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RESEARCH ARTICLE

# Pathways to Empowerment: A Qualitative Exploration of the Effects of Income Generating Activities on Economic and Contraceptive Empowerment and Decision-Making among Adolescent Girls in Nigeria

[version 1; peer review: awaiting peer review]

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## Open Peer Review

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## Abstract

### Background

Economic empowerment interventions are a promising approach to address the lack of agency, confidence, and opportunities among adolescent girls in sub-Saharan Africa. The Adolescents 360 project implemented such an intervention in Kaduna and Ogun states, Nigeria (2022–2023), combining business mentorship with vocational, soft skills, and sexual and reproductive health education. This study explored the effects of girls' income-generating activities (IGAs) on their empowerment and decision-making abilities.

### Methods

This cross-sectional study included 30 in-depth interviews with adolescent program participants (aged 15–19) and 17 key informant interviews with mentors and facilitators. Thematic analysis was

conducted through two rounds of inductive and deductive coding to generate primary themes.

## Results

All participants launched an IGA using the skills gained from the intervention, often building on pre-existing interests. Family support, particularly from husbands in Kaduna and mothers in Ogun, was critical for initiating and sustaining IGAs. Through their IGAs, girls increased their savings, enhanced their purchasing power, and gained greater control over personal financial decisions. This autonomy allowed them to pursue their educational and financial goals. Participants also recognized contraception as a tool to delay or space childbirth, thus supporting their ability to generate income.

## Conclusion

With program support and family engagement, girls developed IGAs aligned with their passions and viewed themselves as economic actors. The opportunity to earn income encouraged them to save, reinvest in their businesses, and pursue goals. Programs that integrate skill-building, saving opportunities, and family engagement can create enabling environments for girls to strengthen their agency and economic prospects.

## Keywords

Adolescent Girls, Nigeria, Economic Empowerment, SRHR, Income Generating Activities, Goal Setting, Decision Making

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## Introduction

There are 1.3 billion adolescents aged 10-19 years old alive today, approximately 20% of whom live in sub-Saharan Africa (UNICEF, 2024). Adolescence is a critical transition period that involves both risks and opportunities. The vibrant and rapid changes that accompany this phase of life provide opportunities to intervene and support young people in developing into healthy, productive, and happy adults (Dahl & Suleiman, 2017). Despite enormous improvements in the health, education, and general well-being of children and adolescents over the last few decades, this progress has been unequal. Adolescent girls are disadvantaged in nearly every measure of well-being when compared to their male peers. Girls are less likely to complete secondary school, more likely to be restricted in their movements, at a higher risk for intimate partner violence, and experience lower perceptions of their own self-worth (The World Bank, n.d.). This lack of equality is troubling both because it deprives girls of their inherent right to choose how to live their own lives and because it harms the communities and countries in which they live. Greater gender inequality contributes to lower productivity and slows the progress of other key developmental outcomes (The World Bank, 2011).

In Nigeria, as in many countries around the world, adolescent girls' choices and future outcomes are limited by differences between men and women in access to resources, as well as social and cultural norms that drive gendered roles. These differences influence the preferences and expectations regarding how girls spend their time (Chakravarty et al., 2017). Given Nigeria's size and diversity, adolescent girls' experiences vary greatly from region to region. In northern Nigeria, many adolescent girls have low educational attainment, marry early, and become pregnant before their eighteenth birthday. For instance, in Kaduna state, half of the girls are married before 17 years of age and half have given birth before their nineteenth birthday (National Population Commission (NPC) & ICF, 2019). In southern Nigeria, child marriages and school dropouts are relatively infrequent. By contrast, adolescent girls experience a heightened risk of violence and encounter restrictions from negative gender and social norms. In Ogun state, over 50% of women have experienced physical violence, and fewer than half of married women can decide how to spend their own earnings (NPC & ICF, 2019).

Empowering adolescent girls economically is one way to challenge these differences and activate their potential. Empowerment can be defined as "the process by which those who have been denied the ability to make strategic life choices acquire such an ability" (Kabeer, 1999). This includes two elements: the idea that empowerment, since it relates to a process, inherently requires change, and the centrality of agency – the ability of individuals to make strategic choices in line with their own interests and needs (Espinoza Revollo & Ogando Portela, 2019). Economic empowerment can then be understood as a process 'whereby women and girls experience transformation in power, agency, and economic advancement' (Pereznieto & Taylor, 2014). There are calls to ensure that this work goes beyond individual-level efforts to improve income and address systematic changes made in partnership with women and girls, so that they can exercise their economic power in ways that matter to them (Rizvi, 2023).

There is a growing body of evidence regarding what works to empower adolescent girls. One essential component is to strengthen girls' skills across a range of domains. These include foundational (basic literacy and numeracy, socio-emotional), technical (vocational training), and business skills (budgeting, marketing, and planning) (Chakravarty et al., 2017). A systematic review examining the effects of vocational training to improve women's labor market outcomes in LMICs found that vocational training has small, positive effects that increase when a gender focus is included. The same review showed that increases in earnings are larger in programs that include life skills training or internships (Chinen et al., 2017). Gendered constraints often hinder girls' ability to participate in programs not uniquely designed to address their needs. For instance, girls may need long-term support; help balancing the responsibilities of childcare and home duties; changes in policy that improve their access to land, capital, and markets; and shifts in cultural and social norms to normalize their status as economic actors (Mayoux, 2001).

