



EMPOWERED REPORT 2022

2nd Edition

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THE EMPOWERED REPORT

PREPARED BY:

JEAN AUGUSTINE CENTRE FOR YOUNG WOMEN'S EMPOWERMENT

The Jean Augustine Centre for Young Women's Empowerment (JAC) is a charitable organization located in South Etobicoke, Ontario, Canada that strives to empower girls and young women in the community. Jean Augustine Centre has been supporting girls and women since 2014 through in-person and online after-school programs, camp programs, workshops and events. Additionally, the charity offers services that address food insecurity and hygiene needs of women and girls.

JAC works with various community partners, including the University of Toronto's Community Action Group, to ensure that the charity is continuously working to understand and address the needs of girls and women both nationally and internationally.

We believe that an empowered young woman can improve her life and have a positive impact on the world around her.

COMMUNITY ACTION GROUPS

The University of Toronto's Community Action Groups consist of undergraduate and graduate student volunteers working together to support a local community organization. With weekly meetings, Community Action Groups engage in dialogue related to equity and social justice while completing a final project alongside a local community organization.

The Empowered Report was completed over one-year, during which students researched, composed, and designed this report for the Jean Augustine Centre. Contributing members which designed, edited, and authored the Empowered Report are listed below.

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ABOUT THE JEAN AUGUSTINE CENTRE

OUR MISSION

The Jean Augustine Centre for Young Women's Empowerment is committed to building the self-esteem & self-worth of young women & girls by positively influencing their outlook on life, broadening their horizons, & helping them to empower themselves.

Programming at the Jean Augustine Centre is guided by our four program pillars:

- Empowerment
- Civic Engagement
- Financial Literacy
- and, Academics & STEM.

OUR VISION

To enrich the lives of girls ages 7 to 17 years old through mentorship, empowerment programs & civic engagement with opportunities that place special emphasis on personal development & experiential learning.

OUR VALUES

- **Empowerment:** *Empowerment* is essential for young women and girls to develop the skills, acquire knowledge, information and the resources they need to achieve a high quality of life and optimum health and wellbeing.
- **Mentorship:** *Mentorship* is long term, centered in community and built around relationships between positive adult role models and young women facing challenges in their social, and personal lives.
- **Leadership:** Embodying responsible *Leadership* with integrity, from a shared vision that inspires and motivates, and with the capacity to grow through change and deliver sustainable outcomes, perfects the ability to enable others to greatness.
- **Civic Engagement:** *Civic Engagement* is working to make a difference in communities. It is essential as young women and girls become empowered that they learn the importance of giving back and helping to build thriving communities.



WHY WE CREATED THIS REPORT

As an organization that focuses on empowering young women and girls, our purpose in creating this report was to demonstrate how intervention programs like those offered at the JAC could positively influence girls' sense of self and help them develop into healthy and confident adults. Accordingly, in this edition of the Empowered Report, we endeavor to provide a clearer picture of the impact that intervention programs like STEM, financial literacy, and civic engagement can have on the self-esteem and confidence of young women and girls between the ages of 7-17 in Canada.

Before delving into our findings, it is necessary to clarify what we mean by the terms intervention, self-esteem, and confidence. In the realm of youth empowerment, an **intervention program** is one which aims to empower youth by equipping them with self-efficacy and a sense of agency over their lives (Kar et al. 1999). By **self-esteem**, we refer to an individual's subjective evaluation of their own worth, including, having confidence in one's own worth or abilities. Similarly, we define **confidence** as a feeling of trust in one's own abilities, qualities, and judgment.

Based on findings from similar girls' empowerment programs in Canada and feedback from participants at the JAC, this report assesses the **impact of the following eight areas of programming on the self-esteem and confidence of girls ages 7-17 in Canada:**

1. STEM (Science, Technology, Engineering, and Math)
2. Civic Engagement
3. Leadership
4. Life Skills
5. Financial Literacy
6. Physical Health
7. Mental Health
8. Mentorship and Peer Support

We choose to focus on the above themes as they best correspond to the kinds of programming offered at the JAC and other youth empowerment programs across Canada.



WHY FOCUS ON SELF-ESTEEM AND CONFIDENCE?

Women's advocacy groups, public health bodies, and mental health experts in Canada and across the globe have all raised alarm about the **systemic decline in girls' self-esteem and confidence in adolescence** (Shipman, Kay, and Riley 2018; Canadian Women's Foundation 2017). Mental health experts attribute this drop, in part, to the damaging consequences of girls' increased awareness of the societal expectations for women's behaviour, appearance, and interests (Girls Action Foundation et al. 2013). Consequently, these gendered expectations place undue challenges to girls' wellbeing and capability for achievement (Shute 2018). Indeed, under confidence is consistently blamed for the systemic academic underachievement of girls' in mathematics and the sciences (Paquette 2015).

Empowerment programs targeted towards girls are important precisely because they give girls an outlet to explore their interests without the pressure of gender norms. Empowering young women and girls to feel confident in their skills and to feel hopeful about the opportunities available to them can serve as an important way of enforcing gender equity.

As this report will demonstrate, investing in girls' empowerment programs is an **easy and effective way of promoting gender equality**, as such programs are shown to counteract the negative impact of gender norms on women, such as a lack of confidence (Keleher 2009). In what follows, we examine the impacts of each of the previously mentioned themes on the self-esteem and confidence of female youth in Canada in turn.



S.T.E.M.

Female enrollment in STEM (Science, Technology, Engineering, and Math) fields is perhaps one of the most commonly identified and persistent areas of gender disparity today (Kantrowitz 2022).

The lack of female representation in STEM related jobs is particularly worrying as careers in this field are considered to be the backbone for a country's economic growth and thus constitute one of the most well paid and stable forms of employment (ASME 2020).

Despite a 10% increase in total university enrollment amongst women between 1985 and 2017 (González-Pérez et al. 2020) **women in Canada still comprise less than 25% of the STEM workforce as of 2022** (CNSC 2022).

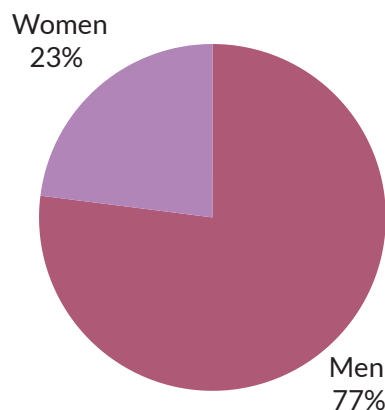
One explanation for the persistent gender gap is an under-developed sense of self-efficacy, or belief in one's ability. As researchers Mary Allison Kanney et al. (2014) attest, self-efficacy is a critical factor for predicting female engagement and persistence in the STEM field.

