Abstract

In this paper an assessment was made to the use and awareness of statistical, modelling and computational tools and methods in higher learning institutions, the University of Dodoma taken as a case study in which 112 instructors were randomly sampled. Data were analyzed using Chi-square tests with p-values to determine the statistical significances in the use of tools. Results show that there is no significant association between instructors of the colleges of the university in the use and awareness of popular statistical tools, however the study reveals very high statistical significant relationships in the awareness of computational and modelling tools and concepts between the instructors. Moreover, a considerable gap was observed in terms of training of the tools and concepts in which a good number of instructors, 75%, never had any formal training and 94.7% have shown the need for training of the tools and concepts. It is an opportunity for relevant bodies to provide effective training of the tools to ensure quality research and better education for the benefit of all stakeholders.

**Index Terms**

- Computer Science
- Information Sciences

**Keywords**

Statistical tools, Computational and modelling tools, higher learning institution.