

Microfinance plus life-skills intervention for couples in Burundi: economic models of intra-household allocation explain mechanisms of impact

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Microfinance, empowerment and intimate partner violence (IPV)

- Mixed results
 - Early investigations suggest positive impact, but methods limitations (Schuler et al., 1996)
 - IMAGE reduces IPV (Kim et al., 2007)
 - Banerjee et al. (2015): no impact on empowerment



Contribution

- Microfinance alone vs add-ons (see Gupta et al., 2013)
- Impact on intimate partner violence (Vyas and Watts, 2009)
- Rigorous evaluation designs (Kim et al., 2009; Gupta et al., 2013; Banerjee et al., 2015 plus companion papers)
- Women and men
- Post conflict settings
- Micro-economic models to explain mechanism





Household decisions & IPV

- Power & wellbeing in the relationship depend on options outside it
- Separate vs joint resource decisions
- Role of violence (Hidrobo et al., 2016):
 - Instrumental: indirect impact on men's wellbeing via control of women's choices (akin to Stark 2007) so that they may align with the man's preferences (Tauchen, Witte, Long 1991)
 - Expressive: increase in women's income is a threat to men's status, so men resort to violence (akin to backlash theory – Dobash and Dobash 1979)
 - Positive (short-run) effect on men's wellbeing: status
 - Negative effect on women's wellbeing: low self-esteem; distress/depression; low perceived autonomy



The intervention



- Village Loans and Savings Association groups (VSLA)
- 6 Life skills- sessions
- Expressive function of IPV:
 - Highlights advantages in women contributing to the household
 - Challenges harmful attitudes and actions
- Instrumental function of IPV:
 - Teaches conflict resolution skills

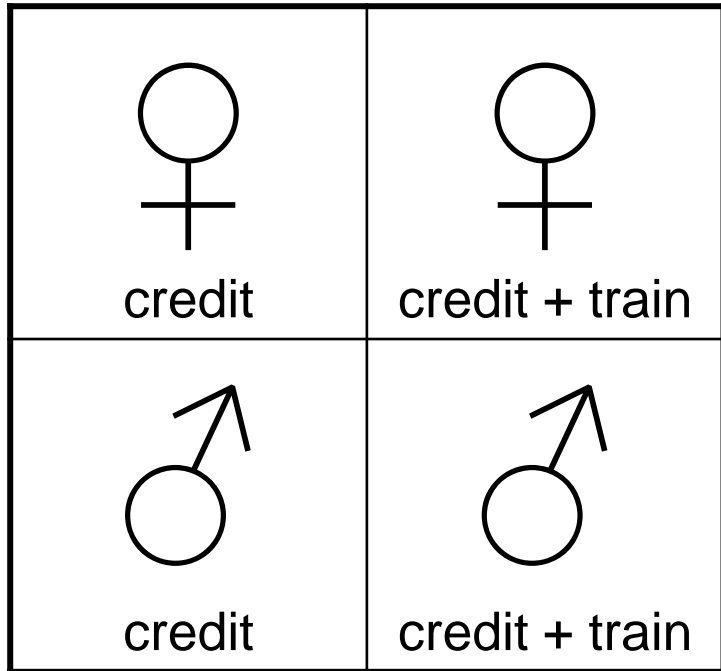


The setting

- 2008-2009 Burundi: post-conflict
- Civil war on and off since 1993
- Most of population experience some displacement
- High exposure to violence



Experiment & Analysis



- 25 VSLAs
- 768 individuals: 356 Control 412 Treat

1. Intention to treat
2. Linear probability model
3. Difference-in-difference-in-differences
4. Controls for commune (FE)
5. Robust standard errors (VSLA)



Sample description and balance

Characteristics

- 70% females
- Average age 37.9
- 61% children under five in the household
- 99% displaced
- 56% owned land
- 61% some primary school

Balance between arms

- Differences are negligible in
 - Socio-economic
 - Outcome indicators at baseline
- Three out of 39 differences are statistically significant



