



Building Self Awareness through STEM Virtual Summer Camp for Young Girls

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BACKGROUND

- Self-awareness is the ability to accurately judge one's own performance and behavior and to respond appropriately to different social situations.
- Self-awareness is a skill that is vital to a student's success, particularly young girls.
- Building Bridges, Inc., a non-profit organization (EIN: 82-5445077), was born out of a desire to empower young Black girls by exposing them to STEM education and self-awareness strategies.
- The goal is to be a part of the movement to radically change the gap in racial and gender diversity in STEM all while envisioning a future where young Black girls intrinsically believe they can be a part of the STEM field because they see examples of Black women in STEM all around them.
- To address this effectively, a 3-day virtual summer STEM camp was created for students to experience topics pertaining to the science of skin and hair along with self-empowerment.

PURPOSE

- The purpose of the virtual summer STEM camp was to expose Black girls ages 8-14 to a science curriculum featuring the chemistry of soap, biology of skin, and anatomy of hair while also introducing self-awareness strategies.

METHODS

- Ten African-American young girls (see Table 1) registered for the 3-day virtual camp consisting of 1.5 hours each day.
- Each student received STEM kits at their home address to create personalized products for self-care.
- Students created personalized products such as soap, sugar scrubs, hair conditioner, and shampoo.
- Students were exposed to career paths, self-affirmations, and guest speakers that talked about their STEM careers.
- Students were awarded with certificates and prizes to reinforce participation and engagement.
- Polls were surveyed daily via Zoom while surveys were conducted via Survey Monkey.

MATERIALS

Figure 1. Advertisement Flyer



Figure 2. Content Examples



Figure 3. Certificates Awarded



RESULTS

Table 1. Student Details

n=10	
Age	10-14 years old
Grade Level	5 th – 10 th
States Represented	District of Columbia Illinois Mississippi
Time Commitment	4.5 hours

