



# DETERMINANTS OF FOOD WASTE BEHAVIOUR IN GREEK HOUSEHOLDS

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The average annual quantity of food waste in developed countries is almost equal to the total food production in Sub-Saharan Africa

The global food security crisis, poses a serious threat to peace and security in the world



In 2018 an estimated 7.5 million children will suffer from severe acute malnutrition

Food waste is a social problem, with a solution lying on social interventions



The consumption behaviour of households is as important as the technical or economic aspects in waste management research and decision making

### **Aim of the study:**

- To analyse Greek consumers' food waste behaviour
- To investigate the most important determinants that influence the intention to reduce food waste



# RESEARCH METHODOLOGY

- Sample survey with a structured questionnaire based mainly on the Theory of Planned Behaviour (TPB)

Setting Goal, theoretical framework and research hypothesis

- 921 Greeks between the age of 18 and 75 completed the questionnaire in the period between April and July 2017 (response rate 92%)

Data collection.  
Convenience sampling

- STATA 12
- Exploratory Factor Analysis-EFA
- Confirmatory Factor Analysis-CFA
- Structural Equation Models-SEM

Statistical analysis and conclusions

The questionnaire includes 67 questions concerning :

TPB

- Attitudes towards food waste
- Perceived behavioural control on capability to deal with household food-related activities

TPB

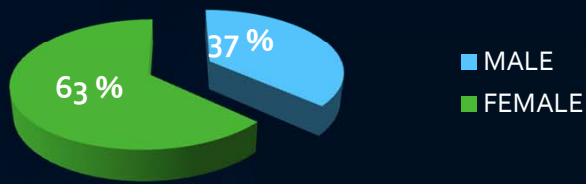
- Perceived expectations of other people, who are important, to food waste
- Intention to reduce food waste

Additional variables

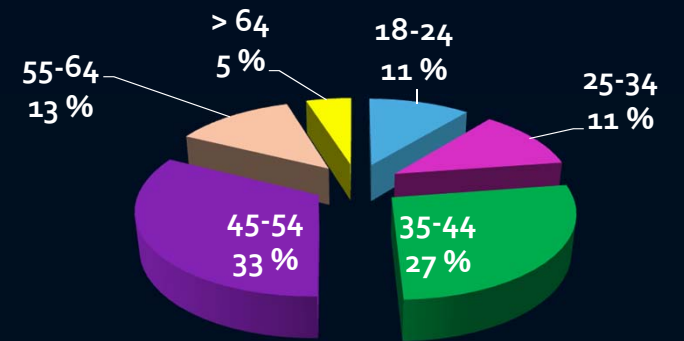
- Knowledge of the problem related to food waste
- Food-related routines and habits (planning, shopping, cooking)
- Moral norms
- General environmental awareness and routines
- Socio-demographic characteristics
- Self-reported amounts of Food Waste

# SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLE

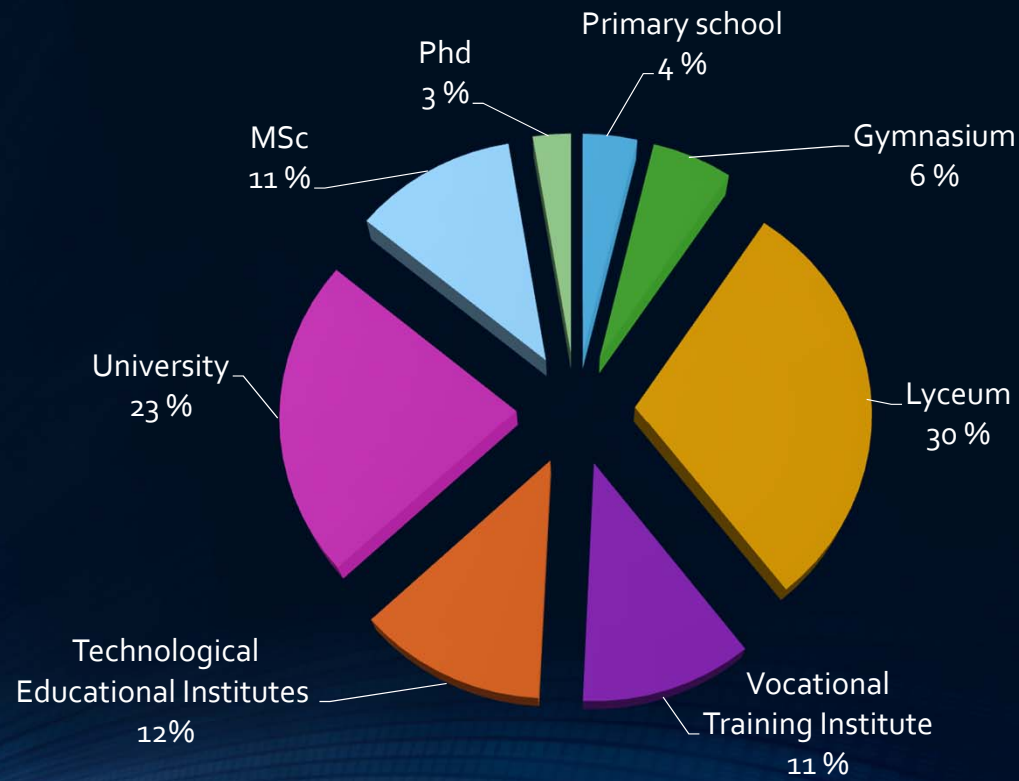
## SEX



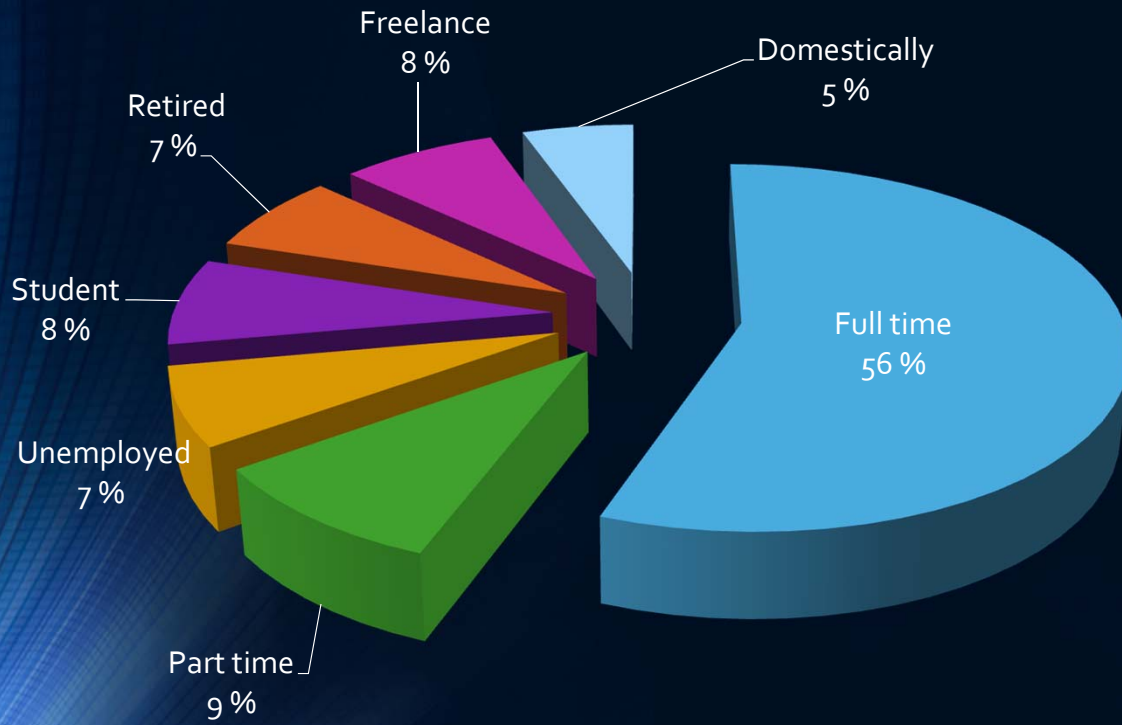
## AGE



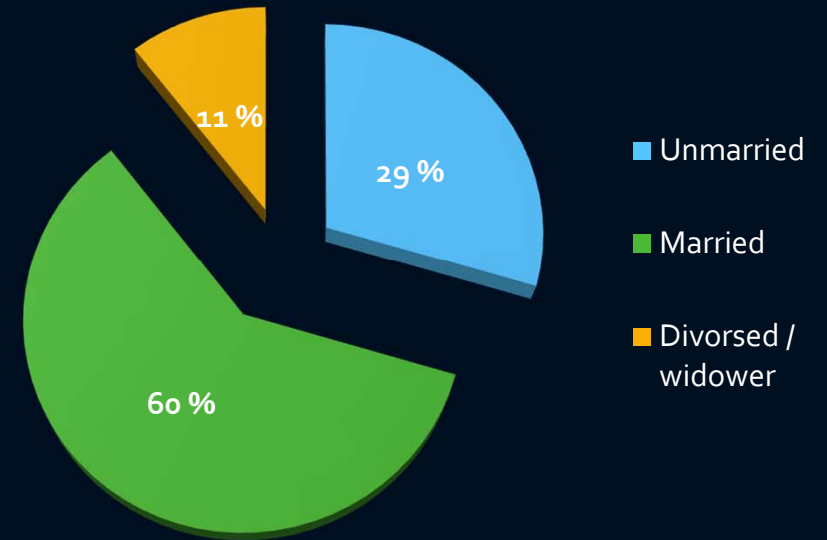
