Primary education and adult women’s experience of intimate partner violence: Quasi-experimental evidence from sub-Saharan Africa

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Sexual Violence Research Initiative Form
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Global evidence shows intimate partner violence (IPV) is pervasive and costly to individuals and society.

Research agenda has turned to “what works,” for prevention—with particular attention to:
• Primary prevention
• Scalable interventions
• Cost-effective interventions

Education and empowerment interventions have been cited as “promising” (Ellsberg et al. 2014; Garcia-Moreno et al. 2014)
Generally education found to be protective against IPV (Abramsky et al. 2011; Kishor & Johnson 2006)

However, not universal
- sometimes education is a risk factor
- “Inverted U” relationship

Caveats:

- Few studies can identify a causal relationship
- Virtually no longitudinal studies/program evaluations
- Systematic reviews focus on education as “behavior change and community interventions”-- Leaving out standard government schooling

2. Explore pathways through which impacts may (or may not) be realized
Pathways: Education → IPV

1. Increase bargaining power inside partnership

2. Delay age at marriage

3. Increase quality of marriage match

Ambiguous effects on IPV (depending if IPV is extractive, instrumental or expressive)

Decrease in IPV (younger age is a risk factor for IPV)

Decrease in IPV as partnership is more likely to be equitable
Data and key variables

Women aged 22 - 29 from Demographic and Health Surveys:

Indicators:
• **IPV**: Any emotional, physical or sexual IPV
• **Schooling**: Self-reported grade attained

Identification:
• Implementation of Universal Primary Education (UPE) policies in the mid-1990s as **natural experiments** to identify casual impacts of education on IPV using an instrumental variable (IV) approach.

• UPE highly successful in improving enrollment in both countries – particularly of girls
IV Estimation Model

(1) \( Education_i = \alpha_0 + \alpha_1 UPE_i + \ldots \alpha_k X_k + \nu_i \)

(2) \( IPV_i = \beta_0 + \beta_1 \hat{Education}_i + \ldots \beta_k X_k + \xi_i \)

\( UPE \) = Partial or full exposure to UPE at during primary years (13/12 or younger). “Randomly” assigned by birth cohort if girl is on track for age in public education system.

\( X_k \) = Controls for ethnic group and religion

Linear Probability Models. Standard errors clustered at the primary sampling unit level.
Trends: UPE and grade attainment

Average years of school over the years of birth for respondents exposed and not exposed to UPE in Malawi and Uganda.

- **Mean**: 5.0 for respondents not exposed to UPE.
- **Mean**: 5.8 for respondents exposed to UPE in Malawi.
- **Mean**: 6.4 for respondents exposed to UPE in Uganda.
Lowess plots of IPV and educational attainment

- **Malawi IPV lifetime**
- **Uganda lifetime**
- **Malawi IPV 12 mo.**
- **Uganda IPV 12 mo.**
**Uninstrumented (naïve) probit results**

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>(1) Malawi IPV lifetime</th>
<th>(2) Uganda IPV lifetime</th>
<th>(3) Malawi IPV last 12 mo.</th>
<th>(4) Uganda IPV last 12 mo.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades attained</td>
<td>-0.00*</td>
<td>-0.02***</td>
<td>-0.00*</td>
<td>-0.02***</td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
<td>(0.00)</td>
</tr>
<tr>
<td>Observations</td>
<td>5,159</td>
<td>1,025</td>
<td>5,159</td>
<td>1,025</td>
</tr>
</tbody>
</table>

Sample is among females aged 22 to 29 in DHS (Malawi 2004 and 2010; Uganda 2006 and 2011). All models include controls for religion and ethno-linguistic background. Robust standard errors are clustered at the cluster level.

*** p<0.001, ** p<0.01, * p<0.05
### Main Instrumental Variables (IV) results

**Panel A**

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Malawi</th>
<th>Uganda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposure to UPE at age 12/13</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.68***</td>
<td>1.15***</td>
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<tr>
<td></td>
<td>(0.10)</td>
<td>(0.25)</td>
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<tr>
<td>Observations</td>
<td>5,159</td>
<td>1,025</td>
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<tr>
<td>R-squared</td>
<td>0.08</td>
<td>0.19</td>
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</table>

**Panel B.**

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Malawi</th>
<th>Uganda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifetime IPV</td>
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<td></td>
</tr>
<tr>
<td>Grades attained</td>
<td>0.09***</td>
<td>-0.10**</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
<td>(0.03)</td>
</tr>
<tr>
<td>Observations</td>
<td>5,159</td>
<td>1,025</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>IPV 12 mo.</th>
<th>Malawi</th>
<th>Uganda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades attained</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.10***</td>
<td>-0.07*</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
<td>(0.03)</td>
</tr>
</tbody>
</table>

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• **Malawi: Stratify on education**
  1) no education or less than primary,
  2) completed primary and above.

• **Results:**
  - Sample (1) schooling => increases in IPV
  - Sample (2) schooling => decreases in IPV

• **Malawi and Uganda: Pathways**
  1) **Work for cash, decision-making**
  2) Age first sex, age at marriage
  3) Partners grade attainment, partners education
Preliminary Conclusions

- Education and IPV relationship complex and non-monotonic
- Evidence of ‘backlash’ among low levels of education in Malawi
  - Consistent with findings from other economic empowering interventions—however not universal
- Need impact evaluations and longitudinal evidence to better understand how to overcome initial power dynamics when women are disempowered in different intervention typologies
Thank you!

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