

The Girl Scout Impact Study



A Report from the Girl Scout Research Institute

Background



Today's youth need a broad set of skills, behaviors, and attitudes to effectively navigate their environment, work well with others, perform their best, and achieve their goals—competencies that are central to the development of human capital and workforce success around the world. Unfortunately, there is a profound gap between the knowledge and skills most youth learn in school and the knowledge and skills needed in 21st century communities and workplaces. Indeed, many employers worldwide report that job candidates lack the social and emotional skills needed to fill available positions."

In addition to being more competitive job candidates, youth who develop competencies like perseverance, self-esteem, and sociability have lower rates of obesity, depression, and aggression, and show greater life satisfaction and emotional well-being than youth who do not develop such attributes." And significantly, when youth develop these competencies early on, the benefits are long-term. A prominent 2011 study demonstrated that kindergarteners who learned how to share, cooperate with others, and be helpful were more likely to have a college degree and a job 20 years later than youth who lacked those social skills. They were also less likely to have substance-abuse problems and run-ins with the law.

It's clear—having technical or academic knowledge alone is no longer enough. Building confidence, forming healthy relationships, solving problems, and developing other such strengths is crucial to the well-being of youth, both today and in the future. •

The Girl Scout Impact Study: An Overview

Girl Scouts is the preeminent leadership development organization for girls, with a research-proven program that helps them cultivate important skills they need to take the lead in their own lives and the world. At Girl Scouts, girls learn and grow in a safe, all-girl environment, discovering who they are, connecting with others, and taking action to make the world a better place.

The Girl Scout Leadership Experience (GSLE), the foundation of the Girl Scout program, features a variety of fun, challenging, and experiential activities that empower girls as they develop five attitudes, skills, and behaviors essential to effective leadership^v:

- 1. Strong Sense of Self
- 2. Positive Values
- 3. Challenge Seeking
- 4. Healthy Relationships
- 5. Community Problem Solving

In December 2016, the Girl Scout Research Institute (GSRI) surveyed a nationally representative sample of girls to assess the role of Girl Scouts in helping girls attain the five GSLE outcomes (or "leadership outcomes") above, as well as other specific ways girls benefit from participating in Girl Scouts.

The research provides compelling evidence that Girl Scouts stand out significantly from non-Girl Scouts, demonstrating more well-rounded lifestyles and a stronger propensity for success. Compared to non-Girl Scouts, Girl Scouts are more likely to:

- **✓** Exhibit strong leadership outcomes
- **✓** Earn "excellent" grades
- **✓** Expect to graduate college
- **✓ Aspire to STEM**, **business**, and law careers
- ✓ Feel hopeful about their future

The findings also show that Girl Scouts provides the differentiating factors that benefit girls. Girls Scouts are more likely than non–Girl Scouts to:

- ✓ Participate in a variety of fun and challenging activities, like those involving the outdoors, STEM, and civic engagement
- ✓ Engage in activities that are girl-led, cooperative, and hands-on
- Have adults in their lives who help them think about their future and pursue their goals

And the benefits of Girl Scouting are not exclusive to any particular demographic; all Girl Scouts are equally likely to develop the five GSLE outcomes, regardless of social class, zip code, race/ethnicity, or degree of engagement in other extracurricular activities. This means that no matter where girls live or what their age or background, Girl Scouts can help them develop to their full potential.

In other words, Girl Scouting works! *The Girl Scout Impact Study* confirms that Girl Scouting has a strong, positive impact on girls, helping them develop into citizens who are responsible, caring, and engaged—and prepared for a lifetime of leadership.



Girl Scouts exhibit stronger leadership outcomes than non-Girl Scouts.

Compared to non-Girl Scouts, Girl Scouts are more likely to ...