Given this complex interplay of challenges, the most promising interventions are those that address multiple constraints simultaneously (Chakravarty et al., 2017). For example, BRAC's Empowerment and Livelihood of Adolescents (ELA) program in Uganda hosted community-based girls' clubs that offered life skills, vocational training, financial literacy, and access to savings and microfinance to young women aged 12-25 (Bandiera et al., 2018). An evaluation of this program found that, after two years, the intervention improved the likelihood that girls engaged in income-generating activities and improved their expenditure on consumer goods. Many of these combined programs move beyond the economic sphere and offer integrated programming to address girls' needs across additional dimensions such as health and education. A review of impact evaluations of community-based girls' groups from LMICs found that the interventions resulted in positive effects on individual-level outcomes, such as improvements in attitudes and beliefs about gender and health, improvements in economic and psychosocial assets, and increases in knowledge and awareness (Temin & Heck, 2020). An evidence review examining combined interventions noted that such programs can lead to positive changes in domains that reinforce girls' economic advancement, such as improvements in sexual and reproductive health (SRH), expansion of

social networks, increases in self-esteem, and the development of more gender-egalitarian attitudes (Stavropoulou, 2018). However, there is a limited understanding of how comprehensive programs work and how program elements influence specific constraints (Chakravarty et al., 2017).

This study analyzes qualitative data from an effectiveness evaluation of a combined economic and SRH intervention for adolescent girls in Nigeria. We explored, from the perspective of program participants and staff, the experiences of engaging in income-generating activities and their influence on girls' decision-making, sense of economic empowerment, and perspectives on contraceptive use.

### Intervention description

This study was undertaken as part of the Adolescents 360 project, which aims to increase the demand for and voluntary use of modern contraception among adolescent girls aged 15–19 years. The economic empowerment intervention was implemented between 2022–2023 in Kaduna and Ogun states and was built on the existing SRH program. Each geography has a branded and tailored approach to increasing contraceptive demand and services among adolescent girls. In Kaduna, *Matasa Matan Arewa (MMA)* is exclusively for married girls, while in Ogun, *9ja Girls* primarily serves unmarried girls (Coppola et al., 2021; Phillips et al., 2020). Participants' first contact with the program was through the SRH component. In Ogun the component consisted of four sessions called Life, Love and Health (LLH) classes covering menstrual hygiene, pregnancy, sexual and reproductive health and rights, negotiation skills, decision-making, and goal setting. In Kaduna, the curriculum for the four sessions, called Life, Family and Health (LFH) classes, also included personal hygiene and sexual health, as well as improving family nutrition, interpersonal skills, and effective communication. In both geographies, girls were offered one-on-one sessions with health providers to discuss their individual contraceptive preferences. The economic empowerment (EE) component included six business upskilling group sessions of approximately 90 minutes each, in which girls identified their strengths, set goals for the future, and received basic business training. Girls then chose up to two vocational skills, one that was quick to master, such as soap-making, and one that required more time, such as tailoring or catering, to learn through apprenticeship (Ogun) or vocational training centers (Kaduna). Vocational training lasted four to five weeks, depending on the skill selected. Girls opted to learn a variety of trades, including catering, hair and makeup, poultry and fish farming, shoemaking, and photography. During and after vocational training, adolescent girls were provided with a mentor who offered support for developing and executing a business plan. The program culminated in a large public graduation ceremony that doubled as a marketplace for adolescent girls to display products and services from their newly gained skills. Additional details regarding the intervention are available elsewhere (Cutherell et al., 2023).

## Materials and methods

### Study design

We employed a cross-sectional design, consisting of in-depth interviews. The study involved 30 adolescent girls (15 from Kaduna and 15 from Ogun) who participated in the EE component of these interventions. Additionally, six mentors and 11 facilitators responsible for teaching the curriculum for EE components or providing entrepreneurial mentorship were interviewed as key informants. (Additional information on survey participants, as well as mentor and facilitator job descriptions are available as extended data).

### Study location

Participants were drawn from seven primary health centers (four in Kaduna and three in Ogun) in Zaria, Sabon Gari, and Ado Odo Ota local government areas, where the EE components were implemented.

### Sampling and participant selection

The study participants were married and unmarried adolescent girls 15–19 years. Participants from Kaduna were exclusively married adolescent girls, whereas those from Ogun were primarily unmarried girls. Adolescent girls were eligible to participate in this study if they participated in the EE component. Participants also received the SRH intervention component of MMA or 9ja Girls. Thirty participants were randomly selected from a list of 1,057 participants who participated in a larger quantitative study using a randomizer applied separately for each state. Once randomly selected participants were contacted, they were asked whether they were willing to participate in the qualitative interview. The 17 key informants included 11 facilitators (four in Ogun and seven in Kaduna) and six mentors (two in Ogun and four in Kaduna) involved in delivering the intervention, who were selected among 74 potential participants through purposive sampling.

