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From Knowledge to Empowerment: Evaluating Financial Literacy and Gender Equitable Attitudes in Adolescent Girls in Ghana

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Abstract

Financial literacy is crucial for empowering adolescent girls, particularly in low-and middle-income countries where gender inequities hinder access to education and financial independence. This study evaluates the impact of the Girl Rising Financial Education Initiative (GR FEI) in Ghana, a 24-session curriculum, with sessions occurring once a week, integrating storytelling and multimedia tools to foster gender-equitable attitudes and norms and financial literacy among middle-school-aged girls. Utilizing a quasi-experimental design with pre-and post-test assessments, data were collected from 582 participants at baseline and 581 at follow-up across 11 schools. Results revealed significant improvements in gender-equitable attitudes, with an increase of 0.108 points in adjusted multivariable models (p<0.001). In addition, results demonstrated significant improvements in financial literacy, particularly in distinguishing between emergency and goal-oriented savings, and in recognizing necessary versus discretionary spending. These findings highlight the program's potential to empower adolescent girls through financial education and social norm change.

Keywords

Girl Rising, financial literacy, gender-equitable attitudes, gender-equitable norms

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1. Introduction

Financial literacy refers to the understanding that includes how to earn, manage, and invest money and has a critical impact on students' ability to make smart choices (Bai, 2023). Financial literacy is a skill to build economic empowerment, particularly for women who face systemic barriers. Increasingly, there have been a wide range of financial literacy programs that have been implemented around the world including, but not limited to, Dream, Save, Do, a program in East Africa that uses animated storytelling to build general financial responsibility; MyMoneyMatters, an interactive digital platform in India that employs storytelling and gamification to teach women financial planning; or GLOW, an initiative in Latin America that uses radio dramas to educate women on financial independence and investment strategies (MetLife Foundation, 2024; My Money Matters, 2025; Who We Are - GLOW Initiative, 2016). However, over the last couple of decades, there has been increasing interest in incorporating financial literacy skills into the education of adolescents, particularly those from low- and middle-income countries, with the intention that adolescents could utilize smart saving skills early and be prepared for financial independence as they grow older (Koomson et al., 2023). At the same time, financial literacy knowledge and skills are deeply entrenched in gender discrimination whereby in patriarchal societies girls and women are not viewed as financial decision makers or having the knowledge and agency to become financially literate (Lusardi & Mitchell, 2014). Low levels of financial knowledge have far-reaching consequences, particularly among women who face unique financial challenges including the gender pay gap, shorter work tenures, and unequal caregiving burden (Lusardi & Mitchell, 2008).

Globally, women often earn much less than men, which contributes not only to the global gender gap but also to adverse health outcomes for women, such as mortality, mental health issues, alcohol consumption, and intimate partner violence for women (Milner et al, 2021). Therefore, financial literacy is of paramount importance for women, as it plays a crucial role in enhancing their financial well-being and overall quality of life. It is imperative that financial literacy programs address gender equitable attitudes and norms while also providing basic financial knowledge and skills. Utilizing theoretical frameworks, this paper explores how gender influences financial decision-making in Ghana.

Ghana is a nation that guarantees equal rights to every citizen and the promise of eliminating any discrimination against women, however, stark gender inequity remains throughout the country (Bassit, 2018). Ghana ranks extremely poorly on the Gender Inequality Index (GII) at 135 out of 162 countries (2020 UNDP Human Development, 2020). These disparities extend into education, where cultural norms often prioritize boys' schooling over girls', leading to lower enrollment and retention rates for female students (Bassit, 2018). High maternal mortality rates (308 deaths per 100,000 live births) (2020 UNDP Human Development, 2020) and widespread gender-based violence – experienced by more than half of adolescent girls (52%) – further hinders girls' ability to complete their education (Adjah & Agbemafle, 2016).