DEVELOP A STRONG SENSE OF SELF

They have confidence in themselves and their abilities, and are happy with who they are as a person



FORM HEALTHY RELATIONSHIPS

They develop and maintain healthy relationships by communicating their feelings directly and resolving conflicts constructively



DISPLAY POSITIVE VALUES

They act ethically, honestly, and responsibly, and show concern for others



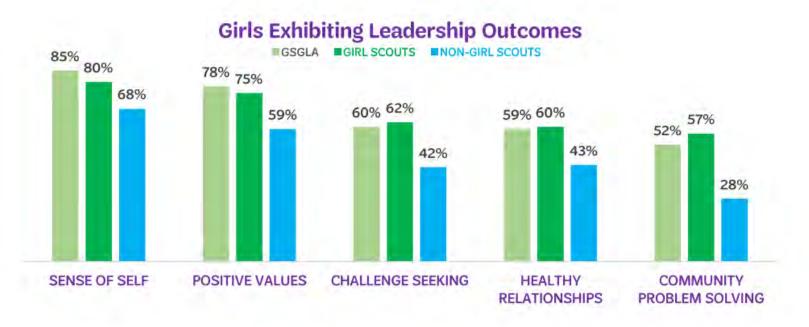
BE COMMUNITY PROBLEM-SOLVERS

They desire to contribute to the world in purposeful and meaningful ways, learn how to identify problems in the community, and create "action plans" to solve them



SEEK CHALLENGES
They take appropriate risks, try things even if they might fail, and learn from mistakes

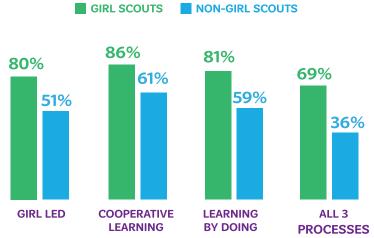
Girl Scouts across age levels fare better than non-Girl Scouts with regard to all five leadership outcomes. Girl Scouting particularly impacts girls' abilities to step outside their comfort zones, manage healthy relationships, and be civically engaged in their communities. For example, three out of five Girl Scouts seek challenges and develop healthy relationships compared to only two in five non-Girl Scouts, and Girl Scouts are twice as likely as non-Girl Scouts to identify and solve problems in their communities.



Girl Scouts are more likely than non-Girl Scouts to participate in out-of-school-time activities that engage them in active learning.

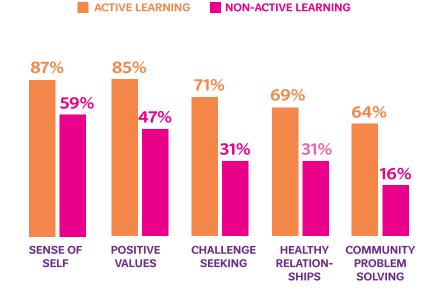
Girl Scouts sets up girls for success by engaging them in activities that are girlled, cooperative, and hands-on—processes that create high-quality experiences conducive to learning. The Girl Scout Impact Study finds that Girl Scouts are more likely than non-Girl Scouts to take an active role in decision making, learn by working cooperatively with others, and participate in hands-on activities that engage them in an ongoing cycle of action and reflection.

Girls Engaging in Active Learning



Engaging in active learning boosts girls' ability to develop leadership outcomes. Girls—both Girl Scouts and non-Girl Scouts—who participate in activities that are girl-led, cooperative, and hands-on outperform their peers with regard to all five leadership outcomes. The effects of active learning are especially pronounced when it comes to making a difference at the community level: 64 percent of girls who engage in active learning exhibit community problem solving skills, compared to 16 percent of girls who have not participated in this kind of learning!

Girls Exhibiting Leadership Outcomes

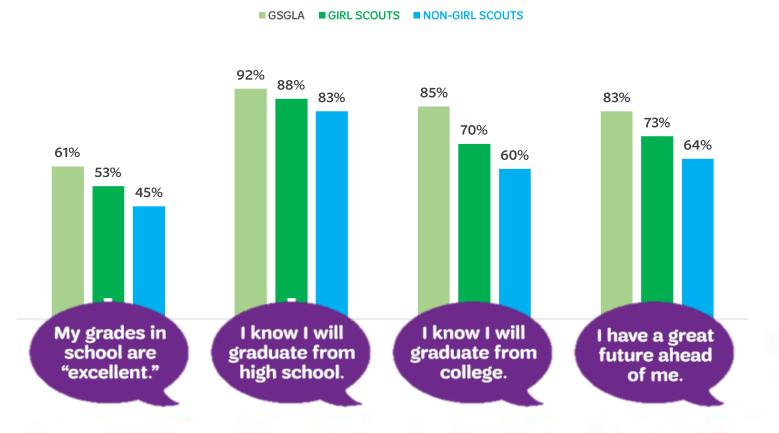


Girl Scouts helps girls do well in the classroom and beyond!

