The Economic Impacts of Gender Targeting and Transformative Couples Training: Evidence from a Multifaceted Anti-poverty Program in Malawi

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Research Questions

- What is the impact of recipient gender on household welfare outcomes?
- What is the impact of the 'Transforming Gender and Power Relations Couple Training' on household welfare outcomes?

Literature: Welfare Impacts of Multifaceted Anti-poverty Programmes

• What is in the literature?

- Programmes increase consumption, income, assets, food security, labour supply and financial (Banerjee et al., 2015, Bandiera et al., 2017, and Bedoya et al., 2019).
- Bandiera et al. (2017) found gains persist and accelerate 4 and 7 years after the intervention.
- Programme may have unintended effects, such as decreasing the mobility of women outside the house (Roy et al., 2015).
- Asadullah and Ara (2016) suggest a possible takeover by men of income generating activities over time.

Literature: Targetting

The welfare impacts of targeting economic inclusion programmes by gender are mixed:

- Cash transfers to women increases expenditure on food towards a more nutritious diet (Armand et al., 2020), while Almas et al., 2020 find little evidence for consumption shifting at the household level.
- No findings to date on whether gender targeting of the Graduation program has differential results.

Literature: Couples Training

- Ismayilova et al. (2018) find that both an economic intervention and one combined with family coaching increased women's financial autonomy, compared to control households, with no within treatment effects
- Gupta et al. (2013) finds that compared to savings groups alone, the provision of gender groups decreases economic abuse.

Model of Graduation

Figure: Concern's Graduation Approach



Theory of Change - Targeting

Gender specific targeting of consumption support, business training, HH visits, asset transfer and VSLA membership.

Aims to improve:

- Women's Economic Outcomes
- Women's Empowerment (later presentation)
- HH welfare, Investment in HH Public Goods

Risks

 Increase in spousal conflict (including IPV)



Theory of Change - Umodzi

Transformative gender training known as Umodzi, meaning 'united'.

Aims to improve:

- Cooperation/shared vision
- Communication skills
- Perceptions: role of the women
- Savings/productive investment
- Efficient resource allocation

Aims to decrease:

- Conflict/violence triggered by shifts in power
- Conflict between children/parents



Research Methodology

Randomised Control Trial to test the effect of gender targeting and the inclusion of gender transformative training on household welfare outcomes

- All benefits are targeted to female
- All benefits are targeted to male
- All benefits are targeted to female, and the couple is exposed to a monthly couples training course called Umodzi for 12 months
- Control Group

The Sample

- 200 villages, stratified across Mangochi and Nsanje districts, and covers a total of 3,300 couples.
- Eligible HH classified as "poor" or "very poor" by community wealth ranking (mostly), or a proxy means test based on household materials and livestock assets.
- Census conducted in late 2017 and early 2018 to identify 3,300 eligible HHs.

The Randomisation

- 50 villages in each arms.
- Treatment villages: 18 HHs surveyed (12 treatment, 6 control).
- Control villages: 12 HHs surveyed.
- Half of villages delayed by one year, creating cohorts 1 or 2.

Treatment/Control Arm: Equal split between Mangochi and Nsanje for each arm

Female Recipients 600 HHs

Female + 'Transforming Gender & Power Relations' Training: 600 HHs Male Recipients 600 HHs

Control Group 1,500 HHs

Welfare Measures

Productive Annual Income

Includes business, wage, livestock and agriculture annual income.

Total Value of Livestock

Includes cattle, poultry and other small livestock.

Consumption

 Includes food and non-food expenditure, festivals, health care and education.

Assets

Total assets owned across a range of 48 items

Food Security

- Annual Food Security Index: 9 components, ranges from 0 (severely food insecure) to 9 (food secure).
- Recent Food Security Index: 3 components, ranges from 0 (severely food insecure) to 3 (food secure).

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Empirical Specification: ANCOVA

Estimation Equation

$$Y_{(i)hvt} = \beta_1 + \beta_2 T_{hvt}^1 + \beta_3 T_{hvt}^2 + \beta_4 T_{hvt}^3 + \beta_5 Y_{(i)bl} + \alpha X_{(i)bl} + \gamma Z_{cd} + \epsilon_{hvt}$$

- Variables T^1 , T^2 and T^2 capture treatment status, taking value of 1 if household h in village v received:
 - T¹ female targeted Graduation program
 - \bullet T^2 male targeted Graduation program
 - ullet T^3 female targeted plus Umodzi Graduation program
- Coefficients β_2 , β_3 and β_4 capture treatment impact on our specified outcomes, Y, for household h/individual i
- We control for baseline values of outcome Y, individual baseline variables, X(i)bl, the time of follow-up, t and district and cohort, Z_{cd} .
- \bullet ϵ_{hvt} is our statistical error term. Errors are clustered at the level of cluster randomisation.

