INTEL COMPUTER CLUBHOUSE NETWORK

Alumni Survey Report

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# Contents

## Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td>4</td>
</tr>
<tr>
<td>Purpose</td>
<td>4</td>
</tr>
<tr>
<td>Methods</td>
<td>4</td>
</tr>
<tr>
<td>Findings</td>
<td>4</td>
</tr>
<tr>
<td>Discussion and Conclusions</td>
<td>5</td>
</tr>
<tr>
<td>I. Purpose of This Study</td>
<td>7</td>
</tr>
<tr>
<td>II. Methods</td>
<td>9</td>
</tr>
<tr>
<td>Survey Design</td>
<td>9</td>
</tr>
<tr>
<td>Survey Administration</td>
<td>10</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>10</td>
</tr>
<tr>
<td>III. Findings</td>
<td>12</td>
</tr>
<tr>
<td>Snapshot of the Sample</td>
<td>12</td>
</tr>
<tr>
<td>Involvement in the Computer Clubhouse</td>
<td>12</td>
</tr>
<tr>
<td>Landing at the Clubhouse: “Why did you first get involved with the Computer Clubhouse?”</td>
<td>12</td>
</tr>
<tr>
<td>Staying Engaged: “What made you want to stay involved with the Clubhouse?”</td>
<td>13</td>
</tr>
<tr>
<td>Important Tools and Resources</td>
<td>15</td>
</tr>
<tr>
<td>Tools in Clubhouse: “Which of these tools did you use at the Clubhouse?”</td>
<td>15</td>
</tr>
<tr>
<td>Important Resources: “Which resources, if any, were important to you in the Clubhouse?”</td>
<td>15</td>
</tr>
<tr>
<td>How and Why the Clubhouse Worked</td>
<td>16</td>
</tr>
<tr>
<td>Sources of Support: “The Computer Clubhouse the most important source of support for...?”</td>
<td>16</td>
</tr>
<tr>
<td>Behavioral Changes: “Of the behavior changes you have made, which were due to your participation in the Computer Clubhouse?”</td>
<td>17</td>
</tr>
<tr>
<td>Changes of Plans: “My participation in the Computer Clubhouse has influenced my plans to...”</td>
<td>18</td>
</tr>
<tr>
<td>Why It Worked: “The reason the Clubhouse worked for me is because...”</td>
<td>19</td>
</tr>
<tr>
<td>Alumni Today</td>
<td>20</td>
</tr>
<tr>
<td>Professional Work: “What kind of work do you do to make a living?”</td>
<td>20</td>
</tr>
<tr>
<td>Tools Now: “Are you using any of the above tools/technology (either professionally or personally) now?”</td>
<td>20</td>
</tr>
<tr>
<td>Current Alumni Network Activity: “What current relationship do you have to the Clubhouse Network as an alum?”</td>
<td>21</td>
</tr>
<tr>
<td>Future Alumni Network Activity: “What would you like to do as a Clubhouse alum, that you DON’T do now?”</td>
<td>21</td>
</tr>
<tr>
<td>Desired Support: “What support would you like the Computer Clubhouse to provide to alumni?”</td>
<td>23</td>
</tr>
<tr>
<td>IV. Discussion of Findings</td>
<td>24</td>
</tr>
<tr>
<td>V. Conclusion</td>
<td>27</td>
</tr>
<tr>
<td>References</td>
<td>28</td>
</tr>
<tr>
<td>Appendix. Computer Clubhouse Alumni Survey</td>
<td>29</td>
</tr>
</tbody>
</table>
Figures

Figure 1. Top three reasons alumni first got involved with the Clubhouse ........................................ 12
Figure 2. Top three reasons alumni first got involved with the Clubhouse by gender .......................... 13
Figure 3. Reasons alumni stayed involved with the Clubhouse ...................................................... 14
Figure 4. Top three tools used by alumni at the Clubhouse .............................................................. 15
Figure 5. Resources in the Clubhouse important to alumni ............................................................ 16
Figure 6. The Clubhouse was the most important source of support for .......................................... 17
Figure 7. Alumni reported behavioral changes overall, and those due to Clubhouse experiences ................................................................................................................................................. 18
Figure 8. Participation in the Clubhouse influenced plans to .......................................................... 19
Figure 9. Reasons the Clubhouse worked for alumni ......................................................................... 20
Figure 10. Types of work reported by alumni .................................................................................... 21
Figure 11. Current relationship to Clubhouse as an alum ................................................................. 22
Figure 12. Things alums would like to do with the Clubhouse but are not doing now ........................ 23
**Executive Summary**

**Purpose**
Designed to give youth opportunities to develop new skills, capacities, and personal confidence, since 1993 the Computer Clubhouse has been providing a creative, safe out-of-school learning environment where young people (ages 10-18) from under-served communities work with adult mentors to explore their own ideas through the use of technology. Members often visit several times a week and are involved over several years, learning to create computer-generated art, music and video; develop scientific simulations; design animation; build kinetic sculptures or robots; construct Web sites; and program computer games.

This report presents the results of a survey taken by more than 200 Computer Clubhouse alumni worldwide in the fall of 2012. SRI worked closely with the leadership of the Intel Computer Clubhouse Network to develop a survey for administering to recent Clubhouse alumni to better understand and document the role of Clubhouse participation in their lives.

The survey focused retrospectively on the features of their Clubhouse experience that alumni strongly feel mattered in shaping them and their capabilities. The survey also gathered data on levels of participation, interest in Clubhouse alumni activities, career outcomes, and demographics that could potentially offer greater understanding of broader social, economic, and psychological influences of the Clubhouse experience for recent alumni.

**Methods**
SRI worked collaboratively to design and develop a survey that would match the experience of Clubhouse members and alumni as closely as possible. The questions were shaped by the documentation and findings in the report *A Place to Be Your Best* (Michalchik, Llorente, Lundh, & Remold, 2008) and aligned thematically with the items in the “Youth Impact Survey” SRI has administered every year since 2004 (e.g., Gallagher, Dominguez, & Michalchik, 2011). The most important source of information and insight regarding the experience of Clubhouse members and alumni, however, was the Clubhouse Network leadership and staff, who, collectively for decades, have been closely connected with the youth who join the Clubhouse and the adults that these youth become.

SRI piloted the survey and revised it on the basis of the pilot results. After a 10-week period of collecting data from Clubhouse alumni, SRI conducted a series of quantitative analyses using statistical software (Stata). In addition to conducting descriptive analyses of individual items (frequencies), comparisons were made between male and female alumni and between alumni in different regions of the world. Additional comparisons were based on questions that reflected respondents’ degree of involvement in Clubhouse activities and influences of Clubhouse participation on their lives.

