



Exploring gender-based disparities with the FAO Food Insecurity Experience Scale



5th Global Forum on Gender Statistics

Aguascalientes, Mexico: 3rd - 5th November 2014



Outline

- Introduction to the FAO Food Insecurity Experience Scale (FIES)
- Malawi Case Study
- Overview from other countries





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Overview



- The FAO Food Insecurity Experience Scale (FIES) leans on the tradition of the experience-based measures on food insecurity.
- They consist in **asking people** about their experiences. The ultimate purpose is to **classify respondents** based on their food insecurity level.
- **They are all grounded on a common construct** - ie., food insecurity is usually characterized by a sequence of events of increased severity

Anxiety surrounding
food access

Changes in the quality
of the diet

Decrease in the
quantity of food
consumed



Some Background



Community childhood
hunger identification
project

Radimer-Cornell Scale

USDA Household Food Security
Survey Module

Venezuela Food
Security Scale

Brazilian Food Security
Scale

Colombian Food
Security Scale

Latin Americana y Caribeña de Seguridad
Alimentaria
(ELCSA)

FAO Food Insecurity Experience Scale



FIES Questions



Scale items	Domains of the food insecurity construct
You were worried you would run out of food because of a lack of money or other resources?	Uncertainty about food
You were unable to eat healthy and nutritious food because of a lack of money or other resources?	Inadequate food quality
You ate only a few kinds of foods because of a lack of money or other resources?	
You had to skip a meal because there was not enough money or other resources to get food?	Insufficient food quantity
You ate less than you thought you should because of a lack of money or other resources?	
Your household ran out of food because of a lack of money or other resources?	
You were hungry but did not eat because there was not enough money or other resources for food?	Insufficient food quantity
You went without eating for a whole day because of a lack of money or other resources?	



Innovative elements of the FAO FIES

- Moves from households to individuals
- ensures cross-country comparability (tks to linguistic adaptation, same implementation modality, equating procedures).





Gender analysis: emerging research

- Most of the measures based on people's experiences use the **household as unit of analysis**.
 - Reasons: Cost, Feasibility, the belief that food insufficiency is mainly a household level experience.
- Such belief has been challenged by **emergent research on individual food insecurity aimed at**:
 - Conceptualizing food insecurity in elderly and children (Wolfe et al., 1996; Fram et al., 2011; Bernal et al., 2012)
 - Analyzing intra-household differences in food security (Nord, 2011)
 - Analyzing relationship between HHs' and adolescents' food insecurity (Hadley et al. 2007)



Gender analysis: emerging research

- The emerging research concluded that **the model of the household as unitary entity** *“does not hold [...] the picture painted [...] indicates that males and females in the household also differ [...] in their ability to command food for their own consumption”*.

(sources: Coates et al., 2010)

- Such perspective
 - **debunks** the usefulness of the concept of household food insecurity
 - **emphasizes** the role of individual food insecurity
 - **pushes for investing** in individual food security measures where people are asked to report on their own experience





Why the shift to individuals in the FIES?

The conclusion of the emerging research had a remarkable impact on the Voices of the Hungry's Project, in particular in the choice to take the individual as unit of analysis

Such a choice has been further simplified by the fact that the Gallup World Pool collects data on the individuals.





Advantages / Caveats

- Individual-level data allow examining differences in the severity of food insecurity as experienced by men and women. This helps to:
 - Generate cross-country comparable sex-disaggregated food insecurity statistics
 - Estimate the effect of sex on food insecurity controlling for other relevant (individual and household) variables
 - Explore intra-household differences between men and women (feasible depending on the sampling design).



