

## Evaluation Girls on Ice 2017 - 2019

---

The evaluation of Girls on Ice Switzerland 2017 to 2019 indicates that the initial program goals were reached. Through both quantitative and qualitative methods, the evaluation focuses on the aims of the program in consideration of the surrounding theoretical framework and the conclusions drawn from previous surveys.

Since the examined group is very small, with nine participants each, the qualitative data and their interpretation are of high importance. The conclusions and the overall balance refer to Girls on Ice 2017 to 2019 exclusively.

**Perception of science:** Through Girls on Ice, the participants image of science and of people working in scientific fields has changed positively. Their perception was altered through the direct communication and exchanges with people from diverse scientific backgrounds as well as the mountain guide.

**Scientific knowledge:** The conceptual, procedural and epistemic scientific knowledge of the participants has increased in all three years. Girls on Ice also promoted interdisciplinary skills, such as assuming responsibility or mutual consideration within the group.

**Critical thinking:** The increase in knowledge about science, as well as the successful promotion of the scientific competence areas can be regarded as essential basis for the promotion of critical thinking.

**Interest in science:** In previous cycles, interest in science was not measured quantitatively. The various basic elements of interest genesis were newly included in the quantitative study in 2019. Girls on Ice 2019 indicates an increase in emotional and value-related components in relation to scientific topics. This suggests that the program provides a basis for increasing and sustained interest in science.

**Self-assessment and self-efficacy:** Throughout the entire evaluation period, the quantitative values of self-efficacy hardly changed before and after the program. Since personality indicators are generally considered as stable and no decrease has been measured in the quantitative survey, particular importance can be adjudged to the qualitative interpretation. This allows the conclusion that the program improves self-efficacy.

In all the self-assessment areas surveyed, the participants felt more secure after the program in comparison to before the program. In addition, the statements in the interviews indicate that the participants have gained in self-confidence and self-assurance.

**Connection to nature:** Despite the fact that even before the start of the project a strong connection to nature was measured, the participants of Girls on Ice expanded their view and their perception of nature in all three years. In addition, the participants were encouraged to reflect on their own position in relation to nature.

The evaluation of the French speaking program of Girls on Ice Switzerland, which was launched for the first time in 2019, shows similar results as the evaluation of the German program. The methods that were used to conduct the evaluation correspond to the methods used for the German speaking program. All aspects mentioned above are consistent with die findings in the evaluation of the French speaking program. The main goals of an enhanced critical thinking, an increase of physical and intellectual self-confidence and a strengthened confidence in women were reached.