**Findings**
Survey findings are grouped into five categories that provide information about the characteristics of the sample of respondents, what brought them to the Clubhouse and why they stayed, the important tools and resources they accessed at the Clubhouse, the support the Clubhouse provided and why it worked for them, and the current professional and Clubhouse-related activities of alumni today.
Snapshot of the sample of respondents

- Respondents were Clubhouse alumni who were an average age of 21, were about two-thirds male, spent an average of 5 years as a Clubhouse member, were very active when they were members, and were distributed evenly among the United States, Latin America, and other regions of the world (each with about one-third of respondents).

Reasons for involvement in the Clubhouse

- Initial involvement for most alumni was motivated by a desire to learn about technology, to prepare for the future, and, sometimes, to be with friends who were already involved. Young men tended to be more socially motivated than young women.
- Alumni reported staying engaged because of the chance to work on projects of their own and because they were learning important skills, valued the access to technology, and felt supported by staff members.

Important Clubhouse tools and resources

- Design and graphics software, video or animation software, and music production technologies were the most important tools alumni reported using at the Clubhouse.
- An overwhelming number of respondents indicated that the hardware, software, and expertise available to them mattered more than other resources at the Clubhouse.

How and why the Clubhouse worked

- Alumni were nearly unanimous in stating that the Clubhouse was the primary source of support for setting high goals and expectations of themselves, and most alumni also attributed to their Clubhouse experience their understanding of themselves and the world and their important career choices.
- The Clubhouse was an important source of support for behavioral changes alumni made in their youth—changes such as improving their education, their self-confidence, and their relationships with friends and family members.
- The Clubhouse positively influenced alumni’s futures for the better, including by helping them use technology to improve their lives, pursue better careers, and pursue college or university degrees.
- Alumni responded that interesting project work, opportunities to use their creativity, and the chance to learn technical skills were the top reasons the Clubhouse worked for them.

Alumni today

- Today alumni work across a wide range of professions, but the largest groups work in arts and design, math and computer science, or education fields.
- Alumni continue to use the technology tools they encountered at the Clubhouse, either personally or professionally.
- Though many alumni have continued involvement in the Clubhouse, they also said that they would like to be more involved, either locally or with the network as a whole.

Discussion and Conclusions

The alumni who responded to the survey were well positioned to provide a perspective on the Clubhouse experience that only they can provide. Through them, we get a view of the Clubhouse that indicates its unique role in members’ lives. From the survey results, we posit that the
Clubhouse provides members a particularly empowering experience of themselves as learners and has distinct educative value. The type of empowerment members derive is based on the opportunity the Clubhouse provides for them to author their own learning activities. That alumni view the Clubhouse as the most important source of support for setting their own high goals and expectations suggests that Clubhouse norms represent an alternative to less empowering learning experiences elsewhere and thereby help provide them a pathway to success in life.
I. Purpose of This Study

The Computer Clubhouse was established in 1993 by the Museum of Science in Boston to provide a creative, supportive, and safe out-of-school learning environment for underserved youth, ages 10–18. The Clubhouse gives youth the opportunity to develop new skills, capacities, and personal confidence, working with adult mentors to explore their own ideas through the use of technology. Members often visit several times a week and are involved over several years, learning to create computer-generated art, music and video; develop scientific simulations; design animations; build kinetic sculptures or robots; construct Web sites; and program computer games.

Using the first Clubhouse as a model, the Intel Computer Clubhouse Network based at Boston’s Museum of Science provides start-up and ongoing support for community-based Clubhouses around the world. Today, over 100 Clubhouses in 20 countries reach tens of thousands of youth from underserved communities each year. Many were started with funding by Intel Corporation, which has invested $50 million since 2000. Others were started by local foundations, corporations, government agencies, and individuals who believe in the Clubhouse mission. All are supported on an ongoing basis by their own local funding sources.

The Clubhouse model is built on four guiding principles that are designed to promote positive youth outcomes. These principles are intended to define the Computer Clubhouse Learning Model.

- Focusing on activities that encourage young people to work as designers, inventors, and creators
- Encouraging youth to work on projects related to their own interests
- Aiming to create a sense of community, where young people work together with support and inspiration from adult mentors
- Dedication to offering resources and opportunities to those who would not otherwise have access to them, in an environment of trust and respect

The Clubhouse learning environment is designed to promote the following outcomes:

- The ability to express oneself with technology
- The ability to collaborate, communicate, and work in teams
- The ability to solve complex problems
- The ability to develop, plan, and execute complex projects
- Self-esteem and self-confidence

In addition to the local resources, activities, and events individual Clubhouses provide, the Intel Computer Clubhouse Network offers many other worldwide resources and opportunities. For example, Clubhouse members can participate in the online community known as the Clubhouse Village, and every 2 years youth leaders from Clubhouses around the world meet in Boston for an international “Teen Summit” where they can go on college tours, take hands-on workshops, and participate on collaborative media projects to address challenges in their local communities.

An important question for educational or developmental programs for children and youth often is: “What are the program’s long-term outcomes?” In discussing objectives for this study with the leadership of the Clubhouse Network, it became clear that the Network hoped for more than capturing the most concrete types of outcomes—for example, whether alumni stayed in college or used technology in their work. The goal, instead, was to understand alumni perceptions regarding how their lives were shaped by their Clubhouse experience, what types of opportunities and tools
the Clubhouse provided, and the ways in which the Clubhouse contributed to their capabilities. The Network sought to tap into Clubhouse alumni’s reflections on whether or not—regardless of situational or intervening factors—the Clubhouse made a difference in the resources they could bring to bear on the challenges that faced them.

The research team and leadership of the Clubhouse Network agreed that it was important to get input from a relatively large and broad sample of recently graduated alumni. The Network has conducted many case studies of notable members, following them into the first few years as Clubhouse graduates (http://www.computerclubhouse.org/content/success-stories). Reaching out to a wide range of alumni through their home Clubhouses would create the opportunity to consider a more diverse set of views than those described in the small set of case studies. On the basis of these considerations and the availability of resources, we decided to develop a survey that we would administer internationally.

In addition to documenting the influence of the Clubhouse experience through the eyes of alumni, the survey helps support the Network’s efforts to better understand alumni involvement and interest in Network activities designed for them. This survey also complements a previous study based on reports, self-assessments, and other documentation submitted to the Network from individual Clubhouses (Michalchik, Llorente, Lundh, & Remold, 2008) and reports of results from a regularly administered survey targeting the impacts on youth who are currently Clubhouse members (Gallagher, Dominguez, & Michalchik, 2011).