Table: Baseline Balance

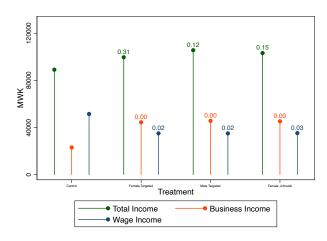
	Total Sample	Control	T1 Female Targetted	T2 Male Targetted	T3 Female plus Umodzi	Trt 1	Trt 2	Trt 3 vs Control	T1-C Normalized	T2-C Normalized	T3-C Normalized
						vs Control	vs Control				
	Mean	Mean	Mean	Mean	Mean	p-value	p-value	p-value	Difference	Difference	Difference
Demographics											
Female Spouse Age	35.56	36.11	35.21	35.01	35.88	0.24	0.12	0.75	0.07	0.09	0.02
Male Spouse Age	42.75	42.99	42.59	42.29	43.13	0.65	0.33	0.84	0.03	0.05	-0.01
Female Spouse Literacy	0.31	0.28	0.29	0.36	0.33	0.77	0.02	0.13	-0.02	-0.17	-0.10
Male Spouse Literacy	0.60	0.56	0.60	0.61	0.64	0.22	0.10	0.03	-0.08	-0.11	-0.15
HH Size	5.65	5.67	5.55	5.60	5.78	0.35	0.66	0.42	0.06	0.03	-0.06
Household Variables Baseline											
Total Productive Income	98,916.72	95,449.07	90,144.33	94,587.21	115,599.68	0.65	0.96	0.24	0.03	0.01	-0.07
Business Income	30,652.29	21,973.30	28,685.90	28,893.62	43,464.63	0.28	0.28	0.08	-0.06	-0.06	-0.11
Wage Income	56,353.79	61,017.73	53,231.13	48,548.34	62,407.70	0.34	0.12	0.89	0.07	0.11	-0.01
Livestock Income	2,585.65	2,749.37	2,693.17	2,172.82	2,722.45	0.96	0.60	0.98	0.00	0.03	0.00
Harvest Income	9,325.00	9,708.67	5,534.13	14,972.43	7,004.89	0.05	0.11	0.24	0.13	-0.10	0.08
Ttl Annual Expenditure	343,667.67	321,656.03	354,715.74	360,800.19	338,560.66	0.16	0.05	0.42	-0.12	-0.15	-0.06
Annual Food Expenditure	254,410.41	255,080.46	251,650.29	264,708.75	246,093.48	0.85	0.53	0.57	0.02	-0.05	0.05
Annual Non-Food Expenditure	72,018.63	65,983.49	73,646.92	74,172.72	74,563.63	0.30	0.23	0.31	-0.08	-0.10	-0.08
Ttl Asset Value	651,825.44	627,774.26	625,920.34	691,688.47	662,645.24	0.97	0.07	0.25	0.00	-0.12	-0.08
Ttl Livestock Value	19,436.21	20,532.67	20,375.59	19,588.27	17,203.02	0.99	0.91	0.55	0.00	0.01	0.04
Observations	2,362	612	579	587	584						
Female Spouse Baseline Variables											
Ttl Income	49,529.44	51,067.18	51,205.62	47,578.12	48,220.13	0.99	0.45	0.62	-0.00	0.05	0.03
Business Income	17,157.66	14,779.95	19,050.67	14,511.16	20,428.60	0.36	0.92	0.19	-0.06	0.01	-0.08
Savings	3,652.82	3,757.20	4,373.32	3,071.79	3,413.28	0.54	0.43	0.74	-0.04	0.05	0.02
Loans Borrowed	846.63	468.58	1,119.08	981.43	836.56	0.04	0.08	0.10	-0.13	-0.11	-0.11
Observations	2,361	611	579	587	584						
Male Spouse Baseline Variables											
Ttl Income	81,561.58	77,466.35	73,982.36	76,511.40	98,443.62	0.76	0.98	0.19	0.02	0.01	-0.07
Business Income	27,429.27	21,025.33	25,411.27	25,133.39	38,448.63	0.49	0.51	0.11	-0.04	-0.04	-0.09
Savings	7,518.34	5,362.25	5,771.93	7,667.36	11,359.46	0.74	0.14	0.23	-0.02	-0.09	-0.07
Loans	3,127.27	2,447.39	3,976.77	3,027.94	3,097.35	0.24	0.35	0.45	-0.09	-0.05	-0.05
Observations	2,362	612	579	587	584						

Standard errors are clustered at the level of randomisation.