A PERSISTENT UNDERCONFIDENCE

Studies show young women develop a **lower self-assessment** of STEM-related abilities as a consequence of **negative societal beliefs** concerning women's academic competence (Chan 2022). These stereotypes, in turn, discourage women from pursuing their academic and occupational aspirations (Chan 2022). Interventions which work towards building confidence and support for young girls and women interested in STEM can aid in mitigating the prevalent gender gap.

Thus, this section will focus on current interventions for young girls and women in STEM, and their effects on self-esteem.

Representation of Women Amongst Canadian Science and Technology Workers Ages of 25-64 in 2016



Source: Statistics Canada 2016

COMBATting UNDERREPRESENTATION IN STEM

Research shows that it is essential to start combatting female underrepresentation in STEM from a young age. The findings of a recent study—conducted in 2020—suggest that **a majority of young children have positive attitudes towards science in primary school. However, this interest sharply declines by the age of 14.** This decline was reported to be more rapid in girls, beginning at 11 years of age (Prieto-Rodriguez et al 2020).

One strategy to increase engagement of young girls with STEM is to provide positive female role models. Studies have shown that when presented with strong female role models, young girls are more likely to consider a field or discipline more accessible (Walsh 2006).

The government of Canada has numerous interventions and programs designed to provide girls with female STEM role models and increase women's participation and retention in STEM, including:

- **Natural Sciences and Engineering Research Council of Canada's Chairs for Women in Science and Engineering (González-Pérez et al. 2020)**
- **#ChooseScience, a digital campaign that increases visibility of women in STEM such as Becky Cook, Vicky Tschirhart and Rachade Hmamouchi**



Providing young girls with strong female role models can help encourage girls to pursue STEM and alleviate the gender gap within this field.

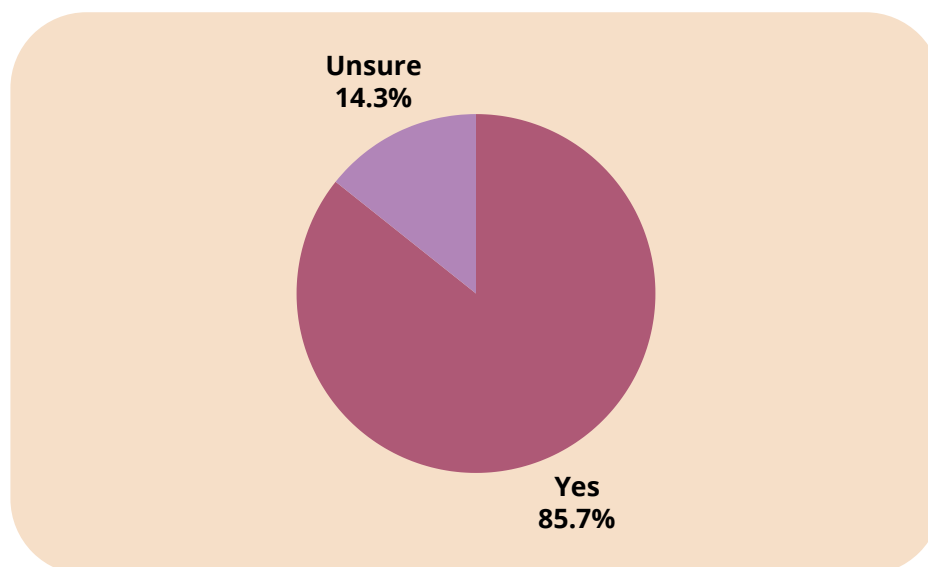
Although there are a variety of interventions (noted above), there is a lack of scientific literature to test the efficacy and/or impact of these interventions on the confidence of young girls and women in STEM.

Results of a survey conducted by the Jean Augustine Centre with girls between the ages of 7-12 and 13-17 from the Etobicoke area, show that the JAC's STEM interventions had a **positive impact** on young girls in terms of building confidence in themselves and future career aspirations.

- **38.9%** of girls ages 7-12 indicated a gain of confidence for prospective career plans
- **85.7%** of respondents 13-17 indicating that the intervention gave confidence for prospective career plans.

If you have ever participated in a STEM program at the JAC, did it give you confidence in your future and career plans?

Ages 13-17



TAKEAWAYS

In order to evaluate future implications with regards to the primary findings, it is necessary to understand the career experiences of female scientists and engineers in the workforce and more importantly, the context of their vocational participation (Walsh 2006).

It can be hypothesized that young girls and women are hesitant to select a career in STEM as a result of deteriorating self-confidence initiated by the presence of barriers such as **microinequities**, **depressed salaries** and, **lack of support**. Furthermore, intervention—as seen in the primary data—has positive impacts in building self-confidence for young girls in STEM. Thus for organizations striving for impactful intervention, there should be more enthusiasm and support in involving young girls.

CIVIC ENGAGEMENT

Civic engagement entails being an **active participant** in addressing public issues and bringing social change, which can foster an orientation towards future participation in social justice at the community and policy level (Brinkman 2016; POWER Camp National 2006). Leadership programs help individuals develop the skills and mindsets to become group leaders.

Research has shown that civic engagement and leadership programs can have positive impacts on confidence and self-esteem among young girls. This is a crucial finding as research shows that many young girls lack confidence in their own abilities.

LEADERSHIP PERCEPTIONS AMONGST CANADIAN GIRLS

A 2019 survey of Canadian girls aged 14-15 revealed that although **80.3%** believed that women have natural leadership qualities, many questioned themselves, as **67.4%** in the same group also occasionally doubt their own leadership abilities (Plan International Canada 2019a).

In contrast, among boys aged 14-15 surveyed, only **56.5%** said that they questioned their own abilities (Plan International Canada 2019b).

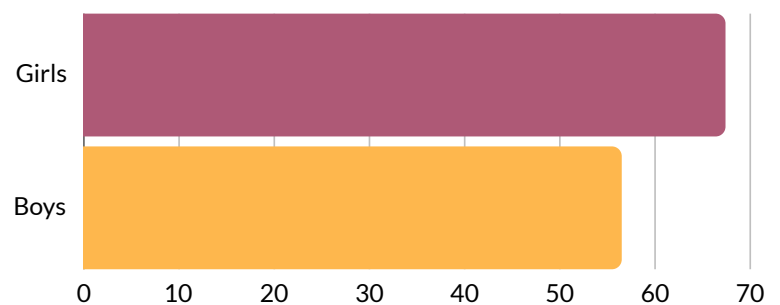
This is demonstrative of a **gap** in girls' confidence towards their own abilities in civic engagement and leadership and demonstrates the potential impact such programming could have.