### Data collection procedures

Interviews were conducted between 23<sup>rd</sup> May and 30<sup>th</sup> June 30, 2022, in spaces that conferred auditory and visual privacy in the seven health facilities that were linked with the EE intervention. Trained interviewers approached selected girls

individually and confirmed their interest in participating in the interviews. The interviewers obtained informed consent and proceeded to perform the interviews. Interviews lasted 45-90 minutes and were audio-recorded.

### Data analysis

Recordings from the interviews were transcribed verbatim and translated (for those conducted in Hausa) into MS word files. The generated transcripts were proofread for errors and then de-identified. These transcripts were then uploaded to Dedoose software, which was used for analysis. Coding was conducted through two rounds of a collaborative process using a thematic analysis. The first round utilized deductive/inductive coding, where an initial codebook was generated based on the structure of the interview facilitation guide, and coders added emerging themes as they went through the transcripts. In round one, each transcript was coded once. After round one, an all-coder review meeting was held to review the findings and develop a new codebook based on the identification of priority themes among coders. Round two utilized a deductive process, in which each transcript was coded twice by two different coders using the updated codebook. To ensure inter-coder reliability, each pair of coding partners reviewed their codes and established a consensus. After round two, another all-coder review meeting was held to define the final thematic structure.

### Ethical considerations

This study was approved by the PSI Research Ethics Board (approval number 09.2022), Nigeria National Health Research Committee (approval number NHREC/01/01/2007-06/05/2022), and State Health Research Ethics Committees of Ogun (approval number HPRS/381/455) and Kaduna (approval number MOH/ADM/744/VOL.1/926). Informed consent was obtained from all participants, and participation was voluntary. Participants were read an informed consent script and asked to sign a consent declaration acknowledging their willingness to participate in the study. The legal age of consent in Nigeria is 18, with exceptions made for married adolescents who are considered emancipated minors. In Ogun, the study team was granted a waiver by the ethical review boards for parental consent of minors because of the sensitivity of the topics being discussed. Girls 15-17 and emancipated minors followed the same consent procedures as those over 18.

### Results

#### All program participants established an income-generating activity (IGA)

All participants started income-generating activities (IGA). The types of IGAs established were largely aligned with traditional gender roles and included activities such as soap-making, raising chicken, tailoring, and catering. A few participants engaged in non-traditional IGAs, such as one Kaduna participant, who made shoes.

In Ogun, the choice of the IGA tended to be based on existing skills or interests. Participants were generally brief in describing their IGA, but some described choosing a traditional skill for which they had pre-existing passion.

*“I was able to begin [hair dressing] because I already know how to plait hair. Then I advertise to people that whenever they want to make their hair they should come to me. Then I start making it for people” [Participant #20, Ogun]*

*“...to become a fashion designer because I have passion for it. That’s why I learnt it.” [Participant #17, Ogun]*

Comparatively, Kaduna participants tended to consider market factors such as which business would perform better in more nuanced ways.

*“...when I came here, I realized that the poultry business is better than selling tiger nuts. I will rather buy cartons of chickens, keep and rear them and when I get any buyers and the poultry business is moving. People say I sell the chickens cheap but I told them it is better I give them out in a cheaper rate so that people will come and pick them quickly.” [Participant #15, Kaduna]*

*“From the beginning I sat and thought about what business to start and what my community’s needs are. For the business to venture into, I had to look deeply into what is being sold around and what isn’t sold, then I sat down and made a plan on what to buy and what not to buy, gradually as I started, I was able to achieve my goal on starting a saving.” [Participant #4, Kaduna]*

#### IGA success factors: vocational skills and familial support

##### Vocational skills

The participants reflected on the role of the EE program in their ability to start an IGA. They attributed their early success to the vocational skills they gained, which they were able to translate into concrete opportunities to earn money.

A participant in Kaduna who creates incense and works in “body beautification” explained how she was able to start her IGA:

*“When they took us for the skills acquisition, they taught us and I learnt how to do it, before then I didn’t know how to, until we were taken, I learnt and started mine at that time.” [Participant #13, Kaduna]*

Participants traced the journey that led to the creation of their IGAs by referencing the training, feedback, and material support provided by the program.

*“I was only knitting before I started the MMA program. I was a bit discouraged when I started learning shoemaking because people were doubting if I will be good at shoe making because I am a lady and I also go to school. I was not understanding when I started but my teacher kept canceling my work until I got better, it was then I started thinking of having my own shop. Since women do it too, I will open my shop, buy materials for making shoes - after some time I realize I can have my own shop since I am now good at shoe making.” [Participant #2, Kaduna]*

*“That’s the support they gave me, I went and learned poultry, after learning, I was given three chicks, but the three chicks I was given brought grace for me, I later [had] 10 chickens, and later sold them and I am excited about it.” [Participant #15, Kaduna]*

#### *Familial support*

In addition to the training provided by the program, the participants recognized the importance of support received from others. For the married girls in Kaduna, husbands were the primary influence, while for the mostly unmarried girls living with their parents in Ogun, parents were the main source of influence.

