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Highlighted herein is a critique of the quantitative information in the news article “ The Impoverished States of America” by Tom Kuntz and Bill Marsh in The New York Times, September 17, 2011.   
Kuntz and Marsh (2011) compare the poverty figures released in 2010 by the Census Bureau and the unemployment data based on the population of various states. The article also compares the poverty and income figures. The data is presented in figures, charts, and maps. A combination of these gives a clear visual impression and enhances easy comprehension of the data. By presenting the data using symbols (such as one symbol of a person to represent one million people in poverty), it’s easy to make estimations and understand the data in details. Different colors have also been used to give a clear distinction of males from females. Also, various maps are used to distinguish the states.   
The article cites different types of data. There are absolute numbers such as the official poverty line and the median household income represented by $22314 and $49445 respectively. From the presentation, it’s beyond any doubt that the given information is just an estimate. When considering the number of people, the data is given in millions, which directly shows an approximation. The authors, however, does not indicate that the information is just an estimate and not the actual. This affects interpretation.   
For the reference purposes, Kuntz and Marsh indicate their main sources of data. The poverty data is sourced from the U. S. Census Bureau, and the unemployment data from the Bureau of Labor Statistics. These are very credible sources and the information in the article can therefore be regarded as credible. The information presented in the article is merely a summary of the original data from the respective sources. Based on these summaries, tracking the original data is somehow more demanding. The information is not sufficient to enable one to access the original source with ease.   
The article itself does not reveal the methods through which the data ware collected. However, the original data sources clearly indicate these methods. The poverty data is based on the people and households who responded to the American Community Survey in 2009 and 2010. The sample size of the ACS is about 3 million spread across the U. S. The data is just an estimate that represents the entire population, based on the sampling techniques. From the article, however, it is not clear whether the given data is the actual data or estimates. The authors, Kuntz and Marsh, should have stated this for the purpose of clarity. A sample of 3 million people, including the housing units and the group quarters, spread across the country perfectly represents the entire country. The sample size is indeed sufficient.   
The article does not indicate any possible source of error. However, from the original source, the possible error sources are clearly indicated and the sampling error taken into account. The confidence level is given as 90 percent which makes the data credible. The data has also been rounded off, which interferers with the accuracy. Due to this, some details do not sum up to totals. The document further expounds on the sampling and estimation methods, the errors, and the confidentiality protection, which again, confirms the credibility of the data. A significance level of 90% and the rounding off has great impacts on large figures and can adversely influence data interpretation. In addition, the information depends on the individuals sampled. People have various biases and may not reveal the actual information. This substantially affects the survey results.   
The authors statistically compare groups of people. Statistical comparison is made on poverty level amongst the White, Black, Hispanic and Asian. In essence, it is exemplary to compare these groups of people based on their age brackets and on their gender. In this case, age is a similar factor. The statistical comparison can thus be considered as valid.   
The cited statistics in the article is in proper context. The authors for instance, use values and symbols for easy comprehension of the level of poverty in Asian group, Hispanic group, Black group or White group. Also, the values used as well critically help evaluate how the subgroups compare to the population of the states.   
There is credible evidence in the article that signifies implied correlation. There is a meaningful correlation between age and number of people who live in poverty. However, for the case of unemployment, correlation is missing. Therefore, the authors use a mere correlation between men and women.   
Although the data used by the authors is complex, it is all together relevant to the issue at hand--the impoverished states of America. The data on the number of people who live on poverty and how subgroups compare to population of states is substantively significant for analysis and understanding of impoverished states of America. As well, the number of jobless and or seeking employment signifies level of unemployment. Unemployment ultimately is significant for understanding of the issue at hand. The authors present the data in an objective manner. Objectivity is attained by clearly stating the median household income for the year 1999.

## Works Cited

Kuntz, T. and Marsh, B. “ The Impoverished States of America” The New York Times, 2011. Web. 17 Mar. 2012.   
U. S. Census Bureau. Poverty: 2009 and 2010. Web. 18 Mar. 2012   
U. S. Department of Labor. Unemployment Rates. 2010. Web. 18 Mar. 2012