DID YOU KNOW?

In a 2019 survey of Canadian girls ages 14 and 15, although 80.3% believed that women have natural leadership qualities, 67.4% occasionally doubted their own leadership abilities (Plan International Canada 2019).

Percentage of Canadians Between the Ages 14-15 Who Doubt their Leadership Ability in 2019



Source: Plan International Canada

REFRAMING GIRLS' LEADERSHIP AND CIVIC ENGAGEMENT PERCEPTIONS

Multiple studies corroborate the influence which civic engagement programming can have in empowering girls as seen in **Girls, Activism, and Social Change** (GASC), an American program promoting activism among girls through workshop and speaker activities to foster awareness, new skills, and community engagement (Brinkman 2017).

Interviews with participants before and after the program show that many young women valued activism and even expressed confidence in their abilities before the program, but undergoing training and workshops better equipped them with the skills to shift from passive interest to perceiving their own personal responsibility and capability with acquired tools to act on previous motivations (Brinkman 2017).

Research shows that leadership-specific programs similarly encourage self-esteem and confidence development among young and adolescent girls. In a study of a **non-profit youth leadership** program for high school girls in New York City, researchers Hoyt and Kennedy (2008) aimed to develop girls' leadership skills through mentorship and youth-designed activism projects. In pre-program interviews, many girls expressed views of leadership in traditional terms, particularly, that leaders had to be assertive to lead others, thus discouraging girls who were not particularly outspoken from seeing themselves as potential leaders.

QUICK FACTS

In a survey of ten JAC participants aged 13-17, **60%** of respondents who participated in leadership and civic engagement programming said that out of all the programs, these had the **greatest positive impact** on their self-esteem and confidence.

After completing the program, many girls expressed **greater** confidence in their leadership potential, as the participant-led projects and mentorship taught them that **multiple forms** of leadership exist.

By shifting from perceptions that they had to be fundamentally aggressive to be leaders, towards understandings of more cooperative forms of leadership, such as respect and listening to others' opinions, many girls were led to see how their own strengths could still embody **alternate modes of leadership**.

Many of the girls interviewed found that the program offered a safe space for them as women to trust each other and address their insecurities, leaving them freer to develop their existing skill set.



TAKEAWAYS

As the aforementioned examples show, civic engagement and leadership programs can have distinct positive impacts on self-esteem and confidence in young girls. Girls often have existing civic engagement and leadership perceptions yet lack confidence in their own abilities. Therefore, such programs are important as they **reveal girls' existing potential and foster a greater sense of self-esteem.**

In designing similar programs, **sustained engagement** is an important aspect to consider. Taylor (2014) suggests that self-esteem increases significantly for girls who continue leadership roles after programs, implying that skills training alone does not necessarily increase self-esteem long term. Formal training combined with sustained involvement is more effective and should be considered in program design.

Challenges to girls' participation is another important consideration. A study of girls across major Canadian urban centers indicated perceived barriers, including a lack of encouragement and community belonging, especially for those living in impoverished neighborhoods with "troubled" community images (Dlamini et al. 2015).

Being perceived as "just kids" further impacts participation, as young girls internalize a feeling of powerlessness to influence the community (Valaitis 2002). Such perceptions highlight the need for civic engagement and leadership programs and should be considered when encouraging participation among young girls.

"Girls often have existing civic engagement and leadership perceptions yet lack confidence in their own abilities."

LIFE SKILLS

According to Choudhary and Koushal (2015), **life skills** are those, “abilities that facilitate the physical, mental and emotional wellbeing of an individual”— such as problem solving, critical thinking, and communication (UNODC 2006). While life skills development is important for youth regardless of gender, girls in particular stand to benefit from the development of self-confidence and self-esteem that a life skills program can offer (UNODC 2006). As is well-documented, young women’s confidence tends to decline in adolescence, especially as they begin to internalize gender norms and expectations (Shute 2018). This is concerning as under-confidence prevents girls from pursuing their talents and following their ambitions.

86%

OF GIRLS AGES 13-17 FELT MORE CONFIDENT IN THEIR ABILITIES AFTER PARTICIPATING IN A LIFE SKILLS PROGRAM-SUCH AS SEWING OR COOKING-AT THE JAC.



LIFE SKILLS LEARNING THROUGH SPORTS

Afterschool programs, such as sports, are a promising avenue whereby young girls can develop life skills and circumvent the negative repercussions of underconfidence, as such activities immerse girls in a social environment that requires them to rely on communication and problem-solving skills, along with their self-confidence, to facilitate a positive experience (Pierce et al. 2017).

Using after-school sports as a site of analysis, this section of the report explores how accessible after-school programming can close the gap in life skills development amongst adolescent girls.

THE BENEFITS OF AFTER-SCHOOL PROGRAMS FOR GIRLS

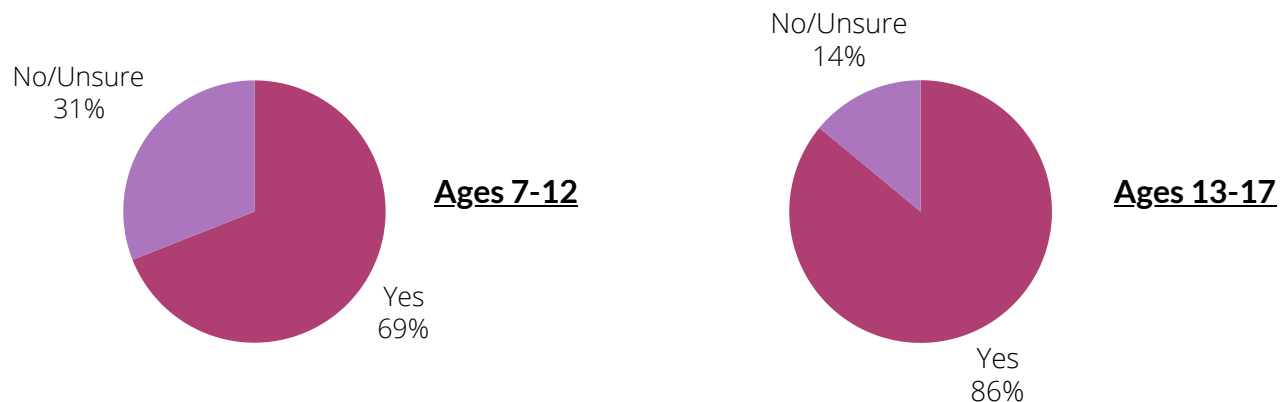
Not only do after-school programs provide an outlet for social development, but researchers have found that the social interactions facilitated during after-school programs are conducive to life skills learning, even in the absence of a direct life skills teaching approach (Pierce, Gould, and Camire 2017).

