

ABSTRACT

The purpose of this study was to establish the extent to which biology scientific creativity skills are influenced by the students' culture and gender in Turkana County. A mixed method research design was used. This involved cross sectional survey and ethnographic study. The target population comprised all form three students in sub county schools who were approximately 1000, 10 men and women of 55 years and above in Turkana county. A sample of 320 students (160 girls and 160 boys) from 4 sub county schools and 10 adults (5 men and 5 women) and two homesteads were involved in the study. Selection of participating schools was by stratified random sampling and purposive sampling for the sub county schools. The adults were selected by purposive sampling. Four instruments, namely; Students' Culture Evaluation Questionnaire (SCEQ), Biology Scientific Creativity Test (BSCT), an Interview Schedule (IS) for the adults and Observation Schedule for the homesteads were used to collect data. Validation of the instruments was done by seeking the opinion of experts from the Faculty of Education and Community studies of Egerton University. The test items were pilot tested in one sub county co-educational school in Turkana County. Reliabilities of SCEQ and BSCT were measured using Cronbach coefficient alpha. The hypotheses were tested at $\alpha=0.05$ significance level. The inferential statistics used were the chi-square and t-test. The reliabilities coefficients of 0.7 for SCEQ and BSCT was realized and accepted. Data from the interview and observation schedules were analyzed quantitatively. The results of this study may provide valuable information to policy makers, curriculum developers and implementers which could be helpful in fostering positive cultural practices that enhance scientific creativity in learners.

Keywords: scientific creativity, culture, gender, influence