R01HD092655

Title: Training for Health Professionals

Statistical Analysis Plan

Last updated: December 1, 2023

The intervention effect will be evaluated using a multiple regression analysis. The intervention group was assessed at baseline, immediately post-intervention, and follow-up, while the control group as assessed at baseline and follow-up only. Thus, difference scores (follow-up – baseline) will be calculated for each outcome listed above and used as the outcome for the regression models. "Intervention" (dummy coded as 0=control, 1=intervention) will be the primary predictor in the model. To assess whether there is a differential effect of intervention based on demographics, students' discipline, gender, and religious affiliation will be included as interaction effects (full model). In the current study, we recruited nursing, midwifery, and medical students. Due to the small number of midwifery students, midwives will be grouped with nurses for modeling purposes. Thus, discipline will be recoded into a variable called "Nursing" (0=medicine, 1=nurse/midwife). Similarly, gender will be coded as "Female" (0=male, 1=female) and religion will be coded as "Muslim" (0=Christian, 1=Muslim), based on the demographic groups with the most responses (demographic information was collected at baseline). If the interaction effects between Nursing, Female, and Muslim with Intervention are not statistically significant, the interactions will be removed from the model and the reduced model (without interaction effects but still including the main effects) will be fit and interpreted. All analyses will be run using R software (v 4.2.1).

Of the 412 recruited, one participant did not complete the post-intervention survey and three participants did not complete the three-month follow-up. Thus, these four participants will be removed from analysis. Furthermore, if participants did not identify as male/female or Christian/Muslim (e.g., responded "Other" or "Prefer Not to Answer"), they will be considered missing data and removed from analysis. Based on the demographic information collected at baseline, this will result in 396 participants for statistical modeling (96% of the total sample).