Additionally, Ghana has one of the highest child labor rates in the world, with 21.8% of children engaged in labor, particularly adolescent migrating from rural to urban areas for work instead of attending school (Sensoy Bahar, et al, 2020). The underrepresentation of women in leadership, with only 14.5% holding parliamentary office, (*Ghana*, n.d.), reflects limited educational opportunities for girls and the systemic barriers that prevent their advancement. Longheld traditional beliefs in some regions support that boys go to school to provide for their families, and girls are forced into marriage; thus, an investment in girls' education would be wasted. Harmful cultural practices such child betrothal, female circumcision, and facial scarification of children further disrupt girls' education and well-being (Bassit, 2018).

The consequences of gender disparities extend beyond education and into financial literacy and economic participation. Research shows that financial literacy is critical for breaking cycles of poverty and empowering individuals, yet Ghana's financial literacy rate remains low at just 32% (Awal, 2023). While the Government of Ghana has launched the National Financial Education Campaign Program to strengthen Ghanaians' financial capabilities and promote responsible financial behaviors, these initiatives primarily target adults, overlooking the unique financial challenges faced young women. Applying an intersectional lens (Crenshaw, 1989) reveals how overlapping factors – such as gender, socioeconomic status, and cultural expectations – compound financial exclusion for women, leaving them vulnerable to economic instability. Similarly, social constructionist theories (Berger & Luckmann, 1966) help explain how societal norms shape financial behaviors and reinforce the marginalization of women in financial decision-making.

Given these barriers, integrating financial literacy into girls' education is crucial for long-term empowerment. Evidence from gender-responsive financial education programs demonstrates that targeted interventions – especially those using storytelling and multimedia approaches – can shift norms and equip young women with the tools they need for financial independence.

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1.1 Girl Rising Financial Education Initiative

Girl Rising (GR) is a global campaign that inspires social action through powerful storytelling and partnerships. GR utilizes communication tools to change long held views (e.g., social norms and beliefs) regarding girls and women, and its media tools and stories inspire people to contemplate and adopt new ideas and practices, and ultimately change behaviors.

In Ghana, the Girl Rising Financial Education Initiative (FEI) program seeks to increase girls' awareness of their social and economic benefits and demonstrate a measurable, positive change in knowledge, attitudes, and behaviors related to financial literacy. The GR FEI program is a comprehensive 24-session curriculum built around the critically acclaimed Girl Rising feature film and additional multimedia tools with the objective of supporting adolescent girls in identifying, articulating, and sharing gender-related experiences through activities and stories. GR partnered with two local organizations Dels Foundation and Exploratory, to implement the program in a school setting. Dels Foundation and Exploratory organizations were identified as they both serve schools in the greater Accra region and serve similar communities. The utilization of two organizations, allowed for further reach of the GEI program and are the only programs in Ghana to have implemented GEI. There are six curriculum modules in the GR FEI program. This study is part of a larger GR financial education program that assessed Gender Equitable Attitudes and Norms, Gender Responsiveness, Gender Equitable Environment, Agency, Voice, Gender-based Financial Perceptions, Financial Literacy and Skills, and Attitudes Towards Finances, among adolescents and educators before and after program implementation. The curriculum was structured to allow students to work on activities in small groups and allowed them time and space to think and listen to each other. The sessions were integrated into the school-day to minimize the burden associated with staying after school and required teachers to conduct sessions at least once a week for 24-weeks. This manuscript examines the relationship between gender equitable attitudes and financial literacy among adolescent girls.

2. Methods

2.1 Study design

The evaluation aimed to assess the effectiveness of the GR FEI program in achieving its intended outcomes. A quasi-experimental design with a one-group pre- and post-test was conducted. Two independent samples were assessed at baseline and follow-up. The baseline assessment was conducted prior to the start of the GR FEI program, and a follow-up assessment was conducted immediately after the completion of the program. Although this was not a cohort study, it is assumed that the majority (if not all) of individuals in the baseline and follow-up samples are the same participants.

2.2 Study sample and data collection

The GR FEI program was specifically designed for middle-school aged girls, and the primary focus was on 6th-9th grade adolescent girls. The final evaluation (baseline and follow-up) samples included 11 schools across 3 districts in Ghana (La Dadekotopon, Senchi, Nsawam Adoagyiri), and yielded a total sample size of 582 adolescent girls (Dels: 264 students; Exploratory: 318 students) and 581 adolescent girls at follow-up (Dels: 262 students; Exploratory: 319 students).