Results

		females			males	
	N	Baseline	Post-treat	95% CI	Post-treat	95% CI
Beating wife is unacceptable	768	.29 (.19, .39)	.14**	(.040, .25)	-.0027	(-.24, .24)
Favourable gender roles	768	.28 (.15, .40)	.045	(-.12, .21)	-.094	(-.36, .17)
All norms	768	.42 (.37, .54)	.097	(-.053, .25)	-.065	(-.28, .16)
Decision making is joint	759	.12 (.057, .18)	.076*	(-.013, .17)	.12	(-.10, .35)
Conflict resolution is joint	704	.49 (.38, .60)	.0013	(-.16, .16)	.27	(-.085, .62)
Consumption (Burundian Francs)	706	21,273 (14,558, 27,988)	-3,306	(-8,119, 1,508)	9,500**	(2,020, 16,979)
Violence (HITS)	543	.33 (.23, .43)	.034	(-.18, .25)	.098	(-.23, .43)

Notes: confidence intervals based on robust standard errors clustered at the village level. Results that are significant at the 0.05 (0.10, 0.01) level are marked with a ** (*, ***). Each row presents the results from a separate OLS difference-in-difference-in-differences regression for the dependent variables listed in each row. Explanatory variables include a treatment and a time dummy, plus their interaction. Each regression also controls for commune fixed effects, and clusters the errors at the VSLA level.



Results synthesis

Instrumental violence

- No change in dispute resolution skills
 - No alternative strategy to violence

Expressive violence

- Limited change in norms
- Women report increase in joint decisions on resources
- Consumption equality worsens for women

This picture could increase women's vulnerability to violence

No change suggests intervention is protective





Way forward

- Tackling direct and instrumental value of violence
- Norms vs economic empowerment
- Independence vs cooperation & IPV
- Microfinance only vs add-ons vs microfinance plus?
- Training men and women together vs separately
- Measurement and data quality



Funding and

NBER

National Bureau of Economic Research



collaborators



GBV METHODS SHORT COURSE

applications open



“Researching Gender-Based Violence: Methods and Meaning”

Who should apply:

Individuals who will conduct or commission research on gender based violence

Location:

Gender Violence & Health Centre, London School of Hygiene & Tropical Medicine
(London, UK)

Dates:

12-16 February 2018

Details:

<https://www.lshtm.ac.uk/study/courses/short-courses/gender-violence>



Outcomes at baseline

	Participants			Non Participants			Summary	
Variable	Num	Mean	SD	Num	Mean	SD	Diff	t
Total HITS Score	97	6.39	2.22	126	6.02	2.29	0.38	1.23



Attitudes to Violence

Variable	Participants			Non Participants			Summary	
	Num	Mean	SD	Num	Mean	SD	Diff	t
Okay to beat wife if goes out w/out telling husband	177	0.60	0.49	203	0.66	0.48	-0.06	-1.13
Okay to beat wife if neglects kids	176	0.49	0.50	203	0.46	0.50	0.03	0.59
Okay to beat wife if argues w/ husband	172	0.76	0.43	203	0.74	0.44	0.02	0.51
Okay to beat wife if refuses sex	167	0.75	0.43	200	0.73	0.45	0.02	0.53
Okay to beat wife if burns food	169	0.92	0.27	204	0.89	0.31	0.03	1.03
Okay to beat wife if does something annoying	177	0.89	0.32	203	0.85	0.36	0.04	1.14
Okay to beat wife for any reason	176	0.91	0.29	204	0.85	0.36	0.06	1.70
Never okay to beat wife	173	0.50	0.50	204	0.48	0.50	0.02	0.43



Gender norms

Variable	Participants			Non Participants			Summary	
	Num	Mean	SD	Num	Mean	SD	Diff	t
Meaningful Relations with Others	126	-0.04	2.13	166	-0.06	2.28	0.03	0.10
Women should do as Men Say	177	2.14	0.55	204	2.19	0.52	-0.06	-1.01
Wife should give money she earns to husband	177	2.60	0.50	203	2.49	0.56	0.11	2.06
Okay for husband to abandon wife if he wants	172	2.40	0.51	202	2.43	0.52	-0.04	-0.66
Woman's job to gather water, even if unsafe	177	2.45	0.53	200	2.49	0.53	-0.03	-0.60
Women cannot manage money	174	2.90	0.34	200	2.88	0.35	0.02	0.61
Women should have sex when husband wants	169	2.44	0.56	201	2.53	0.56	-0.09	-1.53
Women should have as many kids as husband wants	165	2.58	0.52	193	2.63	0.51	-0.06	-1.03