While the Girl Scout mission is not about improving girls' test scores or grades in school, The Girl Scout Impact Study shows that more Girl Scouts than non-Girl Scouts earn "excellent" grades. And although most girls-regardless of Girl Scout status—expect to graduate from high school, Girl Scouts are more likely than non-Girl Scouts to have college graduation in their sights.

This study also shows that Girl Scouts are more likely than non-Girl Scouts to have positive expectations about their future. Hope for the future has been linked to success in school as hopeful youth are more goal-oriented and can overcome obstacles to achieve their dreams^{VI}.

Girls Who "Strongly Agree With Statement"







Girls were also asked what they want to be when they grow up. More Girl Scouts than non-Girl Scouts desire careers in STEM (Science, Technology, Engineering, and Math), law or business; industries in which women are underrepresented.

WHAT I WANT TO BE WHEN I GROW UP	GIRL SCOUTS	NON-GIRL SCOUTS
Doctor, Veterinarian, or Dentist*	29%	31%
STEM Career (Net)	26%	14%
Scientist	11%	7%
Computer Scientist or Information technology (IT) Expert	8%	4%
Engineer or Architect	9%	4%
Mathematician or Statistician	3%	1%
Teacher or Principal/School Administrator	18%	21%
Actor, Dancer, or Singer	15%	20%
Artist or Fashion Designer	13%	19%
Nurse or Nurse Practitioner	12%	9%
Lawyer	8%	4%
Businessperson, Salesperson, or Accountant	7%	4%

st Not statistically significant.

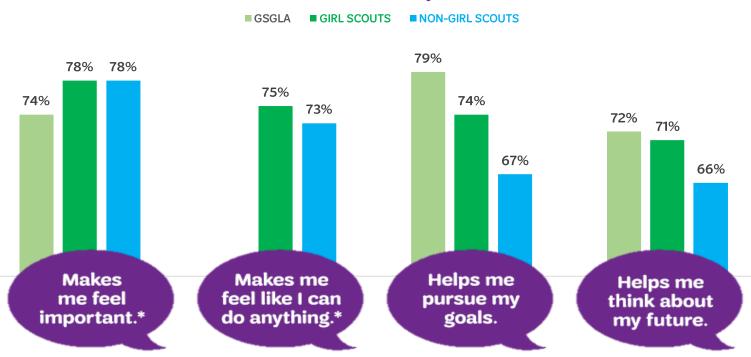
Girl Scouts are more likely than non-Girl Scouts to have an adult in their lives who helps them pursue goals and plan for the future.

Research suggests that enduring relationships with caring adults can provide a buffer against many of the negative influences and high-risk behaviors that youth navigate daily. Positive relationships with caring adults can support academic achievement and the development of resilience and self-esteem.

The Girl Scout Impact Study shows that Girl Scouts and non-Girl Scouts are equally likely to have an adult in their lives who cares about

and supports them. But Girl Scouts are more likely than non-Girl Scouts to have adults in their lives who help them pursue their goals and think about their future. Indeed, at Girl Scouts, adult volunteers push girls to be the best they can be and expand their possibilities by connecting them to people, ideas, and experiences to help them grow.

"There is an adult in my life who..."

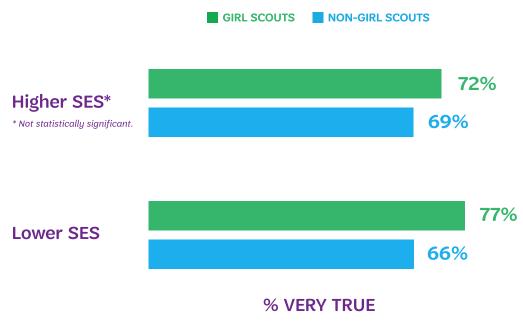


^{*} Not statistically significant.



Having a supportive adult in Girl Scouts is especially beneficial for girls of lower socioeconomic status (SES). In our study, lower-SES Girl Scouts were significantly more likely than lower-SES non-Girl Scouts to say they have an adult in their lives who helps them pursue their goals. In contrast, higher-SES Girl Scouts and non-Girl Scouts did not significantly differ in their ratings. Importantly, lower-SES Girl Scouts had ratings equivalent to their higher-SES Girl Scout peers, suggesting Girl Scouts provides supportive adults that are crucial to girls' success in life.