In January 2023, the GW and GR teams piloted the quantitative instrument and measures in three schools in Greater Accra to assess the salience of the tools and feasibility of data collection in Ghana. Based on the pilot, the instrument was edited and finalized. An extensive data collection protocol was developed, and training was provided to the partner staff of both Dels and Exploratory for implementation during the pilot test, with refresher training provided as videos the week prior to data collection. Baseline data collection included a data collection team, which consisted of six GW student researchers and faculty (GW research team), three GR staff members, and two members from each of the community partners, conducted in-person, paper-pencil surveys at baseline (late February to early March 2023) and follow-up (May to June 2023) to ensure that all surveys were complete prior to the summer break. Youth assent for participating in the quantitative survey was obtained by reading the information and instructions

provided on the first page of the survey and clicking next to proceed. Participation was anonymous for the survey. The data collection team then inputted all the survey responses into iSurvey, a research tool for disseminating online questionnaires that was used to collect survey data for the research team (How iSurvey Works- 2024). The data collection team was trained by the GW research team on how to respond to questions from students during the survey, how to conduct ethical administration of surveys, and how to then input all the data responses into iSurvey. The staff members were given detailed instructions via a video recording and written documentation on how to input the survey data effectively and accurately. A unique survey ID was attached during this process to allow the GW research team to verify questions and complete quality checks of the survey uploads. The GW research team analyzed the data.

2.3 Instrument and measures

The evaluation instruments (baseline and follow-up) were developed by faculty and students at The George Washington University, with input from Girl Rising, and then finalized after the pilot phase with students and teachers in January 2023. During the pilot phase, the survey instruments were tested with a diverse group, including adolescents (the target population), educators, and leaders from partner organizations. This process involved focus group discussions to assess comprehension, appropriateness of vocabulary, and clarity of technical terms. Adolescents provided feedback on whether the questions were easy to understand and culturally relevant, while educators and organizational partners evaluated the content for accuracy and alignment with educational and programmatic goals. Based on this feedback, revisions were made to simplify complex language, clarify ambiguous terms, and ensure the instruments were accessible and engaging for the intended audience.

For the evaluation, data were collected from a 26-item baseline and a 32-item follow-up questionnaire in English that were administered using paper pencil. The survey took approximately 30 to 45 minutes to complete. Measures for this specific evaluation included socio-demographics, gender equitable attitudes, and financial literacy & skills. Perceptions of the program were also measured. Socio-demographic questions for the adolescent survey included grade, age, gender, sibling information and household composition.

Gender Equitable Attitudes

There were 13 statements that evaluated gender equitable attitudes and response options ranged from *strongly disagree* to *strongly agree*. Statements were adapted from the Gender Equitable Measurement scale created for the Gender Equity Movement in Schools program in Mumbai, India; the UNICEF Evaluation of Empowering Young Girls and Women in Maharashtra, India; and the Gender Equitable Men scale from the Compendium of Gender Scales. (Achyut, P. et al, 2011; *United Nations*, 2014; *Compendium*, 2024). Negatively worded statements were reverse coded, and the statements were summated to create a scale. Higher means denote more favorable gender equitable attitudes. Internal consistency of the gender equity statements was found to be acceptable (Cronbach's α 0.655 at baseline and 0.714 at follow-up). The 13 statements consisted of three subdomains - gender roles/privileges/restrictions (8 statements), gender attributes (3 statements), and gender violence (2 statements). The definition of the sub-domains are as follows:

- 1. Roles: Expectations of what an individual is supposed to or required to do based on familial, cultural, and/or social norms.
- 2. Privileges: Advantages that members of one gender face over the other gender.
- 3. Restrictions: Disadvantages that members of one gender face over the other gender.
- 4. Attributes: A direct comparison between boys and girls in which boys are considered to be more superior to girls.
- 5. Violence: Experiences of social norms regarding physical and/or sexual abuse of girls and women.