A. Income (+ 5 months)

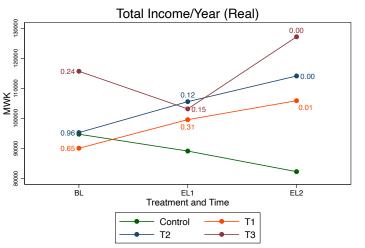
- No significant impact on income.
- Main impact is structural change in graduation HHs income source (business income doubled, wage income fell).

Figure: Income, and its components



Income (+17 months)

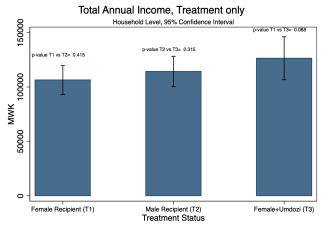
 Total income significantly higher for all graduation HHs, with the Umodzi group having the highest increase (55% higher than control).



P-values of the differences bewteen each treatment group and control are displayed by the mean of each group.

Income (+17 months), Treatment Comparison

Umodzi HHs have (marginally) higher income than female targeted HHs.

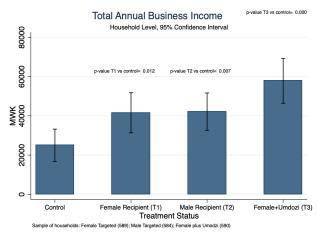


Sample of households: Female Targeted (297); Male Targeted (289); Female plus Umodzi (293)

Focus on Business Income (+17 months)

Income differences driven by **business income**. Compared to control business income:

- Umodzi group:2.5 x higher
- Female targeted:1.78 x higher
- Male targeted:
 - $1.8 \times higher$



Income, Treatment Group Comparison (+ 17 months)

Umodzi out-preforms simple graduation.

0

Female Recipient (T1)

 Greater business income than female and male targeted households

Total Annual Business Income, Treatment only Household Level, 95% Confidence Interval P-value T1 vs T2= 0.940 P-value T3 vs T2= 0.047 P-value T3 vs T2= 0.047

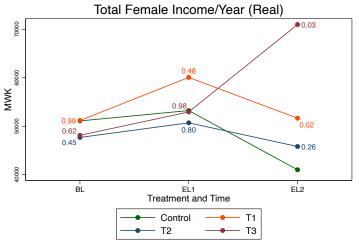
Male Recipient (T2)

Treatment Status

Sample of households: Female Targeted (589); Male Targeted (584); Female plus Umodzi (590)

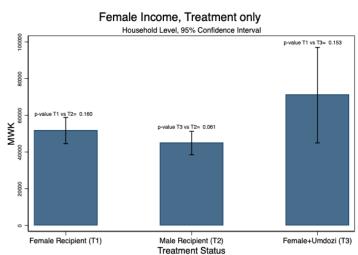
Female+Umdozi (T3)

Female spouses in female targeted households have higher income than control



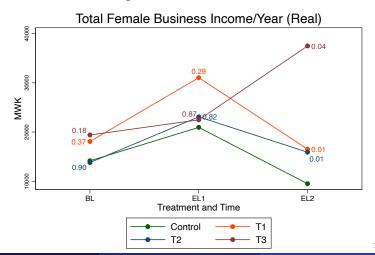
P-values of the differences bewteen each treatment group and control are displayed by the mean of each group.

Suggestive evidence that for business income female spouses in Umodzi households have higher income.

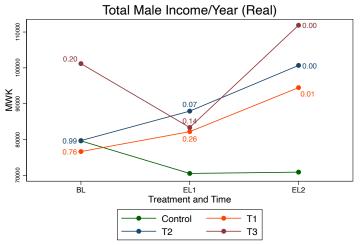


All female spouses in treated households have higher business income than control.

• But the difference is largest for Umodzi households.

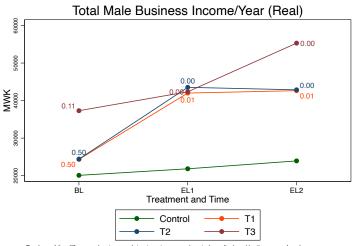


All male spouses in treated households earn more overall income than control. Similar pattern for business income.



P-values of the differences bewteen each treatment group and control are displayed by the mean of each group.

All Male spouses in treated households have more business income than control

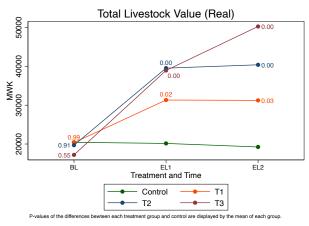


P-values of the differences bewteen each treatment group and control are displayed by the mean of each group.

