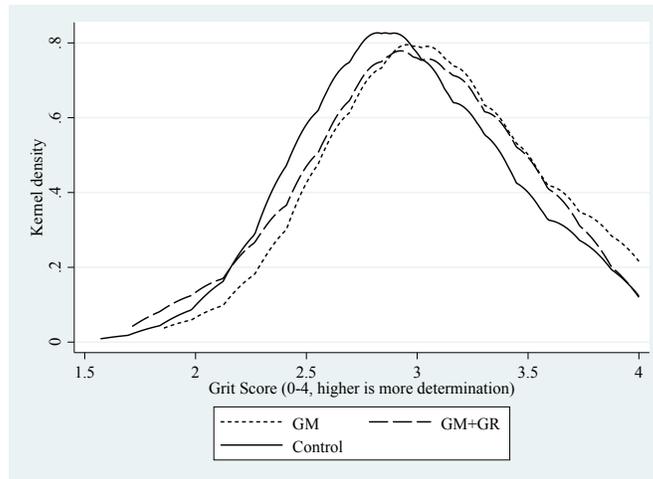**Online Appendix for:**

Improving Mental Health of Adolescent Girls in Low- and Middle-Income Countries:
Causal Evidence from Life Skills Programming
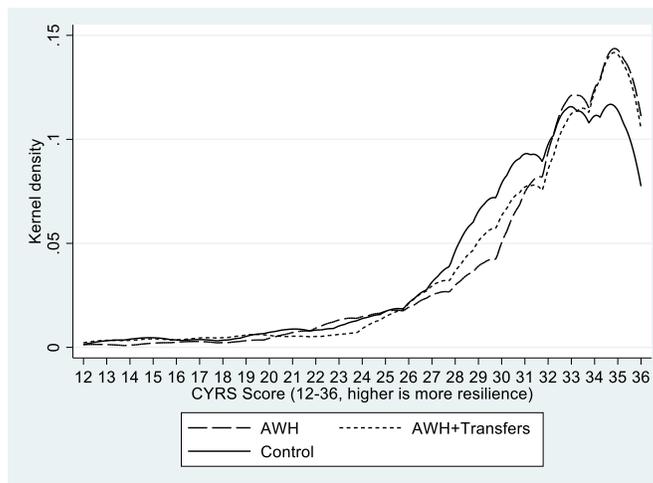
Manisha Shah, Sarah Baird, Jennifer Seager, Benjamin Avuwadah,
Joan Hamory, Shwetlena Sabarwal, Amita Vyas

Online Appendix Figure 1. K-Densities for Bangladesh Socio-Emotional Scale

Notes: This figure plots the kernel density for the Grit Score across the treatment and control groups (defined in the legend) within the study sample of girls in Bangladesh. Kernel densities are not population weighted or clustered.

Online Appendix Figure 2. K-Densities for Ethiopia Socio-Emotional Scale

Notes: This figure plots the kernel density for the Resilience Scale across the treatment and control groups (defined in the legend) within the study sample of girls in Ethiopia. Kernel densities are population weighted but not clustered.

Online Appendix Table 1: Summary of RCTs Studying Life-Skills Programs for Adolescents

Study	Country	Program Length	Adolescent Sample Size[1]	Adolescent Gender	Adolescent Age	Latest Follow-up[2]
Achyut et al. (2016)	India	24 months	3,069	girls & boys	12-14	24 months
Adoho et al. (2014)	Liberia	12 months	2,081	girls	16-27	28 months
Alan et al. (2019)	Turkey	school year	4,074	girls & boys	4th graders	18-30 months
Amin et al. (2016)	Bangladesh	18 months	11,609	girls	12-18	18 months
Andrew et al. (2022)	India	~9 months	5,731	girls	12-17	~18 months
Ashraf et al. (2020)	Zambia	2 weeks	3,146	girls	8th graders	3 years
Austrian et al. (2020)	Zambia	2 years	4,661	girls	10-14, 15-19	4 years
Baird et al. (2020)	Uganda	14 weeks	1,919	girls	12-14	24 months
Bandiera et al. (2020a)	Uganda	2 years	5,966	girls	14-20	4 years
Bandiera et al. (2020b)	Sierra Leone	N/A	5,775	girls	12-25	5-6 years
Beaman et al. (2021)	Liberia	up to 4 months	2,400	girls & boys	15-25	<2 years
Betancourt et al. (2014)	Sierra Leone	10 weeks	436	girls & boys	15-24	6 months
Botea et al. (2015)	Rwanda	12 months	2,000	girls	16-24	<1 year
Boxho et al. (2023)	Cote d'Ivoire	up to 12 months	3,790	girls	8- 24	2 years
Buchman et al. (2018)	Bangladesh	6-month	15,464	girls	10-19	5 years
Buehren et al. (2017a)	Sudan	3 months	4,044	girls	13-19	~4 years
Buehren et al. (2017b)	Tanzania	N/A	5,454	girls	13-19	2-2.5 years
Dhar et al. (2022)	India	2.5 years	14,089	girls & boys	grades 7-8	up to 4.5 years
Dunbar (2014)	Zimbabwe	6 months	315	girls	16-19	24 months
Edmonds et al. (2023)	India	2 years	2,459	girls	grades 6-7	2.5 years
Falb et al. (2016)	Democratic Republic of the Congo, Ethiopia	12 months	886 (DRC), 919 (Eth)	girls	10-14 (DRC), 13-19 (Eth)	N/A
Hinson et al. (2021)	Malawi	N/A	1,500	girls	10-17	N/A
Kangwana et al. (2022)	Kenya	24 months	2,075	girls	11-14	4 years
Leventhal et al. (2015)	India	5 months	2,308	girls	grades 7-8	5 months
Liu et al. (2022)	China	10 weeks	189	girls & boys	14-16	
Miller-Graff & Cummings (2022)	Gaza	8 weeks	68	girls & boys	13-16	6 months
Mohammadzadeh et al. (2019)	Malaysia	5 weeks	271	girls & boys	13-18	4 months
Naved et al. (2018)	Bangladesh	20 months	3,943	girls & boys	10-35	24 months
Outés-Leon et al. (2020)	Peru	90 minutes	800 schools	girls & boys	grades 7-8	14 months
Ozler et al. (2020)	Liberia	8 months	1,216	girls	13-14	24 months
Shah et al. (2023)	Tanzania	11 months	4,644	girls & boys	15-19	~18 months
Thurman et al. (2016)	South Africa	16 weeks	1,016	girls & boys	14-17	16 months
Tol et al. (2014)	Burundi	5 weeks	329	girls & boys	8-17	3 months
Waidler et al. (2022)	Tanzania	12 months	1,933	girls & boys	14-19	21 months

	Intervention Pathway						
Study	Empowering Girls	Engaging Boys	Supporting Parents	Promoting Community Change	Financial Support	Mental Health Outcomes[3]	Heterogeneity Dimensions
Achyut et al. (2016)	X	X	X	X		none	none
Adoho et al. (2014)	X					none	rural-urban, assets, education, age
Alan et al. (2019)	X	X				none	ability
Amin et al. (2016)	X					none	none
Andrew et al. (2022)	X			X		Index composed of PHQ-9 and GAD-7	age
Ashraf et al. (2020)	X					none	ability, parental investment, age
Austrian et al. (2020)	X				X	none	rural-urban, age, assets
Baird et al. (2020)	X				X	LOC; CYRM; Rosenberg (1965) Self-Esteem; PHQ-8; GHQ-12	none
Bandiera et al. (2020a)	X				X	none	rural-urban, assets, age, parental investment
Bandiera et al. (2020b)	X				X	none	assets, risk exposure
Beaman et al. (2021)	X	X				Cantril (1966) Scale; Rosenberg (1965) Self-Esteem; Rotter (1966) Locus of Control	age, education, risk exposure
Betancourt et al. (2014)	X	X			X	OMPA; DERS; PTSD-RI	none
Botea et al. (2015)	X				X	none	none
Boxho et al. (2023)	X	X		X		GHQ-12, Delavallade et al. (2020) Socio-Emotional Skills Index	marital status
Buchman et al. (2018)	X				X	none	education, parental investment
Buehren et al. (2017a)	X					none	none
Buehren et al. (2017b)	X				X	none	none
Dhar et al. (2022)	X	X				none	parental investment
Dunbar (2014)	X			X	X	none	none

	Intervention Pathway						
Study	**Empowering Girls**	**Engaging Boys**	**Supporting Parents**	**Promoting Community Change**	**Financial Support**	**Mental Health Outcomes[3]**	**Heterogeneity Dimensions**
Edmonds et al. (2023)	X				X	Rosenberg (1965) Self-Esteem, Perceived Stress Index, Rotter (1966) Locus of Control	education, ability, age, risk exposure
Falb et al. (2016)	X		X	X		Rosenberg (1965) Self-Esteem Index	none
Hinson et al. (2021)	X			X		none	rural-urban
Kangwana et al. (2022)	X			X	X	none	none
Leventhal et al. (2015)	X					CD-RISC; Schwarzer's General Self-efficacy Scale; CYRM; PHQ-9; GAD-7; KIDSCREEN	none
Liu et al. (2022)	X	X				Tangney et al. (2004) Self-Control scale, FFMQ	none
Miller-Graff & Cummings (2022)	X	X	X			SDQ, CYRM	none
Mohammadzadeh et al. (2019)	X	X				DASS-21; Rosenberg (1965) Self-Esteem scale	none
Naved et al. (2018)	X	X		X		none	none
Outés-Leon et al. (2020)	X	X				none	ethnicity
Ozler et al. (2020)	X		X		X	Rosenberg (1965) Self Esteem Scale; SMFQ; CRIES8; (and all combined into index)	none
Shah et al. (2023)	X	X				none	marital status
Thurman et al. (2016)	X	X				none	none
Tol et al. (2014)	X	X				DSRS; SCARED-C; CPSS; Children's Hope Scale	none
Waidler et al. (2022)	X	X			X	none	none

