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# Food insecurity, depression, parenting and knowledge of community resources in mothers with low-income living in rural areas

### Introduction

Food insecurity and depression is more prevalent among households experiencing poverty than other households. Additionally, rural low-income Americans are at greater risk due to lack of access to grocery stores (Hofferth and Iceland, 1998; Morton, Bitto, Oakland & Sand, 2005) and mental health services (Merwin, Snyder & Katz, 2006). Thus, low income rural families may be at a disadvantage in raising children compared to their urban counterparts.

### Hypotheses

The researchers hypothesize that food insecurity and depression are negatively associated with parental confidence and perceived parenting support. A parent's knowledge of community resources may buffer the effects of food insecurity and depression and improve parenting. The conceptual model in Figure 1 illustrates the hypothesized relations between these variables.

### Methods

The sample in this study was drawn from the multi-state longitudinal study of rural low income families, *Rural Families Speak*. Data from waves 1 and 2 of *Rural Families Speak* was used for this study (N = 313). To participate in the study, mothers had to be at least 18 years of age, have a child under age 13, and live in a household at or below 200% of the federal poverty line.

Figure 1 Conceptual risk-resilience model

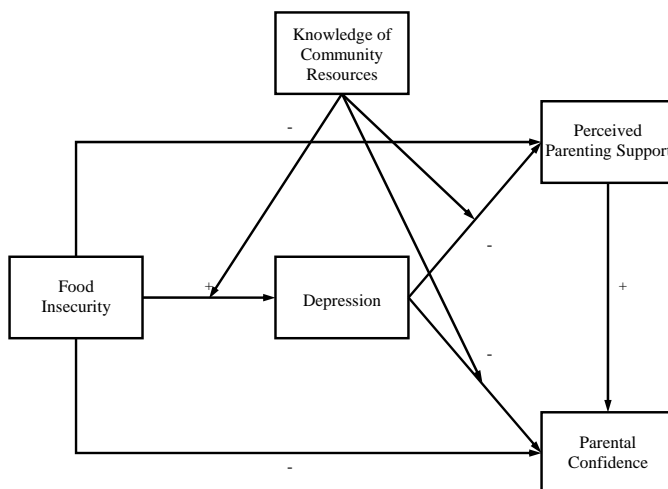
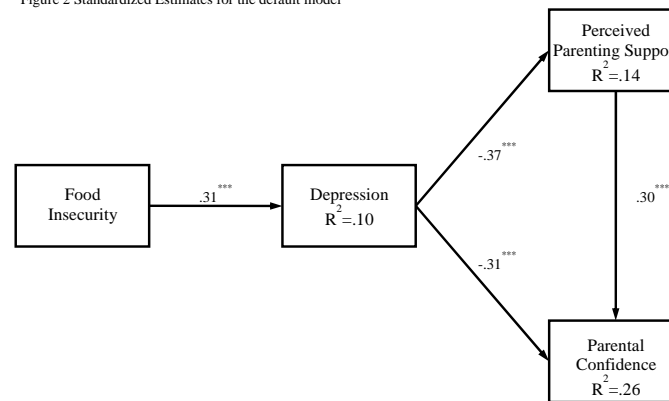


Figure 2 Standardized Estimates for the default model



Standardized  $\beta$  for full sample, N= 313  
Model Fit: Chi-square 1.13 (df=2, p=.57), CFI = 1.00, RMSEA=.000.  
\*p < .05, \*\*p < .01, \*\*\*p < .001



http://www.istock.com/photo/10007314.html

### Results

Each pathway was significant, supporting the hypothesis that food insecurity and depression negatively impact parenting. Contrary to the hypothesis that the knowledge of community resources would moderate all relations, results indicated that the knowledge of community resources did not have a statistically significant moderating effect on the outcomes of perceived support in the parenting role and parental confidence.

### Discussion

Food insecurity was found to predict depression and depression was found to predict both parent confidence and perceived support in the parenting role. Knowledge of community resources did not serve as a protective mechanism for this population. Assuming there was no type II error, high or low levels of knowledge of community resources may not be a significant factor for the population studied. Knowledge about a resource and utilization of a resource are two different concepts. It may be that participants knew about resources and a) did not need the resources, or b) were unable to utilize the needed resources. This distinction is important because access is a relatively tractable aspect that can be addressed through family policy.

### Implications

Family policy implications can be drawn from the findings. Depression significantly predicted perceived parenting support and parental confidence in both the high and low knowledge of community resources groups. Given that low-income mothers are at a higher risk for depression and rural low-income mothers may have difficulty in accessing mental health services, the population in this study is at high risk for depression and poor family outcomes. A potential family policy option is to fund research-based home visiting programs specifically designed to reach low-income rural families and improve mental health. Potentially, increased amounts of positive formal social support that is specific to the parenting role could moderate the relations between food insecurity, depression, parenting confidence and perceived support in the parenting role.

### Limitations

In this study, knowledge of community resources did not have a statistically significant moderating effect on perceived parenting support and parental confidence. The power of the test was limited by the small sample of participants that answered the knowledge of community resources questions in wave 2. A larger sample size may increase the power of the test, thus avoiding type II error.

### Conclusions

The economic status of the United States has changed drastically since the early 2000s, an examination of how the Great Recession of 2007 affected the social support system for low-income rural families is crucial to further the knowledge base about how low-income rural families adapt to stressors.

### References

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Morton, L.W., Bitto, E.A., Oakland, M.J., & Sand, M. (2005). Solving the problems of Iowa food deserts: Food insecurity and civic structure. *Rural Sociology*, 70 (1), 94-112.