Outline

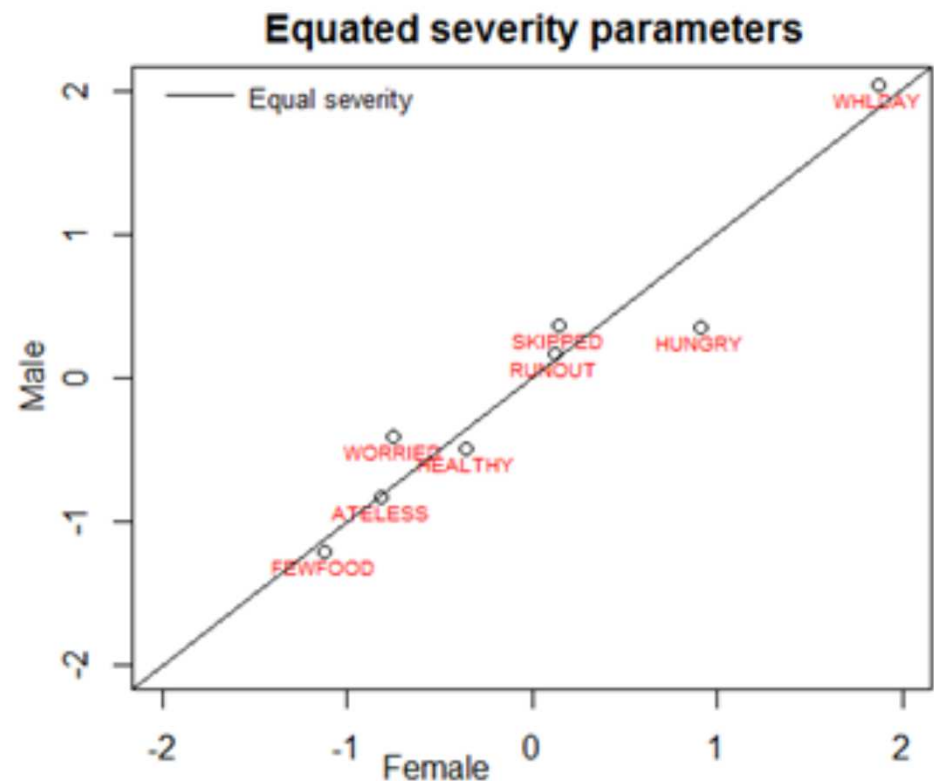
- Introduction to the FAO Food Insecurity Experience Scale (FIES)
- **Malawi case Study**
- Overview from other countries





Malawi Case Study

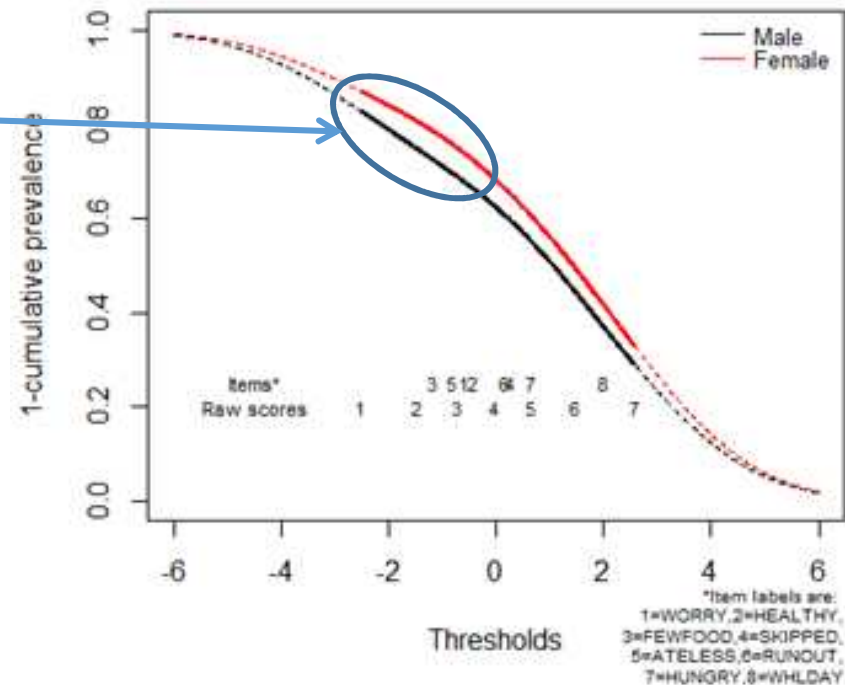
- Year: 2013; nationally representative sample of 1,000 individuals
- Overall, the scale in Malawi performed well. All the rash assumption met
 - All items are related to the latent trait
 - All items discriminate equally well
 - Items are conditionally independent
 - Overall model fit is adequate
- items worked similarly for men & women (same interpretation, same perceived severity, etc.)
- The difference on 'hungry' is considered small enough not to introduce substantial biases in the prevalence comparison.