These previous studies found that the Clubhouse experience promotes members’ technological fluency and 21st century skills, their capacity to follow pathways to success, and their commitment to community and service (Michalchik et al., 2008). Quantitative measures show that Clubhouse members who visit more frequently, stay longer, and have attended for the most number of years are the most engaged in use of technology and measure more highly on several attitudinal assessments, including their views regarding their collaborative, problem-solving, and social competences. For some of these measures, the relationship of attitude to Clubhouse attendance differs significantly by gender. The majority of members aspired to finish high school and continue their education (Gallagher et al., 2011).

A broad range of pertinent research literature identifies common features of environments that promote positive youth development and outcomes (e.g., Durlak & Weissberg, 2007; Hamilton, Hamilton, & Pittman, 2004; Lerner, von Eye, Lerner, Lewin-Bizan, & Bowers, 2010; Morton & Montgomery, 2011; McLaughlin, 2000; National Research Council & Institute of Medicine, 2002; Píha, 2001; Villarruel, Perkins, Borden, & Keith, 2003; Wong, Zimmerman, & Parker, 2010). In our previous work, we identified four “active ingredients” from among the most common environmental features that stand out as particularly relevant to members’ experience in Computer Clubhouses: physical and psychological safety, supportive relationships, opportunities to belong, and opportunities for skill building. While we hold to the view that these factors are meaningful in positive youth development and that the Clubhouse promotes them, in developing the current study we felt it likely that alumni could add depth and new dimensions to our understanding of what aspects of their Clubhouse experience they valued most.

The 20-year anniversary of the founding of the first Clubhouse serves as a motivation for reaching out to alumni, giving them a voice in the greater Clubhouse community, and learning from their reflections and perspectives. Recent alumni, in particular, are positioned to help the Clubhouse Network leadership improve programming and support the youth the Clubhouse currently serves by sharing their insights. It is the leadership’s express hope, too, that the Clubhouse Network will serve as an ongoing resource for alumni; as one recent graduate commented regarding her Clubhouse experience: “Once a member, always a member.”
II. Methods

In December 2011, SRI International and the Intel Computer Clubhouse Network agreed on a new survey study of Clubhouse alumni that would focus retrospectively on the features of their Clubhouse experience that they strongly felt mattered in their lives and that would complement previous research SRI and others had conducted for the Network. We envisioned three tasks: (1) prototyping, piloting, and revising the survey; (2) administering the survey; and (3) analyzing responses and reporting on findings. These tasks were undertaken with the benefit of the experience SRI has had in conducting research and evaluation with the Computer Clubhouse Network since 2004.

SRI’s researchers worked closely with the leadership of the Computer Clubhouse Network to develop research questions and relevant survey items, to plan for piloting and administration of the survey, and to review data for the analysis.

Survey Design

Because our intent was to distribute the survey across Clubhouses internationally, we created primarily closed-ended items in order to readily aggregate results. This approach required consultation with Clubhouse Coordinators and significant piloting to ensure that items and response categories closely related to alumni’s Clubhouse experiences and provided the possibility for a meaningful analysis. Additionally, the survey needed to be readily translatable in diverse cultural contexts.

SRI and the Computer Clubhouse Network team spent 3 months (December 2011-February 2012) discussing the types of survey items and response categories that would be most appropriate. The collective team drew from its understanding of the Clubhouse programming generally, the experience of members and alumni, the challenges confronting communities that the Clubhouse serves, and the findings from the research on the Clubhouse done to date. The survey items reflected a deep understanding and long-term familiarity with the Clubhouse experience and the needs of alumni. The team’s intent in survey design was to reflect as closely and fully the range of views and ideas alumni would hold.

The following broad categories formed the basis for the questions included in the survey:

• Initial attractors and reasons for involvement, including the role of friendships and peer groups
• Milestones for members and reasons for staying over time, including participation in the Teen Summit and other specific notable events
• Relationships at the Clubhouse (Coordinators, mentors, other members) that most mattered
• Resources at the Clubhouse that have been important
• Projects and activities at the Clubhouse that have influenced them
• The Clubhouse in comparison to other places/institutions in their lives
• Important experiences at the Clubhouse related to
  o Careers
  o College/university
  o Understanding themselves
  o Understanding the world
II. Methods

- Personal changes based on Clubhouse participation (e.g., quitting smoking or drug use)
- Clubhouse influence on future plans
- General reflections on how the Clubhouse model works for members
- Background information (e.g., age, geography, gender, years at the Clubhouse, Clubhouse attendance patterns)
- Relationship to Clubhouse alumni community
  - Current activities with the Network or Clubhouses
  - Interest in joining Network or Clubhouse activities
  - Ways the Network can best serve them or activities to be added

A draft of the survey was piloted with Clubhouse alumni on the West Coast and distributed to a small group of Clubhouse Coordinators for their input. Survey items were then revised as needed on the basis of feedback obtained from Clubhouse alumni and Coordinators.

Survey Administration
After final edits and approval from Clubhouse leadership, the survey was mounted on SNAP, an online survey tool developed and maintained by SRI. A single URL was given to the Clubhouse leadership, who then disseminated the link and information about the survey through a number of outlets, including the 2012 Annual Conference, posts on Facebook, connections via Clubhouse Coordinators, and by email. The primary period of data collection was planned for August-October 2012 in order to focus efforts on recruitment during a time of year when many alumni would be back at school after their summer break.

Data Analysis
The alumni survey response period closed in early November 2012. SRI researchers then cleaned the dataset in order to conduct a series of quantitative analyses using statistical software. The dataset contained a total of 305 entries. Out of 305 entries, 39 (13%) had no information recorded and probably represented participants who opened the link but did not complete the survey. These entries were therefore excluded from the dataset. Additionally, to identify duplicate entries, SRI researchers inspected the data to identify multiple entries with the same identifying information. Out of the 305 entries a total of 11 (4%) duplicate entries were identified and excluded from the dataset. Entries that were missing identifying information and had high rates of missing data were also removed from the dataset as a conservative approach. The final dataset contained 202 entries; 91% of these completed 80% or more of the survey.\(^1\)

Initially, SRI researchers conducted descriptive analyses of individual items (frequencies) to examine patterns of responses. The results of this work were shared with Clubhouse leadership over the course of the following weeks, and additional analyses were conducted as requested. Additional analyses included comparisons by gender and comparisons between questions that reflected respondents’ degree of involvement in Clubhouse activities and influences of Clubhouse participation on their lives. When conducting comparisons, SRI researchers conducted chi square difference tests and analysis of variance, adjusting for low response rates when examining significance of effects (i.e., using Fisher’s exact test).