Financial Literacy & Skills

Financial literacy and skills were captured via the financial literacy scale. The financial literacy scale included seven statements and response choices included, *yes*, *no*, and *I don't know*. Negatively worded statements were reverse coded, and then responses were collapsed into a dichotomous variable (0=No/Don't know and 1=yes). The overall financial literacy scale was calculated by adding all seven dichotomous variables. Higher scores denote higher financial literacy. Internal consistency of the financial literacy and skills statements (7 statements) was found to be acceptable (Cronbach's α was 0.666 at baseline and 0.740 at follow-up).

Perceptions of the Program for Adolescents

In the quantitative survey at follow-up, participants were asked a series of questions regarding their perceptions of the program including their favorite GR FEI story, their awareness and confidence on financial literacy concepts, their future goals, and their ability on being heard and willingness to take action toward other girls who face similar challenges in their community (Table 5).

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3. Data analyses

All survey data were cleaned and cross-checked with the notes from the data collection fieldwork forms. Questions concerning data quality were addressed through quality checks using the unique survey IDs created and recorded both on each survey and in the iSurvey software. Univariate tests were performed to describe the study sample, check for violations of normality, record missing data, and evaluate the distribution of the variables. Bivariate and multivariable statistical tests were conducted to assess changes between baseline and follow-up. Bivariate tests included independent samples t-tests and chi-square tests of independence. Multivariable linear regression models were conducted adjusting for baseline responses, grade/class, siblings, and household composition. Data were analyzed using IBM SPSS Version 28.

4. Results

The total study sample consisted of two independent samples, 582 adolescent girls at baseline and 581 adolescent girls at follow-up (Table 1). Most of the adolescents were in class 7 at baseline and follow-up (38.1% vs. 37.9%, respectively). The lowest numbers of participants were in class 6 for both baseline and follow-up (6.7% vs. 6.9%, respectively). Participants mean age at baseline was 13.99 and 14.26 at follow-up.

Most of the participants worked with Exploratory at both baseline and follow-up (54.6% vs. 54.9%, respectively). However, of the three districts, most of the participants were from La Dadekotopon district at both baseline and follow-up (45.4% vs. 45.1%, respectively). La Dadekotopon district is in the purview of Dels Foundation,

At baseline, most participants identified living in a household with both male and female parents (29.7%) and at follow-up most participants identified living with a female parent only (36.7%). Most participants at both baseline and follow-up indicated that they do not have any siblings (96.0% and 96.2% respectively).

4.1 Gender Equitable Attitudes

Results from the gender equitable attitudes scale and subscale are presented in Table 2 and include the full scale as well as the three sub-domains: (1) gender roles/privileges/restrictions, (2) gender attributes, and (3) gender violence. Within the domain of roles, privileges, and restrictions, two items demonstrated statistically significant positive changes from baseline to follow-up: "Boys should be fed before girls during meals" increased from a mean of 3.74 at baseline to 3.92 at follow-up (p<0.01), and "A man should have final say in all family matters" increased from 2.55 to 2.77 (p<0.01). Since only two of the eight statements within the sub-domain of gender roles/privileges/restrictions resulted in statistically significant changes between baseline and follow-up, these findings suggest minimal shift in perception toward more equitable gender roles. Changes in the attributes and violence domains were more varied. For example, agreement with "Boys are naturally better at sports than girls" increased significantly from 2.79 to 3.16 (p<0.001), however, no significant changes were observed for items related to intellectual capabilities, such as "Boys are biologically smarter than girls". Attitudes about violence showed slight, nonsignificant increases, including statements such as "There are times when a husband or boy needs to beat his wife or girlfriend" (Δ =0.097) and "Girls like to be teased by boys" (Δ =0.129). Overall, gender equitable attitudes and norms significantly increased by 0.103 points between baseline and follow-up (p<0.01).

Table 4 represents the multivariable linear regression model that examines changes in the overall gender equitable attitudes and norms (model 1) after adjusting for grade/class, siblings, and household composition. As shown in Table 4, model 1, gender equitable attitudes significantly increased by 0.108 points between baseline and follow-up, adjusting for grade/class, siblings, and household composition (p<0.01).

