

TITLE: Residential Texas Energy Poverty: A Study Comparing Subjective and Objective Measures of Energy Poverty

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ABSTRACT

Energy poverty is lack of access to adequate energy service. There is a consensus among European researchers that energy poverty is a result of high energy prices, low incomes, inefficient households and appliances, and individual household practices and needs. More recently, increased attention has been placed on energy poverty in the U.S. as electricity prices and electricity demand steadily increase; trends that create compounded burden for vulnerable individuals living in older, less energy efficient housing. Traditionally, the percent of income spent on energy expenditures—i.e. objective energy burden—has been used to determine energy poverty. Much of the literature in the U.S. focuses on using this objective energy burden. However, researchers in Europe have criticized objective energy burden as it does not capture other household characteristics or regional and temporal variation in cost and consumption. Measurement is especially important in Texas where previous studies have found that over one-fifth of households are energy burdened, there is no regulatory recognition of the issue, and programs meant to reduce energy poverty have been unsuccessful. A few qualitative studies have posited that demographic, household structure, and health are important indicators of energy poverty; however, there has not been any empirical quantitative study of energy poverty indicators. This study compares structural, demographic, financial, and health indicators of objectively measured energy poverty to subjectively measured (i.e. stated) energy poverty using survey data from the Texas Energy Poverty Research Institute. The results of this study hold implications for electricity access program development.



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