Figure 4. Daily Zoom Polls

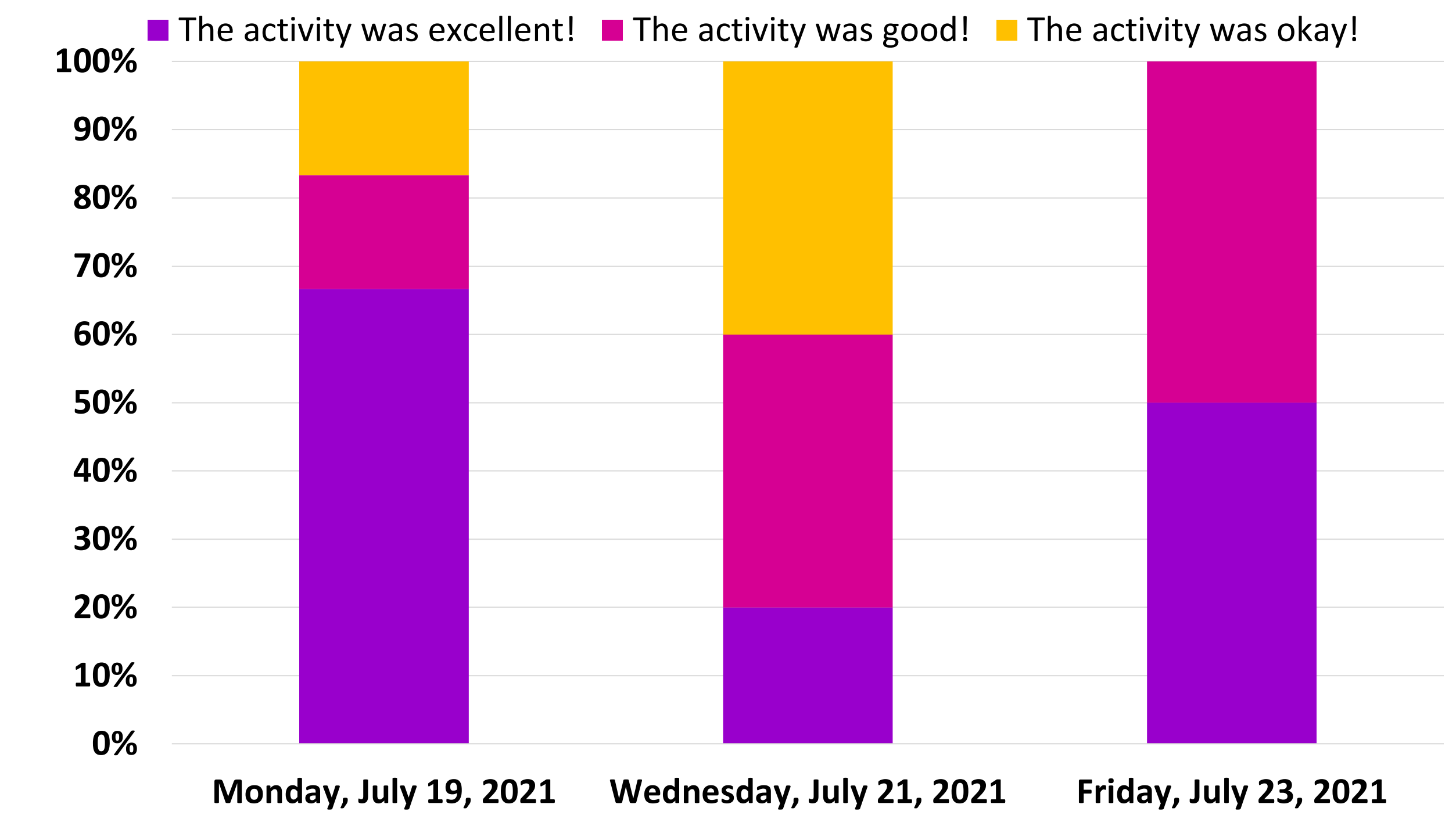
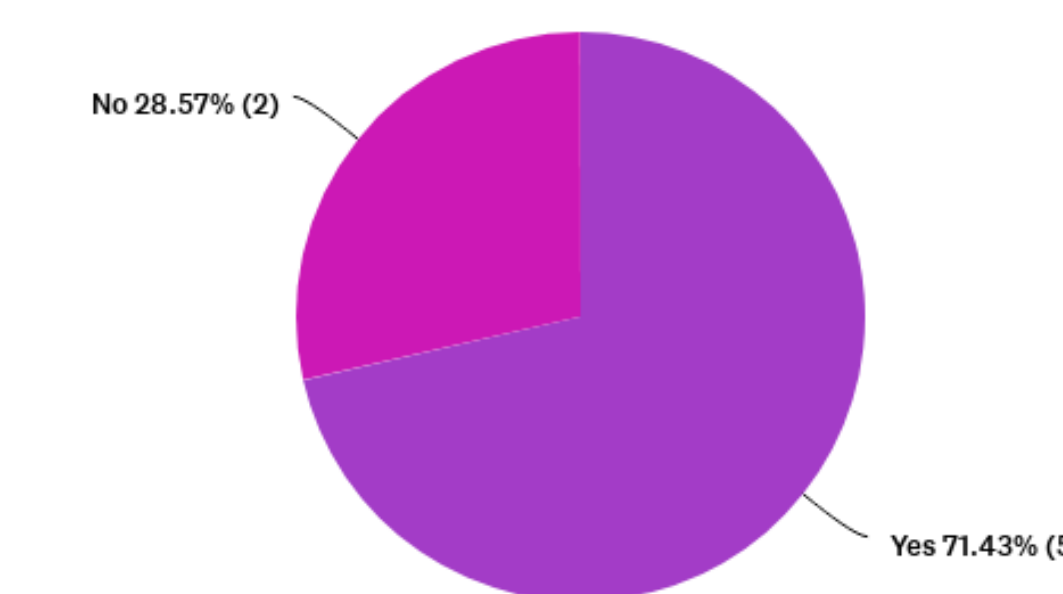


Figure 5. STEM Feedback

Q1 Have you ever thought about STEM (science, technology, engineering, and mathematics) prior to your involvement with Building Bridges, Inc.?