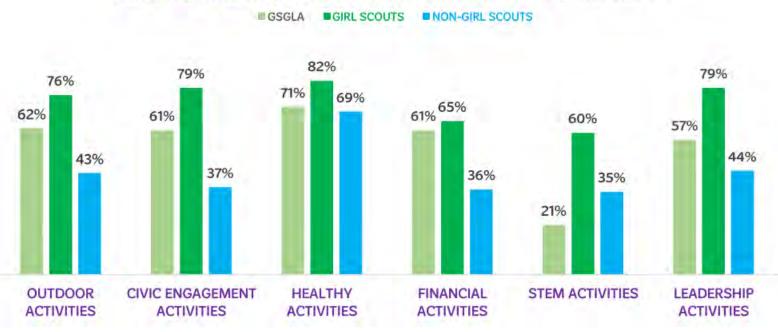


Girl Scouts are twice as likely as non-Girl Scouts to participate in activities that shape their character and open up new worlds to them.

Most after-school pursuits help youth develop a specific set of skills pertaining to sports, art, or music, while still other youth programs are designed to meet child-care or supervisory needs of parents who work late. What makes Girl Scouts unique is the breadth of activities made available to girls, including outdoor experiences such as camping, hiking, and sports; hands-on activities related to science, technology, engineering, and math (STEM); activities that expose girls to exercise, help them eat healthy, and boost their self-esteem; the Girl Scout Cookie Program, which helps girls develop financial literacy and entrepreneurial skills; and service projects that enable girls to improve and enrich their communities.

Girl Scouts are nearly twice as likely as non-Girl Scouts to participate in a variety of fun and challenging activities that shape their character and open up new worlds to them. For example, 79 percent of Girl Scouts participate in civic engagement activities, like community service and volunteering, compared to only 37 percent of non-Girl Scouts—that's a 42 percent difference! And the personal benefits of these activities increase with frequency of participation: 76 percent of girls who participate in STEM activities "a lot" are challenge seekers, compared to just 33 percent of girls who have never participated in STEM. Impressively, higher participation across the six different activities is correlated with higher scores on all five Girl Scout leadership outcomes.

Girls Who Participate in Activities "A Lot" or "Sometimes"



Supportive adults and the Girl Scout processes help Girl Scouts develop the GSLE outcomes.

How girls' activities and experiences are structured and facilitated is more instrumental to their success than the specific activities they participate in. Girls who have at least one adult in Girl Scouts who makes them feel valuable and helps them think about their future exhibit stronger leadership outcomes than their peers who lack this support. And girls benefit the most when they engage in active learning—participating in hands-on, collaborative activities that allow them to make decisions about what they do and how they do it. Indeed, feeling supported and having active learning experiences mean everything when it comes to long-term outcomes for girls.

Regression analyses were conducted using the Girl Scout sample only to investigate the extent to which Girl Scouting contributes to girls' development of the five leadership outcomes, as well as their grades and expectations about their future. All analyses controlled for girl demographic characteristics (age, race/ethnicity, socioeconomic status, and region) and included the following Girl Scout factors: duration in Girl Scouts, frequency of participation in various activities, supportive adult relationships, and the three Girl Scout processes.

The top two drivers of each GSLE outcome and other measures are as follows:

SENSE OF SELF Most heavily driven by the presence of a caring adult who supports and validates girls, and hands-on activities

- Supportive adult relationships
- Learning by doing

POSITIVE VALUES Most heavily driven by collaborative work toward shared goals guided by a caring adult

- Cooperative learning
- Supportive adult relationships

CHALLENGE SEEKING Most heavily driven by hands-on learning that engages girls in an ongoing cycle of action and reflection, and participation in STEM activities

- Learning by doing
- STEM activities

HEALTHY RELATIONSHIPS Most heavily driven by girls' sharing of ideas in collaborative projects and reflecting afterward as a group on what worked and what didn't

- Cooperative learning
- Learning by doing

COMMUNITY PROBLEM SOLVING Most heavily driven by participation in hands-on, collaborative projects that help people

- Community service activities
- Learning by doing; cooperative learning (tie)

GRADES Most heavily driven by positive feelings about oneself and engagement in ethical, honest, and responsible behaviors

- Sense of self
- Positive values

HOPE FOR THE FUTURE Most heavily driven by confidence in oneself and one's abilities, and the presence of a caring adult who supports and validates girls

- Sense of self
- Support adult relationships

Girl Scouts can support girls during their turbulent teen years.

