Content Validity of the Abbreviated Women's Empowerment in Agriculture Index (A-WEAI) in Ethiopia: A Mixed Methods Approach

Marion Min-Barron¹, Jennifer Coates¹, Shibani Ghosh¹, Beatrice Rogers¹, John Maluccio²

¹ Friedman School of Nutrition Science and Policy, Boston, MA ²Middlebury College, Middlebury, VT

Introduction

The conceptual pathway between agriculture and nutrition through the vehicle of women's empowerment has garnered much attention as a means to reducing global malnutrition. Until recently, understanding this complex pathway was particularly challenging given that there was no widely accepted approach to measuring women's empowerment. This research study assessed the internal validity of the Abbreviated Women's Empowerment in Agriculture Index (A-WEAI), a second iteration of the WEAI, within the context of Ethiopian smallholder farming households.

<u>CONTENT VALDITY</u>: The extent to which the measure (A-WEAI) covers the entire range of relevant behaviors, thoughts and feelings that define women's empowerment in agriculture.

<u>EMPOWERMENT</u>: "the expansion of assets and capabilities of poor people to participate in, negotiate with, influence, control, and hold accountable institutions that affect their lives"

EMPOWERMENT in AGRICULTURE, in particular, must consider

- the ability to make decisions
- the material and social resources needed to carry out those decisions



The A-WEAI

- Developed by IFPRI, OPHI and USAID with the purpose "To measure the empowerment, agency and inclusion of women in the agricultural sector".
- ❖ Original WEAI released early 2012, utilizing 5 domains to measure empowerment: production, resources, income, leadership and time.
- The A-WEAI is a second version of the WEAI, taking about 30% less time to administer than the original WEAI.

| Original WEAI (1.0, 1.1) | | A-WEAI | |
|--------------------------|---|------------|---|
| Domains | Indicators | Domains | Indicators |
| Production | Input in productive decisions Autonomy in production | Production | Input in productive decisions |
| Resources | Ownership of assets Purchase, sale, or transfer of assets Access to and decisions on credit | Resources | Ownership of assets Access to and decisions on credit |
| Income | Control over use of income | Income | Control over use of income |
| Leadership | Group membership Speaking in public | Leadership | Group membership |
| Time | Workload Leisure | Time | Workload |
| | | | (Malapit, 2015) |

Methods

Two phases

- I. FOCUS GROUPS (n= 24) in Southern Nation, Nationalities Peoples' Region, which collected qualitative data on Ethiopian agricultural households' gender norms and understanding of the term 'women's empowerment
- 2. CONTENT VALIDITY INDEX (CVI) (n=12), which measures expert interrater agreement on relevance of an item (question). The degree of agreement was calculated by consensus and consistency of the raters on the various items/domains on a four point scale (not relevant, somewhat relevant, quite relevant and highly relevant)
 - > I-CVI = proportion of experts that agreed that the item was relevant
 - > <u>S-CVI/UA</u> = proportion of items that received a rating of 'somewhat relevant' or 'highly relevant' by ALL experts
 - > S-CVI/AVE = average of all I-CVIs across items
- Criteria for CVI Expert Panel

I. Was not involved in the development/piloting of the index (original and AWEAI)

2. Has worked in any of the following disciplines: gender studies, gender and agriculture, agriculture and nutrition, women's empowerment

3. Has published work on the topic of gender studies, gender and agriculture OR extensive work experience in the field

Quantitative results (preliminary)

Table I: Item- Content Validity Scores (I-CVI)

| Domain | Item (Question) | I-CVI* (In General Setting) | I-CVI* (In Ethiopia) |
|---------------------|---|--------------------------------|-------------------------|
| Production | Level of input in agriculture production decisions | 1.0 | 1.0 |
| | Extent you feel you can make your own decisions regarding agriculture production activities | 0.9 | 0.8 |
| Decision- making | Household ownership of assets | 1.0 | 0.9 |
| | Individual ownership of assets | 1.0 | 1.0 |
| | Access to credit | 1.0 | 1.0 |
| | Decision-making on credit activities | 1.0 | 1.0 |
| | Decision-making on received credit | 1.0 | 1.0 |
| Income | Level of input in income use decision-making | 1.0 | 1.0 |
| | Extent you feel you can make your own decision regarding expenditures | 1.0 | 1.0 |
| Leadership | Existence of groups in community | 1.0 | 1.0 |
| | Membership in groups | 1.0 | 1.0 |
| Time | Workload time | 0.9 | 1.0 |

*An I-CVI>0.78 is considered "excellent in content validity" (Lynn 1986).

Table 2: Scale- Content Validity Scores (S-CVI)

| Relevance | S-CVI/UA | S-CVI/AVE |
|--------------------|----------|-----------|
| In general setting | 0.83 | 0.98 |
| In Ethiopia | 0.75 | 0.83 |

**A S-CVI/AVE of 0.90 or higher is considered "excellent in content validity" (Polit 2006).

Qualitative results (preliminary)

❖ GENDER NORMS

- Women are working jointly with the husband, both in the kitchen and field
- Plowing is a man's behavior, except when he not able to (or needs to rest)
- Men have a duty to take care of the family and home

"We are male and female, otherwise we are same." (FG Semen Achefer, all women, owns livestock)

❖ PERCEPTIONS of EMPOWERMENT

- For both men and women, empowerment = decision making
- Exists more strongly within household domain
- Women have a lack of ambition in gaining further ability to make decisions

"If absolute power is given to her she able not to manage. No need to add another power of decision it is better if we equally decided." (FG Semen Achefer, all women)

❖ FACTORS that ENABLE/INHIBIT EMPOWERMENT

- Informal structure of power with children
- Extended family
- Community networks that enable empowerment
- Legal system and programs promoting gender equality

"It is alright, there is no problem, and we are equal to male. We have been informed." (FG Semen Achefer, all women)



Conclusion

To the best of our knowledge, neither the WEAI nor A-WEAI has been assessed for content validity via the CVI in any setting. Results from this study hold great significance as they contribute to understanding, for the first time, the content validity of the scale in general. This study also provides insights into the A-WEAI's functioning in Ethiopia.

While the individual I-CVI scores resulted in 'excellent content validity' in both general settings and the specific context of Ethiopia, the A-WEAI as a *whole* failed to meet the standards of content validity recommended by Polit et al (2006) within Ethiopia.

Future research is needed to identify specific appropriate changes to the A-WEAI for each country such that women's empowerment is measured in an accurate, valid (both internally and externally) and reliable manner.