4.2 Financial Literacy & Skills

Table 3 presents the findings on financial literacy and skills among the participants. The statement, "I know the difference between saving for an emergency and saving for a goal in the future" significantly increased from a mean

of 0.75 at baseline to a mean of 0.80 at follow-up (p<0.05). Similarly, participants reporting on the statement "I know the difference between things that are necessary to buy and things that I want to buy for fun" significantly increased from a mean 0.77 at baseline to a mean of 0.85 at follow-up (p<0.001). Other knowledge indicators, such as "I know what savings are", "I know what a budget is", and "I can make a budget for how I spend my money", showed slight increases from baseline to follow-up, but these changes were not statistically significant.

Further, Table 4, model 2 represents the multivariable linear regression model that examines changes in the overall financial literacy and skills scale after adjusting for grade/class, siblings, and household composition. Financial literacy scores increased 0.203 points between baseline and follow-up, after adjusting for grade/class, siblings, and household composition, and this was statistically significant (p<0.05).

4.3 Perceptions of the Program for Adolescents

Adolescents' perceptions of the GR FEI program were assessed through a series of questions about their favorite story from the film, their awareness and confidence on financial literacy concepts, their future goals, and their ability on being heard and willingness to take action towards other girls who face similar challenges in their community (Table 5).

Overall, nearly 94% (93.8%) of adolescents indicated they would want to do another Girl Rising financial education initiative in the future. When asked their favorite story from the six featured in the program, "Ruksana" (India) was most frequently chosen, with 45.4% (n=261) of participants identifying it as their favorite, followed by "Juliana" (Ghana) at 18.3% (n=105).

Most participants enjoyed the FEI, with 42.4% (n=244) agreeing or strongly agreeing (37.0%, n=213) that they enjoyed the program. Similarly, 83.4% (n=476) agreed or strongly agreed that they learned something new, and 73.8% (n=421) reported that the program helped them think differently about girls.

Finally, the GR FEI positively impacted financial literacy among participants. Most participants (75.6%, n=429) felt more confident in understanding financial concepts such as spending, saving, and budgeting. Additionally, 77.3% (n=443) reported feeling more confident in making financial decisions, and 83.3% (n=478) felt confident in knowing how to save their own money.

5. Discussion

The evaluation of the Girl Rising Financial Education Initiative (GR FEI) demonstrated notable advancements in fostering gender-equitable attitudes among adolescents in Ghana. At follow-up, participants exhibited significant progress in rejecting harmful gender norms, particularly in areas related to family roles and male privilege. For instance, there was a 0.222-point improvement disagreeing with the statement that "a man should have final say in all family matters," and a 0.337-point improvement in challenging the belief that "boys are naturally better at sports than girls". These results indicate the potential of integrating storytelling and financial education to promote gender equity in school-aged populations, a key goal in both intersectionality and social constructionism theoretical frameworks.

Intersectionality, which examines how multiple axes of identity – such as gender, class, and socio-economic status – intersect to create unique experiences of privilege or oppression, provides an essential framework for understanding participants' experiences (Crenshaw, 1989). For instance, the program targeted adolescent girls from both urban and rural communities in Ghana, acknowledging that their experiences with gender norms and financial literacy might differ based on their intersecting identities. By addressing these diverse needs, the program was able to promote gender equity across varied contexts, aligning with the principles of intersectionality.

Moreover, the program's use of social constructionism – which posits that gender roles and identities are socially constructed rather than biologically determined (Berger & Luckmann, 1966) – was evident in the way the curriculum challenged participants' perceptions of traditional gender roles. Through storytelling and multimedia tools, the program redefined financial roles and encouraged girls to envision themselves as financially independent and capable. This aligns with social constructionism's view that societal norms are malleable and that young people, particularly girls, can reconstruct their identities and capabilities when provided with the right tools and support (Berger & Luckmann, 1966).

Additionally, the program addressed critical gaps in financial knowledge, particularly in distinguishing between emergency and goal-oriented savings, as well as between necessary and discretionary purchases. These statistically significant increases in financial literacy demonstrate the potential impact of tailored, context-sensitive education programs on equipping adolescent girls with the tools they need to make informed financial decisions. The program's focus on gender norms and financial literacy provides a dual benefit: challenging cultural inequities while equipping girls with practical skills, fostering agency among adolescent girls.