Decision making & conflict resolution

Variable	Participants			Non Participants			Summary	
	Num	Mean	SD	Num	Mean	SD	Diff	t
how money is spent spouse decides	158	2.38	1.22	193	2.12	1.26	0.26	1.96
spend money disagree: spouse changes	81	4.33	1.14	118	4.41	1.22	-0.07	-0.43
daily hh purchases spouse decides	148	2.24	1.01	183	2.36	1.06	-0.12	-1.09
daily hh purchases disagree: spouse changes	91	4.38	1.02	121	4.50	1.01	-0.12	-0.85
large hh purchases spouse decides	157	2.05	1.18	192	2.10	1.28	-0.05	-0.36
large hh purchases disagree: spouse changes	86	4.30	1.25	116	4.37	1.25	-0.07	-0.38
alcohol & cigarettes spouse decides	82	1.85	1.07	98	1.70	1.00	0.15	0.96
alcohol & cigarettes disagree: spouse changes	45	3.58	1.62	53	3.79	1.66	-0.21	-0.65
when to visit family & friends - spouse decides	145	2.56	1.19	178	2.71	1.30	-0.15	-1.12
when to visit family & friends disagree: spouse changes	78	4.35	1.05	104	4.50	1.11	-0.15	-0.95
when to visit spouse's family & friends - spouse decides	149	2.57	1.22	179	2.70	1.31	-0.13	-0.95
when to visit spouse's fam & fr disagree: spouse changes	66	4.65	0.95	96	4.88	0.55	-0.22	-1.72
how many kids spouse decides	52	2.73	1.46	86	2.57	1.44	0.16	0.63
have sex spouse decides	106	1.84	1.23	150	1.91	1.32	-0.07	-0.46
have sex disagree: spouse changes	52	4.17	1.31	72	4.69	0.82	-0.52	-2.54



Decision making

	female*after*treat (beta_6)	male*after*treat (beta_7)
Major hh purchases, spouse decides	-0.17	0.24
S.E.	(0.18)	(0.51)
p-value	0.33	0.64
N	424	
Disagree w spouse on major hh purchases, spouse knows better	0.066	-0.062
S.E.	(0.19)	(0.54)
p-value	0.73	0.91
N	404	
Daily hh purchases, spouse decides	-0.0021	-0.0030
S.E.	(0.15)	(0.41)
p-value	0.99	0.99
N	662	
Disagree w spouse on daily hh purchases, spouse knows better	-0.056	-0.14
S.E.	(0.15)	(0.44)
p-value	0.71	0.76
N	424	



Decision making ctd

	female*after*treat (beta_6)	male*after*treat (beta_7)
Purchases of alcohol/cigarettes, spouse decides	0.29	-0.28
S.E.	(0.27)	(0.56)
p-value	0.29	0.63
N		360
Disagree w spouse - purchases alcohol/cigarettes, spouse knows better	-0.31	0.64
S.E.	(0.32)	(1.06)
p-value	0.35	0.55
N		196
How money you earn is spent, spouse decides	0.41**	-0.066
S.E.	(0.18)	(0.44)
p-value	0.03	0.88
N		702
Disagree w spouse on how money is spent, spouse knows better	-0.045	0.26
S.E.	(0.22)	(0.48)
p-value	0.84	0.60
N		398



	female*after (beta_4)	male*after (beta_5)	female*after*treat (beta_6)	male*after*treat (beta_7)
Visit your family or friends, spouse decides	0.25	0.42	-0.15	0.57
S.E.	(0.11)	(0.42)	(0.13)	(0.48)
p-value	0.03	0.33	0.24	0.25
N			646	
Disagree w spouse on visit your family or friends, spouse knows better	-0.057	0.54	0.072	-0.33
S.E.	(0.11)	(0.27)	(0.19)	(0.43)
p-value	0.63	0.06	0.71	0.45
N			364	
Visit your spouse's family or friends, spouse decides	0.12	-0.34	-0.05	0.27
S.E.	(0.11)	(0.23)	(0.16)	(0.37)
p-value	0.29	0.15	0.75	0.47
N			656	
Disagree w spouse on visit your spouse's family or friends, spouse knows better	-0.10	0.39	0.015	-0.39
S.E.	(0.20)	(0.29)	(0.23)	(0.29)
p-value	0.64	0.20	0.95	0.19
N			324	