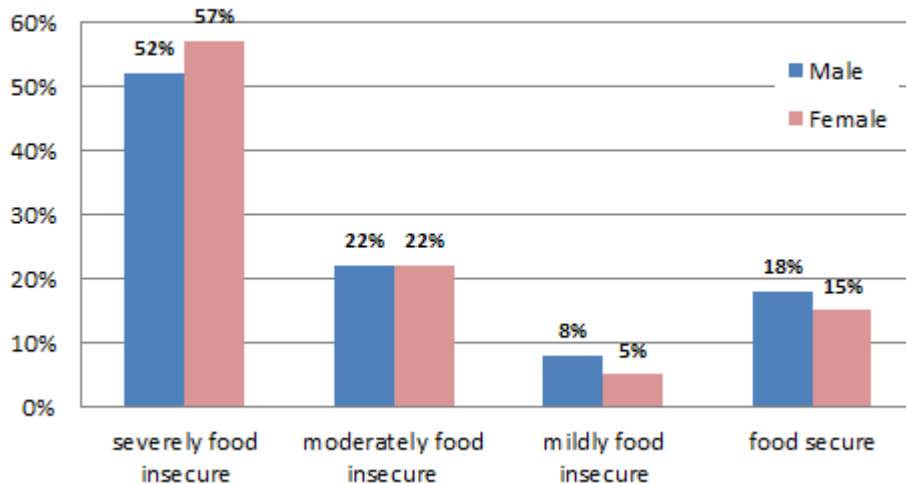


Malawi Case Study

- Overall, women are more food insecure than men. Such difference is more evident in the less severe food insecurity situation



food insecurity by sex of individuals



On this basis we tested the impact of gender on food insecurity with two **logistics regression models**

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Malawi Case Study

- **Regressors:** age, residence area, education, income
- When we introduced education and income → gender disparities disappeared. The results suggest that:
 - In Malawi, women are **more likely than men to be food insecure due to their lower economic and human capital** (which translates into lower income and education)
 - If women had the same educational and income level than men, they would report the same moderate food insecurity level.
 - Due to the design of the GWP, it wasn't possible to 'control for' household-level characteristics (ie., size, position of the person in the hh, etc.).



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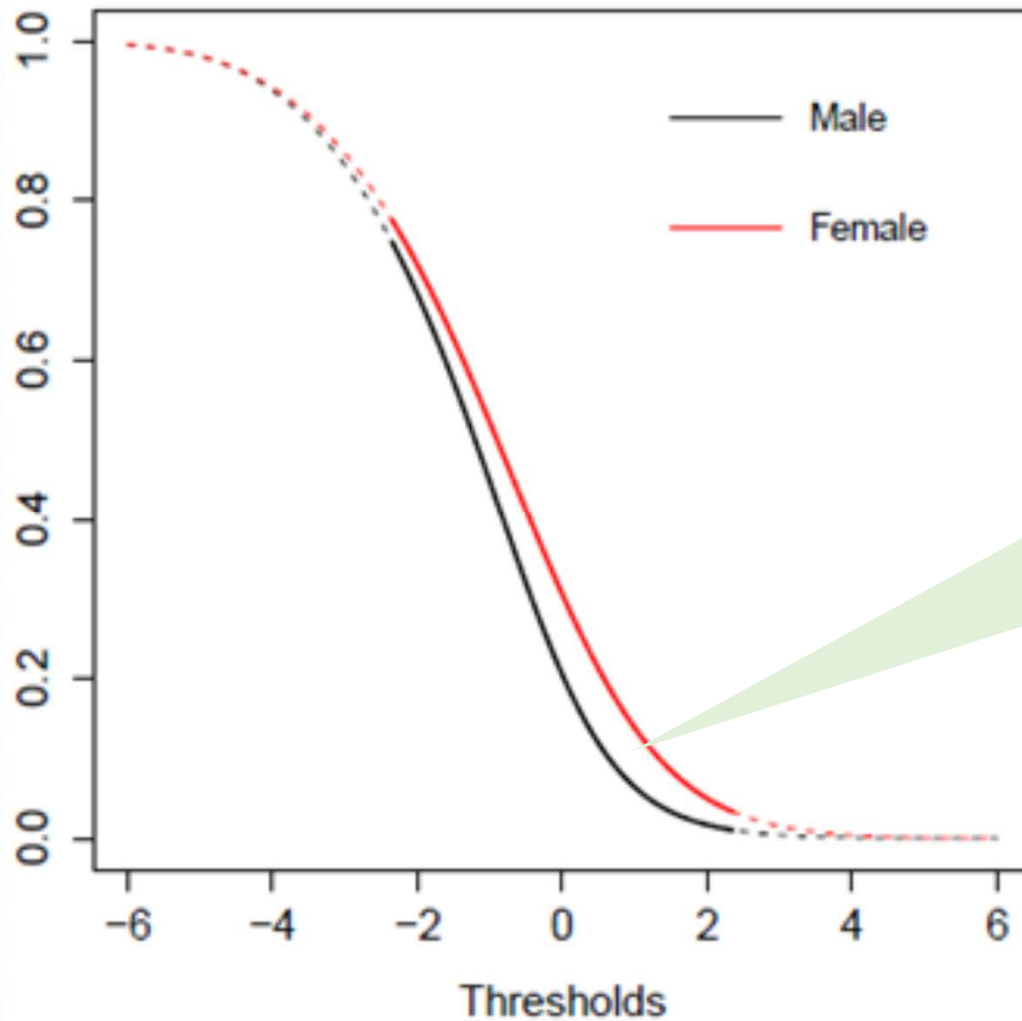
Overview from other countries