Furthermore, participation in after-school programs is directly linked to **academic success** and **high self-esteem** in young girls, paving the way to success later on in their lives. Providing young girls with the opportunity for life skills development through after-school programs is important as it aids in fostering behavioural, cognitive and resilience skills (Nasheeda et. al 2019).

According to a set of surveys recently conducted by the Jean Augustine Centre of its life skills program participants:

- 69% of girls ages 7-12 stated that participation in life skills related programming has increased their confidence
- 86% of young women ages 13-17 felt an increase in confidence as a result of their participation in JAC programming, suggesting that after-school programs can be effective in life skills and confidence building when targeted towards adolescent girls

If you have ever participated in a JAC program related to life skills, do you feel that these programs have increased your confidence in the skills you were taught in the class?



In a pilot study on life skills programs in youth, researchers found that healthy development programs are particularly important for females, as girls' access to positive programming are **lacking in comparison** to programs available for boys (Brown and Fry 2014).

Similarly, in a study of weekly youth-based interventions on 6th and 7th grade boys and girls over the course of 8 months, researchers found that female participants reported significantly higher perceptions of self-worth and scholastic competence at the end of the study, and that youth-based programs that take place as little as once a week made a difference in youth's self-perceptions (Brown and Fry 2014).

AFTER-SCHOOL PROGRAM: LIMITATIONS

Although after-school programming for girls is linked to positive life skills development, programs targeted toward this demographic, such as sports, are not only **lacking in availability** but tend to have **lower social value**, thus limiting participation and engagement with such activities. Moreover, a significant barrier to girls' participation in sport is the sociocultural assumption that girls simply lack interest in athletics (Cooky 2009).

For girls of colour or those who reside in low-income neighbourhoods, this is further compounded by **structural barriers** such as:

- lack of **transportation** (Cooky 2009)
- lack of **funds** to pay for registration fees and equipment (Cooky 2009)
- and scheduling that conflicts with **external responsibilities** such as part-time jobs or babysitting (Cooky 2009)



TAKEAWAYS

As a vulnerable demographic, the development of **accessible, barrier-free** after-school programs is critical in providing young girls with the necessary skills to navigate the world beyond adolescence. The assumption that participation is limited due to lack of interest is simply not true; instead, stakeholders should direct attention toward structural barriers that prevent girls from accessing after-school programs in the first place.

In adolescence, young girls' self-perceptions and confidence suffer greatly due to gender stereotypes, but after-school programs are proven to create significant changes in self-esteem and provide a **positive environment** for girls to learn necessary skills they need to navigate life as adults, including problem solving, communication and behavioural skills,

"As a vulnerable demographic, the development of accessible, barrier-free after-school programs is critical in providing young girls with the necessary skills to navigate the world beyond adolescence."

ARTS

The arts, especially visual arts such as drawing, painting, sculpting, printmaking, and photography have long been lauded for their utility as a mode of self-expression. When it comes to young people in specific, previous findings suggest that participation in the arts is correlated to **“higher academic achievement, creativity, fluency,... originality in thinking, and feelings of self-worth.”** (Holloway and LeCompte 2001). Researchers Debra Holloway and Margaret LeCompte (2001) argue that artistic activities provide young people with an accessible and safe outlet for expressing their emotions.

BENEFITS OF THE ARTS FOR GIRLS' SELF ESTEEM

This can have particular relevance for young women and girls, who research has shown struggle with their self-identity and self-confidence as they reach puberty (Holloway and LeCompte 2001). As a result, it is essential that girls have the opportunity to explore different aspects of their identity, especially during the critical period of **10-15 years of age** (Holloway and LeCompte 2001).

According to Holloway and LeCompte (2001), the arts enable young women and girls to:

- discover their **identities**
- strengthen their sense of **voice and agency**
- develop their **artistic skills**
- utilize their **imagination**s
- illustrate their **experiences**
- and, express their **emotions**

As this section continues, it will concentrate on arts-based interventions and programs in an effort to highlight their impacts on the self-esteem and confidence of young women and girls.



"When it comes to young people in specific, previous findings suggest that participation in the arts is correlated to 'higher academic achievement, creativity, fluency,... originality in thinking, and feelings of self-worth' (Holloway and LeCompte 2001)."

OUTCOMES OF GLOBAL, NATIONAL, AND LOCAL ARTS-BASED INTERVENTIONS

THE UNITED KINGDOM

In a 2019 longitudinal study of 11-year-olds in the U.K. for instance, researchers Mak and Fancourt concluded that children who were involved in artistic activities (i.e., painting, drawing, or making things) on most days of the week were statistically more likely to have **higher self-esteem** than those who participated less often.

Using Rosenberg's 10-item self-esteem scale, they found that children's feelings of self-esteem and self-worth were also elevated through creating new works of art since it validated their uniqueness as an individual (Mak and Fancourt 2019). In turn, this promoted a sense of accomplishment and instilled them with confidence in their abilities (Mak and Fancourt 2019).

Interestingly, the authors found that the child's individual ability in the arts had no bearing on their level of self-esteem, rather the child's **engagement** itself was of importance.



CANADA

Additionally, in a three-year study evaluating a national community-based arts program across five areas of Canada, researchers found that participants, majority of whom were female, experienced a marked improvement to their confidence levels following program completion (Wright et al. 2006).

The study involved 183 young people between the ages of 9 and 15 engaging in various art activities for nine months, including, but not limited to (Wright et al. 2006):

- mask-making
- set design
- painting

In terms of emotional problems (i.e., unhappiness, anxiety, and depression), the program participants demonstrated a slightly lower score of 2.47 than the control group 2.52 on an 8-item scale (Wright et al. 2006). The authors found that these children experienced **higher confidence levels, enhanced art skills, better prosocial skills,** and **greater conflict resolution skills** (Wright et al 2006).