Q2 Do you see yourself considering a STEM career if you continued to interact with Building Bridges, Inc.?

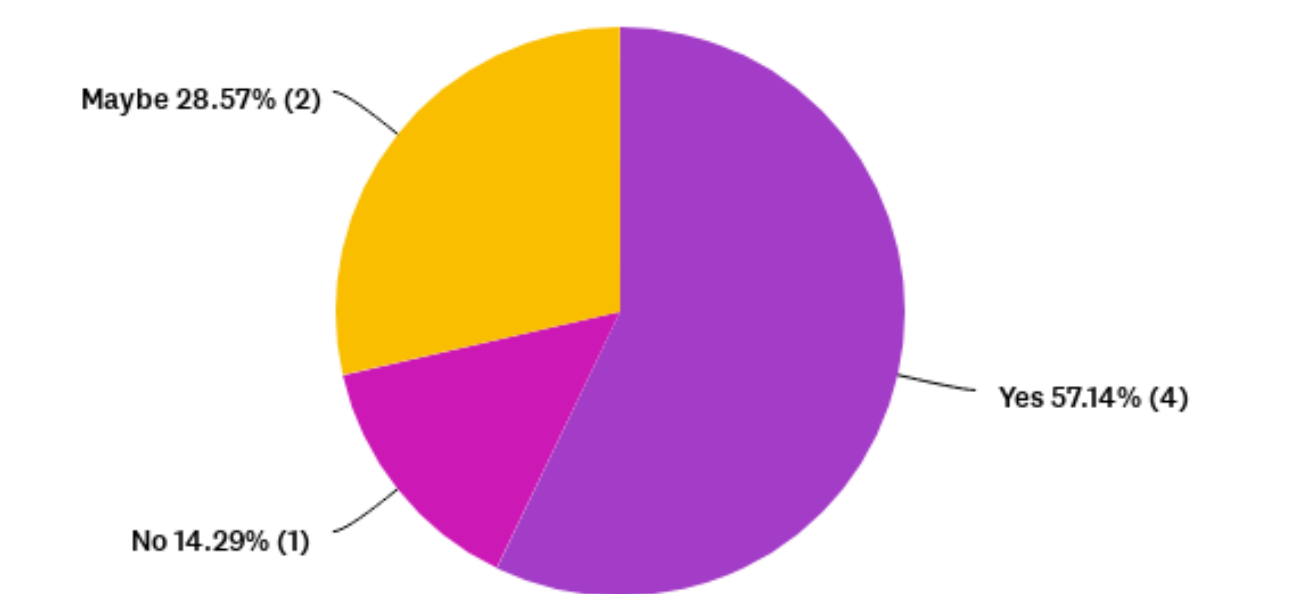
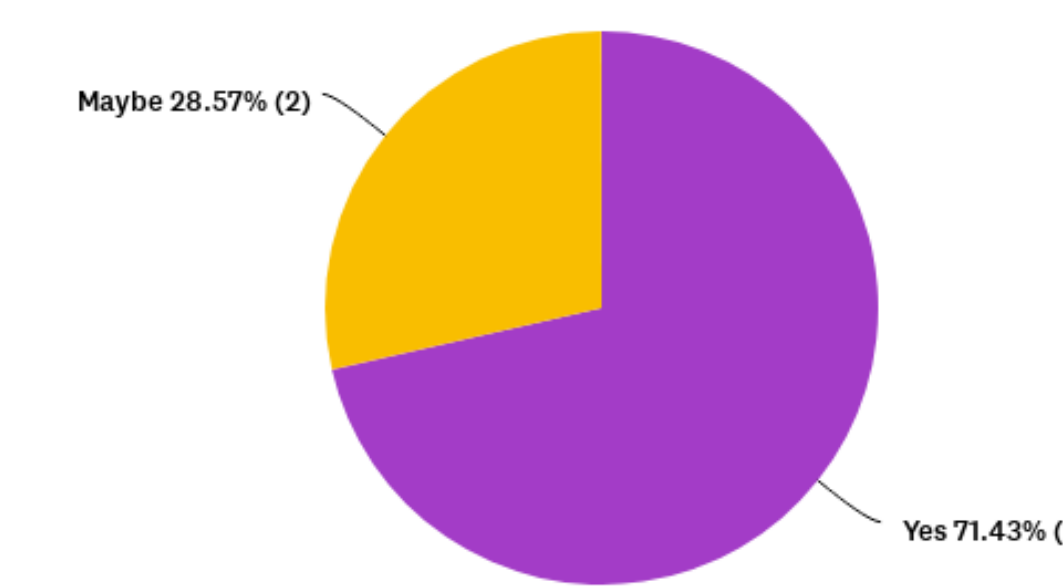
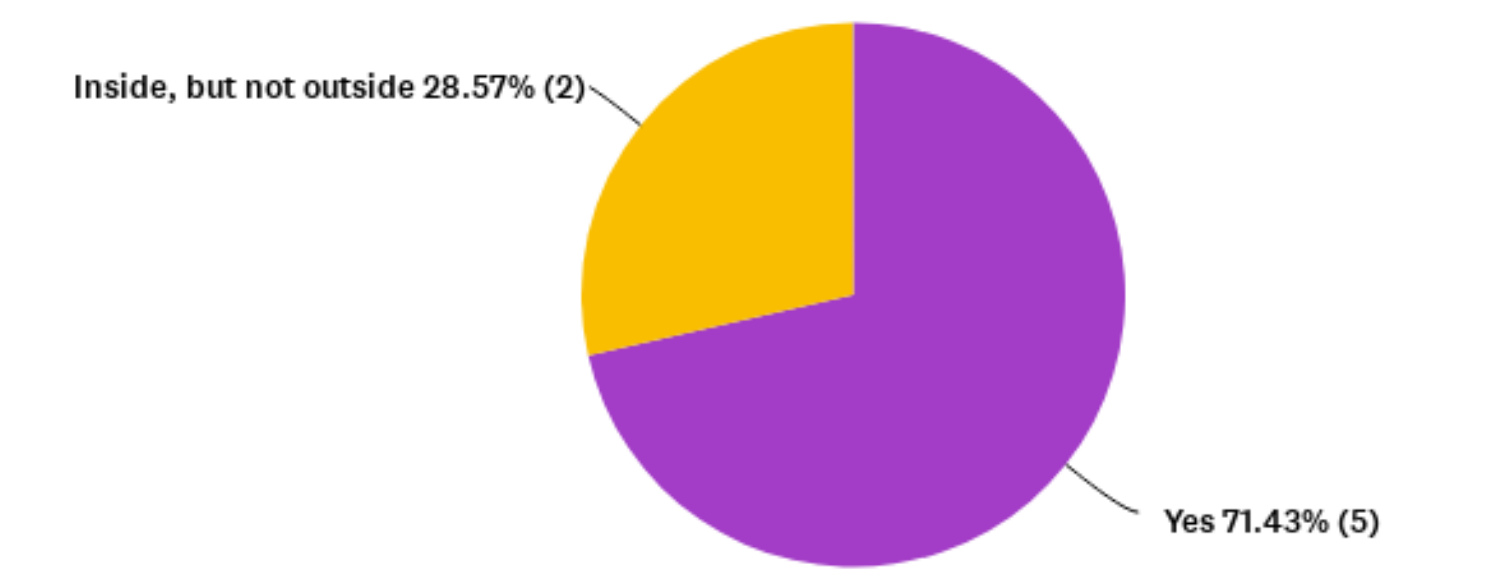


Figure 6. Self-Confidence Feedback

Q3 Did you feel confident about yourself after the STEM program with Building Bridges, Inc.?



Q4 Do you feel confident about yourself outside and inside?



CONCLUSIONS

- Daily polls suggested that each activity was rated as excellent or good while survey feedback revealed that students might consider a STEM career.
- Some students were confident while a small percentage of students did not feel confident about their appearance.
- Overall, engaging students in positive self-affirmation, creative thinking, and self-perception activities may influence students to become more confident learners, experimenters, and true believers in their own capabilities.

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