## EDUCATION



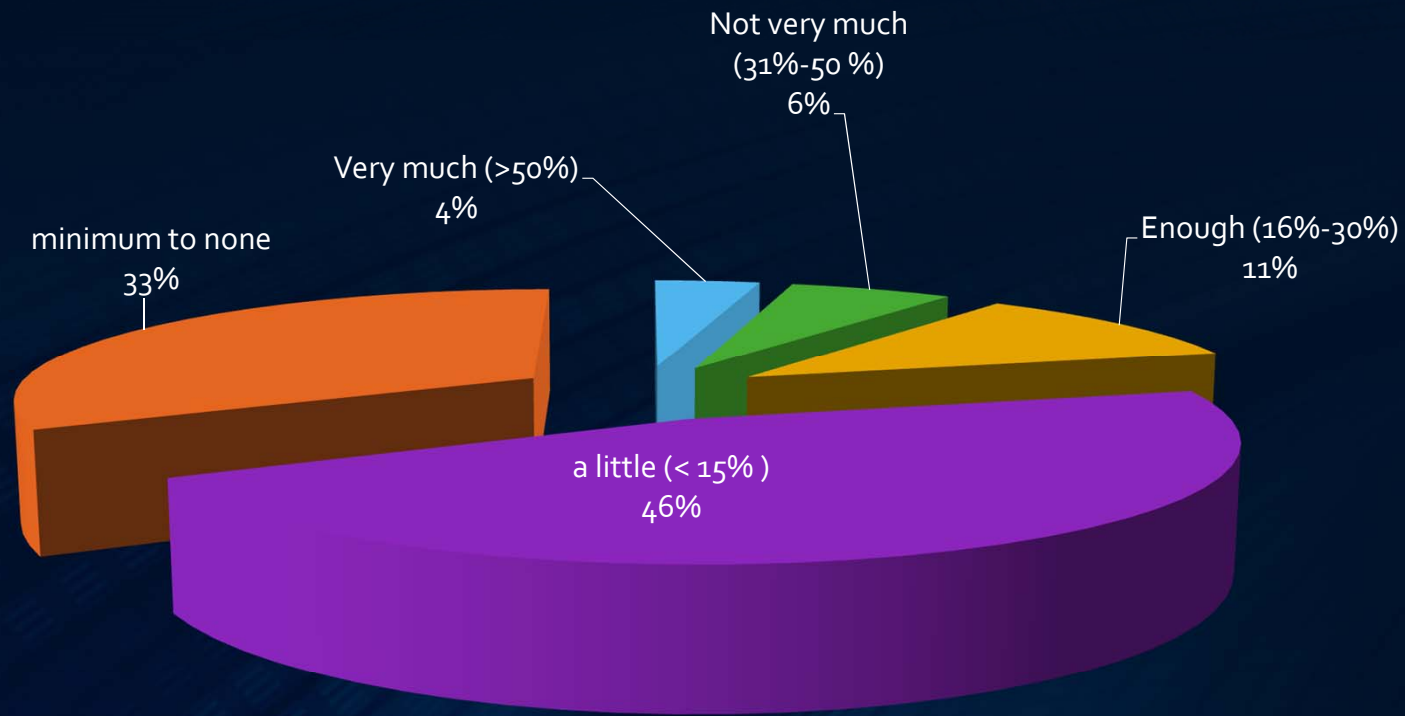
## PROFESSIONAL STATUS



## MARITAL STATUS



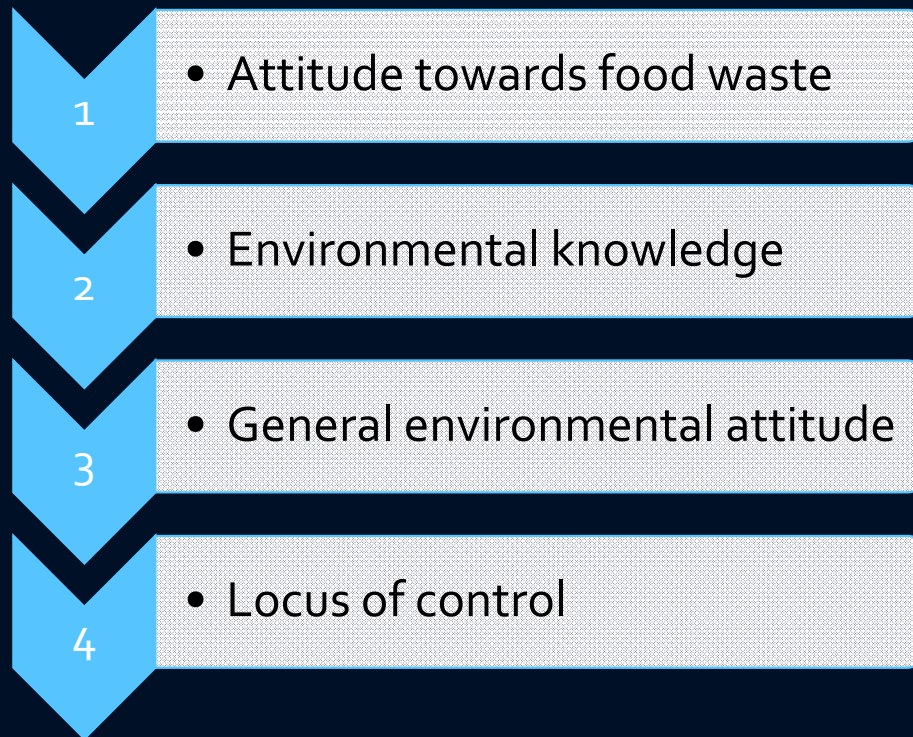
## SELF-REPORTED AMOUNTS OF FOOD WASTE





## RESULTS FROM EXPLORATORY FACTOR ANALYSIS-EFA

4 factors were extracted by EFA:



These factors interpret 44% of the variability of the dependent variable "Food Waste Prevention Intention" (R-squared = 0,44).