Kaduna participants reported that support from their husbands included providing advice, transportation, and hands-on involvement in the participant’s IGA. A participant in Kaduna described receiving advice from her husband to be an honest seller of products and forthcoming to customers. She went on to say,

*“I love the advice he gives me plus the support he shows me.” [Participant #9, Kaduna]*

*“Yes, he supports me because he was the one that introduced me to the shop owner where I usually keep my goods. He’s the one that usually takes the goods to the shop owner and when the shop owner is done selling my husband goes to get the money...” [Participant #8, Kaduna]*

Only a few girls lacked support from husbands. In these cases, husbands did not see the importance of the program or women’s involvement in economic activities. In some instances, this perception changed with the participants’ advocacy and exposure to the program.

*“When I was going to start my own business indeed, I faced some challenges, most especially transport fare, sometimes it is raining, sometimes my husband does not allow me to go complaining that he is tired of the outing.” [Participant #13, Kaduna]*

*“My first challenge was with my husband who did not see the reason why a woman should be doing business. I now had to explain the advantages as we were taught at training. Gradually, he understood and even supported me. He helped me get shops to make supplies in school.” [Participant #14, Kaduna]*

Participants frequently referenced the lack of support from husbands as a potential barrier to participation in the program or beginning an IGA. When asked about some of the challenges girls face when starting an IGA, a participant in Kaduna stated,

*“Disapproval from their husbands or distractions from their children. If they want to learn, their children may not let them fully concentrate to learn.” [Participant #11, Kaduna]*

*“For some women that may want to go out and learn a skill, their husbands may not allow them to go out and will insist they stay at home. That is a major challenge because they want to learn and they also see their fellow women going to learn as well.” [Participant #11, Kaduna]*



Mentors and facilitators confirmed that some husbands were initially unsupportive of the initiative. This resulted in participants missing sessions or having trouble concentrating during the sessions, affecting their ability to achieve the full benefits of the sessions. At times, resistance was specific to the IGAs that their wives had chosen to pursue. However, when husbands were engaged by mentors and facilitators, and they witnessed the progress of their wives, their attitude towards the program changed positively. Consequently, some husbands thanked the mentors and facilitators for their positive influence on their wives. Some husbands dropped off their wives at the facility or paid for their transportation to the sessions, a departure from their earlier attitude.

*“.... if the support is not there, you will notice how worried they are because they are lost in thought during the session and won't even understand what is being taught.” [Facilitator #5, Kaduna]*

*“.... it affects their participation because at times, she might even tell you that the husband has not been around for about a month or two months, or maybe weeks. And during the time you've arranged with them, that is when the husband is available or will be available so she can't make it....” [Mentor #2, Kaduna]*

*“From the beginning, it was really a big challenge because they thought the women are not really achieving anything. But immediately they notice the changes in them, truthfully, the support began to come.” [Facilitator #1, Kaduna]*

In Ogun, the majority of participants reported how their parents, especially their mothers, supported them. Support from mothers most often took the form of advice, mentoring, and hands-on help with participants' businesses.

*“I bake some snacks like chin chin, puff-puff, doughnut. I will take it to school because I attend public school. I will take it to school and show my friends that I sell this. From there, my friends buy and all my classmates. And also I will give my mummy some because she hawks. I will give her. She will help me to sell and she will help me to sell when she's coming back, and also, anytime am at home, I will put it at the front of our house. Children and many people will come and buy from me. From there I see money.” [Participant #26, Ogun]*

Comparatively, one participant in Ogun described that a lack of support from her father was a barrier.

*“My father is not ready to allow me to have a business... says it won't allow me to face my studies again, so he did not want me to have handwork. So, it's me and my mum that planned to do it. I'll go to the place after I come back from work. He's not staying with us so when he asked of me my mum do cover for me because we are doing it behind his back. So, he can be an obstacle for me...” [Participant #19, Ogun]*

According to the mentors and facilitators, some mothers had concerns about their children attending the LLH classes, as they were worried that the girls were underage and would become promiscuous due to the training on family planning, which was a part of the program. However, over time, many shifted their opinions as they saw their daughters change and gain skills.

Another barrier was group activities that conflicted with the girls' responsibilities at home. Mentors and facilitators reported that girls missed sessions to meet the needs of their parents. Some parents did not support their daughters' chosen careers or future goals, which the program encouraged them to identify based on a mix of interest, ability, and market suitability. When girls' own ideas for the future clashed with those of their mothers, girls' ability to progress with their plans could be limited.