The integration of financial literacy and storytelling with the use of multimedia tools proved to be a unique and engaging approach to education. By grounding financial concepts in relatable narratives, the program not only taught practical skills but also inspired participants to envision a future where financial independence is attainable. The overwhelmingly positive perceptions of the program by participants further highlights its accessibility and potential for scalability. Further, the GR FEI's success in urban and rural context, such as La Dadekotopon (urban) and Senchi (rural), highlights its adaptability. Nearly 94% of participants expressed a desire to participate in similar programs in the future, underscoring the need for sustained and expanded interventions of this kind.

However, while the positive feedback and improvements in attitudes and knowledge are promising, it is important to consider long-term impacts of the program participants' financial behaviors and economic independence. Future evaluations should focus on longitudinal tracking of financial decision-making, savings behaviors, and the broader impact on economic self-sufficiency. For instance, it would be valuable to measure whether participants continue to employ what they have learned and whether these changes translate into greater economic independence over time.

The program's focus on both financial literacy and gender norms provides a transformative tool for addressing entrenched social inequities. Intersectionality helps to explain how these girls, depending on their specific socioeconomic backgrounds, experience unique challenges and opportunities. Social constructionism highlights how the program can help shift perceptions around gender and financial roles, enabling participants to reconstruct their identities and achieve greater agency. By integrating these theoretical perspectives, the GR FEI programs offers a holistic approach to empowering girls in Ghana to achieve both financial independence and gender equity.

This study has several limitations. First, its quasi-experimental design without a control group limits causal inferences between the GR FEI program and other observed changes in knowledge, attitude, and skills. The observed changes could partially reflect broader societal shifts rather than the direct impact of the intervention. Second, reliance on self-reported measures introduces potential biases, such as social desirability bias, which might inflate reported improvements in attitudes. Third, the study's relatively short follow-up period may not capture the long-term sustainability of attitude and perception changes. Future research could address these limitations by using randomized controlled trials and longer-term evaluations.

In conclusion, the GR FEI program demonstrated measurable improvements in financial literacy and gender-equitable attitudes among adolescent girls in Ghana, aligning with principles of intersectionality and social constructionism. Future research should explore the long-term effects of the program and assess its scalability. While improvements in financial literacy were evident, tracking real-world application of this knowledge is essential to understanding whether these girls continue to make informed financial decisions, safe effectively, and demonstrate greater economic self-sufficiency over time. As financial literacy is increasingly being recognized as a critical component of economic and social development (*Financial Literacy*, n.d.), initiatives like the Girl Rising Financial Education Initiative represent a vital step toward fostering financial independence and gender equity for adolescent girls not just in Ghana but also in similar low-and-middle income countries.

Table 1: Study Sample Characteristics, Girl Rising - Financial Education Initiative Evaluation, Ghana Schools - Adolescents

Characteristic	Baseline % (N) or Mean (SD) N=582	Follow-up % (N) or Mean (SD) N=581
School		
Senchi-Ferry Methodist JHS	10.3 (60)	10.3 (60)
Senchi-KotropeiB'Akoto JHS	10.7 (62)	9.8 (57)
Senchi-New Town JHS	10.0 (58)	10.7 (62)

10.2 (60)
10.3 (60)
8.8 (51)
5.0 (29)
9.1 (53)
9.0 (52)
13.3 (77)
11.7 (68)
2.1 (12)
6.9 (40)
37.9 (220)
32.7 (190)
22.5 (131)
45.1 (262)
41.1 (239)
13.8 (80)
<u> </u>
58.9 (342)
41.1 (239)
<u> </u>
14.26 (1.615)
'
54.9 (319)
45.1 (262)
47.7 (277)
46.6 (271)
47.7 (277)
48.6 (283)
96.2 (559)
28.1 (163)
7.6 (44)
36.7 (213)
22.2 (129)
5.5 (32)

Statistical significance: *p<.05; **p<.01; ***p<.001

⁺Analyses exclude classes 4 and 5 because of small samples & those classes were outside of the target sample (n=37).