The most important factor in predicting "Food waste prevention intention" was "Attitude towards Food Waste" as it emerged from Linear Regression

✓ Better attitude toward food waste

t-test analysis indicated that women have :

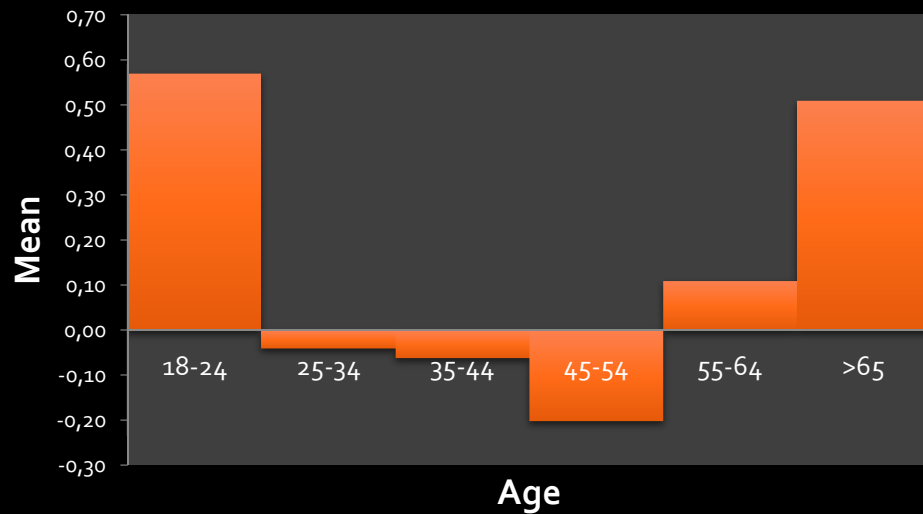
✓ Larger food waste prevention intension

- Food Waste Prevention Behaviour does not show statistically significant differentiation between men and women ( $p=0,8$ ).
- This result contrasts with the results of other studies showing that women throw away more food than men (Gallo, 1980; Buzby and Guthrie, 2002; Koivupuro et al., 2012)

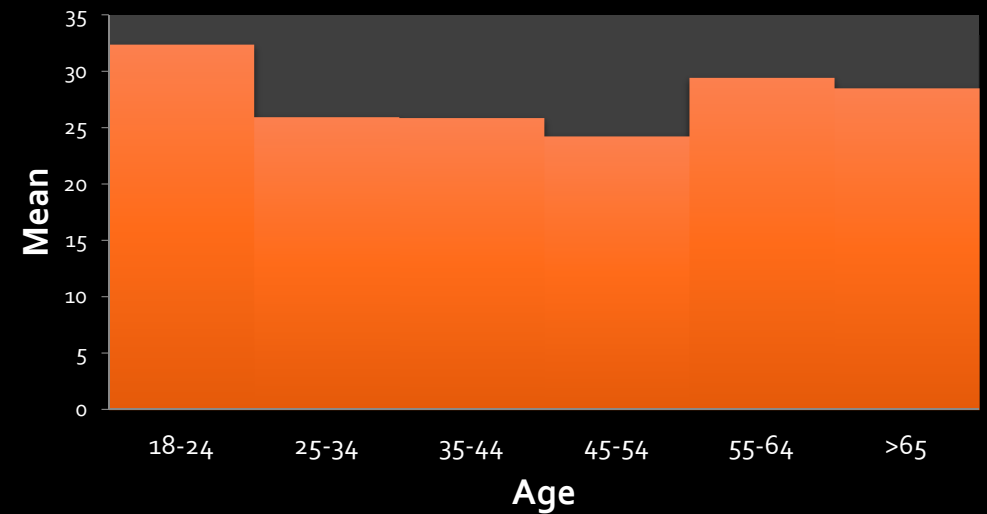
People aged 45-54 have the best attitude towards food waste

