

# Measurement of Women's Agency in Rural Egypt

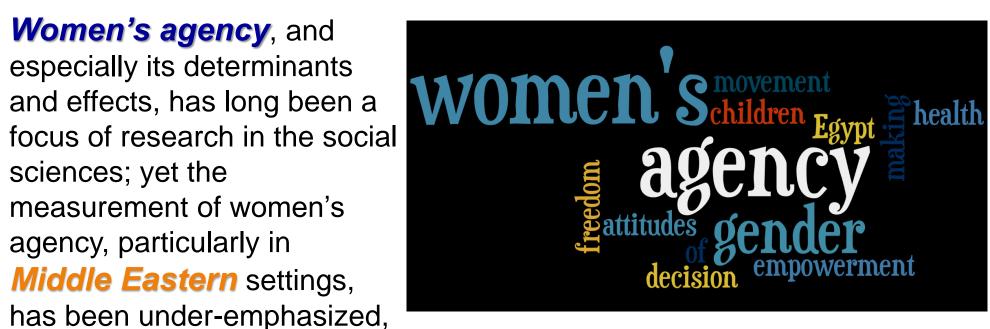
Kathryn M. Yount,<sup>1</sup> Kristin VanderEnde,<sup>1</sup> Yuk Fai Cheong,<sup>1</sup> Rania Salem, <sup>2</sup> Sarah Zureick-Brown,<sup>1</sup> <sup>1</sup> Emory University, <sup>2</sup> University of Toronto

13%



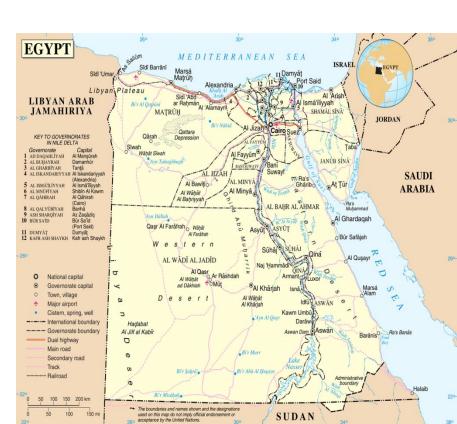
## Introduction

Women's agency, and especially its determinants and effects, has long been a focus of research in the social sciences; yet the measurement of women's agency, particularly in Middle Eastern settings,



clouding interpretations of its use as an outcome or predictor. Using the second wave of panel data from 608 ever-married women, we employed factor analysis to explore the measurement of women's agency in rural Minya, Egypt. We hypothesized that women's agency is a *multidimensional* construct, with positive correlations among these domains. Our final, 21item model consisted of three factors (decision making, freedom of movement, and equitable gender role attitudes) each corresponding to a well-theorized dimension of women's agency. The three factors were positively correlated, lending further support to research presenting women's agency as a multidimensional construct. Future research should validate this measurement model in rural as well as urban Egypt and elsewhere.

## Data and Methods



608 ever-married women aged 22-65 years from rural Minya, Egypt who participated in the 2005 Egypt DHS and our follow-up survey in 2012. The survey included questions about women's role in household decision-making, women's *freedom of movement*, and women's gender attitudes.

#### **Methods:**

- 1) We ran an exploratory factor analysis (EFA) with 25 items, examining and interpreting model fit indices and factor pattern loadings.
- 2) We removed *negatively* loading items and items *with crossloadings* from the model one at a time. The eliminated items included two items related to gender attitudes and two items related to decision making
- 3) We explored the *construct validity* of our measure of women's agency. Using exploratory structural equation models, we assessed the association of women's age with each of the three dimensions of women's agency.

## Results

## Indicators of Women's Agency, Minya, Egypt

(N=608 ever-married women)