*“Huh, in fact initially in our own community we encountered a little difficulty, because when the program newly came in, the news around is that they want to teach our children nonsense and rubbish. They ask them to go for family planning. How old are they? They want to expose them to...it scared a lot of parents away from bringing their children, so it was a serious... but when they now realized that they are just trying to help these girls shaping their future and after all the trainings, there are empowerment, little by little one of the parents said I'll be giving you half dozen of chairs just to support out of the three dozens that we are to use. So, some of them that withdrew their girls brought them back and some were adamant they didn't heed to this thing. But at the long run every one of them could say it is a good program for every child, especially every female child.” [Facilitator #4, Ogun]*

*“.... some of the girls, some of them stay with their parents and during some coaching sessions, their parents will say to them that “today is [community] market day you won't be going for coaching” and you know for that kind of girl we have to go back. Maybe take only her for coaching or she will draw us back entirely when we get another session of coaching.” [Mentor #1, Ogun]*



*“Yes, sometimes their parents don’t help matters. They come for the sessions and after talking and everything, they get back home and their parent are telling them entirely different things or even sometimes for example after [the session entitled] connecting with myself, they get home and the parent are not even encouraging like in some of my sessions. I have had girls that have said they want to be actresses, I have had girls that said they want to be dancers, they get home and their mother is like dancer! What will you use that one to achieve in life? And for this girl, she sees herself as a dancer. The mum is saying no; the father is saying not in this house. So, I think that as much as we carry the girls along we should also try maybe one session that would include the parent and talk to the parent.”*  
[Facilitator #4, Ogun]

### Program facilitators and mentors were instrumental in supporting girls in developing IGAs and their goals

The mentors taught the participants how to articulate their goals and how to achieve them. Before starting the program, some girls had no stated goal. Those who already had goals often did not know where to begin, because the goals felt impossible for them to achieve. The mentors and facilitators effectively employed a range of techniques, including sharing personal experiences, role plays, and storytelling, to help participants understand goal setting and motivate them to engage in IGAs.

*“... we could interact and we could talk about their goals. Some of them have fears that we have to talk about, some of them have plans that they felt were too big for them to achieve and we have to come to terms with it’s not too big for you to achieve if you can do it.”* [Facilitator #4, Ogun]

*“... I usually use myself as an example saying ‘here are my goals and here is how I achieved them, and here are the problems I encountered and here’s how I tackled them. I told them then I had no money to start my business and how I got a little capital to start and now the profit I make in a month, how I work from home without necessarily going to the office and how I receive my alert at the comfort of my bed. So, all these boosts their confidence and ginger them ...’* [Facilitator #2, Ogun]

Mentors and facilitators acknowledged that the progress and initial capabilities of individual girls were not equal. They had to identify each person’s capacity and work with them to overcome their own challenges. In some scenarios, the mentor or facilitator altered the seating arrangement of the training session to ensure that there was a mix of abilities among the groups, which enabled the fast learners to serve as assistants to their peers. When more timid girls were identified, the mentor or facilitator reported engaging them more, including providing them with one-on-one sessions to enhance their skills and boost confidence. Some mentors also noted that they provided makeup classes to girls.

*“When I noticed there are slow learners, after each session or after their skills training we used to have one-on-one sessions with them, we ask them if they understand what was taught during the session, if she say no or she points out the part she doesn’t understand, I then break it down to her in a way she will understand or we join one of them with another person that motivates them in the class so she will be motivating her the more, that’s how we do it.”* [Facilitator #9, Kaduna]

*“... we have some of them we do make-up classes for missing sessions, and we also call the slow learners to join them and even when we go to the center, we tell the skills provider to pay attention to them. When we come back, we ask them questions like, ‘What did you learn today? Tell me about it’.”* [Mentor #1, Kaduna]

Mentors also reported their efforts to engage with the participants’ families to secure support. In Kaduna, there were instances where mentors reached out to the spouses of the AGYW to provide information on the program and its benefits. Often, this engagement was effective in earning the support of the spouse and ensuring his wife’s continued participation in the program.

In Ogun, mentors often spoke with their mothers following a participant’s absence or inquiring about their future attendance. These engagements were an opportunity to promote the program and to ensure that mothers were aware of the benefits of participation for their daughters. Mentors and facilitators reported that they advised mothers to be active supporters of their daughter’s involvement and encouraged them to continue attending the sessions. At times, mentors even promised to handle participants’ transport fares if mothers complained about the costs. Several mentors highlighted that these conversations with mothers were effective and that they often saw additional family support afterwards.

*“.... their husbands complain of their frequent coming for the program and sometimes we tell them not to get discouraged and we also call the husbands sometimes. As a facilitator, you need to know how your beneficiaries are doing. One may keep mute during the classes and then I call her outside and talk with her, she'll say her husband asked her not to attend the class after today. I get worried as a female, because this program is for women's benefits. He complained that the outing is too frequent then I'll comfort her and request his number. In her presence, I'll call him and enlighten him on the importance of these classes, that of the program and the changes he observed in his house, which he admitted.” [Facilitator #4, Kaduna]*

*“.... because sometimes we place a call through to their parents(uhm) to let them know and be aware of the times we chose for sessions with the girls so that it will be easier for them to release the girls to us and at least some of them will say “Haa! we are poor and we do not have money, if you know you will foot their transport bills, they will come,”(uhm) and we say ok let them come so we do the little God helps us with.” [Mentor #1, Ogun]*

### Participants increased income, savings, and purchasing power due to their IGAs

As a result of participating in the IGAs, participants were able to make and save money. Participants reported taking pride in being able to set aside money and feeling prepared to meet their own needs or unexpected future costs.