Table 2: Gender Equitable Attitudes and Norms, Evaluation of GR FEI

	Baseline Mean (sd) (N=534)	Follow-up Mean (sd) (N=536)	Mean Δ from Baseline to Follow-up
Roles/Privileges/Restrictions		<u>'</u>	
Boys should be fed before girls during meals.†	3.74 (±1.413)	3.92 (±1.225)	0.181**
Boys should get health services more than girls.†	4.21 (±1.097)	4.30 (±1.019)	0.092
Boys should go to school more than girls.†	4.30 (±1.064)	4.35 (±1.056)	0.049
When a husband and wife disagree about the number of children to have, the husband's opinion matters more.†	3.11 (±1.345)	3.12 (±1.279)	0.010
A man should have final say in all family matters.†	2.55 (±1.398)	2.77 (±1.342)	0.222**
Girls need their parents' protection more than boys.†	2.11 (±1.320)	2.23 (±1.295)	0.120
Girls and boys should share household tasks equally.	3.34 (±1.438)	3.41 (±1.342)	0.074
Girls can be as good at being a leader as boys.	3.89 (±1.300)	3.81 (±1.223)	-0.078
Attributes			
Boys are better at math and science than girls.†	3.91 (±1.277)	3.96 (±1.201)	0.048
Boys are naturally better at sports than girls.†	2.79 (±1.486)	3.16 (±1.400)	0.375***
Boys are biologically smarter than girls.†	3.97 (±1.191)	3.95 (±1.169)	-0.014
Violence			·
There are times when a husband or boy needs to beat his wife or girlfriend.†	3.67 (±1.422)	3.77 (±1.368)	0.097
Girls like to be teased by boys.†	3.60 (±1.426)	3.73 (±1.298)	0.129
Gender Equitable Attitudes & Norms Scale (1-5)	3.49 (±0.586) (α=0.655)	3.59 (±0.591) (α=0.714)	0.103**

 $Statistical\ Significance:\ *p<.05;\ **p<.01;\ ***p<.001$

†These items were reverse coded to create a consistent scale with Strongly Agree, denoting favorable gender equitable attitudes, and Strongly Disagree, denoting unfavorable gender equitable attitudes.

Table 3: Financial Literacy & Skills, Ghana

Knowledge Score (0=No/Don't Know; 1 = Yes)	Baseline Mean (sd) (N=546)	Follow-up Mean (sd) (N=553)	Mean Δ from Baseline to Follow-up
I know what savings are.	0.89(±0.316)	0.90 (±0.299)	0.013
I know what a budget is.	0.70 (±0.457)	0.72 (±0.446)	0.022
I know the difference between saving for an emergency and saving for a goal in the future.	0.75 (±0.431)	0.80 (±0.394)	0.054*
I know the difference between things that are necessary to buy and things that I want to buy for fun.	0.77 (±0.420)	0.85 (±0.362)	0.074***

Financial Literacy Scale (1-5)	5.49 (±1.633) (α=0.666)	5.66 (±1.689) (α=0.740)	0.173*
I can make a budget for how to spend my money.	0.81 (±0.391)	0.82 (±0.381)	0.013
I can make a plan for how to spend or save my own money.	0.87(±0.342)	0.86 (±0.346)	-0.004
I can identify the currency of my country.	0.66 (±0.473)	0.67 (±0.471)	0.006

Statistical Significance: *p<.05; **p<.01; ***p<.001

Table 4: Multivariable Linear Regression Models of Gender Equitable Attitudes and Financial Literacy Skills

