**Data**

The study was conducted at five (5) hospitals: Harare Hospital (%), Parirenyatwa Hospital (%), Howard Hospital (%), Gweru Hospital (%) and Mpilo Hospital (%) with post and pre service students. The clinical site for two () participants was not captured.

**Sample**

Complete information was obtained from 112 of the 206 students enrolled for the training program, a 54.36% response rate.

Laboratory 6 (5.36%), Medical 41(36.61%), Nursing/midwifery 54 (48.21%), Pharmacy 3 (2.68%) and Other 8 (2.68%).

Female 58 (51.79%) , Male 41 (36.61%) and Other 13 (11.61%)

Postgraduate 1 (0.89%) and Pre service 111 (99.11%)

**Statistical Analysis**

Data analysis was carried out using Stata/MP 13.0 for Windows. The study collected paired data: pretest scores before the training and posttest scores after the training. The analysis explores the relationships between the initial score and change in score (posttest minus pretest).

Out of the 206 participants, 112 (54.36%) completed both the pretest and posttest questionnaires. 94 (45.64%) participants did not complete the posttest questionnaire and were excluded from the analysis. The pretest posttest analysis reveals statistically significant gains in knowledge for each module and all modules combined.

Mean change in test score (posttest minus pretest)

Among-student variation

Within-student variation

**Results**

The study’s design generated appropriate data, while a statistical test was necessary to deter-mine significant differences between pretest and posttest means (Improvement, i.e., the dependent variable). We applied a paired-sample t test to each of the six sections of the course Statistical Analysis.

Pretest-posttest means, standard deviations, and differences for each class taught and all classes combined appear in Table 2. The table displays the mean percentages of correct responses for the pre-tests and posttests. The difference between means is statistically significant for each course and all courses combined (t = 22.0, p < .001), revealing substantial improvement (i.e., knowledge gain) in test scores. The overall mean pretest score (per-centage correct) is 43.9 percent, compared with the mean posttest score of 64.8 percent. This difference between the pretest and posttest mean equals 20.9 percent. Given the significant paired-sample t tests, I conclude that studentsâ€™ social statistics knowl-edge was greater at the end of the semester than at the beginning of the semester. This increased learn-ing occurred in addition to the effects of studentsâ€™ prior knowledge, as measured by the pretest. Consequently, it is unlikely that gains in learning