Abstract
Monte Carlo simulations were used to generate data for ABAB designs of different lengths. The points of change in phase are randomly determined before gathering behaviour measurements, which allows the use of a randomization test as an analytic technique. Data simulation and analysis can be based either on data-division-specific or on common distributions. Following one method or another affects the results obtained after the randomization test has been applied. Therefore, the goal of the study was to examine these effects in more detail. The discrepancies in these approaches are obvious when data with zero treatment effect are considered and such approaches have implications for statistical power studies. Data-division-specific distributions provide more detailed information about the performance of the statistical technique.