	Model 1		Model 2		
	Gender Equitable Attitudes		Financial Literacy Skills		
	Adjusted β	95% CI	Adjusted β	95% CI	
Follow-up (vs. baseline)	0.108**	(0.040, 0.176)	0.203*	(0.014, 0.392)	
Age (in years)	-0.025	(-0.052, 0.002)	-0.082*	(-0.157,-0.008)	
Dels (vs. Exploratory)	0.081*	(0.005, 0.156)	0.399***	(0.192, 0.606)	
Grade in School (vs. Class 6)		·			
Class 7	-0.380***	(-0.527, -0.233)	-0.405	(-0.814, 0.004)	
Class 8	-0.206**	(-0.361, -0.051)	0.396	(-0.033, 0.826)	
Class 9	0.051	(-0.112, 0.214)	0.853***	(0.398, 1.308)	
Siblings (vs. No Siblings)					
Older Brothers	0.000	(-0.070, .071)	0.040	(-0.155, 0.235)	
Younger Brothers	-0.030	(-0.099, 0.040)	0.053	(-0.139, 0.245)	
Older Sisters	0.038	(-0.032, 0.109)	0.250*	(0,055, 0.445)	
Younger Sisters	0.085*	(0.014, 0.155)	0.171	(-0.025, 0.367)	
Household Composition (vs. Both Male & Female Parent)					
Male Parent	-0.192**	(-0.329, -0.055)	-0.433*	(-0.822, -0.044)	
Female Parent	-0.101*	(-0.188, -0.014)	0.129	(-0.114, 0,371)	
Aunt/Uncle/ Grandparent(s) Only	-0.134**	(-0.226, -0.041)	-0.153	(-0.410, 0.104)	
Other	-0.313***	(-0.478, -0.148)	-0.522*	(-0.957, -0.087)	

Statistical Significance: *p<.05; **p<.01; ***p<.001; R² = 0.124 Adjusted R² = 0.

Would you want to do another FEI with new stories	Follow-up % (n)		
Yes	93.8 (542)		

Ruksana (India)	45.4 (261)
Wadley (Haiti)	14.3 (82)
Of the six stories, which was your favorite?	Follow-up % (n)
Senna (Peru)	5.2 (30)
Dania (Mexico)	6.4 (37)
Mariama (Sierra Leone)	10.4 (60)
Juliana (Ghana)	18.3 (105)

Table 5: Perceptions of the program - Adolescents, Ghana

Feelings towards FEI?	SD	D	N	A	SA
I enjoyed the Financial Education Initiative	4.5 (26)	7.5 (43)	8.7 (50)	42.4 (244)	37.0 (213)
I learned something new from the Financial Education Initiative	3.7 (21)	4.9 (28)	8.1 (46)	45.7 (261)	37.7 (215)
The Financial Education Initiative made me think differently about girls	7.5 (43)	15.0 (86)	17.7 (102)	31.8 (183)	28.0 (161)
The Financial Education Initiative helped me think about my own future goals	2.8 (16)	7.3 (42)	6.8 (39)	35.4 (204)	47.7 (275)
One or more of my friends has talked to me about something they learned in the program	4.9 (28)	11.3 (65)	12.5 (72)	42.9 (247)	28.5 (164)
I feel more confident that I can say what I feel after the FEI	4.2 (24)	9.1 (52)	11.6 (66)	37.7 (215)	37.4 (213)
The program helped me think about ways I can talk about issues girls face with my family	4.5 (26)	6.3 (36)	13.0 (75)	40.1 (231)	36.1 (208)
The program helped me think about ways I can talk about issues girls face with other adults in my community	4.7 (27)	7.8 (45)	13.2 (76)	38.9 (223)	35.4 (203)
After participating in the program, I want to do something to help girls who do not have the same opportunity as me	6.3 (36)	5.9 (34)	13.8 (79)	40.4 (231)	33.6 (192)
The program made me want to do something about issues girls are facing in my community	4.2 (24)	8.2 (47)	11.2 (64)	43.2 (246)	33.2 (189)
After participating in the program, my teachers listened to me more	4.8 (27)	13.3 (75)	24.7 (140)	38.5 (218)	18.7 (106)
After participating in the program, my teachers cared more about what I had to say	5.3 (30)	11.6 (66)	23.5 (133)	41.4 (235)	18.2 (103)
I am more confident in better understanding financial concepts like spending, saving, and budgeting	2.8 (16)	9.2 (52)	12.3 (70)	38.4 (218)	37.2 (211)
I feel more confident in making financial decisions	4.0 (23)	8.2 (47)	10.5 (60)	40.7 (233)	36.6 (210)
I feel more confident in knowing how to save my own money	3.3 (19)	6.3 (36)	7.1 (41)	38.0 (218)	45.3 (260)

SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree

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