1077-VL-1997   **Daniel J. Ghezzi*** (`danielghezzi@kings.edu`), 144 White Birch Lane, Dallas, PA 18612. *What Does the Normality Test Indicate About the Coverage Probability of the One Sample t-based Confidence Interval?* Preliminary report.

When conducting a study to estimate the mean of a population variable, the researcher desires a sufficiently large sample size so as to estimate the mean with a sufficiently narrow confidence interval. Further, for large sample sizes, the Central Limit Theorem allows the researcher to assume, with high confidence, that the sampling distribution of the sample mean is approximately normal. When large sample sizes are not possible, the Central Limit Theorem does not apply, and the researcher performs a hypothesis test to determine whether it is safe to assume that the data was selected from a normally distributed variable. In this talk, I will analyze the relationship between the p-value of the Anderson-Darling Normality Test and the confidence interval's probability of covering the population mean. (Received September 21, 2011)