**Secondary hypotheses and outcomes**

1. Youth participating in the program will demonstrate a positive change in their values and sense of meaning of life, as assessed before and after the program.
2. Youth participating in the program will demonstrate a positive change in their orientation towards the future, as assessed before and after the program. This includes their motivation (perceived value of investment in the future, expectations for the future, perception of control of the future), cognitive variables such as hope, and behaviors such as being pro-active and making commitments.
3. Youth participating in the program will demonstrate a positive change in their **volunteer identity,** as assessed before and after the program.

## **Research design and key milestone**

Mixed design (qualitative and quantitative) longitudinal research with repeated measures, within & between subjects.

**1-6 months**

The research will begin with interviews with: A). The research population of young participants (future, current, and alumni); B). A control group of non-participating youth with similar background traits; C). Other relevant stakeholders such as community leaders, organization managers, participants’ parents, community members, and senior staff from the AJT program, who will be interviewed in order to provide additional perspectives. Choosing the optimum sample for interviews will be discussed and planed with JDC-FSU.

The main purpose of these preliminary interviews is to understand the environment (including affiliation with BBYO), its complexity, and challenges, in order to optimize the sampling, the tools, and the procedure. The secondary purpose, where applicable (among current and future participants) is to serve as baseline for future qualitative comparison.

At the same time, we will examine the findings from the ongoing surveys that have been conducted since 2018. The sample, tools, and findings will be used to improve the accuracy of the research. Based on the findings of the survey, we may advise adding, in the first year of the research, a backward validation with alumni.

**7-12 months**

These months will be devoted to the design and precision of the research, receiving the necessary approvals for the research, designating the framework and sample size, developing tools, and implementing the procedures. However, the goal is to be able to conduct the baseline quantitative measurements by the end of the first six months.

**12-24 months**

The second year will be dedicated to adjustment and reaffirmation of the research method based on the qualitative and quantitative findings of the first year and various other factors (including interim sample size calculations).

**3-6 years**

Implementation of the full research as detailed in the research process on page ##

## **Methodology**

**Population**

*Primary:*

Active Jewish youth (ages 13-17), including new members prior to participation, current participants, and program alumni.

*Secondary and perspectives:*

Non-participating Jewish youth (with similar background traits as the AJT participants)

Leaders in the community

Organization managers

Parents of AJT participants

Community members

Senior staff from the AJT program

Other stakeholders

**Sample**

***Centers***

The three centers will be selected based on an understanding of the entirety of the considerations and in cooperation with the research commissioners. A balance must be struck between the internal validity (centers which are ideally suited for examining the intervention itself) and the external validity (centers which are representative overall).

The accumulated experience suggests that there are cultural and other differences between the various countries, cities, and centers; therefore, three centers is the minimum. We strongly recommend integrating and delivering the quantitative tools to all participants in all centers every year (cycle).[[1]](#footnote-1) This will: A). Encourage evidence-based decision-making and a focus on results rather than outputs; B). Increase statistical power; C). Allow for analysis, and to statistically control for trends over time.

***AJT (research group)***

We recommend a sample size of n≥400 participants and a control group of n≥120 non-participants.

Following are the sample size calculations in order to confirm one main hypothesis at one (post) point in time.

Assumptions & criteria for determining sample size:

* Two-way ANCOVA 2 (time) X 2 (groups)[repeated measures, within-between subjects, interaction. 6 covariates]
* Medium effect size (f' = 0.40)
* Power [1 - β error probability] = 0.95
* Alpha(α) error size = 0.05[one-tailed]
* Based on these preliminary assumptions, we will need a total sample (research and control groups) of 130 subjects to confirm one hypothesis and 163 for all three main hypotheses.
* Since: A). We expect major differences (variance) between centers, participants, and interventions; B). We want to confirm the hypotheses at five points in time; C). We don't want to waste subjects on the control group (the proportion between the groups is 4:1); D). We expect a dropout rate of 20%-30%; and E). We want to analyse the data for each center separately; therefore, we recommend a sample size of n≥400 participants and n≥120 non-participants.
* The decision regarding the composure of the sample will be made after assessing the population and its characteristics (sub-populations and their relevance to the main results).
* Interim sample size calculation will be re-executed after first results.

***Non-participants***

The population of non-participants will be made up of youth who enrolled in the program but did not actually attend and / or those whose participation has been delayed. The advantage of including those who enrolled but did not attend is that there was no impairment to their participation (it was not delayed), but it is reasonable to assume that there is a basic difference between this group and the group of participants. The benefits of including those who delayed their participation are that the background traits of this group are similar to those of the research group (moreover, we can ensure compatibility), there is a high likelihood of their eventual willingness to participate, there is only a small incidence of dropouts, and there is no difficulty in recruiting them. The disadvantage is that there was an impairment (delay) to their participation. A possible compensation is providing meaningful activities and experiences that are not aimed at achieving the results of the program and the research.

Interviews with participants

We will use non-probability sampling, with interviewees chosen according to relevance. Some interviews will be conducted multiple times with the same interviewees, and some will not, according to relevance and topics raised during the interviews.

All interviews will be conducted at the same time.[[2]](#footnote-2) At this point, we recommend doing the interviews at the beginning of the study, the end of first year, end of third year, and end of sixth year, but these times are flexible.

~60 Interviews with participants: 5 interviewees \* 3 centers \* 4 times (pre-entrance, end of first year, end of third year, end of sixth year).

Interviews with secondary populations:

We will use non-probability sampling, with interviewees chosen according to relevance. Some interviews will be conducted multiple times with the same interviewees, and some will not, according to relevance and topics raised during the interviews.

All interviews will be conducted at the same time.2 At this point, we recommend doing the interviews at the beginning of the study, the end of the first year, end of the third year, and end of the sixth year, but these times are flexible.

~36 Interviews with leaders in the community: 3 interviewees \* 3 centers \* 4 times

~36 Interviews with organization managers / BBYO: 3 interviewees \* 3 centers \* 4 times

~36 Interviews with parents of AJT youth: 3 interviewees \* 3 centers \* 4 times

~36 Interviews with community members: 3 interviewees \* 3 centers \* 4 times

~36 Interviews with senior staff from the AJT program: 3 interviewees \* 3 centers \* 4 times

~36 Interviews with other stakeholders: 3 interviewees \* 3 centers \* 4 times

Total of ~276 interviews

1. If necessary, a shorter version will be used. [↑](#footnote-ref-1)
2. In order to save expenses. [↑](#footnote-ref-2)