ETOBICOKE

Furthermore, in a survey conducted by the Jean Augustine Centre where 28 girls aged 7-12 were asked on a scale of 1-5 to indicate how much their self-esteem had improved since participating in JAC arts and crafts programs:

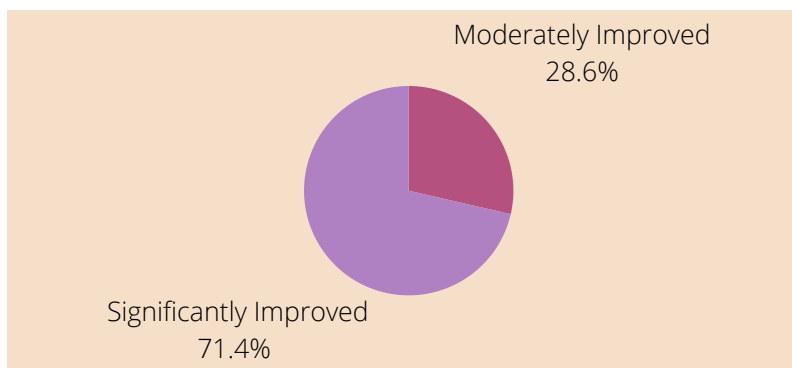
- **78.6%** of the girls self-reported that their self-esteem significantly improved
- **17.9%** revealed that their self-esteem moderately improved

In a second survey, 7 girls aged 13-17 were asked the same question. The results concluded that all the girls exhibited improved levels of self-esteem with:

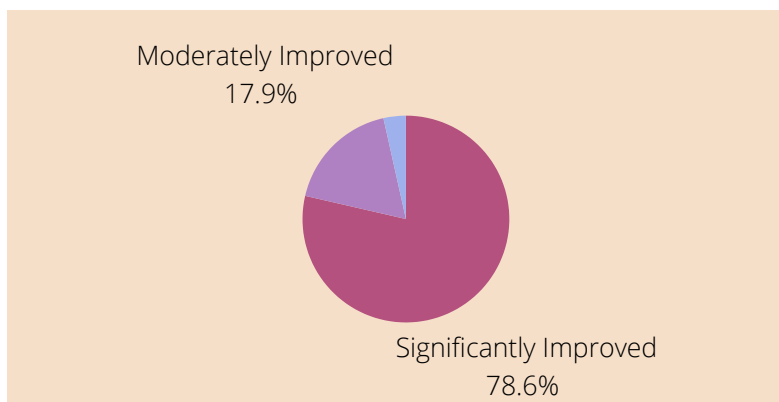
- **28.6%** of the girls rating a 4
- **71.4%** rating a 5 on the scale

If you have ever participated in an arts and crafts program at the JAC, please rate on a scale of 1-5 how much your self-esteem has improved since participating in any of these programs.

Ages 7-12



Ages 13-17



TAKEAWAYS

Being engaged in arts programming has been shown to make positive contributions to the well-being of young girls and children by (Fanian et al 2015):

- reducing anxiety and stress,
- improving one's mood,
- increasing self-awareness,
- boosting feelings of self-esteem and self-worth
- elevating one's sense of identity

In order to increase involvement in such programs, it is crucial that barriers inhibiting participation are removed and that organizations actively recruit participants with the intention of making arts-based programming accessible to all girls everywhere (Wright et al 2006).

FINANCIAL LITERACY

Financial literacy refers to one's knowledge of personal finance, and the ability to use financial information to achieve financial well-being.

It is an important skill associated with positive financial outcomes such as **higher household wealth, lower financial stress, greater retirement savings, and greater economic participation**.

Conversely, inadequate financial knowledge can contribute to poor retirement planning, increased indebtedness, and a lack of participation in income generation and growth.

Although financial literacy is considered a fundamental skill for all members of society, it is of particular importance for women (OECD, 2013).

Women generally have longer lifespans, spending a greater number of years in retirement and therefore requiring greater retirement savings. Women also tend to have discontinuous careers arising from factors such as child-rearing. While in their careers, women are more likely to earn less than male counterparts, placing them at risk for higher levels of indebtedness (OECD 2013).

THE IMPORTANCE OF FINANCIAL LITERACY FOR WOMEN

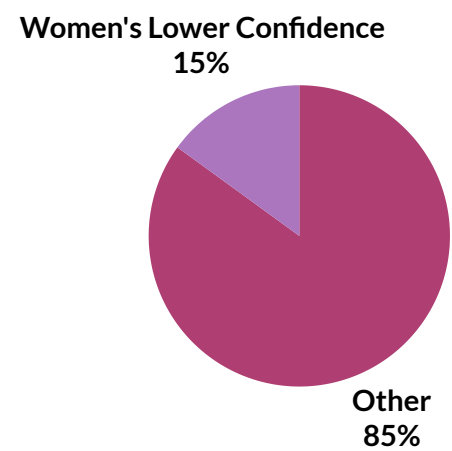
These factors make it especially crucial that women have adequate financial knowledge to confidently execute financial decisions that safeguard their futures. Despite these heightened financial requirements of women, there is clear evidence of a **financial literacy gender gap**. The remainder of this section will discuss the gender gap in financial literacy and outline the importance of financial literacy initiatives to empower young women and girls in their financial well-being and life-long economic participation.

WOMEN AND FINANCIAL LITERACY: THE FACTS

The OECD – of which Canada is a member nation – released a comprehensive report on women's financial literacy in 2013. This report stated that women display lower financial knowledge than men in many developed and developing countries (OECD 2013).

According to the report, young women, who are not as well-educated and come from **low-income backgrounds**, are most lacking in financial knowledge. Analysis of a 2009 Canadian Financial Capability Survey corroborates that Canadian women have less financial knowledge than men (Arrowsmith 2010).

Causal Factors Related to the Financial Literacy Gender Gap



Source: Fonseca and Lord 2019

UNDERSTANDING THE GENDER GAP IN FINANCIAL LITERACY

One explanation for the financial literacy gender gap is the subjective attitudes of women and female youth towards financial topics.

A recent study found that almost **15%** of the financial literacy gender gap can be explained by women's lower confidence towards financial matters (Fonseca and Lord 2019). Female high school students see themselves as less "interested" in financial matters and report lower self-knowledge than their male counterparts (Lührmann, Serra-Garcia, and Winter 2015). Low financial literacy in youth has been shown to persist throughout the life cycle (Annamaria Lusardi and Mitchell 2008; A. Lusardi, Michaud, and Mitchell 2013). This trend of low self-esteem and disinterest continues as girls transition to adulthood, contributing to a **financial literacy gender gap** that **widens with age**.

