



USDA Food and Nutrition Service Research Program on Child Hunger Task Order I.



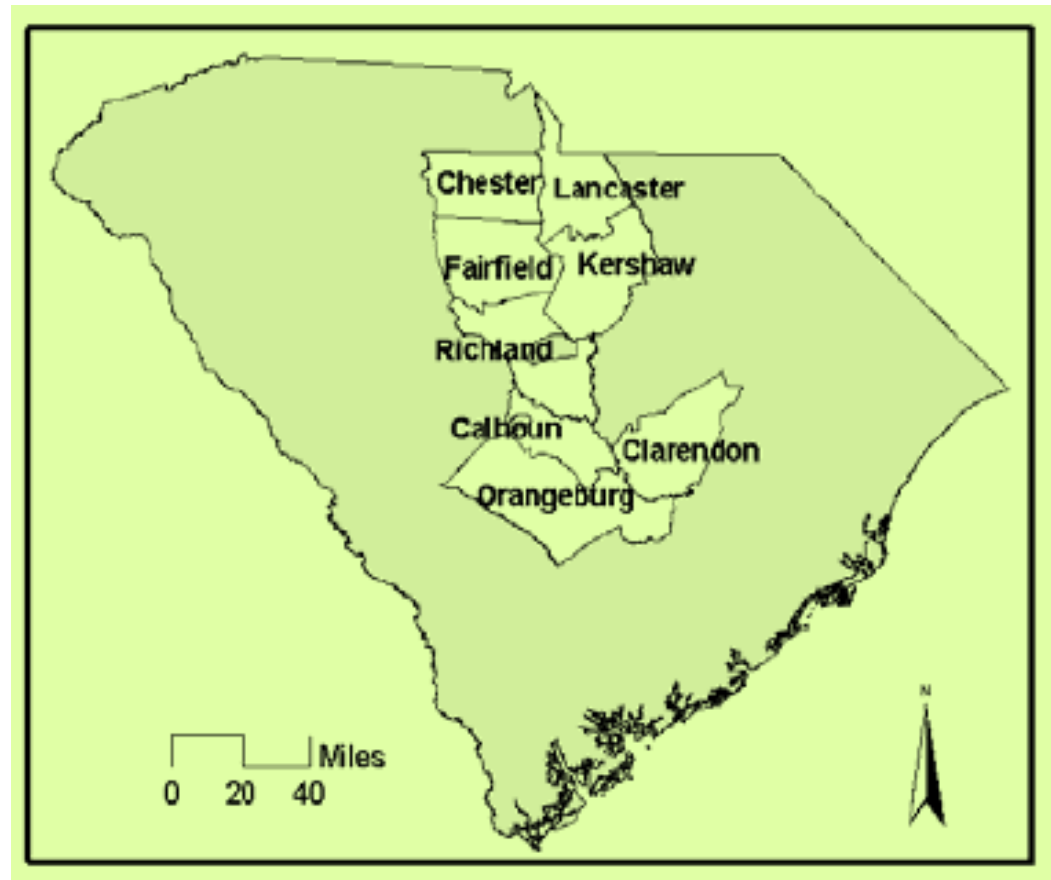
# Research objectives

- Identify the household conditions that distinguish among households experiencing:
  - Very low food security in children (VLFS)
  - Food insecurity but not VLFS
  - Food secure households
- Identify the community conditions that distinguish among the three groups of households



# Study Population

- Eight counties in midlands region of South Carolina
  - 470 block groups
  - 80,600 households



# Study design

## 1,660 Food systems stakeholders



*Grocers*



*Restaurants*



*Emergency food*



*Food assistance*



Randomly selected  
recruitment sites  
(249 urban/ 178 rural)