Notes: Studies included in this table are cited at the end of this online appendix. [1]Sample size is measured at study baseline. [2]Follow-up timing is measured with respect to launch of intervention. [3]Abbreviations for mental health scales: CD-RISC- Connor Davidson Resilience Scale, CES-D- Center for Epidemiological Studies Depression Scale, CRIES8- Children's Revised Impact of Events (8-item version), CPSS- Child Posttraumatic Symptom Scale, CYRM- Child and Youth Resilience Measure, DASS-21- Depression Anxiety Stress scale (21-item version), DERS- Difficulties in Emotion Regulation Scale, DSRS- Depression Self-rating scale, ERQ- Emotional Regulation Questionnaire, FFMQ- Five Facet Mindfulness Questionnaire, GAD-7- General Anxiety Disorder scale (7-item version), GHQ12- General Health Questionnaire (12-item version), KIDSCREEN- Screening for and Promotion of Health-Related Quality of Life in Children and Adolescents - a European Public Health Perspective, LOC - locus of control measure (on a scale of 1-10, how much control do they feel they have over their lives), OMPA- Oxford Measure of Psychosocial Adjustment, PHQ- Patient Health Questionnaire (8- or 9-item version), PHQ-ADS- Patient Health Questionnaire- Anxiety and Depression Scale, PTSD-RI Post-Traumatic Stress Disorder Reaction Index, SCARED-C- Children's Depression Inventory- Child, SCARED-P- Children's Depression Inventory- Parent, SDQ - Strength and Difficulties Questionnaire, SIFS- Security in the Family scale, SMFQ- Short Mood of Feelings Questionnaire

Online Appendix Table 2. Country Characteristics

	Tanzania	Bangladesh	Ethiopia
Population, in millions (2021)[1]	61.5	166.3	117.9
Total fertility rate (2021)[2]	4.73	1.98	4.16
Household size[3] (year in parenthesis)	4.9 (2015-16)	4.3 (2017-18)	4.7 (2019)
Youth dependency ratio (2020)[2]	82.8%	40.0%	71.3%
GDP per capita, in 2017 international dollars (2020)[4]	$2,635	$4,871	$2,297
Share of population living in extreme poverty (<$2.15/day) (year in parenthesis)[5]	45.0% (2018)	13.5% (2016)	27.0% (2015)
Share of the labor force employed in agriculture (2019)[6]	65.1%	38.3%	66.6%
Average years of schooling among those aged >=25 (2021)[7]	6.4	7.4	3.2
Net secondary school enrollment rate among males (year in parenthesis)[8]	25.8% (2018)	61.1% (2018)	31.3% (2015)
Net secondary school enrollment rate among females (year as in row above)[8]	27.3%	72.3%	30.3%
Median age at first marriage for females aged 25-29 (year in parenthesis)[3]	19.6 (2015/16)	16.7 (2017/18)	18.1 (2016)
Share of women who believe a husband is justified in beating his wife (year in parenthesis)[4]	58.0% (2016)	20.1% (2018)	63.0% (2016)

Notes: This table presents country-level summary statistics drawn from official sources. Sources are noted by the numeric footnotes. [1]These statistics were drawn from the United Nations Population Division (2022) via World Bank (2022a). [2]These statistics were drawn from the United Nations Population Division (2022) via Roser (2022). [3]These statistics were drawn from the most recent Demographic and Health Survey (DHS) for each country, via the Demographic and Health Survey STATcompiler database (2022). [4]These statistics were drawn from the World Bank (2022c) via Roser (2022). [5]These statistics were drawn from the World Bank (2022b) via Roser (2022). [6]These statistics were drawn from Roser (2022). [7]These statistics were drawn from the United Nations Development Programme (2021-2022) via Roser (2022). [8]These statistics were drawn from the UNESCO Institute for Statistics (2020) via World Bank (2022a).

Online Appendix Table 3: Control Sets

	Contextual Level	Tanzania	Bangladesh	Ethiopia
Basic controls				
Adolescent age	Adolescent	Age (years)	Age (years)	Age (years)
Residential location	Community	Indicator for region of residence	Set of indicators for region	(N/A; included in sampling block indicators)
Survey timing	--	Set of indicators for months since baseline survey launch	Indicator for survey during Ramadan	Set of indicators for months since baseline survey launch
Other	--	--	Set of indicators for randomization strata: attending government school (compared to private)/ urban vs rural; Set of indicators for grade and gender to account for adolescent sampling	Set of indicators for sampling block (by woreda, kebele marginalization status), Indicator for households with multiple adolescents eligible for the study
Consistent controls		Basic controls +	Basic controls +	Basic controls +
Household characteristics				
Number of household members	Household	X	X	X
Indicator for mother living in household	Household	X	X	X
Indicator for father living in household	Household	X	X	X
Household head highest grade attained	Household	X (linear in grade/level)	X (linear in grade/level)	X (linear in grade/level)
Indicator for primary female caregiver in the household engages in paid work	Household	X (indicator for mother (or grandmother, if no mother) in household primary daily activity brings money into the household)	x (indicator for primary female caregiver engages in activity that brings money into the household)	X (indicator for primary female caregiver engages in an activity that brings money into household)
Household asset index: Deciles of principle components following Filmer and Pritchett (2001)	Household	X (decile of principle components from a list of 7 assets)	x (decile of principal components form a list of 16 assets)	X (decile of principle components from a list of 16 assets)
Indicator for male sibling lives in household	Household	X	X	X
Indicator for improved flooring	Household	X (indicator for floor is wood, bamboo, vinyl, asphalt, ceramic, cement, or	X (indicator for floor is wood/tiles/cement/carpet)	X

Online Appendix Table 3: Control Sets *(continued)*

	Contextual Level	Tanzania	Bangladesh	Ethiopia
Adolescent characteristics				

Indicator for adolescent enrolled in	Adolescent	X	N/A (all are enrolled)	X
Fraction of time adolescent spent on leisure	Adolescent	X (fraction of 24-hour period spent on sleep, eating, physical exercise; playing sports with friends, other leisure; at ELA club; time spent with boyfriend)	X (fraction of 24-hour period spent on sleep, personal care, eating, play/leisure)	X (fraction of 24-hour period spent on sleep, personal care, eating, play/leisure)
Index of perceptions of gender stereotypical roles (standardized)	Adolescent	X Index constructed as the sum of: An indicator for disagrees that "Women and men should have equal say in a relationship" An indicator for agrees that "even if a girl is education, her primary role is to take care of her home" and standardized to the control group (non-ELA communities, non-goal setting participants)	X Index constructed as the sum of: 1) Indicator for (partially) agrees with 'A man should have the final word on decisions in his home' 2) Indicator for (partially) agrees with 'A woman's most important role is to take care of her home and cook for her family' Index standardized within the control group after summing	X Index constructed as the sum of: 1) Indicator for (partially) agrees with 'A man should have the final word on decisions in his home' 2) Indicator for (partially) agrees with 'A woman's most important role is to take care of her home and cook for her family' Index standardized within the control group after summing
Indicator for adolescent aspires to higher than secondary schooling	Adolescent	Indicator for adolescent aspires to university education	X (indicator for adolescent aspires to attain at least university education)	X (Indicator for adolescent aspires to attain at least some university)
Indicator for adolescent has savings	Adolescent	X	X	X

Online Appendix Table 3: Control Sets *(continued)*

	Contextual Level	Tanzania	Bangladesh	Ethiopia
Index of topics discussed with mother (education, relationships/marriage) (standardized)	Household	X Index constructed as the sum of: 1) Indicator for discusses about problems you are having at school/work with mother 2) Indicator for discusses relationships with boys with mother Index standardized within the control group after summing the individual items	X Index constructed as the sum of: 1) Indicator for has ever talked about "when you will get married" with mother/female guardian 2) Indicator for has ever talked about "education" with mother/female guardian Index standardized within the control group after summing	X Index constructed as the sum of: 1) Indicator for has ever talked about "when you will get married" with mother/female guardian 2) Indicator for has ever talked about "education" with mother/female guardian Index standardized within the control group after summing
Expanded controls		Consistent controls +	Consistent controls +	Consistent controls +
Household characteristics				
Indicator for household is severely food insecure	Household	NA	X (Indicator for any household member has experienced either of the following in the 12 months preceding the survey: (1) was hungry but did not eat because there was not enough money or other resources, or (2) went a whole day without eating because of a lack of money or other resources (Cafiero et al. 2018)	X (Indicator for any household member has experienced either of the following in the 12 months preceding the survey: (1) was hungry but did not eat because there was not enough money or other resources, or (2) went a whole day without eating because of a lack of money or other resources (Cafiero et al. 2018)
Indicator for household receives support	Community	X (Indicator for has source of support in the community)	X (indicator for receives financial support from someone outside of the household)	X (Indicator for household receives benefits from Ethiopia's Poverty Safety Net Program)

Online Appendix Table 3: Control Sets *(continued)*

	Contextual Level	Tanzania	Bangladesh	Ethiopia
Primary caregiver characteristics				
Index of female caregiver mental health	Household		X (PHQ-9, scores ranging from 0-27, inverse coded so that higher scores indicate less distress and standardized to the control group)	X (Short General Health Questionnaire (GHQ-12), a measure of psychological distress with scores ranging from 0-12, inverse coded so that higher values indicate less distress, and then standardized within the control group)
Index of household support for adolescent's schooling	Household	NA	X (Index of household support for adolescent's schooling, across the following categories: supervising school work, reducing domestic chores, providing light, purchasing books/stationary, purchasing uniforms, pay for transport to school; scores ranging from 0 7 with higher values indicating more support, and then standardized within the control group)	N/A due to missing data
Adolescent characteristics				
Indicator for ever had sex	Adolescent	X	--	--
Indicator for experienced intimate partner violence in last 12 months	Adolescent	X	--	--
Risk tolerance (indicator for choose either of the 2 highest expected value options in a risk game)	Adolescent	X	--	--
Patience (discount factor)	Adolescent	X	--	--
Religion (indicator for Muslim)	Community	X	--	--