\(^1\) The data gathered have a nested structure since alumni are nested within Clubhouses. However, since most Clubhouses
Interpretations of the data benefited from SRI’s understanding of the Clubhouse model and history, as well as the viewpoints of Computer Clubhouse Network staff based on discussions regarding emergent findings. This final report is a concise description of the findings from the alumni survey with interpretive supports drawn from SRI’s other Clubhouse evaluation efforts. We see this survey effort as a way of substantiating the findings from previous research and providing input for future studies that can better document effective features of successful Clubhouse implementation.
III. Findings

In the sections below, we report the main findings from the survey. We start by providing a snapshot of the sample. We then discuss alumni’s responses regarding their involvement in the Computer Clubhouse, their views of resources and sources of support they received while participating in the Computer Clubhouse, and how and why they believe the Computer Clubhouse had a positive impact on their lives. Finally, we discuss their lives today—both their professional lives and their continued involvement as alumni of the program.

Snapshot of the Sample

The mean age of the survey respondents was 21 years, with males constituting 66% of respondents and females 34%. A majority of survey respondents indicated where in the worldwide Clubhouse Network they participated (156 alumni). Approximately one-third of these respondents represented the United States, one-third Latin America (Colombia, Mexico, Brazil, Argentina, Costa Rica, Panama, among others), and one-third other parts of the world (Jordan, New Zealand, Ireland, Australia, Philippines, among others). On average, the length of participation in the Clubhouse reported by alumni was 5 years, and 78% of respondents reported high participation (daily or weekly attendance).

Involvement in the Computer Clubhouse

Landing at the Clubhouse: “Why did you first get involved with the Computer Clubhouse?”

Clubhouse alumni reported that they started attending their Clubhouse initially to learn about technology (61%), to learn something useful for their future (57%), and to be with friends who were already members (41%) (see Appendix for full list of response options).

Figure 1. Top three reasons alumni first got involved with the Clubhouse

These responses indicate that, in retrospect, developing capabilities that they could usefully apply to their goals for the future stand out to current alumni as the key motivation for their involvement in the Clubhouse. Although a sizable minority joined to be with friends, making new friends (25%) and having fun (23%) were not primary reasons.
Few alumni report getting involved because they were encouraged by the adults in their lives (parents 9%, teachers 5%, other adults 10%), indicating that self-motivation or peer motivation played a larger role in initial involvement.

Whereas more respondents, regardless of gender, identified learning about technology as a top reason for getting involved, male respondents were, at a statistically significant rate, more likely to say that having a friend or friends who were already members was a motivating factor (45.9%), compared with female alums (30.4%). For female respondents, significantly more alums indicated that the possibility of having help with schoolwork was an important motivator (24.6%), compared with male alums (5.3%).

**Figure 2. Top three reasons alumni first got involved with the Clubhouse, by gender**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percent of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>My friend or friends were members*</td>
<td>60</td>
</tr>
<tr>
<td>To learn about technology</td>
<td>62</td>
</tr>
<tr>
<td>To learn something useful for my future</td>
<td>59</td>
</tr>
</tbody>
</table>

**Staying Engaged: “What made you want to stay involved with the Clubhouse?”**

Alumni reported that they continued to participate at the Clubhouse because of opportunity to work on projects of their own (38%) and because they felt they were learning important skills (34%), they felt supported by staff members (32%), and they valued the access they had to technology (31%). Young women were significantly more likely to indicate that learning important skills was an important reason to remain engaged (51% vs. 26%).

III. Findings
Few alumni responded that they stayed engaged because their parents encouraged involvement (1%), because they wanted to improve chances of getting into college (3%), because they wanted help with schoolwork (5%), or because they felt supported by other members (5%). Also low (5% or less) were activities like participating in the Teen Summit, paid work at the Clubhouse, and representing the Clubhouse to the public.

**Figure 3. Reasons alumni stayed involved with the Clubhouse**
Important Tools and Resources

Tools in Clubhouse: “Which of these tools did you use at the Clubhouse?”

The most popular tools while at the Clubhouse, according to survey respondents, were design and graphics software (78%), video or animation software (75%), and music production tools (62%).

Figure 4. Top three tools used by alumni at the Clubhouse

[Bar chart showing the top three tools used by alumni at the Clubhouse: Design or graphic software (78%), Video or animation software (75%), and Music studio tools (62%).]

Young men were significantly more likely than young women to report using music production tools (67% vs. 52%) and engineering materials (23% vs. 9%).

Important Resources: “Which resources, if any, were important to you in the Clubhouse?”

In reflecting on the many resources available to members at Clubhouses, large majorities of respondents indicated that the hardware (84%) and software (75%) resources on offer were important parts of the Clubhouse experience. Likewise, alumni identified the knowledge and support of staff members and mentors (74%) as being important resources. Finally, Internet access, as a stand-alone resource, was identified as important by more than half of respondents (53%).
Figure 5. Resources in the Clubhouse important to alumni

How and Why the Clubhouse Worked

Sources of Support: “The Computer Clubhouse the most important source of support for...?”

An overwhelming majority of alumni from across the Clubhouse network reported that their experiences with the Clubhouse were the most important source of support in their lives for setting
high goals and expectations for themselves (97%). At the same time, alums described Clubhouse experiences as the primary support for helping them understand themselves (82%) and the world (80%). Consistent with these responses, alumni also indicated that their career choices were primarily influenced by their experiences at their Clubhouse (80%).

**Figure 6. The Clubhouse was the most important source of support for...**

<table>
<thead>
<tr>
<th>Supporting Impact</th>
<th>Percent of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting high goals and expectations for myself</td>
<td>97%</td>
</tr>
<tr>
<td>Understanding myself</td>
<td>82%</td>
</tr>
<tr>
<td>Understanding the world</td>
<td>80%</td>
</tr>
<tr>
<td>Pursuing a career</td>
<td>80%</td>
</tr>
<tr>
<td>Attending college/university</td>
<td>68%</td>
</tr>
<tr>
<td>Living a healthy lifestyle</td>
<td>66%</td>
</tr>
<tr>
<td>Staying in school</td>
<td>60%</td>
</tr>
</tbody>
</table>

**Behavioral Changes: “Of the behavior changes you have made, which were due to your participation in the Computer Clubhouse?”**

Large majorities of alumni responded that Clubhouse experiences had enabled them to make important positive changes in their lives. Sixty-seven percent of alums indicated that they had improved in their education or schooling as a result of their Clubhouse engagement. Young women were significantly more likely to report this impact on their lives (76% vs. 62%). Almost as many alums identified increases in self-confidence and self-esteem (57%) as the result of positive Clubhouse experiences. Finally, a majority of respondents (51%) indicated that their relationships with friends and family members improved as a result of Clubhouse experiences. In the figure
below, the top (lighter) bar represents the number of alumni who reported changes overall in their lives with regard to a particular outcome, and the bottom (darker) bar shows the percentage of respondents who attributed the positive change principally to the Clubhouse.