Attitudes to violence

	female*after (beta_4)	male*after (beta_5)	female*after*treat (beta_6)	male*after*treat (beta_7)
Okay to beat wife if out & not tell husband	0.25***	-0.27***	-0.02	0.11
S.E.	(0.06)	(0.09)	(0.08)	(0.12)
p-value	0.001	0.004	0.83	0.36
N			760	
Okay to beat wife if neglects kids	0.13**	-0.15*	0.15**	-0.0035
S.E.	(0.06)	(0.09)	(0.07)	(0.12)
p-value	0.03	0.10	0.03	0.98
N			758	
Okay to beat wife if argues	0.10	-0.10	0.14**	-0.16
S.E.	(0.05)	(0.08)	(0.07)	(0.10)
p-value	0.05	0.22	0.05	0.14
N			750	
Okay to beat wife if refuses sex	0.11	-0.15	0.060	0.070
S.E.	(0.04)	(0.05)	(0.05)	(0.08)
p-value	0.01	0.01	0.22	0.37
N			734	
Okay to beat wife if burns food	0.016	-0.038	0.035	0.015
S.E.	(0.04)	(0.05)	(0.05)	(0.07)
p-value	0.68	0.45	0.45	0.83
N			746	
Okay to beat wife if annoying	0.086	-0.13	0.026	0.087
S.E.	(0.04)	(0.05)	(0.06)	(0.07)
p-value	0.02	0.02	0.64	
N			760	



Gender norms and ex-ante value of cooperation

	female*after (beta_4)	male*after (beta_5)	female*after*treat (beta_6)	male*after*treat (beta_7)
Women should do what husbands say	0.33***	0.039	0.042	-0.28
S.E.	(0.09)	(0.15)	(0.12)	(0.19)
p-value	0.002	0.80	0.72	0.16
N			762	
Women should have sex when husband wants	0.40***	-0.15	-0.19*	0.21
S.E.	(0.09)	(0.16)	(0.11)	(0.21)
p-value	0.0001	0.38	0.09	0.33
N			740	
Women should give money they earn to husbands	0.12	-0.056	0.048	0.10
S.E.	(0.07)	(0.12)	(0.09)	(0.17)
p-value	0.13	0.63	0.59	0.53
N			760	
Ok for husband to abandon wife if he wants	0.35***	-0.31***	-0.016	-0.16
S.E.	(0.09)	(0.11)	(0.14)	(0.22)
p-value	0.001	0.008	0.91	0.49
N			748	
Women should fetch water, even if unsafe	0.20***	-0.012	0.034	0.044
S.E.	(0.08)	(0.13)	(0.10)	(0.16)
p-value	0.02	0.93	0.73	0.79
N			754	



Gender norms and ex-ante value of cooperation

	female*after (beta_4)	male*after (beta_5)	female*after*treat (beta_6)	male*after*treat (beta_7)
Women cannot manage money	-1.04***	0.040	0.12	-0.20
S.E.	(0.07)	(0.10)	(0.11)	(0.13)
p-value	<0.0001	0.71	0.28	0.14
N			748	
Women should have as many children as husband wants	0.30***	-0.11	-0.11	0.11
S.E.	(0.07)	(0.11)	(0.09)	(0.16)
p-value	0.0004	0.36	0.25	0.50
N			716	



Consumption

	female*after (beta_4)	male*after (beta_5)	female*after*treat (beta_6)	male*after*treat (beta_7)
Consumption	3,418.45	-2,980.65	-3,305.63	9,499.78***
S.E.	(1,867.43)	(2,313.91)	(2,337.12)	(3,631.57)
p-value	0.08	0.21	0.17	0.01
N			706	
Weekly Total Consumption	155.80	-2,886.97	-3,014.73	6,667.82***
S.E.	(1,931.36)	(2,402.85)	(2,196.09)	(3,470.85)
p-value	0.94	0.24	0.18	0.07
N			742	