Online Appendix Table 3: Control Sets *(continued)*

	Contextual Level	Tanzania	Bangladesh	Ethiopia
Indicator for experienced gender based violence	Adolescent	--	X	--
Indicator for adolescent has personal mobile phone	Adolescent	--	Only 3% of the sample said yes	X
Indicator for adolescent has access to internet	Adolescent	--	X (indicator for adolescent can access the Internet when she wants/needs to)	X (Indicator for adolescent can access the Internet when she wants/needs to)
Indicator for adolescent leaves mohalla/village daily	Adolescent	--	X	
Indicator for adolescent has gone to market in previous 3 months	Adolescent	--	--	X

Online Appendix Table 4. Baseline Balance for Tanzania

	Goal Setting vs. control (1)
PHQ Depression (standardized)	-0.030*
	(0.015)
Grit (standardized)	-0.004
	(0.013)
Locus of control (standardized)	-0.009
	(0.016)
Number of household members	-0.013
	(0.012)
Household head education (years)	0.001
	(0.004)
Indicator for mother living in household	0.014
	(0.035)
Indicator for father living in household	0.016
	(0.033)
Indicator for male sibling living in household	0.015
	(0.028)
Asset decile	-0.001
	(0.005)
Indicator for floor is wood/tiles/cement/carpet	0.013
	(0.038)
Indicator for primary female caregiver brings money to household	-0.006
	(0.028)
Share of time not working / at school / domestic work	0.069
	(0.123)
Index of perceptions of gender stereotypical roles (standardized)	-0.013
	(0.012)
Indicator for enrolled in school	-0.026
	(0.036)
Indicator for adolescent aspires to attain at least some university education (among enrolled)	0.017
	(0.035)
Indicator for adolescent has had savings in last 12 months	0.064
	(0.039)
Index of topics discussed with mother (education, relationships/marriage) (standardized)	0.012
	(0.016)
Number of observations	*1,449*
Joint p-value across controls	*[0.213]*

Notes. Each column presents results from a separate OLS regression. The outcome measure is an indicator for respondent was assigned to the treatment group indicated in the column title (compared to the other group indicated in the column title). Regression controls include baseline values of the adolescent mental health outcomes we study, those necessary to account for the study sampling design by country (basic controls), as well as what we refer to as 'consistent controls' across all countries - more specific information on the control sets for each country can be found in Online Appendix Table 3. Results presented in each cell include the coefficient (standard error) on covariate of interest. Each regression is properly weighted and clustered according to the country's sample design. * indicates statistical significance at $p<0.1$, ** at $p<0.05$, and *** and $p<0.001$.

Online Appendix Table 5. Baseline Balance for Bangladesh

	GM vs Control	GM + GR vs Control	GM vs GM + GR
	(1)	**(2)**	**(3)**
PHQ Depression (standardized)	-0.001	-0.016	0.006
	(0.025)	(0.026)	(0.022)
Grit (standardized)	0.029	0.040	-0.027
	(0.031)	(0.032)	(0.034)
Locus of control (standardized)	0.029	0.012	0.019
	(0.030)	(0.038)	(0.032)
Number of household members	0.010	0.005	0.001
	(0.010)	(0.010)	(0.011)
Household head education (years)	0.020***	0.003	0.016**
	(0.006)	(0.006)	(0.007)
Indicator for mother living in household	0.083	0.070	0.043
	(0.079)	(0.085)	(0.086)
Indicator for father living in household	-0.118**	-0.033	-0.054
	(0.057)	(0.057)	(0.068)
Indicator for male sibling living in household	-0.004	0.027	-0.044
	(0.047)	(0.037)	(0.040)
Asset decile	-0.014	0.002	-0.010
	(0.011)	(0.011)	(0.011)
Indicator for floor is wood/tiles/cement/carpet	0.096	0.065	0.021
	(0.065)	(0.064)	(0.056)
Indicator for primary female caregiver brings money to household	-0.050	-0.038	0.013
	(0.085)	(0.082)	(0.065)
Share of time not working / at school / domestic work	0.220	-0.987*	1.160**
	(0.405)	(0.513)	(0.511)
Index of perceptions of gender stereotypical roles (standardized)	0.007	0.001	0.021
	(0.028)	(0.032)	(0.025)
Indicator for adolescent aspires to attain at least some university education (among enrolled)	-0.034	-0.023	-0.040
	(0.066)	(0.065)	(0.065)
Indicator for adolescent has had savings in last 12 months	-0.024	-0.027	0.015
	(0.044)	(0.052)	(0.052)
Index of topics discussed with mother (education, relationships/marriage) (standardized)	0.003	0.006	0.000
	(0.018)	(0.017)	(0.018)
Number of observations	*793*	*815*	*792*
Joint p-value across controls	*[0.000]*	*[0.066]*	*[0.108]*

Notes. Each column presents results from a separate OLS regression. The outcome measure is an indicator for respondent was assigned to the treatment group indicated in the column title (compared to the other group indicated in the column title). Regression controls include baseline values of the adolescent mental health outcomes we study, those necessary to account for the study sampling design by country (basic controls), as well as what we refer to as 'consistent controls' across all countries - more specific information on the control sets for each country can be found in Online Appendix Table 3. Results presented in each cell include the coefficient (standard error) on covariate of interest. Each regression is properly weighted and clustered according to the country's sample design. * indicates statistical significance at $p<0.1$, ** at $p<0.05$, and *** and $p<0.001$.

Online Appendix Table 6. Baseline Balance for Ethiopia

	AWH vs Control	AWH+ Transfers vs Control	AWH vs AWH+ Transfers
	(1)	(2)	(3)
GHQ Depression (standardized)	0.017	0.014	0.004
	(0.017)	(0.020)	(0.020)
Locus of control (standardized)	0.031	0.005	0.011
	(0.021)	(0.020)	(0.018)
Number of household members	0.008	0.020*	-0.014
	(0.009)	(0.011)	(0.011)
Household head education (years)	-0.002	-0.006	0.001
	(0.003)	(0.004)	(0.004)
Indicator for mother living in household	0.104*	-0.011	0.132*
	(0.056)	(0.060)	(0.067)
Indicator for father living in household	-0.027	0.036	-0.035
	(0.041)	(0.043)	(0.045)
Indicator for male sibling living in household	-0.029	-0.032	0.006
	(0.040)	(0.036)	(0.043)
Asset decile	0.002	-0.002	0.003
	(0.007)	(0.007)	(0.007)
Indicator for floor is wood/tiles/cement/carpet	0.068	0.027	-0.019
	(0.105)	(0.140)	(0.099)
Indicator for primary female caregiver brings money to household	-0.120*	0.114	-0.214***
	(0.062)	(0.070)	(0.073)
Indicator for enrolled in school	-0.015	-0.051	0.023
	(0.055)	(0.071)	(0.060)
Share of time not working / at school / domestic work	0.221	-0.156	0.428
	(0.308)	(0.361)	(0.350)
Index of perceptions of gender stereotypical roles (standardized)	0.013	-0.004	0.016
	(0.015)	(0.016)	(0.012)
Indicator for adolescent aspires to attain at least some university education (among enrolled)	-0.061	-0.048	-0.025
	(0.041)	(0.041)	(0.037)
Indicator for adolescent has had savings in last 12 months	0.068	0.184	-0.084
	(0.122)	(0.175)	(0.143)
Index of topics discussed with mother (education, relationships/marriage) (standardized)	0.017	-0.022	0.036**
	(0.014)	(0.018)	(0.016)
Number of observations	1,380	977	1,221
Joint p-value across controls	[0.469]	[0.385]	[0.370]

Notes. Each column presents results from a separate OLS regression. The outcome measure is an indicator for respondent was assigned to the treatment group indicated in the column title (compared to the other group indicated in the column title). Regression controls include baseline values of the adolescent mental health outcomes we study, those necessary to account for the study sampling design by country (basic controls), as well as what we refer to as 'consistent controls' across all countries - more specific information on the control sets for each country can be found in Online Appendix Table 3. Note that for Ethiopia, the PHQ-9 was not measured at baseline, but rather another validated measure of mental health, the General Health Questionnaire (GHQ-12). Results presented in each cell include the coefficient (standard error) on covariate of interest. Each regression is properly weighted and clustered according to the country's sample design. * indicates statistical significance at p<0.1, ** at p<0.05, and *** at p<0.001.

Online Appendix Table 7. Attrition Regressions for Tanzania

	Surveyed at follow-up	
	(1)	(2)
Goal Setting	-0.007	-0.000
	(0.032)	(0.030)
Goal Setting X ELA	0.023	0.023
	(0.039)	(0.041)
ELA Only	0.000	0.001
	(0.033)	(0.035)
Baseline controls interacted with treatment?	No	Yes
p-value on Goal Setting X ELA	[0.563]	[0.571]
p-value on joint F-test for Goal Setting interaction terms	--	[0.131]
p-value on joint F-test for Goal Setting X ELA interaction terms	--	[0.653]
Mean of outcome measure in control group	0.791	0.791
Number of observations	1,449	1,449

Notes. Each column presents results from a separate OLS regression, properly weighted and clustered according to the country's sample design. The outcome measure of interest is an indicator for adolescent was surveyed at follow-up interview. In addition to the treatment measures listed in the table, regression controls include baseline measures of mental health (PHQ score, Grit, and Locus of Control), controls necessary to account for the study sampling design (basic controls) as well as what we call "consistent controls" - more specific information on the control sets can be found in Online Appendix Table 3. All controls are demeaned, and column (2) includes interactions between the demeaned baseline controls and the treatment measures. Results presented in each cell include the coefficient (standard error) on covariate of interest. * indicates statistical significance at $p<0.1$, ** at $p<0.05$, and *** at $p<0.001$.