**Figure 7. Alumni reported behavioral changes overall, and those due to Clubhouse experiences**

Clubhouse alumni were least likely to indicate that their experiences helped them overcome eating disorders (4%), stop carrying weapons (5%), stop participating in gang activity (5%), stop using illegal drugs (5%), or stop staying out all night (7%)—all of which were changes in behavior relevant only to a small percentage of Clubhouse alumni. That these behaviors did not change is primarily a function of the low frequency of these behaviors among Clubhouse youth—that is, they probably were not engaged in these behaviors to start with.

**Changes of Plans: “My participation in the Computer Clubhouse has influenced my plans to...”**

Beyond specific behavior impacts reported by alumni, survey respondents indicated that their plans for the future were influenced for the better. Alumni indicated that their experiences...
positively impacted the way they thought they might use technology to improve their lives (64%). Alumni also reported that Clubhouse experiences helped them pursue better careers (56%) and go to college (50%). Importantly, alums also believed that the Clubhouse increased their plans to serve others and give back to their communities (51%).

**Figure 8. Participation in the Clubhouse influenced plans to...**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Not at all</th>
<th>A little</th>
<th>Some</th>
<th>A lot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Give back to my community</td>
<td>8</td>
<td>12</td>
<td>28</td>
<td>51</td>
</tr>
<tr>
<td>Use technology to improve my life</td>
<td>5</td>
<td>11</td>
<td>20</td>
<td>64</td>
</tr>
<tr>
<td>Pursue a career in technology</td>
<td>13</td>
<td>14</td>
<td>28</td>
<td>46</td>
</tr>
<tr>
<td>Pursue a better career</td>
<td>5</td>
<td>11</td>
<td>28</td>
<td>56</td>
</tr>
<tr>
<td>Go to college/university</td>
<td>9</td>
<td>15</td>
<td>26</td>
<td>50</td>
</tr>
<tr>
<td>Finish school</td>
<td>20</td>
<td>11</td>
<td>25</td>
<td>44</td>
</tr>
</tbody>
</table>

**Why It Worked: “The reason the Clubhouse worked for me is because...”**

Clubhouse alumni indicated that a top reason the Clubhouse experience was powerful for them was that it provided the chance to work on interesting projects (45%), use their creativity (39%), and gain important technical skills (32%). Few alumni indicated that the Clubhouse experience worked for them because it helped them become better writers (2%).
Significantly more young men (34%) identified interesting project work as the most important reason the Clubhouse worked for them, compared with young women (19%). Conversely, significantly more young women (33%) indicated that learning how to better communicate with others was an important reason the Clubhouse worked, as opposed to young men (17%).

Alumni Today

Professional Work: “What kind of work do you do to make a living?”

Researchers used the U.S. Census employment categories in asking respondents about their professional work today. Alumni indicated working across a wide range of occupations; the most
common types of professional work alumni reported doing now were jobs in arts, design, entertainment, sports, or media fields (40%). Nineteen percent indicated that they worked in math or computer science. The next-largest group reported working in education, training, or library professions (13%).

**Figure 10. Types of work reported by alumni**

![Graph showing types of work reported by alumni]

Young men were significantly more likely than young women to report working in math or computer science (25% vs. 9%).

**Tools Now: “Are you using any of the above tools/technology (either professionally or personally) now?”**

Eighty-two percent of respondents said that they were using technology tools they learned about at the Clubhouse in their personal or professional lives today. Seventy-two percent said they were using design or graphics software, and 58% said they were using animation or video production software. Young women were significantly more likely to indicate using animation or video tools now (70% vs. 53%). Young men were significantly more likely to report using music production tools (49% vs. 18%), game or robot design tools (20% vs. 7%), and engineering materials (16% vs. 4%).

**Current Alumni Network Activity: “What current relationship do you have to the Clubhouse Network as an alum?”**

Many alumni respondents described continuing participation and involvement with their Clubhouse communities. Alums indicated that they continue to talk with Clubhouse staff members
(78%) and socialize with current Clubhouse members (74%), as well as with other alumni (60%). Alumni who were frequent attendees at the Clubhouse as members were more likely to refer the Clubhouse to others (52% vs. 27%).

**Figure 11. Current relationship to the Clubhouse as an alum**

![Bar chart showing current relationship to the Clubhouse as an alum]

**Future Alumni Network Activity: “What would you like to do as a Clubhouse alum, that you DON’T do now?”**

The largest group of alumni respondents indicated that they would like to engage in Clubhouse Network activities but do not do so now (46%). Forty-two percent of respondents indicated they’d like to speak to current members about their workplace or university. Thirty-nine percent of alumni survey takers indicated wanting to participate in their local Clubhouse.

Significantly more young women respondents indicated that they wanted to donate time or money to the Clubhouse (42%), compared with young men (26%). Significantly more young men (26%) indicated that they wished they were in touch with Clubhouse staff, compared with young women (12%).
Figure 12. Things alums would like to do with the Clubhouse but are not doing now

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percent of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engage in activities in the Network</td>
<td>46%</td>
</tr>
<tr>
<td>Speak at a Clubhouse about my university or workplace experience</td>
<td>42%</td>
</tr>
<tr>
<td>Participate in activities at the local Clubhouse</td>
<td>39%</td>
</tr>
<tr>
<td>Refer others to the Clubhouse</td>
<td>38%</td>
</tr>
<tr>
<td>Connect with other Clubhouse alumni</td>
<td>37%</td>
</tr>
<tr>
<td>Donate time or money to the Network</td>
<td>32%</td>
</tr>
<tr>
<td>Offer tours of my university or workplace to current members</td>
<td>30%</td>
</tr>
<tr>
<td>Talk to Clubhouse members</td>
<td>22%</td>
</tr>
<tr>
<td>Talk to Clubhouse staff</td>
<td>21%</td>
</tr>
</tbody>
</table>

Desired Support: “What support would you like the Computer Clubhouse to provide to alumni?”