*“I started saving when I started this handwork. Before we graduated, we said that it wouldn't be nice to just learn a skill and go back home without doing anything and waiting for capital to start. We are supposed to save and start. We saved money and went to our mentor's house who also supports us a lot.” [Participant #6, Kaduna]*

*“[Saving] is to provide for your needs today and forever that may arise unexpectedly.” [Participant #11, Kaduna]*

*“Saving is very important...If I can have a business, can fetch me money to paying my son's school fees, I mean that is something to take pride in. Truly I am very happy.” [Participant #13, Kaduna]*

Participants determined where and how they wanted to save, and the vast majority saved through multiple channels, including at home, in banks, and through savings groups.

*“I save at home, and there is a group we formed for saving money.” [Participant #14, Kaduna]*

*“I save at home and also indulge in contributory savings in order to achieve my goal of opening my big store.” [Participant #6, Kaduna]*

Participants described in detail their motivations for joining a savings group, which included positive pressure to save. Moreover, participants described the camaraderie they experienced in the savings groups.

*“I joined this savings group because I love to keep money. Not that I can't keep money at home or with my friend but if I keep money at home I can just decide that okay I'm hungry today, let me just take out of my money I'll just spend it but if I save in 9ja Girls to collect the money I'll be like my mates are still contributing money, me I will now go and collect my own to spend it, no.” [Participant #29, Ogun]*

*“I had admiration for joining so that I can save some money, because it is very useful. It also connects us very well and we also made new friends. What excites me the most is how when we go, we sit to take oranges, eat food.” [Participant #13, Kaduna]*

With income and savings in hand, the participants reported increased purchasing power. They expressed that they had the freedom and ability to purchase. Most participants reported being able to make purchases without the support or supervision of others.

*“When I was not doing any business, I was not able to buy some basic thing that I need when I was not doing anything, but now I don't need to ask anyone before I get school materials and some things, I just take from my own money without asking anyone.” [Participant #2, Kaduna]*

*“You see this? [shows the interviewer her android phone] I bought it with my own money, I saved money and bought a phone, and I am currently saving so I can go back to school.” [Participant #15, Kaduna]*

*“Interviewer: In your household, who decides how you will use the money that you earn? Respondent: I take the decision alone.” [Participant #14, Kaduna]*

Only one participant reported that her husband had made spending decisions in their household. Others have suggested that it was a joint decision.

*“I will decide with my husband. If he agrees with it, then I will go with it.” [Participant #11, Kaduna]*

Moreover, participants spoke of their ability to make spending decisions with a high level of confidence, as they were those who earned money through their work.

*“Chap! I am the one who decides how I use my money. I and sometimes my husband, if I want him to know, but it’s my money. I know the stress I pass through. How do I tell someone to decide for me? I make the decision myself.” [Participant #13, Kaduna]*

Participants reported having plans for their savings. In Ogun, goals were primarily but not always educational, whereas in Kaduna, they were mostly financial or connected to growing a business.

*“I want to become a nurse in future because I love treating people.” [Participant #30, Ogun]*

*“To achieve my goals, I must have a stepping stone and for me to achieve my goal to become a doctor I can’t just wake-up and say I want to become a doctor, I must have a stepping stone and my stepping stone is to own a business shop and for me to have a business shop I must save also.” [Participant #19, Ogun]*

In Kaduna, participants described savings for purchases that would help grow their businesses, such as equipment and mobile phones.

*“I would like to buy a phone because I do my business online where I can post and a potential client might see and be interested.” [Participant #11, Kaduna]*

Participants in Ogun also linked their savings with the desire to purchase assets related to income generation.

*“With the money I have saved I hope to buy a sewing machine.” [Participant #29, Ogun]*

*“To add it [my savings] to my business, so I can open a shop. Instead of going and coming, I will have one stable place and start my own business.” [Participant #3, Ogun]*

### Participants were aware of contraceptive methods and understood how contraception could be utilized to achieve their goals

When asked about their knowledge of contraceptive methods across both regions, participants understood contraceptive methods prevented pregnancy and were aware of a variety of methods. Participants described the reason behind their choice of contraceptive method.

*“I came to the hospital, and they explained and told me the different family planning methods were implants, family planning injection, pills and I can’t remember the other two. After that, I asked them to explain each one and they did. They said the injection lasts for three months, implants ranges from one to three years, and I think they said pills are for two or three months. I told them I did not like pills. They should give me the [family planning] injection.” [Participant #6, Kaduna]*

Injectables and birth control pills were the methods most frequently mentioned by the participants. When asked to explain why she chose a particular contraceptive method to prevent pregnancy, a participant in Ogun stated,

*“Because I feel [more] comfortable with it than other ones. Like injectable that they put in your body that I don’t know its side effect later and I’m sure they put IUCD and Implant in the body, and I can’t allow it. But pills and condom are easy for me.” [Participant #19, Ogun]*

Participants spoke concisely and directly about their choice. When asked why she chose an implant, a participant in Ogun states,

*“It’s so easy and doesn’t hurt.” [Participant #24, Ogun]*

A participant in Kaduna explained her choice to switch from an implant to a contraceptive pill.