- The FAO FIES is not the first individual scale in the field of food security, but it is the **first applied into a large number of countries in a standardized manner**
- The Voices of the Hungry project is collecting data at national level in more than 150 countries
 - The preliminary analysis confirms the validity of the FIES, but suggests that some adjustments could be needed in the actual data collection to **avoid that possible bias** may affect the analysis of men/women differences





Pakistan

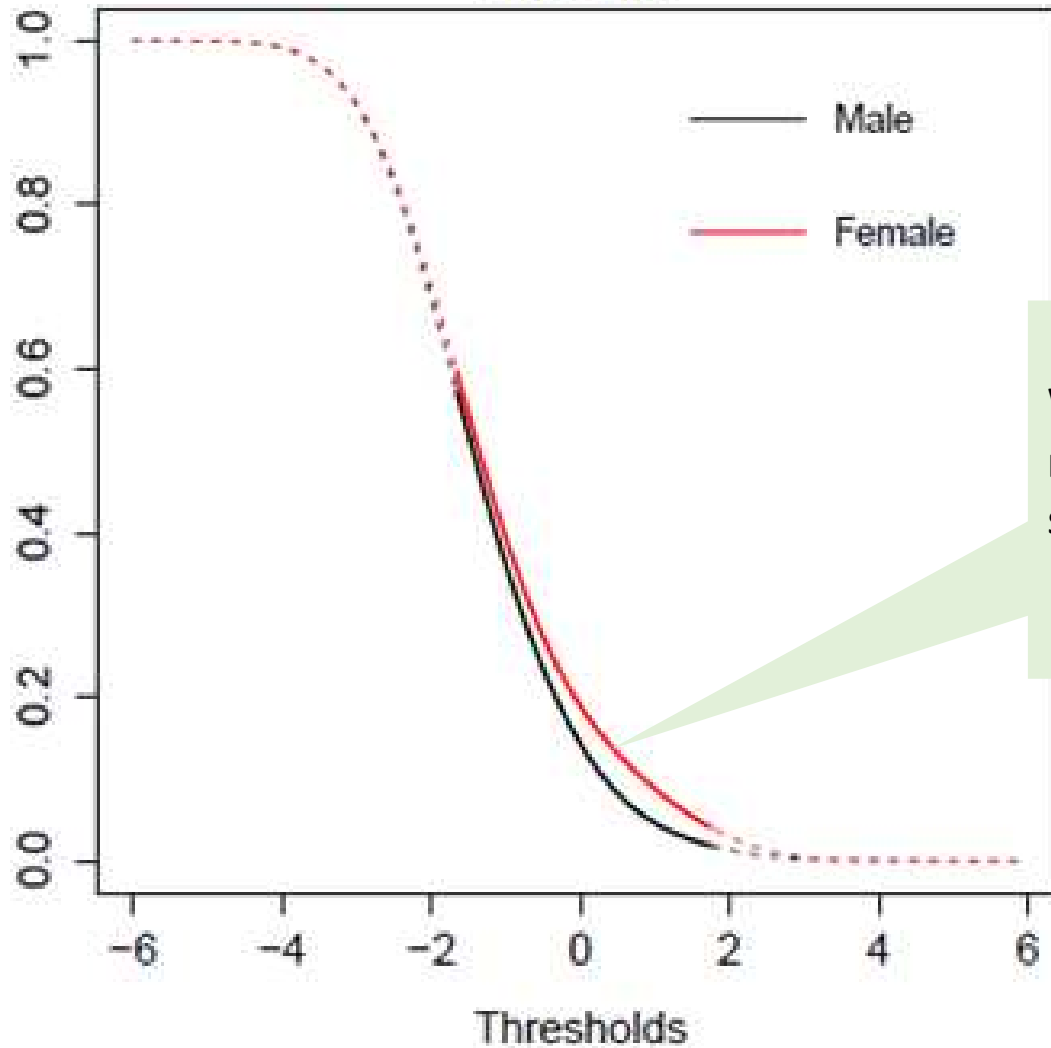


Women are clearly more food insecure than men.

This affect the entire latent trait, although the disparity become larger on the more severe side of the trait.