The implications of lower levels of financial knowledge and confidence in women are believed to contribute to less willingness to deal with financial issues and participate in investment opportunities for income generation.

This is consistent with findings that men are **more likely** than women to:

- hold **investment products** (Atkinson and Messy 2012)
- have **retirement savings plans** (Hui and Leckie 2011)
- report **higher asset values** than women of the same age (Hui and Leckie 2011)

These findings point to a clear need to focus on increasing financial literacy in girls and female youth to promote self-esteem and close the financial literacy gap in adulthood.

BENEFITS OF FINANCIAL LITERACY INTERVENTIONS

To boost self-confidence and promote early life engagement with financial topics in girls and female youth, non-curriculum financial literacy programs, such as those offered by the JAC, are invaluable initiatives. This is evident from preliminary findings of an ongoing longitudinal study by Park et al. who are investigating short- and long-term outcomes of the Invest in Girls (IIG) financial literacy program targeted at female students from 12 high schools located in the USA (total of 1010 participants).

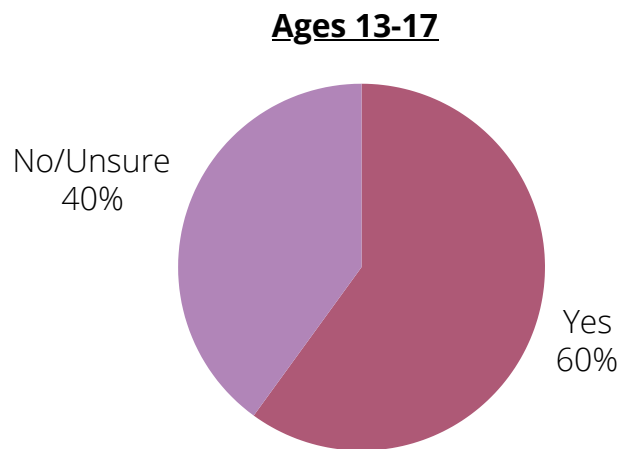
The early data indicates that the female participants in this program derive a myriad of benefits (Park et al. 2021). These benefits include an **increase** in their objective financial knowledge - such as being able to assess credit card debt risk. The participants also display a greater ability to **articulate financial concepts**, and greater likelihood of adopting a **personal budget** and **college savings plan**. Of particular note, participants of the study self-reported higher confidence in engaging with financial topics.



This corresponds with JAC survey findings in which **60%** of respondents (young women between the ages of 13 and 17) reported higher levels of self-confidence in their financial decision-making following completion of JAC financial literacy programs.

Surprisingly, the Park study also found that IIG participants expressed interest in learning more about finance in the future. In fact, the increased engagement with financial topics has actually led to a greater proportion of IIG participants pursuing post-secondary educational programs related to financial disciplines compared to control cohorts.

If you have ever participated in a financial literacy program at the JAC, do you feel that it has made you more confident in your ability to make good financial decisions?



TAKEAWAYS

Repeated studies have shown a gender gap in financial literacy that is believed to start in young adulthood and expand over time. Women from **low-income** and **low-education** backgrounds appear to be particularly vulnerable to a lack of financial literacy. This is of concern as low financial literacy is correlated with poor financial outcomes. Lower confidence in financial matters is believed to contribute to this gender disparity and represents a clear target in efforts to eliminate it.

Financial literacy programs targeted to female youth and young girls have been shown to be effective in increasing self-confidence in financial decision-making and engagement with financial topics. Our hope is that more financial education programs that focus on girls become available to underserved populations and contribute to empowering and helping young women prepare for their futures.

MENTAL HEALTH

According to the Canadian Mental Health Association (2021), **mental health** refers to the general state of wellbeing of our thoughts and emotions, our connections to others, and the possession of mental and emotional resilience to deal with life's challenges. Poor mental health has a variety of negative outcomes, including, but not limited to the development of mental illness.

Widespread consensus amongst mental health professionals indicates that the mental health of girls and young women faces significant challenges in the form of **poor body image, disordered eating, and depressive symptoms** (Tirlea, Truby, and Haines 2013; McPhie and Rawana 2012). Indeed, the 2019 Ontario Student Drug Use and Health Survey, which surveys students from grades 7-12, attests to the **disproportionately negative** mental health impacts experienced by girls in Canada.

Encouragingly though, experts have suggested that high self-esteem can be an important protective factor against the development of mental health problems that overwhelmingly affect girls (Tirlea, Truby, and Haines 2013).

IMPROVING GIRLS' MENTAL HEALTH

Several studies have examined the impact of mental health promoting youth initiatives, particularly those that target girls. Often, the secondary goals of such programs are increased self-esteem and positive body image.

In a 2011 study of Canadian preadolescents, a school-based body image and self-esteem intervention program depicted encouraging results on the self-esteem of girls ages 10 and 11. Through a week-long intervention involving interactive workshops based on media literacy, communication skills, and building awareness of individual uniqueness, the program successfully **reduced girls' tendency to compare themselves to the societal ideal of thinness** (Norwood et al. 2011).

DID YOU KNOW?

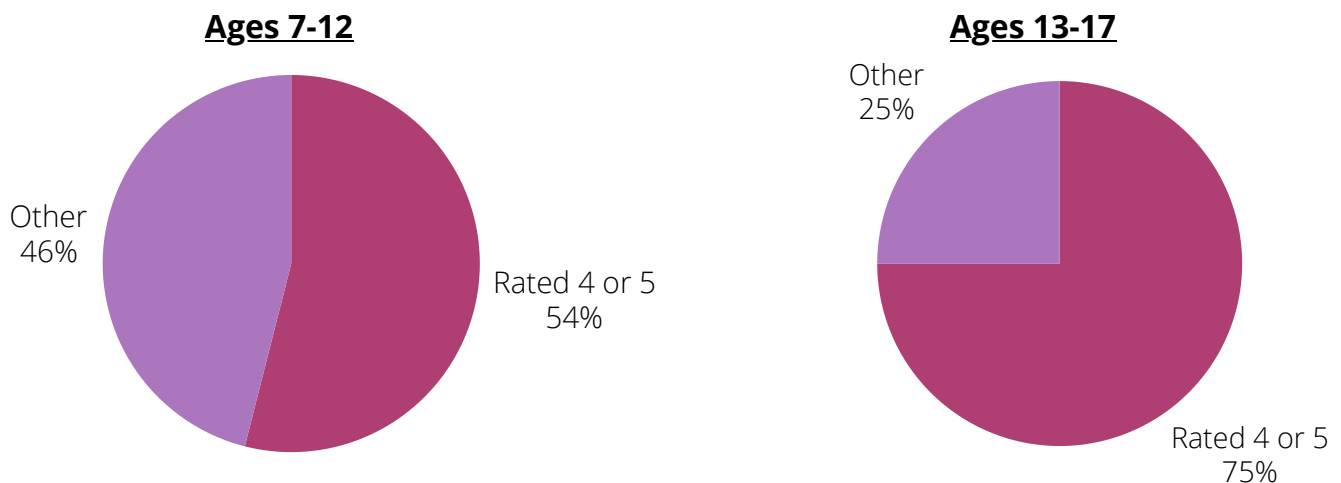
Compared to their male counterparts, female students in Ontario were **more likely** to indicate challenges to their mental health, including a greater likelihood of being prescribed medication for depression and anxiety, suffering from low self-esteem, and rating their mental health as fair or poor (Centre for Addiction and Mental Health 2019).