Online Appendix Table 8. Attrition Regressions for Bangladesh

	Surveyed at follow-up	
	(1)	**(2)**
Growth Mindset	-0.023	-0.040**
	(0.023)	(0.020)
Growth Mindset + Girl Rising	0.013	-0.001
	(0.023)	(0.021)
Baseline controls interacted with treatment?	No	Yes
p-value on GM vs. GM + GR *(row 1 - row 2)*	[0.031]	[0.033]
p-value on joint F-test for GM interaction terms	--	[0.043]
p-value on joint F-test for GM + GR interaction terms	--	[0.269]
p-value on GM interactions vs GM + GR interactions	--	[0.539]
Mean of outcome measure in control group	0.926	0.926
Number of observations	1,200	1,200

Notes. Each column presents results from a separate OLS regression, properly weighted and clustered according to the country's sample design. The outcome measure of interest is an indicator for adolescent was surveyed at follow-up interview. In addition to the treatment measures listed in the table, regression controls include baseline measures of mental health (PHQ score, Grit, and Locus of Control), controls necessary to account for the study sampling design (basic controls) as well as what we call "consistent controls" - more specific information on the control sets can be found in Online Appendix Table 3. All controls are demeaned, and column (2) includes interactions between the demeaned baseline controls and the treatment measures. Results presented in each cell include the coefficient (standard error) on covariate of interest. * indicates statistical significance at p<0.1, ** at p<0.05, and *** and p<0.001. The "p-value on GM interactions vs GM + GR interactions" is a test of the null hypothesis that the linear combination of the GM interactions equals the linear combination of the GM + GR interactions.

Online Appendix Table 9. Attrition Regressions for Ethiopia

	Surveyed at follow-up	
	(1)	(2)
Act With Her	0.011	0.008
	(0.026)	(0.022)
Act With Her + Transfers	0.027	0.027
	(0.023)	(0.018)
Baseline controls interacted with treatment?	No	Yes
p-value on AWH vs. AWH+Transfers *(row 1 - row2)*	[0.497]	[0.311]
p-value on joint F-test for AWH interaction terms	--	[0.067]
p-value on joint F-test for AWH+Transfers interaction terms	--	[0.084]
p-value AWH interactions vs AWH+Transfers interactions	--	[0.523]
Mean of outcome measure in control group	0.861	0.861
Number of observations	1,863	1,863

Notes. Each column presents results from a separate OLS regression, properly weighted and clustered according to the country's sample design. The outcome measure of interest is an indicator for adolescent was surveyed at follow-up interview. In addition to the treatment measures listed in the table, regression controls include baseline measures of mental health (PHQ score and Locus of Control - note that resilience was not measured at baseline in Ethiopia), controls necessary to account for the study sampling design (basic controls) as well as what we call "consistent controls" - more specific information on the control sets can be found in Online Appendix Table 3. Note that for Ethiopia, the PHQ-9 was not measured at baseline, but rather another validated measure of mental health, the General Health Questionnaire (GHQ-12). All controls are demeaned, and column (2) includes interactions between the demeaned baseline controls and the treatment measures. Results presented in each cell include the coefficient (standard error) on covariate of interest. * indicates statistical significance at $p<0.1$, ** at $p<0.05$, and *** and $p<0.001$. The "p-value on AWH interactions vs AWH+Transfers interactions" is a test of the null hypothesis that the linear combination of the Act With Her interactions equals the linear combination of the Act With Her+Transfers interactions.

Online Appendix Table 10. Outcome Regressions for Tanzania

	Basic controls (1)	Basic + consistent controls (2)	Basic + LASSO (consistent controls) (3)	Basic + LASSO for (consistent & expanded controls) (4)	Basic + LASSO for (consistent & expanded controls + baseline outcome) (5)
Panel A: PHQ Depression Score (standardized)					
Goal Setting	0.150	0.153	0.150	0.150	0.150
	(0.102)	(0.105)	(0.102)	(0.102)	(0.102)
Goal Setting x ELA	-0.208	-0.194	-0.208	-0.208	-0.208
	(0.131)	(0.133)	(0.131)	(0.131)	(0.131)
ELA only	0.136	0.129	0.136	0.136	0.136
	(0.102)	(0.102)	(0.102)	(0.102)	(0.102)
Panel B: Indicator for Depression					
Goal Setting	0.086**	0.088**	0.089***	0.086**	0.086**
	(0.033)	(0.033)	(0.033)	(0.033)	(0.033)
Goal Setting x ELA	-0.111**	-0.106**	-0.105**	-0.111**	-0.111**
	(0.043)	(0.044)	(0.043)	(0.043)	(0.043)
ELA only	0.054	0.048	0.046	0.054	0.054
	(0.037)	(0.036)	(0.035)	(0.037)	(0.037)
Panel C: Socio-Emotional Development (standardized)					
Goal Setting	-0.057	-0.047	-0.057	-0.057	-0.057
	(0.111)	(0.111)	(0.111)	(0.111)	(0.111)
Goal Setting x ELA	0.058	0.053	0.058	0.058	0.058
	(0.137)	(0.137)	(0.137)	(0.137)	(0.137)
ELA only	-0.135	-0.125	-0.135	-0.135	-0.135
	(0.105)	(0.107)	(0.105)	(0.105)	(0.105)
Panel D: Locus of Control (standardized)					
Goal Setting	-0.112	-0.110	-0.112	-0.112	-0.112
	(0.089)	(0.088)	(0.089)	(0.089)	(0.089)
Goal Setting x ELA	0.096	0.096	0.096	0.096	0.096
	(0.137)	(0.137)	(0.137)	(0.137)	(0.137)
ELA only	-0.079	-0.081	-0.079	-0.079	-0.079
	(0.118)	(0.118)	(0.118)	(0.118)	(0.118)
Panel E: Mental Health Index (standardized)					
Goal Setting	-0.165	-0.160	-0.165	-0.165	-0.148
	(0.103)	(0.106)	(0.103)	(0.103)	(0.104)
Goal Setting x ELA	0.199	0.188	0.199	0.199	0.209
	(0.129)	(0.131)	(0.129)	(0.129)	(0.130)
ELA only	-0.174	-0.165	-0.174	-0.174	-0.166
	(0.123)	(0.122)	(0.123)	(0.123)	(0.118)

Notes. Each column and panel presents coefficient estimates (standard errors) from a separate regression. Each successive column considers the inclusion of additional controls. In columns (1) and (2), researchers selected controls to control for based on the study sampling design (basic) and relevant baseline characteristics (basic + consistent). In columns (3)-(5), we use LASSO to select control variables based on possible set of control variables. The control set varies as indicated by the row title, and more specific information on the control sets for each country can be found in Online Appendix Table 3. Each regression is properly weighted and clustered according to the country's sample design. Outcomes (constructs) are listed in the panel title, and are described in more detail in the text. Number of observations is as indicated in Table 4. * indicates statistical significance at p<0.1, ** at p<0.05, and *** at p<0.001.

Online Appendix Table 11. Outcome Regressions for Bangladesh

	Basic controls (1)	Basic + consistent controls (2)	Basic + LASSO (consistent controls) (3)	Basic + LASSO for (consistent & expanded controls) (4)	Basic + LASSO for (consistent & expanded controls + baseline outcome) (5)
Panel A: PHQ Depression Score (standardized)					
Growth Mindset	-0.018	-0.000	-0.020	-0.020	-0.019
	(0.090)	(0.096)	(0.089)	(0.089)	(0.096)
Growth Mindset + Girl Rising	-0.001	-0.017	-0.007	-0.007	-0.012
	(0.107)	(0.100)	(0.103)	(0.103)	(0.103)
p-value on (1st row – 2nd row)	*0.877*	*0.868*	*0.900*	*0.900*	*0.947*
Panel B: Indicator for Moderate/Severe Depression					
Growth Mindset	-0.002	-0.002	-0.003	-0.001	-0.001
	(0.009)	(0.010)	(0.009)	(0.010)	(0.010)
Growth Mindset + Girl Rising	-0.003	-0.004	-0.003	-0.002	-0.002
	(0.011)	(0.012)	(0.011)	(0.011)	(0.012)
p-value on (1st row – 2nd row)	*0.960*	*0.866*	*0.995*	*0.911*	*0.967*
Panel C: Socio-Emotional Development (standardized)					
Growth Mindset	0.317***	0.299***	0.293***	0.266***	0.245***
	(0.111)	(0.101)	(0.101)	(0.094)	(0.087)
Growth Mindset + Girl Rising	0.140	0.092	0.093	0.082	0.070
	(0.103)	(0.104)	(0.104)	(0.101)	(0.095)
p-value on (1st row – 2nd row)	*0.126*	*0.077*	*0.077*	*0.101*	*0.094*
Panel D: Locus of Control (standardized)					
Growth Mindset	0.175	0.177*	0.162	0.175	0.142
	(0.110)	(0.103)	(0.100)	(0.110)	(0.098)
Growth Mindset + Girl Rising	0.027	-0.009	-0.007	0.027	-0.013
	(0.101)	(0.094)	(0.097)	(0.101)	(0.091)
p-value on (1st row – 2nd row)	*0.272*	*0.113*	*0.145*	*0.272*	*0.178*
Panel E: Mental Health Index (standardized)					
Growth Mindset	0.286**	0.265**	0.266**	0.255**	0.229**
	(0.125)	(0.122)	(0.123)	(0.113)	(0.110)
Growth Mindset + Girl Rising	0.090	0.052	0.051	0.052	0.018
	(0.095)	(0.103)	(0.104)	(0.097)	(0.093)
p-value on (1st row – 2nd row)	*0.137*	*0.111*	*0.110*	*0.101*	*0.077*

Notes: Each column and panel presents results from a separate regression. The panel title indicates the outcome (construct) of interest (described in more detail in the text). Each successive column considers the inclusion of additional controls. In columns (1) and (2), researchers selected controls based on the study sampling design (basic) and relevant baseline characteristics (basic + consistent). In columns (3)-(5), LASSO methods are used to select controls based on possible sets. The control set varies as indicated by the row title, and more specific information on the control sets for each country can be found in Online Appendix Table 3. Each regression is properly weighted and clustered according to the country's sample design. Results presented for each treatment indicator include the coefficient estimates and standard errors (in parentheses). Number of observations is as indicated in Table 4. * indicates statistical significance at $p<0.1$, ** at $p<0.05$, and *** and $p<0.001$. The results presented in brackets in the final row of each panel are p-values on the test of equality of the treatment indicator coefficients.