Analyses were conducted to examine age differences in girls' outcome scores and other experiences.

A natural correlation with age exists for many factors measured in this study, regardless of Girl Scout status:

- As both Girl Scouts and non-Girl Scouts get older, they tend to develop positive values—exhibiting stronger ethics, honesty, and reliability, and showing concern for others.
- However, fewer girls report the presence of a supportive adult in their lives as they age, and their sense of self tends to become more vulnerable.

There are other areas that reflect correlation with age for one group only:

- As non-Girl Scouts get older, their participation in activities involving healthy living, the outdoors, and STEM declines. In contrast, Girl Scouts' participation in these activities remains consistent through the years.
- While non-Girl Scouts report consistently low participation in community service and activities that teach money management, Girl Scouts' participation increases with age.

Girl Scouts also engage in more girl-led, cooperative, and hands-on learning as they age, whereas non-Girl Scouts remain steady in these experiences over time.

Still other areas show similar trends for both groups up until middle school (ages 11–13), when trends shift negatively for non–Girl Scouts but remain consistent or increase for Girl Scouts as they transition to high school:

- While it's common for a girl's sense of self to decline after middle school, Girl Scouts experience a slight lift in theirs at this time. (Figure 1)
- During middle school, non-Girl Scouts experience a dramatic drop in interest and involvement in their communities, whereas Girl Scouts' desire to solve problems in their communities increases. (Figure 2)
- Also during middle school, Girl Scouts remain confident about their future, whereas non-Girl Scouts are more likely to question theirs. (Figure 3)

Collectively, these findings demonstrate that participating in Girl Scouts can provide a buffer against many of the negative influences and experiences girls have starting around middle school. Girl Scouts have adults in their lives who deeply value and support them, boosting their sense of self at a time when it's especially vulnerable. In turn, girls who feel good about themselves and their abilities have more hope for a bright future and dedicate time to solving problems in their communities. Additionally, while many after-school programs provide adult mentors and enhance girls' confidence, unique to Girl Scouts is a driving commitment to civic engagement. At Girl Scouts, girls discover they have the power to make the world a better place for generations to come—and then go out and make it happen.



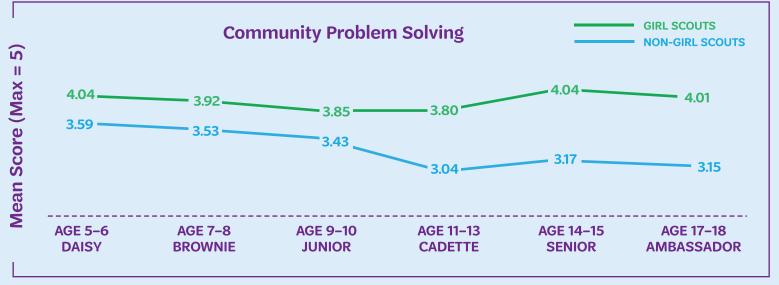


Figure 2

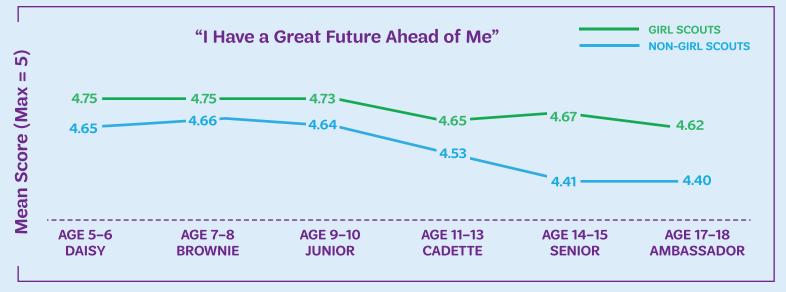


Figure 3

Appendix

RESEARCH QUESTIONS. In 2016, Girl Scouts of the USA simplified its national program model[™], the Girl Scout Leadership Experience (GSLE), which featured 15 measurable leadership benefits or "outcomes." This was done in order to tell a more succinct and consistent Movement-wide story about the impact of Girl Scouting on girls. In collaboration with Tufts University's Institute for Applied Research in Youth Development, the Girl Scout Research Institute reduced the 15 GSLE outcomes to a set of five, with validated measures that are closely connected to the Girl Scout mission and pro-

The overarching goal of *The Girl Scout Impact Study* was to assess the attitudes, behaviors, and skills associated with the five GSLE outcomes among a nationally representative sample of Girl Scouts and non–Girl Scouts. The specific questions were:

gram activities, and reflect competencies the youth development

field have determined are crucial to helping youth thrive.