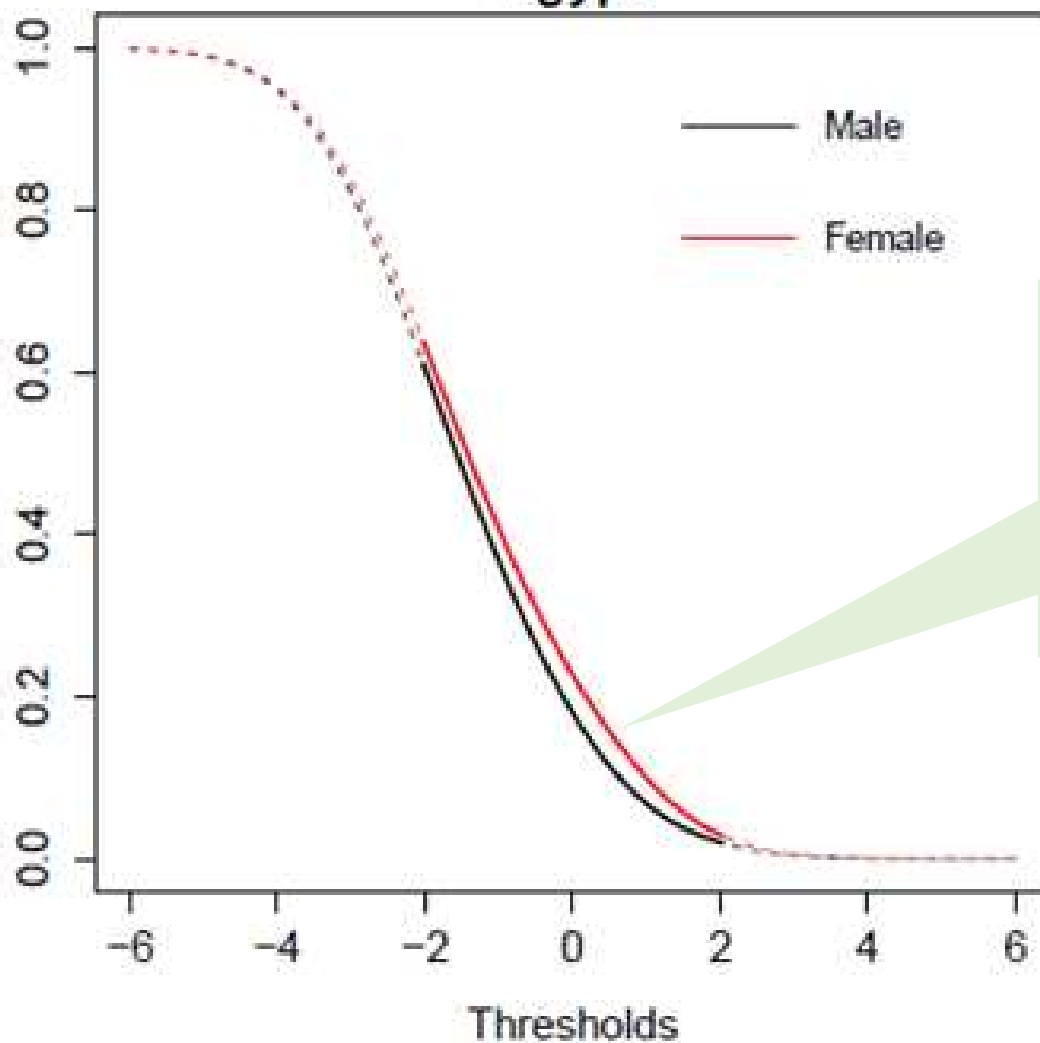
Jordan



Women are more food insecure than men only when we focus on the more severe side of the latent trait



Egypt

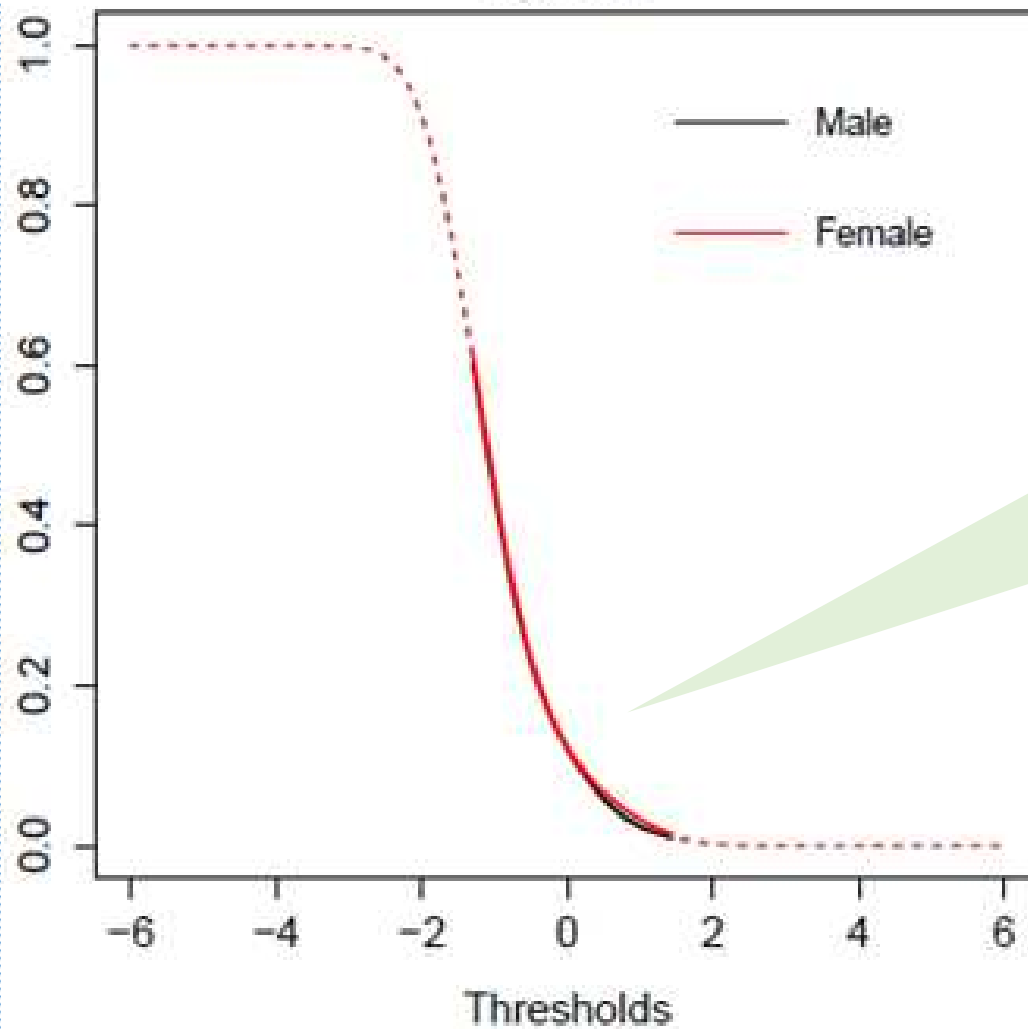


Women are slightly more food insecure than men.

This is more visible in the more severe side of the trait.



Greece



No food security difference between men and women !



THANK YOU !

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