Online Appendix Table 12. Outcome Regressions for Ethiopia

	Basic controls (1)	Basic + consistent controls (2)	Basic + LASSO (consistent controls) (3)	Basic + LASSO for (consistent & expanded controls) (4)	Basic + LASSO for (consistent & expanded controls + baseline outcome) (5)
Panel A: PHQ Depression Score (standardized)					
Act With Her	-0.113	-0.110	-0.113	-0.113	-0.115
	(0.071)	(0.071)	(0.071)	(0.071)	(0.072)
Act With Her + Transfers	0.011	0.006	0.011	0.011	0.002
	(0.091)	(0.091)	(0.091)	(0.091)	(0.089)
p-value on (1st row - 2nd row)	*0.091*	*0.115*	0.091	0.091	*0.104*
Panel B: Indicator for Moderate/Severe Depression					
Act With Her	-0.006	-0.006	-0.006	-0.006	--
	(0.007)	(0.007)	(0.007)	(0.007)	
Act With Her + Transfers	0.007	0.007	0.007	0.007	--
	(0.010)	(0.010)	(0.010)	(0.010)	
p-value on (1st row - 2nd row)	*0.130*	*0.128*	*0.130*	*0.130*	--
Panel C: Socio-Emotional Development (standardized)					
Act With Her	0.158**	0.160**	0.163***	0.149**	--
	(0.067)	(0.062)	(0.061)	(0.062)	
Act With Her + Transfers	0.087	0.095	0.099	0.093	--
	(0.072)	(0.067)	(0.066)	(0.066)	
p-value on (1st row - 2nd row)	*0.329*	*0.325*	*0.309*	0.377	--
Panel D: Locus of Control (standardized)					
Act With Her	0.104	0.105	0.113	0.114	0.114
	(0.072)	(0.072)	(0.072)	(0.071)	(0.071)
Act With Her + Transfers	0.056	0.053	0.060	0.058	0.058
	(0.075)	(0.074)	(0.075)	(0.075)	(0.075)
p-value on (1st row - 2nd row)	*0.490*	*0.450*	*0.433*	*0.404*	0.404
Panel E: Mental Health Index (standardized)					
Act With Her	0.172**	0.177**	0.178**	0.179**	--
	(0.071)	(0.069)	(0.070)	(0.068)	
Act With Her + Transfers	0.063	0.075	0.077	0.080	--
	(0.076)	(0.071)	(0.071)	(0.071)	
p-value on (1st row - 2nd row)	*0.116*	*0.107*	0.105	*0.113*	--

Notes: Each column and panel presents results from a separate regression. The panel title indicates the outcome (construct) of interest (described in more detail in the text). Each successive column considers the inclusion of additional controls. In columns (1) and (2), researchers selected controls based on the study sampling design (basic) and relevant baseline characteristics (basic + consistent). In columns (3)-(5), LASSO methods are used to select controls based on possible sets. The control set varies as indicated by the row title, and more specific information on the control sets for each country can be found in Online Appendix Table 3. Each regression is properly weighted and clustered according to the country's sample design. Results presented for each treatment indicator include the coefficient estimates and standard errors (in parentheses). Number of observations is as indicated in Table 4. * indicates statistical significance at p<0.1, ** at p<0.05, and *** and p<0.001. The results presented in brackets in the final row of each panel are p-values on the test of equality of the treatment indicator coefficients. Note that the PHQ-9 was not administered at baseline in Ethiopia, but we use a mental health scale that was collected at baseline (the General Health Questionnaire (GHQ-12)), as a control for the baseline outcome measure in the last column of Panel A. Cells with a "--" denote outcomes for which we do not have a baseline outcome measure.

Online Appendix Table 13: Outcome Component Regression Results for Tanzania

	Goal Setting	Goal Setting X ELA	ELA only
	(1)	(2)	(3)
PHQ Items			
PHQ-9 Item #1: Over the last two weeks, how often have you been bothered by having little interest or pleasure in doing things that you used to enjoy? [Indicator]	-0.036 (0.045)	0.058 (0.065)	0.018 (0.057)
PHQ-9 Item #2: Over the last two weeks, how often have you been bothered by feeling sad, down, depressed, or hopeless? [Indicator]	0.015 (0.041)	-0.084* (0.050)	0.063 (0.050)

Notes: Each row presents coefficient estimates (standard errors) from a separate regression. Regression controls include only those necessary to account for the study sampling design (basic controls) - more specific information on the control sets for each country can be found in Online Appendix Table 3. Each regression is properly weighted and clustered according to the country's sample design. Outcomes are listed in the row titles. Number of observations is as in Table 4. * indicates statistical significance at $p<0.1$, ** at $p<0.05$, and *** and $p<0.001$.

Online Appendix Table 14: Outcome Component Regression Results for Bangladesh

	Growth Mindset (1)	Girl Rising + Growth Mindset (2)	p-value on (1st - 2nd column) (3)
PHQ Indices and Items			
PHQ-2 (standardized)	-0.042	0.069	
	(0.078)	(0.104)	0.256
PHQ-9 Item #1: Over the last two weeks, how often have you been bothered by having little interest or pleasure in doing things that you used to enjoy? [Indicator]	0.003	0.094	
	(0.045)	(0.057)	0.099
PHQ-9 Item #2: Over the last two weeks, how often have you been bothered by feeling sad, down, depressed, or hopeless? [Indicator]	0.008	-0.012	
	(0.038)	(0.037)	0.598
PHQ-9 Item #3: Over the last two weeks, how often have you been bothered by trouble sleeping, including staying asleep or sleeping much more or much less than you normally do? [Indicator]	-0.067*	-0.040	
	(0.036)	(0.039)	0.510
PHQ-9 Item #4: Over the last two weeks, how often have you been bothered by feeling tired or like you are carrying a heavy burden or like you have little strength in your body? [Indicator]	-0.060	-0.031	
	(0.055)	(0.029)	0.486
PHQ-9 Item #5: Over the last two weeks, how often have you been bothered by your appetite including eating much less or much more than you normally do? [Indicator]	-0.031	-0.045	
	(0.029)	(0.029)	0.646
PHQ-9 Item #6: Over the last two weeks, how often have you been bothered by feeling bad about yourself, feeling that you are a failure, feeling that you are worthless, or feeling guilt that you have let yourself or your family down?	0.001	-0.027	
	(0.026)	(0.024)	0.268
PHQ-9 Item #7: Over the last two weeks, how often have you been bothered by having trouble concentrating on things such as your work, the care of your children or other activities? [Indicator]	0.066**	0.075*	
	(0.031)	(0.042)	0.851
PHQ-9 Item #8: Over the last two weeks, how often have you been bothered by moving or speaking so slowly that other people have noticed? Or have you experienced the opposite - meaning that others noticed that you had so much movement, or restlessness that caused you to move around a lot more than usual? [Indicator]	-0.000	0.042*	
	(0.022)	(0.022)	0.133
PHQ-9 Item #9: Over the last two weeks, how often have you been bothered by thoughts that you would be better off dead or thoughts of hurting yourself in some way? [Indicator]	-0.004	-0.009	
	(0.017)	(0.016)	0.702

Online Appendix Table 14: Outcome Component Regression Results for Bangladesh *(continued)*

	Growth Mindset	Girl Rising + Growth Mindset	*p-value on (1st - 2nd column)*
Grit Items			
Grit Item #1: I like schoolwork best which makes me think hard, even if I make a lot of mistakes. (agree)	0.019	-0.006	
	(0.028)	(0.033)	*0.373*
Grit Item #2: Setbacks discourage me. (disagree)	0.080	0.056	
	(0.049)	(0.039)	*0.621*
Grit Item #3: If I think I will lose in a game, I do not want to continue playing. (disagree)	0.042	0.006	
	(0.030)	(0.040)	*0.349*
Grit Item #4: When I receive a bad result on a test I spend less time on this subject and focus on other subjects that I'm actually good at. (disagree)	0.048	-0.041	
	(0.034)	(0.034)	*0.030*
Grit Item #5: I work hard in tasks. (agree)	0.053**	0.023	
	(0.023)	(0.024)	*0.109*
Grit Item #6: I prefer easy homework where I can easily answer all questions correctly. (disagree)	0.031	0.001	
	(0.054)	(0.051)	*0.511*
Grit Item #7: If I'm having difficulty in a task, it is a waste of time to keep trying. I move on to things which I am better at doing. (disagree)	0.114***	0.021	
	(0.043)	(0.041)	*0.068*

Notes: Each row presents coefficient estimates (standard errors) from a separate regression. Regression controls include only those necessary to account for the study sampling design (basic controls) - more specific information on the control sets for each country can be found in Online Appendix Table 3. Each regression is properly weighted and clustered according to the country's sample design. Outcomes are listed in the row titles. Number of observations is as in Table 4. * indicates statistical significance at p<0.1, ** at p<0.05, and *** and p<0.001.