B. Livestock Value

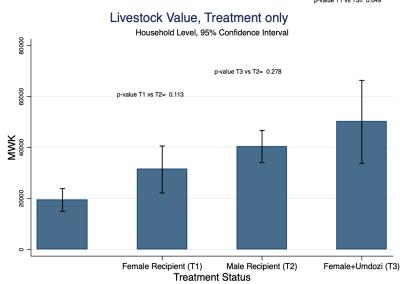
Livestock represents both a future income stream and a store of wealth to realise in time of need.

- Graduation HHs have livestock value 55-96% higher than control (at 5 months).
- For male targeted and Umodzi HHs this increases to 110-160% higher livestock value (at 17 months).



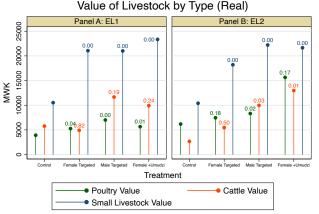
Livestock, Treatment Group Comparison (+ 17 months)

Umodzi out-preforms simple graduation, especially female targeted.



Livestock Value, By Type

- Female targeted: greater small livestock (17 months post)
- Male targeted: greater values of all livestock (17 months post)
- Umodzi: greater values for cattle/small livestock (17 months post)

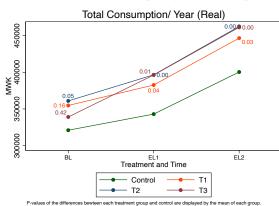


P-values of the differences bewteen each treatment group and control are displayed above the mean of each group.

C. Consumption

Graduation HHs greater consumption than control (at 5/17 months).

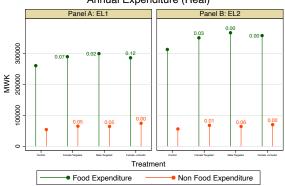
- At 5 months, consumption higher than control by at least 11.5% of the control group's average.
- At 17 months, treated households consumption is maintained (and very slightly increased).



Consumption, By Type

- Graduation HHs food expenditure continues to increase slightly over controls.
- Non-food consumption is greater than controls (but gap not widening)

Annual Expenditure (Real)

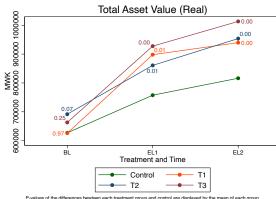


P-values of the differences bewteen each treatment group and control are displayed above the mean of each group.

D. Asset Value

Graduation HHs greater value of assets than control (at 5/17 months).

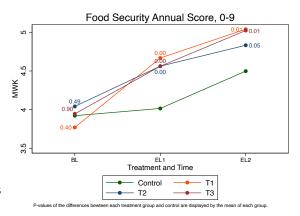
- At 5 months, asset value higher than control by at least 13% of the control group's average.
- At 17 months. treated households higher total asset values maintained.



P-values of the differences bewteen each treatment group and control are displayed by the mean of each group

E. Food Security (Annual)

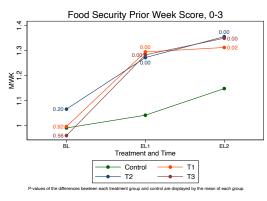
- At 5 months, 14-16% higher score than control households.
- At 17 months, all female treated households (regardless of gender training or not), maintained a score higher by 14%, while male targeted households had a score 7% higher.



Food Security (Recent)

Graduation HHs always have greater recent food security score than control households.

- Treated households have 22-24% higher scores 5 months post programme.
- 17 months post implementation, households maintain 17% lead.



Summary 1

Graduation

- At 5 months structural change in income source, at 17 months higher income for all treatment groups.
- Sustained benefits for all treatments (livestock, consumption, assets and food security).

Targeting

- Female targeting improves their total income, but not HH income.
- Higher number of business owned at 5 months, not at 17 months.
- No other differences.
- Deeper analysis still to come, including IPV data.

Summary 2

Transformative Couple's Training

Umodzi is transformative.

- Overall HH gains:
 - Umodzi HHs have (marginally) higher total income than female targeted HHs.
 - Greater business income than female and male targeted HHs, accelerates at 17 mths.
 - Umodzi out-preforms simple graduation, especially female targeted.
 Livestock.
 - No difference for HH consumption, asset values and food security.
- Umodzi improves female empowerment (see later).
- No gender differences for food security.
- Number HH and female controlled businesses higher for Umodzi.

Learnings for Practitioners

- Female targeting may not have big gains economically for HH.
- ..but female income higher, different investments made in livestock.
- Gender transformative training produces sizable economic returns, in addition to empowerment gains.

Future Research

- Efficiency and empowerment trade-offs of dynamic inter-spouse business turnover with HH.
- IPV impacts of gender targeting/Umodzi.
- Next cycle business support to manage business transition.
- Environmental profile of businesses chosen vs foraging alternatives.