Key informant interviews  
Purposively selected

Clients, customers, visitors,  
participants recruited from site

Respondents allowed to  
invite up to 4 others

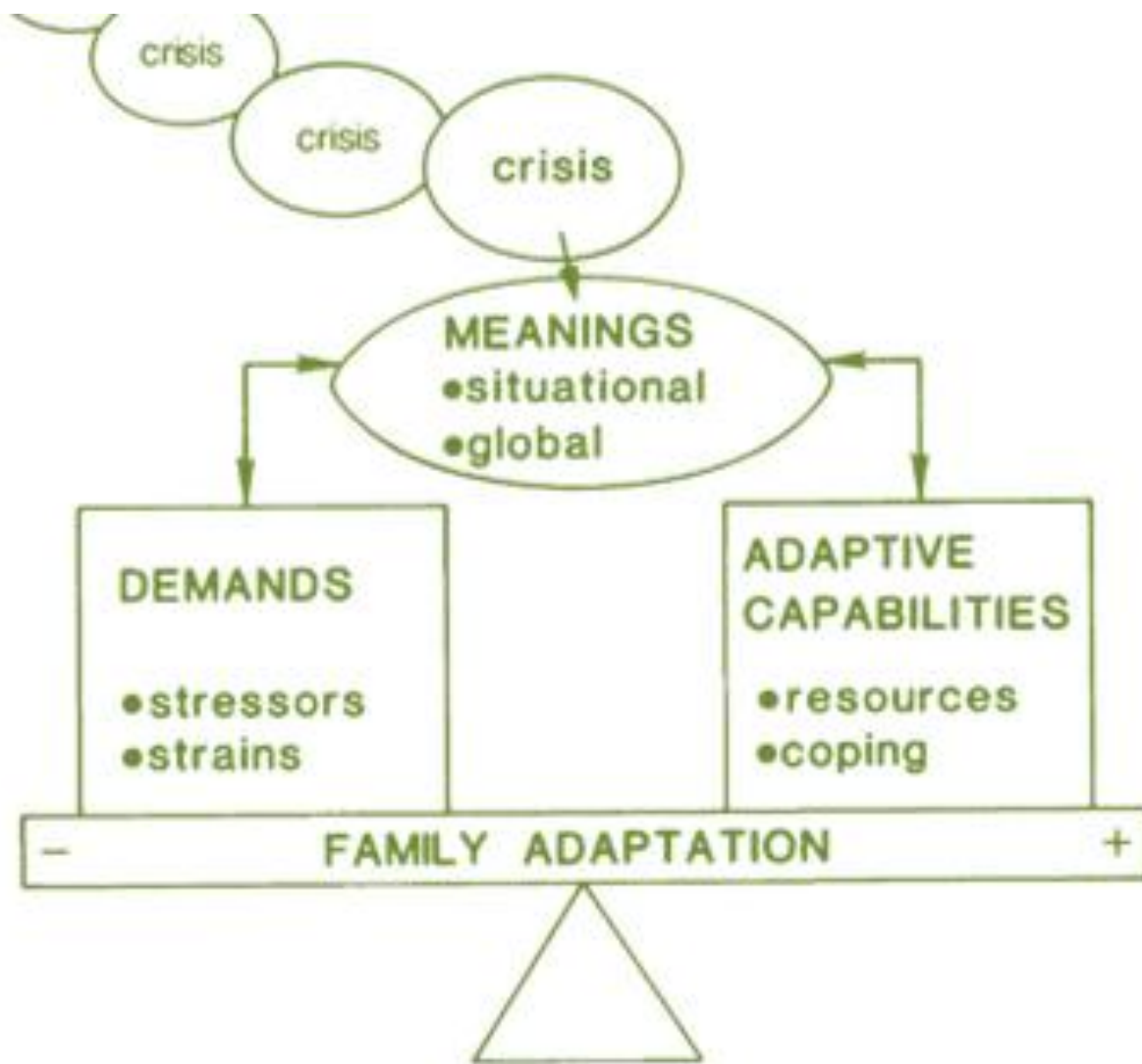
Final sample:  
200 VLFS, 200 Food *insecure*,  
200 food secure