People aged 45-54 have the greatest food waste prevention intention

Dependence of the factor "attitude towards food waste" on age



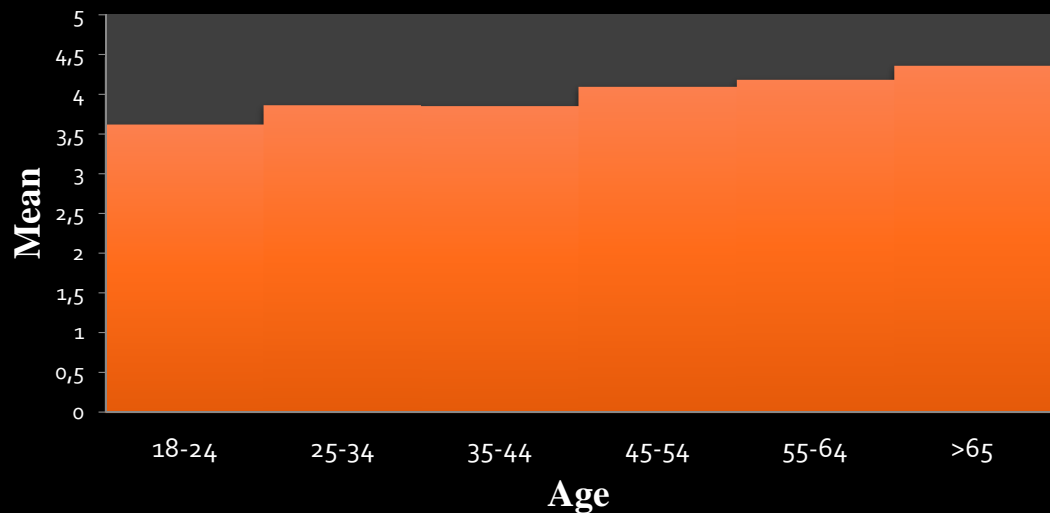
Dependence of food waste prevention intention on age



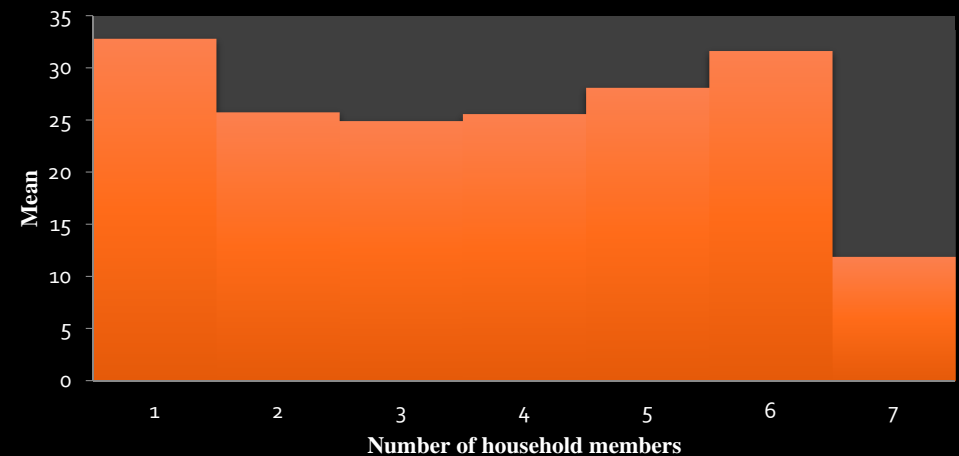
Self-reported Food Waste Prevention Behaviour improves with age increase

Food waste prevention intention increases as the number of household members increases, except for the extreme groups with low participation rates (0.1% the last and 12.8% the first)

Dependence of food waste prevention behavior from age



Dependence of food waste prevention intention on the number of household members



## CONCLUSIONS

- ❖ There was no statistically significant effect of the different levels of education on the food waste prevention intention and on the food waste prevention behavior
- ❖ There was no statistically significant effect of the professional status on the food waste prevention intention and on the food waste prevention behavior
- ❖ There was no statistically significant effect of the income on the food waste prevention intention and on the food waste prevention behavior
- ❖ There is no statistically significant correlation of "Food Waste Prevention Behaviour" with the number of household members.

Thank you