Alumni responded that they would like to receive ongoing support for career or employment development (75%), to have more volunteer opportunities at the Clubhouse (63%), and to have more networking opportunities with other alums (62%).
IV. Discussion of Findings

The survey results represent the self-report of a group of recently graduated Clubhouse alumni who were active members during their time at the Clubhouse. These alumni are also self-selected, having responded to appeals by Clubhouse Coordinators, leaders, and other contacts who encouraged them to voice their opinions through this channel. Gathering the views of alumni who had been active members and stayed connected to their Clubhouse roots is appropriate to the purposes of the survey: to understand more about alumni perspectives on the effects of their Clubhouse participation on their lives. The alumni who responded are well positioned to voice such views. In this sense, we can see these alumni as expert consultants, giving us a window on the Clubhouse experience that only they can provide.

Our previous study of the Clubhouse culture, *A Place to Be Your Best* (Michalchik et al., 2008), provided insights into the experience of members and alumni based on written documentation and interviews. Because of the complementarity of the content, we have used representative quotations from that report to illustrate our discussion of findings from the alumni survey (referenced with the page numbers from the earlier report).

The Clubhouse alumni responding to the survey let us know several interesting things about their initial attraction to the Clubhouse. Very few were motivated by recommendations from adults; most started their Clubhouse journey in a process of recognizing the value of technology and what the Clubhouse had to offer for their future. One alumna described it as follows:

> When I entered the Clubhouse the atmosphere was one where I felt safe, confident, and like I was part of something big. After I entered the Clubhouse and became a member I was one of the first members to use and learn the software and how it works. (54)

In the same study, an alumna offered:

> What I taught, witnessed and learned inside the Clubhouse has boosted my self-confidence. I learned skills that became useful while I pursue college. I know that whatever I learned will help me to reach my goals, help me to find a job and make me successful person someday. (46)

A noteworthy number of survey respondents also initially participated to be with their existing friends, and, as other research shows (Michalchik et al., 2008), the social aspects of Clubhouse participation do, indeed, matter to members. But the survey indicates that the primary draw of the Clubhouse—and what sets it apart from other spaces in youths’ lives—is the opportunity for learning that it offers. Moreover, survey findings suggest that while social elements of Clubhouse participation affect involvement, this element is tied in with the possibilities for learning new, fun, engaging, and valuable things. Also, contrary to stereotype, girls place more emphasis than boys on the opportunities for learning the Clubhouse offers in comparison with the social opportunities. As one alumna said:

> If someone was to ask me “What do you want to major in?” My answer would be computer engineering with a minor in Business. If I was asked the same question when I was in the seventh grade my answer would have been cosmetology. (67)

Continued involvement seems motivated by three primary factors: the opportunity for members to pursue projects of their own, learning new skills in the process, and the support they received from Clubhouse staff in their efforts. These findings suggest that youth come to the Clubhouse to learn
and they stay because they feel empowered, both by the opportunity they have to determine their own course of action and by the way in which staff facilitate the process.

Young women were significantly more likely than young men to report that they remained engaged in order to learn important skills, consistent with the finding that they initially came to the Clubhouse to learn. With respect to the tools and resources they most valued in their Clubhouse experience, an overwhelming number of respondents indicated that the hardware, software, and expertise available to them mattered more than other resources at the Clubhouse. The potency of the learning experience affected one young man’s goals as follows:

My academic goals are to study, in a national or international university (MIT). To construct robotics mechanism that help people in their lives, and to be an engineer in electronics and computer programming.... (51)

Empowerment becomes an even stronger theme when we look at the findings regarding what alumni viewed as the primary supports for important accomplishments. In terms of what the Clubhouse provided for their lives beyond the Clubhouse doors, an astonishing 97% said that the Clubhouse was the most important source of support for them in setting high goals and expectations for themselves. As one alumnus stated:

The Clubhouse has changed many things about me, especially my aspirations. (45)

For nearly all respondents, the Clubhouse empowered youth in a way that no other institution, organization, or source of support could match. Consistent with this response, the vast majority of alumni indicated that their understanding of themselves and the world was more influenced by the Clubhouse than other sources. Notably fewer alumni (60%) identified the Clubhouse as the major support for keeping them in school.

Additional survey questions about the difference the Clubhouse made in their lives corroborated this experience of empowerment through self-directed learning and use of technology. Most alumni, and women more than men, responded that Clubhouse experiences had helped improved their education or schooling. As one alumnus described:

I owe a lot to the Intel Computer Clubhouse. In the 2 years I have been there, I learned a lot, not just about computers but myself. As a result of the positive reinforcement I stayed in school where before I did not care. The Intel Computer Clubhouse was my U-turn. Since then I have passed all my classes and made up for lost ground. (48)

Another found hope through the Clubhouse:

Through this, I am able to explore the modern world. It has taught me to welcome new changes, and shown me what possibilities are out there. I have learned skills gained through workshops, lessons, projects, and the life. I have been able to develop myself in different aspects, from mental to emotional. I have learned to widen my views regarding my ambitions in life. I have discovered that I am capable of doing things I did not expect before. I am now hopeful. (63)

Survey respondents also reported that increases in self-confidence and self-esteem resulted from their Clubhouse participation. Improvement in relationships with friends and family members and in professional activities also resulted from Clubhouse participation. Alumni typically discussed experiencing multiple forms of growth:

When I went through orientation at the Clubhouse, I learned a lot. I learned not only how to operate a computer, which is the main priority of the Clubhouse, but I also learned how to befriend others whom I didn’t know, how to cooperate with them and how to understand their different moods that I know must go along with. Being a part of the Clubhouse not only
increased my technical knowledge, but also helped me to develop as a person overall, in learning to interact with other people. (20)

Even for positive life changes that relatively few Clubhouse members experienced, such as overcoming depression, these alumni overwhelmingly reported that these changes were “due to” Clubhouse participation. The Clubhouse strongly influenced members’ plans to use technology to improve their lives and to aspire to high career goals, as well as to give back to the community and attend college. Clubhouse alumni valued their Clubhouse experience most because of the opportunities to work on interesting projects, use their creativity, and gain important technical skills that it provided.

