

## BIO Girls: Proven to Increase Self-Esteem in Adolescent Participants

A primary goal of BIO Girls is to improve girls' self-esteem. Improving self-esteem is important because having low self-esteem, or being regularly unhappy or unsatisfied with yourself, is a strong predictor of behavioral and emotional problems including depression, anxiety, eating disorders, suicide, risky sexual behaviors, and substance abuse.

### BIO GIRLS PROGRAMMING IS RESEARCH PROVEN

Participants in BIO Girls completed surveys on self-esteem, body esteem, and enjoyment of physical activity at the beginning and completion of the program. Preseason and postseason scores on each survey were compared to determine whether girls experienced changes in self-esteem, body esteem, and enjoyment of physical activity as a result of participating in BIO Girls.

Results from these analyses showed that, by the end of the BIO Girls program, girls scored higher on self-esteem, body esteem, and enjoyment of physical activity.



#### Participating in BIO Girls increases girls' **self-esteem**.

- Significantly more girls reported feeling good about themselves
- Significantly fewer girls reported wishing they were different

#### BIO Girls is also successful in improving **body esteem** among its participants.

That means that girls are happier with their appearance and proud of their bodies after completing the program.

- Girls scored significantly higher on being proud of their bodies
- Girls scored significantly lower on wanting to change their looks

Girls who take part in BIO Girls report higher enjoyment of physical activity.

- Girls were more likely to report enjoying physical activity
- Girls were less likely to report being bored with physical activity



## BENEFITS IN MULTIPLE PROGRAM TYPES

BIO Girls addresses 4 pillars in their life-skills lessons: mental wellness, healthy relationships, leadership, and kindness. BIO Girls also emphasizes the importance of mentorship by fostering close, supportive relationships between participants and adult role models. An additional component of BIO Girls programming is participation in noncompetitive physical activity.

BIO Girls offers programs in running, yoga, cross-training, and self-defense.

All program types showed the **same outcomes**.



No matter which type of physical activity participants engage in, they show similar increases in both self-esteem and body esteem.

## OUTCOMES ACROSS AGE GROUPS: PREVENTION AND INTERVENTION

BIO Girls serves girls in grades 2 through 6. BIO Girls believes in the importance of prevention as well as intervention. Prevention refers to addressing something **BEFORE** it becomes a problem.

BIO Girls improves self-esteem and body esteem in **all age groups** it serves.

In 2nd graders, for example, BIO Girls programming is aimed at **PREVENTING** low self-esteem by equipping young girls with the tools they need to be successful and happy throughout their childhood and into adolescence. Intervention, on the other hand, refers to addressing the issue **WHILE** it's happening. Research has consistently shown that self-esteem dips substantially by 6th grade for girls. For the older participants, BIO Girls is aimed at **INTERVENING** during a time when participants are experiencing decreased self-esteem.

### Participant Feedback

The top 4 things participants love about the BIO Girls program are:

- 1) Accomplishing Goals
- 2) Meeting New Friends
- 3) The Mentor Relationship
- 4) The Lessons (that cover topics such as gratitude, self-compassion, perseverance and friendship)

## Parent Feedback

Not only do we see these important changes in girls and know that girls enjoy the program, but parents rave about BIO Girls. 72% have personally noticed an increase in self-esteem in their daughters.

81% of parents rate BIO Girls  
as **EXCEPTIONAL**.

95% of parents would recommend  
BIO Girls to other parents.

A common benefit parents report seeing in their girls is a gain in **CONFIDENCE**. Girls are more willing to try new things, go out of their comfort zone, resist pressures, and stand up for themselves. Parents have also perceived increases in both body esteem and enjoyment of physical activity in their girls from preseason to postseason.

## BIO GIRLS: A GIFT FOR ALL PARTICIPANTS

99% of participants  
felt good about themselves after  
participating in BIO Girls.

## MEET THE BIO GIRLS RESEARCH LEAD



**Dr. Beth Blodgett Salafia** earned her Ph.D. in Psychology from the University of Notre Dame. She was a professor at North Dakota State University for 13 years, teaching and conducting research on adolescence, socioemotional development, parenting, and body image. In 2021, she joined BIO Girls as the Director of Programming and Research.