Online Appendix Table 15: Outcome Component Regression Results for Ethiopia

	AWH	AWH + Assets	p-value on (1st - 2nd column)
	(1)	(2)	(3)
PHQ Indices and Items			
PHQ-2 (standardized)	-0.088	-0.004	*0.238*
	(0.069)	(0.087)	
PHQ-9 Item #1: Over the last two weeks, how often have you been bothered by having little interest or pleasure in doing things that you used to enjoy? [Indicator]	-0.010	-0.007	*0.824*
	(0.013)	(0.014)	
PHQ-9 Item #2: Over the last two weeks, how often have you been bothered by feeling sad, down, depressed, or hopeless? [Indicator]	-0.015	-0.011	*0.821*
	(0.014)	(0.017)	
PHQ-9 Item #3: Over the last two weeks, how often have you been bothered by trouble sleeping, including staying asleep or sleeping much more or much less than you normally do? [Indicator]	*-0.023*	*0.007*	*0.089*
	(0.017)	(0.019)	
PHQ-9 Item #4: Over the last two weeks, how often have you been bothered by feeling tired or like you are carrying a heavy burden or like you have little strength in your body? [Indicator]	-0.018	0.023	*0.065*
	(0.018)	(0.025)	
PHQ-9 Item #5: Over the last two weeks, how often have you been bothered by your appetite including eating much less or much more than you normally do? [Indicator]	-0.003	-0.009	*0.718*
	(0.016)	(0.018)	
PHQ-9 Item #6: Over the last two weeks, how often have you been bothered by feeling bad about yourself, feeling that you are a failure, feeling that you are worthless, or feeling guilt that you have let yourself or your	-0.021*	0.001	*0.077*
	(0.012)	(0.015)	
PHQ-9 Item #7: Over the last two weeks, how often have you been bothered by having trouble concentrating on things such as your work, the care of your children or other activities? [Indicator]	-0.016	-0.006	*0.373*
	(0.010)	(0.014)	
PHQ-9 Item #8: Over the last two weeks, how often have you been bothered by moving or speaking so slowly that other people have noticed? Or have you experienced the opposite – meaning that others noticed that you had so much movement, or restlessness that caused you to move around a lot more than usual? [Indicator]	-0.014	-0.021*	*0.550*
	(0.011)	(0.012)	
PHQ-9 Item #9: Over the last two weeks, how often have you been bothered by thoughts that you would be better off dead or thoughts of hurting yourself in some way? [Indicator]	0.000	0.014	*0.159*
	(0.008)	(0.011)	

Online Appendix Table 15: Outcome Component Regression Results for Ethiopia *(continued)*

	AWH	AWH + Assets	*p-value on (1st - 2nd column)*
Resilience Items			
CYRS-12 Item #1: I have people I want to be like.	0.097**	0.073*	*0.445*
	(0.040)	(0.039)	
CYRS-12 Item #2: Getting an education is important to me.	-0.024	-0.003	*0.271*
	(0.017)	(0.022)	
CYRS-12 Item #3: I feel that my parent(s)/caregiver(s) know a lot about me.	-0.001	0.002	*0.271*
	(0.016)	(0.016)	
CYRS-12 Item #4: I try to finish activities that I start.	0.006	-0.011	*0.267*
	(0.015)	(0.017)	
CYRS-12 Item #5: When things don't go my way, I can fix it without hurting myself or other people.	0.059**	0.006	*0.064*
	(0.030)	(0.034)	
CYRS-12 Item #6: I know where to go to get help.	0.107***	0.073**	*0.246*
	(0.035)	(0.036)	
CYRS-12 Item #7: I feel that I belong at my school.	0.044**	0.017	*0.275*
	(0.022)	(0.026)	
CYRS-12 Item #8: I think my family cares about me when times are hard.	0.013	0.006	*0.625*
	(0.015)	(0.017)	
CYRS-12 Item #9: I think my friends care about me when times are hard.	0.019	0.058**	*0.086*
	(0.023)	(0.024)	
CYRS-12 Item #10: I am treated fairly.	-0.004	-0.022	*0.312*
	(0.020)	(0.021)	
CYRS-12 Item #11: I have chances to learn things that will be useful when I am older.	0.001	-0.018	*0.348*
	(0.021)	(0.022)	
CYRS-12 Item #12: I like the way my community celebrates things.	0.021	0.005	*0.230*
	(0.015)	(0.017)	

Notes: Each row presents coefficient estimates (standard errors) from a separate regression. Regression controls include only those necessary to account for the Study sampling design (basic controls) – more specific information on the control sets for each country can be found in Online Appendix Table 3. Each regression is properly weighted and clustered according to the country's sample design. Outcomes are listed in the row titles. Number of observations is as in Table 4. * indicates statistical significance at $p < 0.1$, ** at $p < 0.05$, and *** and $p < 0.001$.

Online Appendix Table 16: FDR sharpened Q-values for Main Regression Results

	PHQ Depression Score (standardized) (1)	Indicator for Moderate/ Severe Depression (2)	Socio-Emotional Development (standardized) (3)	Locus of Control (standardized) (4)
Panel A: Tanzania				
Goal Setting	0.144	0.011	0.611	0.210
	[0.266]	[0.047]	[0.389]	[0.266]
Goal Setting X ELA	0.115	0.012	0.674	0.488
	[0.209]	[0.051]	[0.509]	[0.483]
ELA only	0.189	0.147	0.204	0.507
	[0.374]	[0.374]	[0.374]	[0.374]
Panel B: Bangladesh				
Growth Mindset	0.844	0.803	0.005	0.116
	[0.731]	[0.731]	[0.021]	[0.211]
Growth Mindset + Girl Rising	0.990	0.788	0.178	0.792
	[1.000]	[1.000]	[1.000]	[1.000]
Growth Mindset = Girl Rising +	0.877	0.960	0.126	0.272
Growth Mindset	[1.000]	[1.000]	[1.000]	[1.000]
Panel C: Ethiopia				
Act With Her	0.115	0.338	0.020	0.155
	[0.184]	[0.261]	[0.087]	[0.184]
Act With Her + Transfers	0.907	0.518	0.227	0.460
	[1.000]	[1.000]	[1.000]	[1.000]
Act With Her = Act With Her+Transfers	0.091	0.130	0.329	0.490
	[0.352]	[0.352]	[0.352]	[0.352]

Notes: Each column and panel presents results from a separate regression. The column title indicates the outcome measure (construct) of interest. Regression controls include only those necessary to account for the study sampling design by country (basic controls) - more specific information on the control sets for each country can be found in Online Appendix Table 3. Each regression is properly weighted and clustered according to the country's sample design. Number of observations is as in Table 4. Results presented for each treatment indicator include the p-value from the regressions presented in Table 4, and the FDR-adjusted q-value (Anderson (2008) [in brackets], across outcomes for the specified treatment indicator.

Online Appendix Table 17. Heterogeneity Regressions for Tanzania

	x Indicator for Assets > Median	x Indicator for Enrolled in School	x Indicator for Perceptions of Gendered Norms in Community > Median	x Indicator for PHQ Score > Median	x Indicator for Mother Lives in Household
	(1)	(2)	(3)	(4)	(5)
Panel A: PHQ Depression Score (standardized)					
Goal Setting	0.207	0.104	0.133	0.101	0.066
	(0.135)	(0.173)	(0.117)	(0.138)	(0.235)
Goal Setting x ELA	-0.319*	0.002	-0.024	-0.107	-0.030
	(0.189)	(0.246)	(0.153)	(0.185)	(0.322)
GS X Heterogeneity	-0.118	0.069	0.034	0.169	0.114
	(0.155)	(0.221)	(0.217)	(0.211)	(0.264)
(GSxELA) X Heterogeneity	0.249	-0.285	-0.330	-0.201	-0.234
	(0.301)	(0.320)	(0.266)	(0.297)	(0.364)
Number of observations	*1,167*	*1,167*	*1,167*	*1,167*	*1,167*
Panel B: Indicator for Moderate/Severe Depression					
Goal Setting	0.092*	0.034	0.061	0.062	0.086
	(0.048)	(0.057)	(0.038)	(0.042)	(0.082)
Goal Setting x ELA	-0.126*	-0.009	-0.018	-0.118*	-0.008
	(0.064)	(0.086)	(0.050)	(0.062)	(0.107)
GS X Heterogeneity	-0.012	0.079	0.061	0.074	0.002
	(0.060)	(0.074)	(0.069)	(0.070)	(0.086)
(GSxELA) X Heterogeneity	0.034	-0.144	-0.186**	0.018	-0.134
	(0.100)	(0.115)	(0.086)	(0.106)	(0.127)
Number of observations	*1,167*	*1,167*	*1,167*	*1,167*	*1,167*
Panel C: Socio-Emotional Development (standardized)					
Goal Setting	-0.091	-0.204	-0.103	0.025	-0.121
	(0.112)	(0.172)	(0.142)	(0.137)	(0.204)
Goal Setting x ELA	0.053	0.076	0.242	-0.035	0.185
	(0.150)	(0.283)	(0.179)	(0.185)	(0.258)
GS X Heterogeneity	0.075	0.208	0.116	-0.181	0.087
	(0.146)	(0.204)	(0.228)	(0.158)	(0.196)
(GSxELA) X Heterogeneity	0.022	-0.037	-0.413	0.194	-0.165
	(0.213)	(0.340)	(0.271)	(0.258)	(0.277)
Number of observations	*1,176*	*1,176*	*1,176*	*1,176*	*1,176*
Panel D: Locus of Control (standardized)					
Goal Setting	-0.167	-0.104	-0.172	-0.224*	-0.258
	(0.119)	(0.153)	(0.133)	(0.126)	(0.188)
Goal Setting x ELA	0.071	0.054	0.038	0.094	0.245
	(0.154)	(0.272)	(0.181)	(0.191)	(0.324)
GS X Heterogeneity	0.121	-0.022	0.155	0.292*	0.183
	(0.138)	(0.229)	(0.164)	(0.170)	(0.222)
(GSxELA) X Heterogeneity	0.074	0.066	0.060	-0.029	-0.188
	(0.202)	(0.350)	(0.268)	(0.257)	(0.377)
Number of observations	*1,176*	*1,176*	*1,176*	*1,176*	*1,176*

Notes. Each column and panel presents results from a separate regression. The column title indicates the heterogeneity metric of interest, and the panel title indicates the outcome measure (construct) of interest. Regression controls include only those necessary to account for the study sampling design (basic controls) - more specific information on the control sets can be found in Online Appendix Table 3. Each regression is properly weighted and clustered according to the country's sample design. Results presented include the coefficient (standard error) on a treatment indicator or the interaction between the heterogeneity metric and a treatment indicator. * indicates statistical significance at p<0.1, ** at p<0.05, and *** and p<0.001.