*“I used implants before which made me bleed, and it had to be removed. My elder sister suggested tablets and said I wouldn’t bleed as compared to implants.” [Participant #5, Kaduna]*

She went on to explain that since switching methods, she did not have any adverse effects.

In Kaduna, where AGYW tend to be married and living with a partner, the majority of participants used methods to prevent pregnancy. In Ogun, where participants tended to be unmarried and live with their parents, many participants had yet to adopt a method of contraception. A participant in Ogun justified her choice of not using contraception at this time.

*“...since I’m not yet sexually active and have not started giving birth. Maybe if I’m sexually active I can adopt one of the contraceptive methods. For me to avoid pregnancy, or disease or any other thing and in the future so I can adopt the contraceptive method too if I’m not ready to have a child.” [Participant #20, Ogun]*

Participants linked contraceptive methods to achieving goals, remarking that family planning and birth spacing reduced their burden and allowed them to focus on their financial, educational, and business goals. Many participants who did not currently use a contraceptive method identified the value of using one in the future.

*“Honestly, its benefits... it has so much benefit, it is also for your own wellbeing and you do not have to give birth every year.” [Participant #4, Kaduna]*

*“The benefit is that, I would have given birth again and my daughter isn’t even up to two years. I would have given birth and would have been suffering because I would have been taking care of two children at the same time.” [Participant #11, Kaduna]*

*“Yes [I plan to use a method of contraception in the future]. I want to be able to space my children. This will also help me with my business.” [Participant #14, Kaduna]*

## Discussion

Participants were successful in achieving one of the main program outcomes; every girl interviewed described starting an income-generating activity. These IGAs were typically “traditional” in nature, meaning that they conform to gendered expectations of roles and activities suited for women (i.e., hair stylists, body beautification, catering, etc.). These sectors are frequently low-paid with limited growth potential. However, respondents, especially in Ogun, spoke about selecting their IGA based on passion or interest in the topic, and that passion was an important motivator for starting and maintaining the IGA. In Kaduna, where all participants were married, more consideration was given to the potential profitability of the IGA. The authors suggest that this may reflect the additional responsibilities faced by married adolescents, who often have young children to care for. In both geographies, IGAs, although traditional, served as the first opportunity for income generation, which, in turn, prompted positive savings and purchasing behavior.

The success of the IGA and the profit gained, although on a small scale, seemed to be an important step in building girls’ confidence as economic actors. This suggests that, for young women, the act of beginning to generate income is especially significant, even if the long-term potential of the enterprise is limited (Bandiera et al., 2020). More research is needed on the impact of early success and the feasibility of supporting girls in transitioning to higher-profit sectors. Implementers should not ignore the importance of passion and interest in individual motivation to start a microenterprise and make sure that entrepreneurship programs offered appeal to girls’ interests.

For IGAs to be successful, girls need to access skill-building and receive dedicated support. Participants were clear that goal setting and vocational training delivered by mentors and facilitators were critical to their success. Many reported not thinking about their goals for the future or being uncertain about how to achieve them until the program began. Although goal setting was an important first step, participants needed practical, concrete ways to begin earning money, which vocational skills training provided. The perspectives of mentors and facilitators offer insights into how their roles can meet the unique needs of adolescent girls. Following up with resistant husbands or parents, spending additional time with girls struggling to learn, sharing their own stories of success, and encouraging girls who were shy or reluctant to participate were cited as activities important to ensure that all girls could launch an IGA. The amount of individual attention provided by mentors and facilitators to girls offers a sense of the high level of effort required for economic empowerment activities for adolescent girls and is a considerable challenge to scaling such programming.

Adolescent girls in LMICs face well-documented limitations in mobility and decision-making power (Banati et al., 2021; Harper et al., 2018; Kågesten et al., 2016; Ricker & Ashmore, 2020). Thus, key influencer support was crucial for girls’ engagement in initial skill building as well as for launching and maintaining IGAs in both geographies. In the south, parents, especially mothers, were the primary influencers, whereas in the north, where marriage rates were higher, husbands played that role. Girls took an expansive view of how support manifested, providing examples of emotional and

financial support, and direct involvement in the IGA. Girls themselves were keenly aware of the value of this support, noting that they were grateful for it and able to explain the barriers that any girl without family support would face. Girls and mentors provided examples of how non-supporters can be persuaded to become supporters. Strategies included tackling misconceptions about what the program offered and demonstrating that the participants were learning new skills for income generation. Mentors and facilitators were well-placed to advocate for participants and mitigate barriers to participation. As with direct support for girls, they discussed employing a variety of strategies tailored to the participant's unique situation. At times, girls were able to play this role themselves and could use the negotiation skills they had recently learned to make the case for their own involvement and participation. These findings suggest that successfully overcoming resistance to girls' participation in economic activities is an important element of economic empowerment among adolescent girls. Programs can address this by strengthening participants' skills and offering techniques for navigating resistance to program staff and participants.

