-13.
- Lerner, R. M. (2004). *Liberty: Thriving and civic engagement among America's youth*. Thousand Oaks, CA: Sage Publications.
- Li, J., & Julian, M. M. (2012). Developmental relationships as the active ingredient: A unifying working hypothesis of "what works" across intervention settings. *American Journal of Orthopsychiatry*, 82(2), 157-166.
- Liang, B., & Rhodes, J. (2007). Cultivating the vital element of youth mentoring. *Applied Developmental Science*, 11(2), 104-107.
- Lippman, L. H., Ryberg, Renee, Carney, R., Moore, & Moore, K. A. (2015). *Workforce connections: Key 'soft skills' that foster youth workforce success—Toward a consensus across fields*. Washington, DC: Child Trends.
- Matsuba, M. K., & Pratt, M. W. (2013). The making of an environmental activist: A developmental psychological perspective. *New Directions for Child and Adolescent Development*, 142, 59-74.
- Matsuba, M. K., Pratt, M. W., Norris, J. E., Mohle, E., Alisat, S., & McAdams, D. P. (2012). Environmentalism as a context for expressing identity and generativity: Patterns among activists and uninvolved youth and midlife adults. *Journal of Personality*, 4, 1091-1115.
- Mayton, D. M., II, & Furnham, A. (1994). Value underpinnings of antinuclear political activism: A cross-national study. *Journal of Social Issues*, 50, 117-128.
- National Research Council. (2002). *Community programs to promote youth development*. Gootman, J. A., & Eccles, J. (Eds.). Washington, DC: National Academies Press.
- National Scientific Council on the Developing Child (2015). *Supportive relationships and active skill-building strengthen the foundations of resilience* (Working Paper 13). Cambridge, MA: Center on the Developing Child at Harvard University.
- Pancer, S. M., Pratt, M., Hunsberger, B., & Alisat, S. (2007). Community and political involvement in adolescence: What distinguishes the activists from the uninvolved? *Journal of Community Psychology*, 35, 741-759.
- Pekel, K., Roehlkepartain, E. C., Syvertsen, A. K., & Scales, P. C. (2015). *Don't forget the families: The missing piece in America's effort to help all children succeed*. Minneapolis, MN: Search Institute.
- Pratt, M. W., Hunsberger, B., Pancer, M., & Alisat, S. (2003). A longitudinal analysis of personal values socialization: Correlates of a moral self-ideal in late adolescence. *Social Development*, 12, 563-585.
- Salusky, I., Larson, R. W., Griffith, A., Wu, J., Raffaelli, M., Sugimura, N., Guzman, M. (2014). How adolescents develop responsibility: What can be learned from youth programs. *Journal of Adolescent Research*, 24(3), 417-430.
- Scales, P. C., Benson, P. L., & Roehlkepartain, E. C. (2011). Adolescent thriving: The role of sparks, relationships, and empowerment. *Journal of Youth and Adolescence*, 40(3), 263-277.
- Smetana, J. G., & Villalobos, M. (2009). Social-cognitive development during adolescence. In R. L. Lerner & L. Steinberg (Eds.), *Handbook of Adolescent Psychology*, 3rd Ed., Vol. 1 (pp. 187-208). New York, NY: Wiley.
- Seider, S., Gilbert, J. K., & Gomez, J. (2012). The role of moral and performance character strengths in predicting achievement and conduct among urban middle school students. *Teachers College Record*, 115, 1-18.
- Syvertsen, A. K., Sullivan, T. S., & Wu, C. (2016). *SCA's Human Impact: Youth Development through Service to Nature*. Minneapolis, MN: Search Institute.
- Thomashow, C. (2002). Adolescents and ecological identity: Attending to wild nature. *Children and Nature: Psychological, Sociocultural, and Evolutionary Investigations*, 259-278.
- Zimmer-Gembeck, M. J., & Collins, W. A. (2003). Autonomy development during adolescence. In G. R. Adams & M. Berzonsky (Eds.), *Blackwell Handbook of Adolescence* (pp. 175-204). Malden, MA: Blackwell Publishing.

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