MENTAL HEALTH INTERVENTIONS: OUTCOMES

In a similar study conducted in Australia, researchers found a significant increase in participants' self-esteem and self-efficacy (i.e. belief in one's abilities) up to six months following program participation, a finding that remained consistent between the two age groups, girls ages 10-13 and 13-16 (Tirlea, Truby, and Haines 2013). The study's results are particularly encouraging for the Canadian context as program participants largely hailed from racially diverse backgrounds.

Within the Jean Augustine Centre's own mental health programming, more than half of girls ages 7-12 who participated in mental health after-school programs or workshops at the JAC affirmed that these programs had made a difference in their self-esteem and confidence levels, with **44%** reporting that they had made "a big difference." Amongst girls 13 to 17, **half of respondents** indicated that JAC's mental health programs made a "big difference" to their self-esteem and confidence.

If you have ever participated in a JAC program related to mental health and well-being, please rate on a scale of 1-5 (5=big difference) how much of an impact you feel any of these programs have made on your self-esteem and confidence?



TAKEAWAYS

In terms of girls' mental health, self-esteem is widely considered a **protective factor** against a host of negative mental health issues including poor body image, disordered eating and depressive symptoms. However, in contrast to their male counterparts, girls are disproportionately affected by low self-esteem as they enter adolescence.

Intervention programs that target the mental wellbeing of girls and young women have been shown to have a **positive effect** on self-esteem development, as experts suggest that improving mental health in girls requires initiatives that promote self-esteem.

PHYSICAL HEALTH

Within the past year, considerable evidence has suggested that young people in Canada are not getting the recommended amount of exercise for their age group (Ponticelli 2020; Jones 2021). In their most recent annual report in 2020, ParticipACTION, a Canadian non-profit which advocates for increased physical activity amongst Canadians, found that the **majority of Canadian youth and children** were not meeting the **minimum standards** for daily physical movement and activity.

Girls in particular seem to be **less physically active** than boys in most or all age brackets (Statistics Canada 2016). Indeed, there appears to be a distinct gendered disparity in sports participation and physical activity in Canadian youth (BC Centre of Excellence for Women's Health 2014).

THE FITNESS DISCREPANCY

While there are several factors that may influence girls' level of physical activity, Dr. Holly Gooding, an adolescent health specialist at Harvard University, suggests that the differing cultural messaging is to blame for the discrepancy (Watson 2018). Unlike with boys, there is **less of a societal expectation** for girls to devote time to exercise or to be physically active when they spend time with friends, according to Gooding (Watson 2018).

These wavering levels of physical movement amongst Canadian girls and young women have concerning implications, not only because of the necessity of movement for physical health, but for emotional and mental wellbeing as well (ParticipACTION 2020). Helpfully, multiple studies within the adolescent physical health literature identify **improved self-esteem** as an outcome of organized sports and physical activity participation amongst girls and young women in the U.S. and beyond.



PHYSICAL ACTIVITY INTERVENTIONS: OUTCOMES

1. ALLEVIATING MENTAL HEALTH CONCERNS

The positive correlation between physical activity and self-esteem is well-documented in the adolescent health literature (Birgisdóttir 2017; ParticipACTION 2020; Liu, Wu, and Ming 2015). In a 2012 study, for instance, researchers confirmed that self-esteem was a **mediating factor** in lowering depressive symptoms in girls who were physically active (McPhie and Rawana 2012).



2. IMPROVING SELF-CONCEPT

Similarly, a 2009 study attests to the **positive** impact that children's sport participation can have on their self-esteem. The authors suggest that this may be because children's self-esteem is built on their perceived competence in different areas of life, including sports, academics, and social interaction (Slutzky and Simpkins 2009).

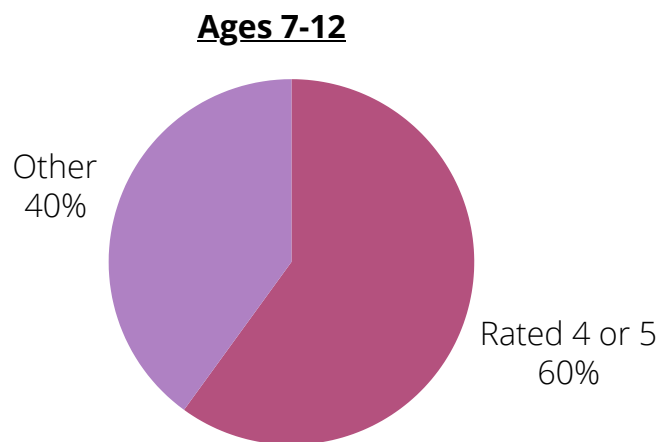
Physical activity interventions have also been shown to be effective in counteracting the negative effects of **physical inactivity** and **promote empowerment** amongst girls and young women (Liu, Wu, and Ming 2015; Birgisdóttir 2017). In particular, it was found that interventions which focused on physical activity alone (as opposed to those that combined physical activity with other skills) were indeed **effective** in improving the self-worth and self-concept (i.e., an individual's view of themselves) of children and adolescents (Liu, Wu, and Ming 2015). This effect was most pronounced in interventions that took place in a gymnasium or school setting, rather than in a clinic or amongst family (Liu, Wu, and Ming 2015).

Similarly, a simple and brief three week long intervention, in which participants were educated on the benefits of physical movement and encouraged to pay closer attention to their daily step count, promisingly increased the self-esteem of girls in a study of Icelandic adolescents (Birgisdóttir 2017).

