Abstract
Each year, critical care nurses across the nation make the decision to become anesthesia providers. In order to become a certified anesthesia provider, nurses must meet the high standards required to be considered for entrance into anesthesia school. Once accepted, these students, known as Student Registered Nurse Anesthetists (SRNAs), must successfully complete a rigorous curriculum consisting of both didactic and clinical training. Due in part to the high degree of difficulty of anesthesia programs, SRNAs are at risk for experiencing high levels of stress. Chipas and McKenna (2011) shows SRNAs experience a self-reported average daily stress level of 7.2 on a 10 point scale compared to a self-reported average daily stress level of 4.7 among Certified Registered Nurse Anesthetists (CRNAs). The purpose of this study was to examine if the use simulation training can decrease self-reported stress levels among first year SRNAs. The inclusion criteria required all participants to be a first year SRNA enrolled in a three year, Bachelor of Science in Nursing (BSN) to Doctorate of Nursing Practice (DNP) anesthesia program at a public university in south Mississippi. A convenience sample of up to 21 SRNAs was randomly assigned into two separate groups. One of these groups was taught using simulation training while the second group was not. A pretest/posttest design was then used to evaluate whether simulation training is better at reducing self-report average daily stress levels than conventional means of teaching. Statistical analysis consisted of a two-tailed t-test used to compare self-reported stress levels between the two groups. After collection of the posttest results, the control group was exposed to the same simulation as the test group. Posttest scores from the simulation group demonstrated a greater reduction in self-reported stress levels when compared to the non-simulation group. Three specific causes of stress were examined on the self-reported stress survey: (a) entering into clinical rotation, (b) anesthesia machine check-off, (c) mask-ventilation/airway maintenance. Posttest scores of the simulation group demonstrated a 27.2% ($t(17) = -3.49, p=0.002$), 8.9% ($n=10$) ($t(17) = -1.04, p=0.31$), and 6.7% ($n=10$) ($t(17) = -2.09, p=0.05$) reduction in self-reported stress levels, respectively.