The alumni responding to the survey have put to use what they learned as Clubhouse members. A large percentage of Clubhouse alumni now work in the arts, design, and entertainment fields. They also work in computers, education, management, and administration, all fields in which digital technologies and know-how play an important role. These alumni also feel an ongoing sense of connection to the Clubhouse and a desire to be more involved. Half the alumni surveyed who do not do so already want to engage in Clubhouse Network alumni activities, and nearly as many reported wanting to participate as alumni in Clubhouse activities in a variety of other ways. Alumni expressed their feelings about giving back to the Clubhouse and supporting others:

In the CC [Computer Clubhouse], I always try to give a great example to the youngsters. I try to teach them about computers and I sometimes help them with their homework. (36)

I have also tutored the younger children at the Clubhouse with their homework and explaining to them how to operate some of the computer programs that I have understood. (25)

Now I mentor kids in the music studio and help them on their exploration into their creativity. (25)

When I finished the project, I realized that with my work I was changing some thoughts about hip hoppers and when people listened to my music, they could change their opinions about them. That is why I decided to help other boys and share my knowledge. During this year I have been mentoring others, teaching them the basics of recording and mixing music. I believe that most of the boys and girls of our community want a better country for every one of us, including the hoppers. (42)
V. Conclusion

Overall, the picture that the survey responses paint is that the Clubhouse has a unique role in the lives of participants. We are using the term *empowerment* to signify the particular types of agency and personal authority in designing, creating, producing, and, accordingly, learning that the Clubhouse supports. Although there are various ways in which the term *empowerment* is applied to youth-serving programs (e.g., Wilson, Minkler, Dasho, Wallerstein, & Martin, 2008), the types of outcomes it generally connotes align with the purposes and objectives of the Clubhouse. For example, in a meta-analysis of outcomes for these types of programs, the authors write:

Youth empowerment programs (YEPs) are designed to build on the assets of young people through a focus on active participation, mastery experiences, and positive connections in order to improve developmental outcomes and positive transitions to adulthood. (Morton & Montgomery, 2011)

Looking across the alumni survey results, we posit that the type of empowerment members derive is based in the opportunity they have to author their own learning activities and products at the Clubhouse. Importantly, members are able to recognize that knowledge, know-how, and the development of their capacities are outcomes that they can control to serve ends that they value. Alumni's nearly unanimous endorsement of the Clubhouse as the most important source of support for setting high goals and expectations for themselves suggests that Clubhouse norms regarding learning stand as an alternative to those of school, family, and religious or community-based institutions elsewhere in their lives. Scholars have explored this concept by noting how “epistemological framing” differentially shapes what it means to learn in various activities, interactions, and institutional settings (see, for example, Hutchison & Hammer, 2010; for similar discussions, see Hull & Greeno, 2006; Polman, 2006). It would be worthwhile to further explore the view that the Clubhouse has a distinct educative value because of the particularly empowering ways of learning and knowing that members experience within the Clubhouse environment and can carry forward into other aspects of their lives.
References


## COMPUTE CLUBHOUSE ALUMNI SURVEY

### 1. Why did you first get involved with the Computer Clubhouse? (Please mark your top three choices - Reason #1 being the most important.)

<table>
<thead>
<tr>
<th>Reason</th>
<th>Top Reason #1</th>
<th>Top Reason #2</th>
<th>Top Reason #3</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. My friend or friends were members</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. To make new friends</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>c. To learn about technology</td>
<td></td>
<td></td>
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<tr>
<td>d. To have a safe place to hang out</td>
<td></td>
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<tr>
<td>e. To have fun</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>f. To learn something useful for my future</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. To get help with schoolwork</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. To fill time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. My parent(s) wanted me to join</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j. My teacher(s)/school wanted me to join</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>k. Another adult in my life encouraged me to join</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>l. Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please specify other:
_____________________________________________________________________________________

Please specify the other adult who encouraged you:
_____________________________________________________________________________________

Appendix. Computer Clubhouse Alumni Survey
COMPUTER CLUBHOUSE ALUMNI SURVEY

2. What made you want to stay involved with the Clubhouse?  
(Please mark your top three choices - Reason #1 being the most important.)

<table>
<thead>
<tr>
<th>Reason</th>
<th>Top Reason #1</th>
<th>Top Reason #2</th>
<th>Top Reason #3</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Got to work on projects of my own</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Got to lead projects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Got to have fun with my friends</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Had access to technology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Felt like I belonged</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Felt supported by Clubhouse staff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Felt supported by Clubhouse mentors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Felt supported by other Clubhouse members</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Was learning important skills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j. Wanted to improve my chances of getting into college</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>k. Wanted help with schoolwork</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>l. Wanted to participate in the Teen Summit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>m. Liked the staff and mentors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n. My parents asked me to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o. Had leadership opportunities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p. Had chances to showcase my work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>q. Had chance(s) to attend the Teen Summit</td>
<td></td>
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<tr>
<td>r. Had chance(s) to represent my Clubhouse in public</td>
<td></td>
<td></td>
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<tr>
<td>s. Had a paid job at the Clubhouse</td>
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<td></td>
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<tr>
<td>t. Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please specify other:

_________________________________________________________________
________________________
3. Which resources, if any, were important to you in the Clubhouse? *(Mark all that apply.)*

- Computers and other technology (e.g. music studio, video equipment, robotics, Lego)
- Internet access
- Software programs
- Clubhouse staff and mentors’ knowledge and support
- Scholarship opportunities
- Job opportunities
- (C2C) Clubhouse to College/Career activities (e.g., field trips, guest speakers)
- Teen Summit
- Personal or final project
- Other:

Please specify other:

__________________________________________________________________________________________________

_______________
4. Was the Computer Clubhouse the most important source of support for... *(Mark Yes or No for each item.)*

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Staying in school</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Attending college/university</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Pursuing a career</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Living a healthy lifestyle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Setting high goals and expectations for myself</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Understanding myself</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Understanding the world</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5. Have you made any of the following behavior changes? *Mark all that apply.*

- Adopted a healthier lifestyle (ex: eating better, exercising)
- Improved in my job
- Improved in my education/schooling
- Improved in relationships/getting along better with friends or family
- Gaining self-confidence/self-esteem
- Started participating in productive activities, like music or sports
- Overcame depression
- Engaged in safer sex
- Stopped self-destructive behavior or self-harming (cutting)
- Stopped thinking about or attempting suicide
- Overcame an eating disorder
- Stopped bullying or hurting others
- Stopped running away or staying out all night
- Stopped breaking rules for no reason/acting out
- Stopped or reduced smoking
- Stopped using illegal drugs
- Stopped being in a gang
- Stopped carrying weapons
- Stopped committing illegal behavior (stealing, shoplifting, etc.)
- Others

Please specify other:

___________________________________________________________________________________

________________________

________________________
5b. Of the behavior changes you have made, which were due to your participation in the Computer Clubhouse?  *(Mark all that apply.)*