# Demographic Characteristics of Sample

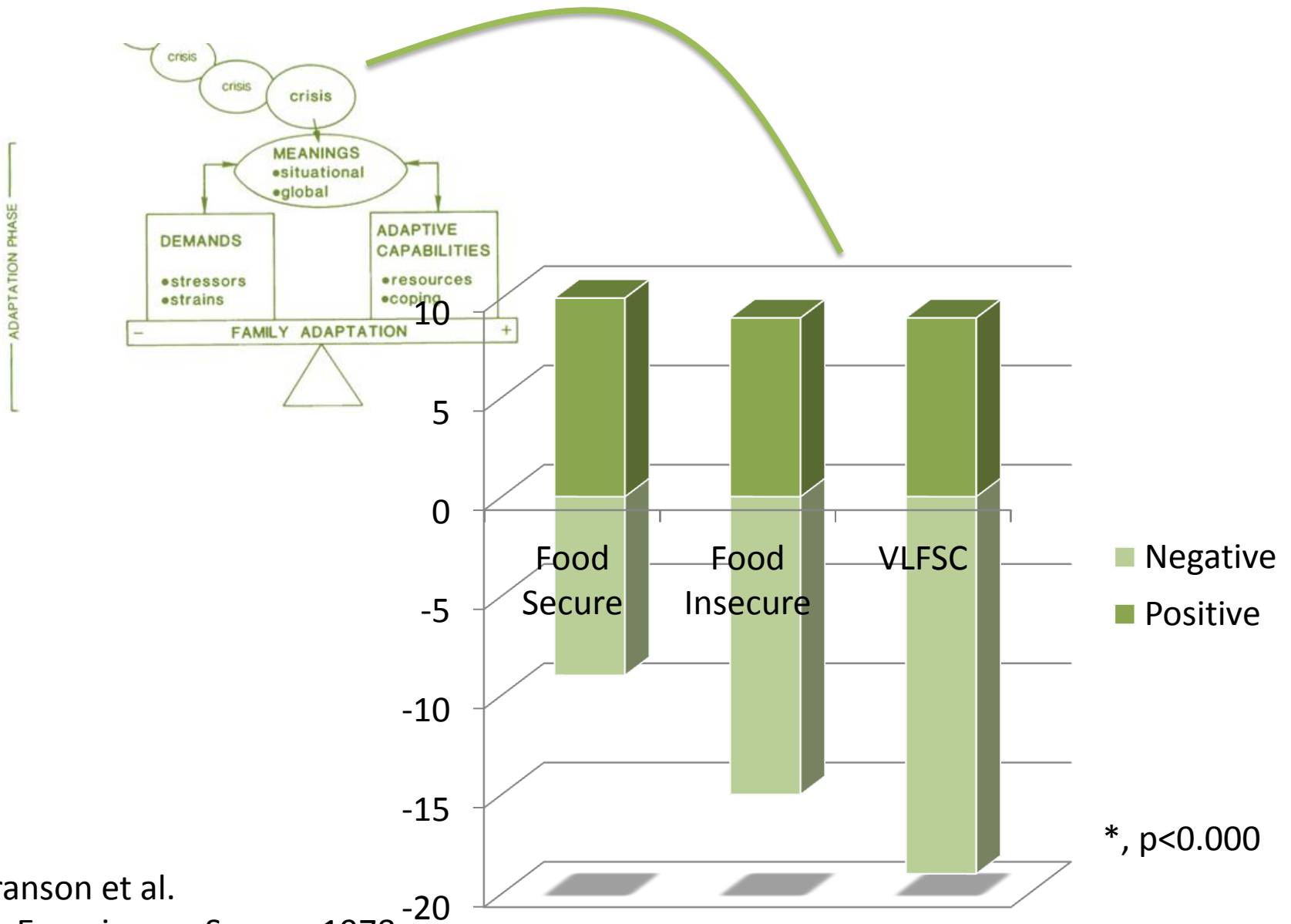
	All	Food Secure	Food Insecure	VLFSC
Total	512	151	210	151
Female caregiver	474	93% (138)	93%(194)	94%(142)
# children	2.1	2.1	2.0	2.2
% with >4 children	12.9%	12.9%	11.6%	14.6%
# adults	1.8	1.8	1.8	1.7
% with 1 adult	43.7%	38.9%	44.7%	47.0%
Less than college degree	75.1%	61.5%	78.9%	83.3%
Black	78.7%	70.2%	78.6%	87.4%

# Data management and analysis

- Data cleaning and merges in SAS
- Composite variables developed per author guidance
- Data analysis in STATA 12
  - Bivariate analyses (anova, chi-squared tests) used for variable selection
  - Models developed based on theoretical constructs
  - Final model most parsimonious fit