Online Appendix Table 18. Heterogeneity Regressions for Bangladesh

	x Indicator for Assets > Median	x Education Aspirations	x Indicator for Perceptions of Gendered Norms in Community > Median	x Indicator for PHQ Score > Median	x Indicator for Mother Lives in Household
	(1)	(2)	(3)	(4)	(5)
Panel A: PHQ Depression Score (standardized)					
Growth Mindset	0.163	0.080	-0.113	-0.043	-0.007
	(0.125)	(0.228)	(0.105)	(0.098)	(0.297)
Growth Mindset + Girl Rising	-0.120	-0.382*	-0.031	0.078	0.140
	(0.149)	(0.196)	(0.130)	(0.140)	(0.355)
GM X Heterogeneity	-0.313**	-0.116	0.243	0.055	-0.013
	(0.157)	(0.223)	(0.174)	(0.183)	(0.294)
(GM + GR) X Heterogeneity	0.200	0.440**	0.054	-0.156	-0.149
	(0.162)	(0.195)	(0.226)	(0.217)	(0.333)
Number of observations	*1,096*	*1,096*	*1,096*	*1,096*	*1,096*
Panel B: Indicator for Moderate/Severe Depression					
Growth Mindset	-0.009	0.031	-0.007	0.004	-0.006
	(0.016)	(0.023)	(0.013)	(0.011)	(0.010)
Growth Mindset + Girl Rising	-0.003	0.027	-0.007	-0.002	0.061
	(0.017)	(0.021)	(0.016)	(0.009)	(0.065)
GM X Heterogeneity	0.014	-0.039	0.014	-0.012	0.004
	(0.020)	(0.025)	(0.021)	(0.022)	(0.016)
(GM + GR) X Heterogeneity	0.003	-0.035	0.017	-0.000	-0.067
	(0.019)	(0.023)	(0.025)	(0.023)	(0.064)
Number of observations	*1,096*	*1,096*	*1,096*	*1,096*	*1,096*
Panel C: Socio-Emotional Development (standardized)					
Growth Mindset	0.195*	0.068	0.255*	0.392***	0.302
	(0.114)	(0.188)	(0.153)	(0.112)	(0.394)
Growth Mindset + Girl Rising	0.204*	-0.182	0.046	0.266**	0.117
	(0.111)	(0.242)	(0.149)	(0.107)	(0.297)
GM X Heterogeneity	0.179	0.286	0.107	-0.154	0.014
	(0.163)	(0.209)	(0.218)	(0.169)	(0.412)
(GM + GR) X Heterogeneity	-0.150	0.366	0.184	-0.264	0.022
	(0.135)	(0.287)	(0.192)	(0.195)	(0.298)
Number of observations	*1,100*	*1,100*	*1,100*	*1,100*	*1,100*
Panel D: Locus of Control (standardized)					
Growth Mindset	-0.024	0.139	0.330**	0.172	0.001
	(0.138)	(0.211)	(0.126)	(0.129)	(0.449)
Growth Mindset + Girl Rising	-0.076	0.211	0.020	-0.173*	0.098
	(0.103)	(0.178)	(0.130)	(0.103)	(0.361)
GM X Heterogeneity	0.338**	0.039	-0.450**	-0.002	0.183
	(0.164)	(0.233)	(0.200)	(0.174)	(0.443)
(GM + GR) X Heterogeneity	0.168	-0.218	-0.020	0.415***	-0.074
	(0.136)	(0.218)	(0.195)	(0.113)	(0.341)
Number of observations	*1,104*	*1,104*	*1,104*	*1,104*	*1,104*

Notes. Each column and panel presents results from a separate regression. The column title indicates the heterogeneity metric of interest, and the panel title indicates the outcome measure (construct) of interest. Regression controls include only those necessary to account for the study sampling design (basic controls) - more specific information on the control sets can be found in Online Appendix Table 3. Each regression is properly weighted and clustered according to the country's sample design. Results presented include the coefficient (standard error) on a treatment indicator or the interaction between the heterogeneity metric and a treatment indicator. * indicates statistical significance at $p<0.1$, ** at $p<0.05$, and *** and $p<0.001$.

Online Appendix Table 19. Heterogeneity Regressions for Ethiopia

	x Indicator for Assets > Median	x Indicator for Enrolled in School	x Indicator for Perceptions of Gendered Norms in Community > Median	x Indicator for PHQ Score > Median[1]	x Indicator for Mother Lives in Household
	(1)	(2)	(3)	(4)	(5)
Panel A: PHQ Depression Score (standardized)					
AWH	-0.061	-0.257*	-0.075	-0.159	-0.024
	(0.050)	(0.138)	(0.053)	(0.107)	(0.166)
AWH + Transfers	0.138	-0.041	0.153	0.024	-0.064
	(0.092)	(0.199)	(0.103)	(0.116)	(0.206)
AWH X Heterogeneity	-0.124	0.164	-0.123	0.131	-0.096
	(0.126)	(0.132)	(0.172)	(0.135)	(0.176)
(AWH+T) X Heterogeneity	-0.313**	0.049	-0.440**	-0.050	0.080
	(0.132)	(0.197)	(0.175)	(0.138)	(0.226)
Number of observations	*1,518*	*1,518*	*1,518*	*1,497*	*1,518*
Panel B: Indicator for Moderate/Severe Depression					
AWH	-0.001	-0.007	-0.001	-0.011	0.007
	(0.003)	(0.009)	(0.005)	(0.010)	(0.012)
AWH + Transfers	0.016	0.016	0.017	0.001	-0.001
	(0.011)	(0.015)	(0.012)	(0.011)	(0.005)
AWH X Heterogeneity	-0.012	0.001	-0.015	0.013	-0.015
	(0.012)	(0.008)	(0.017)	(0.010)	(0.014)
(AWH+T) X Heterogeneity	-0.023*	-0.011	-0.031*	0.017	0.009
	(0.013)	(0.011)	(0.018)	(0.011)	(0.013)
Number of observations	*1,518*	*1,518*	*1,518*	1497	1518
Panel C: Socio-Emotional Development (standardized)					
AWH	0.031	0.114	0.180**	0.163**	0.078
	(0.087)	(0.262)	(0.075)	(0.078)	(0.171)
AWH + Transfers	0.060	0.040	0.151*	0.118	0.002
	(0.085)	(0.282)	(0.081)	(0.088)	(0.149)
AWH X Heterogeneity	0.310***	0.050	-0.057	-0.010	0.089
	(0.104)	(0.262)	(0.177)	(0.126)	(0.189)
(AWH+T) X Heterogeneity	0.052	0.073	-0.204	-0.098	0.093
	(0.128)	(0.289)	(0.165)	(0.129)	(0.175)
Number of observations	*1,405*	*1,405*	*1,405*	*1,386*	*1,405*
Panel D: Locus of Control (standardized)					
AWH	0.061	0.429**	0.073	0.138*	0.112
	(0.096)	(0.184)	(0.081)	(0.082)	(0.144)
AWH + Transfers	0.137	0.380	0.035	0.085	0.007
	(0.099)	(0.239)	(0.087)	(0.087)	(0.186)
AWH X Heterogeneity	0.103	-0.378**	0.084	-0.062	-0.005
	(0.129)	(0.181)	(0.170)	(0.109)	(0.171)
(AWH+T) X Heterogeneity	-0.201	-0.378	0.054	-0.034	0.054
	(0.143)	(0.247)	(0.197)	(0.145)	(0.203)
Number of observations	*1,617*	*1,617*	*1,617*	*1,594*	*1,617*

Notes. Each column and panel presents results from a separate regression. The column title indicates the heterogeneity metric of interest, and the panel title indicates the outcome measure (construct) of interest. Regression controls include only those necessary to account for the study sampling design (basic controls) - more specific information on the control sets can be found in Online Appendix Table 3. Each regression is properly weighted and clustered according to the country's sample design. Results presented include the coefficient (standard error) on a treatment indicator or the interaction between the heterogeneity metric and a treatment indicator. * indicates statistical significance at p<0.1, ** at p<0.05, and *** and p<0.001. [1]The depression heterogeneity term for Ethiopia is the General Health Questionnaire (GHQ-12) measure, another validated measure of mental health (as the PHQ was not collected at baseline in Ethiopia).