- 1. How do Girl Scouts and non-Girl Scouts fare on the five GSLE outcomes, controlling for demographic factors?
- 2. Do certain Girl Scout experiences (e.g., activities, supportive adults, three Girl Scout processes) contribute to the development of the five GSLE outcomes?
- 3. Are the five GSLE outcomes correlated to other measures, like grades, educational and career aspirations, and hopeful future expectations?

METHODOLOGY. An online survey was conducted by the research firm Decision Analyst and sampled 3,014 girls (1,507 Girl Scouts, 1,507 non-Girl Scouts) ages 5-18. Girls were recruited to the survey via their parents, who received an email invitation to complete a screener. Parents were screened based on the following qualifications: adult age 18-plus and parent or legal guardian of a 5to 18-year-old girl living in the same household. Within the screener, parents completed a brief survey that asked about their girl's demographic information (age, race/ethnicity), family income, U.S. state where the girl lives, their girl's participation in monthly outof-school time activities, and their girl's participation in Girl Scouts specifically. Girls who were currently participating in Girl Scouts were considered "Girl Scouts" and girls who had never participated in Girl Scouts were considered "non-Girl Scouts." Girls who were not current Girl Scouts but had been in the past were excluded from the study. Parents of Girl Scouts were then asked what Girl Scout grade their girl was currently in and how long their girl had been a Girl Scout. Quotas were set by race/ethnicity, region, and household income to achieve a nationally representative sample. The survey was conducted December 17, 2016-January 6, 2017.

SAMPLE. Demographic data of the sample is shown in Table 1. While Girl Scouts had significantly higher family income than non-Girl Scouts, analyses examining the GSLE outcomes using weighted scores did not alter the findings. Therefore all data reported are unweighted.

Table 1

URBANICITY	GS	NON-GS
Urban or city area	36%	27%
Suburban area next to city	43%	42%
Small town or rural area	21%	31%

FAMILY INCOME	GS	NON-GS
Less than \$25,000	7%	23%
\$25,000-\$34,999	11%	11%
\$35,000-\$49,999	15%	14%
\$50,000-\$74,999	22%	18%
\$75,000-\$99,999	16%	12%
\$100,000-\$149,999	17%	13%
\$150,000 or more	13%	7%

ETHNICITY	GS	NON-GS
White	69%	66%
Hispanic or Latino	13%	14%
Black or African American	12%	13%
Asian or Pacific Islander	5%	5%
American Indian or Alaskan Native	1%	1%
Other	1%	2%

REGION	GS	NON-GS
Northeast	23%	18%
Midwest	24%	24%
South	34%	37%
West	20%	20%

Preliminary analyses were also conducted to examine the GSLE outcomes by demographic factors. A few statistically significant differences emerged; however, they were not large enough to be meaningful so we do not report out on them. All demographic factors were controlled for in the analyses.

ANALYSES. Each leadership outcome and the 3 Girl Scout processes (girl-led, learning by doing, and cooperative learning) were assessed with three to six items. Mean scores were calculated for each. Girls were considered to have exhibited an outcome or experienced active learning if the mean score of the items that make up an outcome or process was equal to or greater than 4.0 on a 5-point scale. One-way ANOVAs were used to examine comparisons between Girl Scouts and non-Girl Scouts. Key driver analyses included latent class factor analyses and regression modeling using the Girl Scout sample only. Separate regressions were conducted for each outcome measure and included demographic factors, number of out-of-school-time activities girls participate in monthly, duration in Girl Scouts, frequency of participation in various activities, supportive adult relationships, and the three Girl Scout processes. Separate regressions were also conducted using grades, expectations of graduating high school and college, and hope for the future as dependent variables, and included all of the factors listed above as well as the five GSLE outcomes. The variance explained for each regression model was moderate for the GSLE outcomes, ranging from 33 to 44 percent, and low for grades, educational aspirations, and hopeful future expectations, ranging from 15 to 28 percent. This indicates that other factors not measured in the study may have an impact on the development of the GSLE outcomes and other measures.