ADAPTATION PHASE



Saranson et al.  
Life Experiences Survey. 1978



		Food Secure B(p value)	Food Insecure B(p value)	VLFSC B(p value)
<b>Demands</b>	<b>Rent (\$100)</b>	Reference	<b>-0.04(0.337)</b>	<b>-0.01(0.893)</b>
	<b>Transportation (\$100)</b>	Reference	<b>0.07(0.519)</b>	<b>-0.01(0.946)</b>
	<b>Electricity (\$100)</b>	Reference	<b>0.22(0.062)</b>	<b>0.17(0.205)</b>
	<b>Homelessness</b>	Reference	<b>0.36(0.285)</b>	<b>0.88(0.016)</b>
	<b>Domestic Violence</b>	Reference	<b>0.47(0.155)</b>	<b>0.49(0.167)</b>
	<b>CHAOS</b>	Reference	<b>0.06(0.318)</b>	<b>0.09(0.153)</b>
<b>Adaptive Capabilities</b>	<b>Wages (\$500)</b>	Reference	<b>-0.08(0.256)</b>	<b>-0.23(0.014)</b>
	<b>SNAP(\$100)</b>	Reference	<b>-0.02(0.734)</b>	<b>-0.10(0.180)</b>
	<b>Social Support</b>	Reference	<b>-0.06(0.171)</b>	<b>-0.14(0.005)</b>
	<b>Speeding Up</b>	Reference	<b>0.30(0.221)</b>	<b>0.44(0.110)</b>
	<b>Individualizing Meals</b>	Reference	<b>0.28(0.390)</b>	<b>0.79(0.030)</b>
	<b>Planning</b>	Reference	<b>-0.78(0.000)</b>	<b>-0.65(0.009)</b>
<b>Crises</b>	<b>Life Events</b>	Reference	<b>-0.01(0.203)</b>	<b>-0.03(0.020)</b>
<b>Global Stress Appraisals and Meanings</b>	<b>Perceived Stress</b>	Reference	<b>0.07(0.013)</b>	<b>0.06(0.052)</b>
	<b>Intrinsic Religiosity</b>	Reference	<b>-0.19(0.007)</b>	<b>-0.12(0.072)</b>

		Food Secure	Food Insecure B(p value)	VLFSC B(p value)
<b>Demands</b>	<b>Homelessness</b>	Reference	<b>0.47(.107)</b>	<b>1.07(0.001)</b>
<b>Adaptive Capabilities</b>	<b>Wages (\$500)</b>	Reference	<b>-0.05(.460)</b>	<b>-0.18(.034)</b>
	<b>SNAP (\$100)</b>	Reference	<b>-0.04(.471)</b>	<b>-0.11(.083)</b>
	<b>Social Support</b>	Reference	<b>-0.11(.004)</b>	<b>-0.17(&lt;.000)</b>
	<b>Individualizing Meals</b>	Reference	<b>0.60(.045)</b>	<b>1.06(.001)</b>
	<b>Planning</b>	Reference	<b>-0.69(&lt;.000)</b>	<b>-0.76(.001)</b>
<b>Crises</b>	<b>Life Events</b>	Reference	<b>-0.03(.002)</b>	<b>-0.05(&lt;.000)</b>
<b>Demands</b>	<b>Homelessness</b>		Reference	<b>0.60(.014)</b>
<b>Adaptive Capabilities</b>	<b>Wages (\$500)</b>		Reference	<b>-0.13(.082)</b>
	<b>SNAP (\$100)</b>		Reference	<b>-0.07(.187)</b>
	<b>Social Support</b>		Reference	<b>-0.06(.063)</b>
	<b>Individualizing Meals</b>		Reference	<b>0.46(.073)</b>
	<b>Planning</b>		Reference	<b>-0.07(.710)</b>
<b>Crises</b>	<b>Life Events</b>		Reference	<b>-0.02(.070)</b>

# Preliminary thoughts on implications

- Policy solutions:
  - Fair wages
  - Housing
  - SNAP nutrition education to help with meal planning
  - SNAP formulas for families that are homeless

# Strengths and Limitations

- Strengths
  - One of largest samples of VLFSC families in US
  - Excellent study recruitment
  - High quality data cleaning & management (little data loss)
  - Family Adaptation Framework
- Limitations
  - Cross-sectional design
  - Limited power without additional 100 families
  - Disentangling level of program participation

# Acknowledgements

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- Study team: Carrie Draper, Michael Burke, Lauren Martini, Sherretta Thomas, Nick Younginer, Emily, Amanda
- Work study students