The energy and passion with which girls reported ownership of the money they earned through their IGAs was remarkable. For many, it seemed impossible to imagine that the money they had earned would belong to anyone but themselves. Most girls were interested in reinvesting their income in their business and made small purchases necessary to grow or sustain the IGA or were saving to contribute to a larger purchase towards medium- or long-term goals. Having access to income allowed participants to see and strive for new possibilities. In both geographic contexts, income provided support for girls' goals in their current life. In Ogun, many girls discussed the need for income to stay enrolled in school and covered the associated expenses. In Kaduna, many girls were focused on growing their businesses to increase long-term profitability, which would bring them and their families greater financial stability. It is encouraging to see the varied ways in which girls hope to use their income and savings to address their unique needs, suggesting that economic empowerment programming for girls can support choice and agency for young women.

Savings behavior is complex and multifaceted. Nearly all participants reported saving through multiple channels: a formal savings account at a bank, home, and through a savings group established as part of the program. Girls viewed the different options as having different benefits. For example, savings groups introduced positive peer pressure to keep saving and opportunities to socialize, while bank accounts were proof of engagement with the formal system and perceived as a status symbol. The consistency with which participants utilized multiple savings methods suggests that girls see value in having access to different options for saving that come together to form a comprehensive saving strategy.

Participants were generally well informed about contraceptive methods and were able to list several methods available to them. Contraceptive use was higher in the north, among married adolescent girls, than in the south. The participants' responses suggest that girls' actions regarding method uptake align with their current needs and stage of life. Among participants who were not using a method, the reported reason was a lack of sexual activity. Nonetheless, nearly all girls could describe the value of contraception as a tool to support income generation and goal attainment in the future, and girls indicated that they felt empowered to act on their fertility desires.

The limitations of this study include the relatively short duration of program intervention at the time of the interviews (four months), which may have either limited the time in which girls had to experience positive program effects or over-emphasized the effect of the results, which may fade over time. Additionally, the large team participating in the interview coding process may have introduced many individual biases into the analysis process. We attempted to limit this through multiple rounds of coding and consensus meetings to establish intercoder reliability. However, these results should be interpreted with these limitations in mind.

## Conclusion

This study provides insight into how girls, mentors, and session facilitators experienced the intervention and offers insights into how program outcomes were achieved, which may be valuable for other programs seeking to implement economic empowerment interventions for adolescent girls. Through this explorative study, we have generated evidence about the complexity with which girls considered their IGAs and goals, the way in which they appreciated, negotiated for, and sought support from gatekeepers, and the pride they took in earning and saving money and making spending decisions. This study demonstrates the importance of engaging with girls' influencers to garner ownership and support programming. Working with mothers, fathers, and husbands can foster an improved enabling environment for girls' economic activity and create more opportunities for girls to self-select the type of IGA in which they are most interested and to exercise agency in saving and spending. Respected adults, in this case, mentors and facilitators, play an important role in mediating and advocating for adolescent girls to fully participate by engaging their key influencers. In addition, these individuals also often work unseen to tailor intervention components to girls' unique capabilities, adapting pre-determined course materials to ensure that no girl is left behind. Taken together, this study suggests that supporting girls' passions and interests with a combination of soft and practical skills, working with key influencers, and engaging with quality program mentors or facilitators are key elements of an economic empowerment program for this audience.

## Consent

Voluntary informed consent for publication of the findings of this study was obtained from the participants at the time of consent to participate.

## Researcher characteristics and reflexivity

The research team included public health professionals with experience in adolescent sexual and reproductive health, program development, and economic empowerment; highly experienced researchers with experience conducting research in a range of LMICs; and Nigerian young people involved in A360's programming. Team members are based in Nigeria, Kenya, and the United States. Reflexive practices included team discussions, cooperative review of codebooks, and consensus-building around major themes. While some of the researchers organized and coordinated the A360 programming program and helped facilitate the study, they had no prior relationships with any of the study participants.

## Data availability statement

Given the difficult nature of de-identifying qualitative data and the sensitive information shared by participants, including contraceptive use status and reflections on familial relationships, the data used in this study are not publicly available. The authors are concerned about the potential identification of participants based on local knowledge of who in the community participated in the program and their chosen IGA. Individuals interested in accessing the data can contact the corresponding author, detailing the reasons they wish to access the data, how it will be used, and the steps they would take to ensure participants' confidentiality. Requests will be reviewed on a case-by-case basis.

## Extended data

Supplementary Material

The following materials are available in Figshare: Standards for Reporting Qualitative Research (SRQR) completed checklist, Annex 1. Participant and Facilitator Descriptions, and Annex 2. Job Descriptions. All materials are available under a CC0 license.

DOI: <https://doi.org/10.6084/m9.figshare.29185022.v1> Phillips, Mary (2025).

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