Intimate partner violence

	female*after (beta_4)	male*after (beta_5)	female*after*treat (beta_6)	male*after*treat (beta_7)
Physically hurt	-0.05	-0.19		-0.06
S.E.	(0.07)	(0.14)		(0.09)
p-value	0.48	0.18		0.48
N			452	
Insult	-0.21	-0.32		-0.02
S.E.	(0.17)	(0.30)		(0.27)
p-value	0.25	0.29		0.95
N			452	
Threaten	0.11	-0.29		-0.18
S.E.	(0.14)	(0.27)		(0.20)
p-value	0.44	0.29		0.38
N			446	
Scream	-0.37***	-0.58***		-0.03
S.E.	(0.15)	(0.21)		(0.21)
p-value	0.02	0.01		0.87
N			452	
tothit>5	-0.16***	-0.14		0.04
S.E.	(0.07)	(0.12)		(0.12)
p-value	0.03	0.27		0.71
N			446	



- Baseline:
 - low levels of cooperation, with the husband conferring all public goods, and spouses' choices directed by traditional gender roles,
 - this evidence is consistent with an initial separate-spheres bargaining equilibrium where each spouse makes his or her choices, taking the other's as given.
 - Consistent with transcripts from FGDs with study participants
- Reduced cost of co-operation by improved negotiation skills (learn how to enforce agreement – *without use of violence*)
- Increased ex ante value of co-operation by providing information on economic improvements if spouses co-operate
- Aim: shift the household from a separate-spheres bargaining equilibrium to one where spouses would
 - at least partially pool resources (Browning et al., 2009) [increased value to co-operation]
 - Exhibit improved co-op skills and reduced levels of violence [learn new enforcement skills, no need for violence]



Conflict resolution

- If conflict resolution skills improve, violence should decrease
- If violence is instrumental to attaining desired goals for husband, then learning how to obtain these goals using negotiation skills should reduce the amount of violence meted out



Difference from previous work...

- No *explicit* gendered content for fear that
 - Angers community (specifically many men) and reduces attendance
 - May be perceived as invasive or paternalistic
 - Instead—focus on financial skills and planning with emphasis on gender roles
- Focus on Negotiation in Resource Allocation & Management
- Inclusion of spouse
 - Men participate
 - Seen as family program rather than program for women



Microfinance component

- Group savings model
 - No external capital
 - Group saves for 2-3 months, then can make small loans to members
 - Social fund for emergencies
- Meetings every 2 weeks
- Share-out after 18 months and then cycle begins again



Synthesis

- Intervention has limited impact
- Only **five** of the 35 empowerment domains (14%) record estimates of impact statistically significantly different from zero, i.e. such that they may be considered improbable, were the effect for the population from which the sample is drawn effectively zero.
- Results suggest that the household moves from an initial separate-spheres non-cooperative equilibrium governed by gender roles that envisage division of labour to a final resource pooling equilibrium, where women decide alone to contribute monetary resources to the household.
- This is accompanied by no change in dispute resolution skills and, relatedly, no change in violence.





- VSLA Burundi's aim was to improve spouses' joint decision-making and conflict resolution skills.
- Interventions that favour independent decision-making may lead households to inefficient decisions (e.g., working separate plots of land may lead to less than optimal exploitation)
- Cooperation is costly – e.g., the cost of enforcing an agreement via communication and cooperative behaviour, rather than violence
- Perceived value of co-operation *ex ante*, i.e. before a transaction occurs, may be low: there are predefined gender roles that determine how an individual should behave, without the need to negotiate each decision.



- Intervention aims to:
 - Change status perception of violence:
 - Reduce the acceptability of violence among both men and women
 - Reduce the usefulness of violence as a strategic tool
 - change individuals' perception of the gains from co-operation so that, instead of choosing a non-cooperative equilibrium, spouses may choose to engage in bargaining and attain a Pareto-efficient equilibrium.
 - equip individuals with negotiation skills that would lower the transaction costs attached, e.g., to enforcing agreements via co-operation, and



Our contribution

Methods

- Individually randomised controlled trial
- Both women and men
- Incremental effect of life-skills sessions for microfinance clients
- Application of an intra-household model of resource allocation to interpret mechanism of impact

Findings

- Limited impact on empowerment
- No impact on exposure to intimate partner violence
- Failure to implement negotiation skills may explain lack of reduction in violence exposure