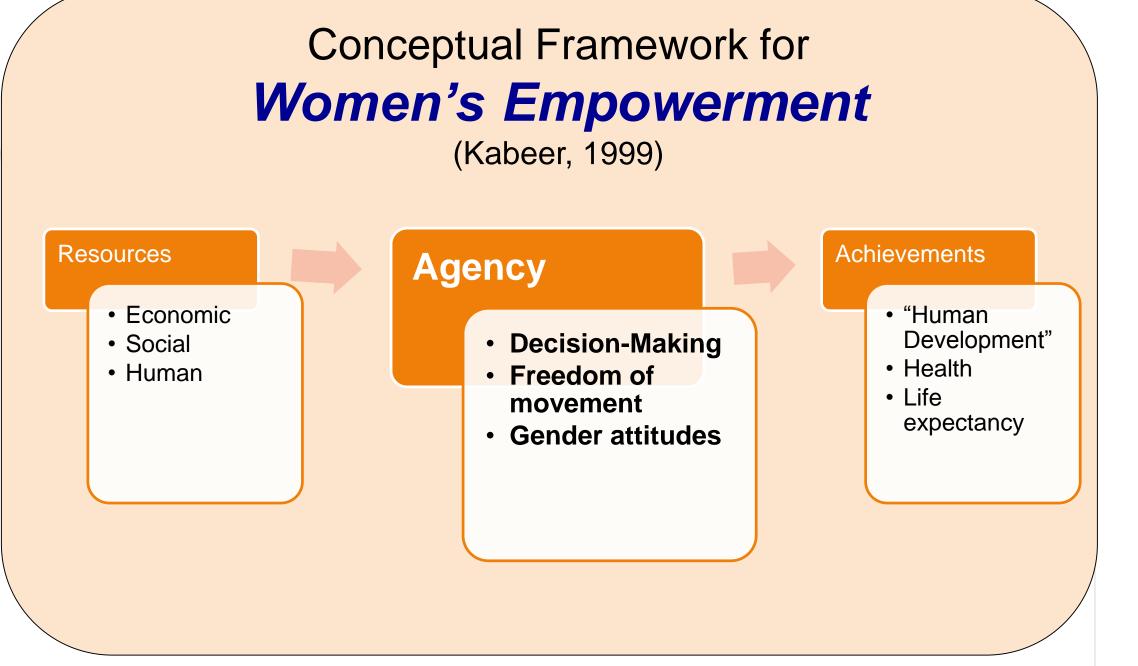
DECISION-MAKING	SOE	You & SOE	You
Who in your family has the final say things?	in purchas	sing the fo	llowing
egetables and fruit	12%	13%	<b>75</b> %
Clothes for yourself	20%	22%	<b>57%</b>
Any kind of medicine for yourself	24%	28%	48%
oiletries for yourself (like hair oil, cream, or henna)	21%	19%	60%

#### ... and 5 more decision-making items

Large household purchases (like a TV

or any other electronic appliances

FREEDOM of MOVEMENT	Never	Not Alone	Alone
Are you allowed to go to the following	ng places?		
To the local market to buy things	2%	23%	<b>75</b> %
To a local health center or doctor	1%	25%	74%
To the homes of your friends in the neighborhood	1%	22%	77%
To a nearby mosque or church	6%	25%	69%
GENDER ATTITUDES	Yes	Don't	No
GENDER ATTITUDES		Know	140
In your opinion is a husband justifie following situations:		Know	
In your opinion is a husband justifie		Know	
In your opinion is a husband justifie following situations:	ed in hitting	Know  his wife i	n the
In your opinion is a husband justifie following situations:  If she goes out without telling him	ed in hitting 57%	Know  his wife i  0%	n the 43%
In your opinion is a husband justified following situations:  If she goes out without telling him liming the she neglects the children	ed in hitting 57% 46%	Know  his wife i  0%  0%	n the 43% 53%



#### **Factor Correlation Matrix**

FACTOR	Decision Making	Freedom of Movement	Gender Attitudes
<b>Decision Making</b>	1		
Freedom of Movement	0.410*	1	
Gender Attitudes	0.211*	0.307*	1

<sup>\*</sup> Significant at p ≤ 0.05

### **Associations Between Women's Age and** Three Dimensions of Women's Agency

(N=608 ever-married women)

Women's Age (ref <30 years)	Decision Making	Freedom of Movement	Gender Attitudes
30-39 years	0.165	0.170	-0.017
40-49 years	0.257†	0.095	-0.076
50+ years	0.406*	-0.166	-0.093

† Significant at p≤ 0.10, \* Significant at p ≤ 0.05

## Conclusions

#### Our measure of women's agency is multidimensional.

Our final, 21-item model consisted of three factors, each corresponding to a well-theorized dimension of women's agency. In addition, the three factors were positively correlated, lending further support to research presenting women's agency as a multidimensional construct.

#### Our measure of women's agency is context specific.

Women's older age, as anticipated, was positively associated with women's decision-making agency, although women's age was not associated with the other domains of women's agency, freedom of movement and gender attitudes.

#### Measurement of women's agency in rural Egypt may be improved further.

As currently conceptualized, the measurement model does not capture political agency, which may be appropriate for the rural Egyptian context.

Likewise, the current items for decision making may reflect 'feminine' or relegated domains of decision making under classic patriarchy, and may not fully capture women's decision making agency in arenas typically reserved

In the future, qualitative research should be used to develop items to explore these, and other emerging dimensions, of women's agency in rural Egypt.

## Acknowledgements

We thank Dr. Ray Langsten and Dr. Rania Roushdy for their outstanding management of the field activities; Ms. Tahra Hassan, Ms. Eman Shady, and Ms. Sally Dijkerman for their research assistance; Mr. Ali Rashed for his assistance with data entry and management; Ms. Amal Refaat, for her supervision of the fieldwork; Dr. Ragui Assaad for his advice on study design; Ms. Carol McMurtray for her assistance with research administration; and Mohammad Nizamuddin Khan for helpful comments on this manuscript. Finally, we express our heartfelt gratitude for the time and dedication of the office and field staff in Egypt and of the women who participated in this study, without whom this project would not have been possible.