Within the JAC's own physical activity programming,

- **59%** of girls ages **7-12** who had participated in physical activity programs like martial arts or dance through the JAC attested to the positive impact of such initiatives on their self-esteem and confidence.
- Amongst older girls ages **13-17**, there was **consensus** that physical activity programs made a difference on their self-esteem and confidence.

If you have ever participated in a JAC program related to physical health, please rate on a scale of 1-5 (5= a big difference) how much of an impact you feel any of these programs have made on your self-esteem and confidence.



TAKEAWAYS

Partly due to gender norms surrounding exercise, female youth are at-risk for **failing to remain physically active**. This is concerning as there is substantial consensus amongst researchers that increased physical activity is positively associated with self-esteem amongst adolescents and children, which is critical to their overall wellbeing.

Girls in late adolescence tend to have **lower self-esteem** than their male counterparts. Thus, alongside its many other mental and physical benefits, exercise is an **efficient** and **cost-effective** way of preventing the negative ramifications of compromised self-esteem including issues like body dissatisfaction and eating disorders (Liu, Wu, and Ming 2015). Physical activity interventions have demonstrated promising results on the self-esteem of girls in Europe and North America ranging from as young as 3 years old up to those as old as 20 (Liu, Wu, and Ming 2015; Birgisdottir 2017).

MENTORSHIP & PEER SUPPORT

Establishing strong and positive social connections with friends, peers and role models is a crucial factor which contributes to girls' self-esteem and confidence. Specifically, relationships in the form of mentorship and peer support help young girls navigate their personal, academic and professional growth.

Mentorship entails a structured or unstructured relationship between two individuals in which one (mentor) shares their life experience with the other (mentee), allowing the second individual to benefit from the advice of a role model.

Peer support entails emotional or professional guidance provided by others who are often similar in age or life experiences. Analysis of a number of previous mentorship programs reveals critical benefits but also key factors that must be considered to minimize potential risks of poor mentorship and peer support infrastructures (Wheeler 2010; DuBois 2011; Chen 2011; Highley 2014).

MENTORSHIP & PEER SUPPORT PROGRAMS

Girl Zone launched a mentorship program in Sweden between 2010 - 2012 between young girls and women which aimed to prioritize mental health and promote healthy living by strengthening young women's self-esteem (Larsson 2016).

Through surveys and structured interviews, it was found that participants in the program appreciated the attention given to them by the organization and their mentor; the chance to talk with someone who would **actively listen** in order to help them handle circumstances in life was a key benefit.

Establishing this level of trust was critical and more importantly, mentors did not instruct or direct their mentees towards a particular course of action. Instead, by encouraging the mentee to reflect on their feelings and thoughts through distinct questions, the program helped mentees **gain self-confidence** while being **guided by a person they trusted**. Mentors provided suggestions by sharing their own experiences and this further built on the foundation of trust.

"[...]By encouraging the mentee to reflect on their feelings and thoughts through distinct questions, the program helped mentees gain self-confidence while being guided by a person they trusted."

THE LINK BETWEEN PEER SUPPORT, MENTORSHIP, AND SELF-ESTEEM

Beyond this specific program, two meta-analysis studies on various mentorship programming found that mentorship had positive effects on self-esteem and perception of academic abilities (Wheeler 2010; DuBois 2011). Through assessment of over 70 mentoring programs for children and adolescents, the researchers found overwhelming evidence of these programs leading to improvements in self-esteem and social behavior.

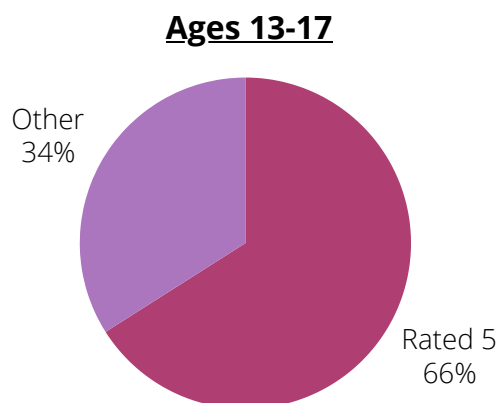
Additionally, there are positive correlations made between peer support and perception of one's academic ability which indirectly led to positive impacts on self-esteem. Specifically, engaging girls aged 10-15 in STEM activities illustrated the potential for positive peer support and guidance from older students on their perception of academic potential. After-school programming with hands-on STEM-related activities led by female mentors resulted in program participants demonstrating improvement in STEM subjects in school (Chen 2011).

MENTORSHIP: IMPORTANT CONSIDERATIONS

Despite these benefits, there are important considerations that must be accounted for when establishing mentorship programs. Most importantly, ideal mentorship relationships last for **at least 1 year**. Mentorship matches that last for less than 6 months can lead to feelings of distress and abandonment for youth, particularly youth belonging to a vulnerable, at-risk population (Higley 2014).

In addition to adequate duration, it is also important to ensure **strong relationship intensity** and **quality**. Regarding the former, frequent interactions were found to be ideal, allowing for the mentor-mentee relationship to grow while providing both parties space to reflect on the relationship during times apart. Ensuring relationship quality entails a thorough onboarding and training process in place for mentors.

On a scale of 1-5 (5 = significantly), how much has participating in a mentorship or peer support program at the JAC improved your self-esteem/confidence?



RESULTS FROM JAC'S PROGRAMS

JAC's own Peer Tutoring program reflected similar benefits of peer support. A survey of 9 participants aged 13-17 who participated in peer support programming, reported that on a scale from 1-5, **66%** of respondents thought that these programs "significantly" improved their self-esteem.

Similarly, amongst 12 girls aged 7-12, **58%** also reported a significant change in their self-esteem as a result of JAC's peer support programs with the remaining **42%** attesting a "somewhat significant" improvement.

Notably, this survey showed that girls aged 13-17 used more of the peer support services than girls aged 7-12. Therefore, it may be possible that girls in their adolescent years may benefit more from mentorship and peer support given the significant influence of personal relationships during this time on self-esteem.

TAKEAWAYS

Ultimately, both mentorship and peer support can have positive effects on young girls' self-esteem. Peer support allows girls to share concerns with others and build relationships that can result in positive effects on self-confidence. It is critical however, to ensure well-developed mentorship infrastructures are in place before initiating these relationships. Specifically, expectations about mentorship programs, adequate duration of interaction and relevant training is required.

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