References for Online Appendix

Achyut, P., Bhatla, N., Verman, H., Uttamacharya, S.G., Bhattacharya, S., and Verma, R. 2016. *Towards Gender Equality: The GEMS Journey Thus Far*. New Delhi: International Center for Research on Women.

Adoho, F., Chakravarty, S., Korkoyah. D.T., Lundberg. M., and Tasneem, A. 2014. *The Impact of an Adolescent Girls Employment Program: The EPAG Project in Liberia*. World Bank Policy Research Working Paper #6832.

Alan, S., Boneva, T., Ertac, S. 2019. "Ever Failed, Try Again, Succeed Better: Results from a Randomized Educational Intervention on Grit." *The Quarterly Journal of Economics,* 134(3): 1121-1162.

Amin, S., Ahmed, J., Saha, J., Hossain, M.I., and Haque, E. 2016. *Delaying child marriage through community-based skills-development programs for girls: Results from a randomized controlled study in rural Bangladesh.* New York and Dhaka: Population Council.

Andrew, A., Krutikova, S., Smarrelli, G., and Verma, H. 2022. "Gender norms, violence and adolescent girls' trajectories: Evidence from a field experiment in India." *Institute for Fiscal Studies Working Paper 22/41.*

Ashraf, N., Bau, N., Low, C., and McGinn, K. 2020. "Negotiating a Better Future: How Interpersonal Skills Facilitate Intergenerational Investment." *The Quarterly Journal of Economics*, 135(2): 1095-1151.

Austrian, K., Soler-Hampejsek, E., Behrman, J.R., Digitale, J., Hachonda, N.J., Sweupe, M., and Hewett, P.C. 2020. "The impact of the Adolescent Girls Empowerment Program (AGEP) on short and long term social, economic, education and fertility outcomes: a cluster randomized controlled trial in Zambia." *BMC Public Health*, 20(1): 349.

Baird, S., Ozler, B., Dell'Aira, C., and Us Salam, D. 2020. "Using Group Interpersonal Psychotherapy to Improve the Well-Being of Adolescent Girls." *Journal of Development Economics,* Registered Report Stage 1: Proposal*.*

Bandiera, O., Buehren, N., Burgess, R., Goldstein, M., Gulesci, S. Rasul, I., Sulaiman, M. 2020a. "Women's Empowerment in Action: Evidence from a Randomized Control Trial in Africa." *American Economic Journal: Applied Economics*, 12(1): 210-259.

Bandiera, O., Buehren, N., Goldstein, M., Rasul, I., and Smurra, A. 2020b. "Do School Closures During an Epidemic have Persistent Effects? Evidence from Sierra Leone in the Time of Ebola." *Mimeo.*

Beaman, L., Herskowitz, S., Keleher, N., and Magruder, J. 2021. "Stay in the Game: A Randomized Controlled Trial of a Sports and Life Skills Program for Vulnerable Youth in Liberia." *Economic Development and Cultural Change*, 70(1): 129-158.

Betancourt, T.S., McBain, R., Newnham, E.A., Akinsulure-Smith, A.M., Brennan, R.T., Weisz, J.R., and Hansen, N.B. 2014. "A Behavioral Intervention for War-Affected Youth in Sierra Leone: A Randomized Controlled Trial." *Journal of the American Academy of Child & Adolescent Psychiatry*, 53(12): 1288-1297.

Botea, I. A., Chakravarty, S., and Haddock, S. E. 2015. *The adolescent girls initiative in Rwanda: Final evaluation report.* Washington D.C.: The World Bank.

Boxho, C., Kanga, D., Koussoubé, E., Rouanet, L., and Boulhane, O. 2023. "Empowering Adolescent Girls through Safe Spaces and Accompanying Measures in Cote d'Ivoire." *Mimeo.*

Buchmann, N., Field, E., Glennerster, R., Nazneen, S., Pimkina, S., and Sen, I. 2018. "Power vs Money: Alternative Approaches to Reducing Child Marriage in Bangladesh, a Randomized Control Trial." *Mimeo.*

Buehren, N., Chakravarty, S., Goldstein, M., Slavchevska, V., and Sulaiman, M. 2017a. "Adolescent Girls' Empowerment in Conflict-Affected Settings: Experimental Evidence from South Sudan." *Mimeo.*

Buehren, N., Goldstein, M., Gulesci, S., Sulaiman, M., and Yam, V. 2017b. *Evaluation of an Adolescent Development Program for Girls in Tanzania.* Washington, DC: The World Bank.

Cafiero, C., Viviani, S., and Nord, M. 2018.""Food security measurement in a global context: The food insecurity experience scale"" *Measurement*, 116:146-152.

Dhar, D., Jain, T., and Jayachandran, S. 2022. "Reshaping Adolescents' Gender Attitudes: Evidence from a School-Based Experiment in India." *American Economic Review*, 112(3):899-927.

Dunbar, M.S., Kang Dufour, M.S., Lambdin, B., Mudekunye-Mahaka, I., Nhamo, D., and Padian N.S. 2014. "The SHAZ! Project: Results from a Pilot Randomized Trial of a Structural Intervention to Prevent HIV among Adolescent Women in Zimbabwe." *PLoS ONE,* 9(11): e113621.

Edmonds, E., Feigenberg, B., and Leight, J. 2023. "Advancing the Agency of Adolescent Girls." *The Review of Economics and Statistics,* 105(4): 1-15.

Falb K.L., Tanner, S., Ward, L., Erksine, D., Noble, E., Asham, A., Bakomere, T., Graybill, E., Lowry, C., Mallinga, P., Neiman, Al, Poulton, C., Robinette, K., Sommer, M., and Stark, L. 2016. "Creating opportunities through mentorship, parental involvement, and safe spaces (COMPASS) program: multi-country study protocol to protect girls from violence in humanitarian settings." *BMC Public Health*. 16(1): 231.

Hinson, L., Steinhaus, M., Rizzo, T., and Gregowski, A. 2019. *Enabling Girls to Advance Gender Equity (ENGAGE) Baseline Report.* Washington, D.C.: International Center for Research on Women.

Kangwana, B., Austrian, K., Soler-Hampejsek, E., et al. 2022. "Impacts of multisectoral cash plus programs after four years in an urban informal settlement: Adolescent Girls Initiative-Kenya (AGI-K) randomized trial." *PLoS ONE*, 17(2):e0262858.

Leventhal, K.S., Gillham, J., DeMaria, L., Andrew, G., Peabody, J., & Leventhal, S. 2015. "Building psychosocial assets and wellbeing among adolescent girls: A randomized controlled trial." *Journal of Adolescence*, 45: 284-295.

Liu, X., Xiao, R., and Tang, W. 2022. "The Impact of School-Based Mindfulness Intervention on Bullying Behaviors Among Teenagers: Mediating Effect of Self-Control." *J Interpers Violence,* 37(21-22):NP20459-NP20481.

Miller-Graff, L.E. and Cummings, E.M.. 2022. "Supporting Youth and Families in Gaza: A Randomized Controlled Trial of a Family-Based Intervention Program." *IJERPH,* 19(14):8337.

Mohammadzadeh, M., Awang, H., Ismail, S., and Kadir Shahar, H. 2019. "Improving emotional health and self-esteem of Malaysian adolescents living in orphanages through Life Skills Education program: A multi-centre randomized control trial." *PLoS ONE,* 14(12):e0226333.

Naved, R. T., Mamun, M. A., Mourin, S. A., & Parvin, K. 2018. "A cluster randomized controlled trial to assess the impact of SAFE on spousal violence against women and girls in slums of Dhaka, Bangladesh." *PLoS One*, 13(6), e0198926.

Outes-Leon, I., Sanchez, A., and Vakis, R. 2020. "The Power of Believing You Can Get Smarter: The Impact of a Growth-Mindset Intervention on Academic Achievement in Peru." *World Bank Policy Research Working Paper #WPS9141.*

Özler, B., Hallman, K., Guimond, M.F., Kelvin, E.A., Rogers, M., and Karnley, E. 2020. "Girl Empower – A gender transformative mentoring and cash transfer intervention to promote adolescent wellbeing: Impact findings from a cluster-randomized controlled trial in Liberia." *SSM - Population Health*, 10:100527.

Roser, M. 2022. Our World in Data database. https://ourworldindata.org/

Shah M., Seager J., Montalvao J., Goldstein M. 2023. "Sex, Power, and Adolescence: Intimate Partner Violence and Sexual Behaviors." *NBER Working Paper 31624.*

Thurman, T.R., Kidman, R., Carton, T.W., and Chiroro, P. 2016. "Psychological and behavioral interventions to reduce HIV risk: evidence from a randomized control trial among orphaned and vulnerable adolescents in South Africa." *AIDS Care*, 28(sup1):8-15.

Tol, W. A., Komproe, I. H., Jordans, M. J., Ndayisaba, A., Ntamutumba, P., Sipsma, H., Smallegange, E. S., Macy, R. D., & de Jong, J. T. (2014). School-based mental health intervention for children in war-affected Burundi: a cluster randomized trial. *BMC medicine*, *12*, 56. https://doi.org/10.1186/1741-7015-12-56

United Nations Development Programme. 2021-2022. *Human Development Report* (2021-22).

Waidler, J., Gilbert, U., Mulokozi, A., and Palermo, T. 2022. "A 'Plus' Model for Safe Transitions to Adulthood: Impacts of an Integrated Intervention Layered onto A National Social Protection Program on Sexual Behavior and Health Seeking among Tanzania's Youth." *Studies in Family Planning,* 53(2):233-258.

World Bank. 2022a. DataBank database. https://databank.worldbank.org/

World Bank. 2022b. Poverty and Inequality Platform. https://pip.worldbank.org/

World Bank. 2022c. World Development Indicators database. https://datacatalog.worldbank.org/search/dataset/0037712/World-Development-Indicators