COMPARISONS AND RECOMMENDATIONS USING BINOMIAL CONFIDENCE INTERVALS: ESTIMATING COMPLETION RATES FROM SMALL SAMPLES

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sample completion rates is to add two successes and two failures to the observed completion rate, then tests. It appears that the best method for practitioners to compute 95% confidence intervals for smallcompletion rates, using Monte Carlo methods to sample data from a number of real, large-sample usability that are usable. We examined alternative methods for building confidence intervals from small sample This can result in practitioners unintentionally accepting interfaces that are unusable or rejecting interfaces Alternative "exact" methods over-correct the problem by providing intervals that are too conservative. factors literature) grossly understates the width of the true interval when sample sizes are small. confidence intervals (the "Wald Method," discussed both in introductory statistics texts and in the human interval is a binomial confidence interval. The most widely-taught method for calculating binomial confidence intervals for completion rate data. For proportions such as the completion rate, the appropriate usability measurement. As is true for any point measurement, practitioners should compute appropriate The completion rate - the proportion of participants who successfully complete a task - is a common