- [ ] Adopted a healthier lifestyle (ex: eating better, exercising)
- [ ] Improved in my job
- [ ] Improved in my education/schooling
- [ ] Improved in relationships/getting along better with friends or family
- [ ] Gaining self-confidence/self-esteem
- [ ] Started participating in productive activities, like music or sports
- [ ] Overcame depression
- [ ] Engaged in safer sex
- [ ] Stopped self-destructive behavior or self-harming (cutting)
- [ ] Stopped thinking about or attempting suicide
- [ ] Overcame an eating disorder
- [ ] Stopped bullying or hurting others
- [ ] Stopped running away or staying out all night
- [ ] Stopped breaking rules for no reason/acting out
- [ ] Stopped or reduced smoking
- [ ] Stopped using illegal drugs
- [ ] Stopped being in a gang
- [ ] Stopped carrying weapons
- [ ] Stopped committing illegal behavior (stealing, shoplifting, etc.)
- [ ] Others

*(For "Other" behaviors, you have identified: "{CC_5_x}".)*
6. My participation in the Computer Clubhouse has influenced my plans to... *(Mark one box per item.)*

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>A little</th>
<th>Some</th>
<th>A lot</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Finish school</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Go to college/university</td>
<td></td>
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</tr>
<tr>
<td>c. Pursuing a better career</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Pursue a career in technology</td>
<td></td>
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</tr>
<tr>
<td>e. Use technology to improve my life</td>
<td></td>
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<td></td>
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<tr>
<td>f. Give back to my community</td>
<td></td>
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</tbody>
</table>
### COMPUTER CLUBHOUSE ALUMNI SURVEY

#### 7. The reason the Clubhouse worked for me is because... *(Please mark your top three choices - Reason #1 being the most important.)*

<table>
<thead>
<tr>
<th>Reason</th>
<th>Top Reason #1</th>
<th>Top Reason #2</th>
<th>Top Reason #3</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. I got to work on interesting projects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. I was inspired by other members’ projects or ideas</td>
<td></td>
<td></td>
<td>❑</td>
</tr>
<tr>
<td>c. I got to work on projects with other people</td>
<td>❑</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. I got to help others</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. I felt wanted and accepted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. I felt people listened to me</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. I learned to write better</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. I learned how to solve hard problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. I learned how to better communicate with others</td>
<td></td>
<td>❑</td>
<td></td>
</tr>
<tr>
<td>j. I gained important technical skills</td>
<td></td>
<td>❑</td>
<td></td>
</tr>
<tr>
<td>k. I gained important social skills</td>
<td>❑</td>
<td></td>
<td></td>
</tr>
<tr>
<td>l. I was encouraged to think positively about my future</td>
<td>❑</td>
<td></td>
<td></td>
</tr>
<tr>
<td>m. I was encouraged to use my creativity</td>
<td>❑</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8. What current relationship do you have to the Clubhouse Network as an alum? *(Mark all that apply.)*

- I talk to Clubhouse staff
- I talk to Clubhouse members
- I talk to other Clubhouse alumni
- I engage in activities in the Network
- I participate in activities at the local Clubhouse
- I donate time or money to the Network
- I refer others to the Clubhouse (potential members, mentors, funders, etc.)
- I offer tours of my university or workplace experience
- Other

Please specify other:

__________________________________________________________________________________________________

_______________
9. What would you like to do as a Clubhouse alum, that you DON'T do now? *(Mark all that apply.)*

- Talk to Clubhouse staff
- Talk to Clubhouse members
- Connect with other Clubhouse alumni
- Engage in activities in the Network
- Participate in activities at the local Clubhouse
- Donate time or money to the Network
- Offer tours of my university or workplace to current members
- Speak at a Clubhouse about my university or workplace experience
- Refer others to the Clubhouse (potential members, mentors, funders, etc.)
- Other

Please specify other:

________________________________________________________________________________________

_____________

10. What support would you like the Computer Clubhouse to provide to alumni? *(Mark all that apply.)*

- Employment/ career resources
- Technology tutorials
- College info
- Volunteer opportunities at a Clubhouse
- Networking opportunities with other alumni
- Other

Please specify other:
COMPUTER CLUBHOUSE ALUMNI SURVEY

Please tell us a little bit about yourself:

11. Email address: (If you'd like to participate in the Clubhouse Alumni Online Community.)

__________________________________________________________________________________________

__________________________________________________________________________________________

12. Age:

__________

13. Gender:

☐ Female

☐ Male

☐ Other

14. Country: [pull down list]

COMPUTER CLUBHOUSE ALUMNI SURVEY

15. The Clubhouse you participated in:

__________________________________________________________________________________________

__________________________________________________________________________________________

16. Years participating at the Clubhouse:

__________

17. How often did you go to the Clubhouse? (Mark one only.)

☐ Daily

☐ Weekly

☐ Monthly

☐ A few times a year
18. Which of these tools did you use at the Clubhouse? (Mark all that apply.)
- Design or graphic software
- Video or animation software
- Website design tools
- Music studio tools
- Game, toy, or robot design tools
- Programming languages (for example, Flash Action Scripts, Scratch, or Pico Crickets)
- 3D model, 3D photograph or 3D movie production software
- Engineering materials

19. Are you using any of the above tools/technology (either professionally or personally) now?
- Yes
- No

19b. Please indicate which ones. (Mark all that apply.)
- Design or graphic software.
- Video or animation software
- Website design tools
- Music studio tools
- Game, toy, or robot design tools.
- Programming languages (for example, Flash Action Scripts, Scratch, or Pico Crickets)
- 3D model, 3D photograph or 3D movie production software.
- Engineering materials
20. *What kind of work do you do to make a living?* *(Check all that apply.)*

- Management (e.g. business executive)
- Business or financial (e.g. banker)
- Computer or math (e.g. programmer)
- Architecture or engineering
- Life, physical or social science (e.g. biologist)
- Community or social service (e.g. social worker, clergy)
- Education, training, or library (e.g. teacher or librarian)
- Arts, design, entertainment, sports, or media
- Health care
- Protective service (law enforcement)
- Food preparation
- Cleaning and maintenance
- Personal care (e.g. massage therapist)
- Sales
- Office or administrative support
- Farming, fishing, or forestry
- Construction
- Installation, maintenance, and repair (e.g. mechanic)
- Production or manufacturing
- Transportation
- Military
- Other

Please specify other:

________________________________________________________________________

________________________________________________________________________
21. Please indicate the last level of education you have completed:
- Elementary/Primary School
- Middle/Junior High School
- High School/Secondary School
- Some University/College
- Associate Degree
- Bachelor’s Degree
- Graduate/Professional Degree

22. If you have additional comments about any aspect of the Clubhouse, please add them here:

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

Thank you very much for your time and responses. Please click "Submit" to close your survey.