MEASURES

GSLE OUTCOMES. All outcomes measured on a 5-point Likert scale (5 = exactly like me, 1 = not at all like me)

- 1. Sense of Self (2 subscales; α = .83)
- Confidence (3 items; e.g., "Girls like me can be leaders.")
- Positive Identity (3 items; e.g., "I am glad I am me.")
- 2. Positive Values (2 subscales; $\alpha = .82$)
- Integrity (3 items; e.g., "I do what is **right, even when** it is hard.")
- Caring (3 items; e.g., "When I see someone being picked on, I feel sad.")
- 3. Challenge Seeking (3 items; α = .84; e.g., "I try things even if I may not be good at them.")
- 4. Healthy Relationships (3 items; $\alpha = .73$; e.g., "I listen to people even if I disagree with them.")
- 5. Community Problem Solving (2 subscales; $\alpha = .91$)
- Civic Orientation (3 items; e.g., "I want to make the world a better place to live in.")
- Civic Engagement (3 items; e.g., "When I see a problem in my community, I think of many ways to solve it.")

GIRL SCOUT PROCESSES. All Girl Scout processes were measured on a 5-point Likert scale (5 = exactly like my troop, 1 = not at all like my troop). For non–Girl Scouts, we asked girls to think about their experience working with others on group projects either at school or during out-of-school time activities. The response scale was altered to say "group" instead of "troop." We also altered items that refer to "other girls" to simply say "others."

- 1. Girl-Led (3 items; a = .91; e.g., "When we plan an activity, we share our ideas and opinions.")
- 2. Cooperative Learning (3 items; a = .88; e.g., "We learn by working with other girls.")
- 3. Learning by Doing (2 subscales; α = .90)
- Action (3 items; e.g., "We get to try out our ideas and see how they work.")
- Reflection (3 items; e.g., "After we finish a project or activity, we talk about what worked and what didn't work.")

SUPPORTIVE ADULT RELATIONSHIPS. Girls were asked to think about the adults they know who are not their parents or guardians. Then they rated how true four statements are for them (a = .82; e.g., "There is an adult in my life who makes me feel important.")

PARTICIPATION IN VARIOUS ACTIVITIES. Girls rated how often they participated in seven different activities (e.g., outdoor, STEM) in the past year outside of school using a 5-point scale (4 = a lot, 1 = not at all).

GRADES. Girls were asked, "Which of the following describes the grades you get in school?"—rated on a Likert scale (4 = excellent, 1 = poor).

HOPEFUL FUTURE EXPECTATIONS. Girls were asked how much they agreed with three statements (5 = strongly agree, 1 = strongly disagree).

- I know I will graduate from high school.
- I know I will graduate from college.
- I have a great future ahead of me.

CAREER INTEREST. Girls were asked, "As of today, what do you want to be when you grow up?" They could select up to three responses from a list of 22 careers (partial list on page 7).

End Notes:

I. Child Trends. (2015). <u>Key "Soft Skills" that Foster Youth Workforce Success: Toward a Consensus across Fields.</u>

II. ManpowerGroup. 2016/2017 Talent Shortage Survey

III. OECD. (2015). Skills for Social Progress: The Power of Social and Emotional Skills. Paris, France: OECD Publishing.

IV. Durlak, J., Weissberg, R. Dymnicki, A. Taylor, R., & Schellinger, K. (2011). <u>The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions</u>. *Child Development*, 82(1), 405–432.

V. Girl Scout Research Institute. (2016). Five Ways Girl Scouts Builds Girl Leaders.

VI. Gallup, Inc. (2015). Gallup Student Youth Poll 2015 Results

VII. Girl Scout Research Institute. (2016). Girl Scout Leadership Experience Outcomes Revision.



About Girl Scouts of the USA

Founded in 1912, Girl Scouts of the USA is the preeminent leadership development organization for girls, with 2.6 million members—1.8 million girls and 800,000 adults. Girl Scouts is the leading authority on girls' healthy development, and builds girls of courage, confidence, and character, who make the world a better place. To volunteer, reconnect, donate, or join, visit www.girlscouts.org.

About GSRI

The Girl Scout Research Institute, formed in 2000, is a vital extension of Girl Scouts of the USA's commitment to addressing the complex and ever-changing needs of girls. The GSRI documents the impact of Girl Scouting; conducts original research on girls today; monitors external marker and customer trends; and provides valuable research support to GSUSA's 112 councils nationwide. The GSRI also informs program and resource development, public policy, and advocacy for Girl Scouting.