Students' poor performance in mathematics in national examinations remains a major concern worldwide and Kenya in particular. Teachers, students, parents, curriculum developers, and the public tend to blame one another for the poor performance in mathematics at secondary level. In an attempt to respond to this problem, the Kenya mathematics scholars have carried out many studies in mathematics education. Despite these studies, students' mathematics performance is still poor. This means that the main reason for this poor performance has not been established. The reason could be that students have developed low achievement motivation and low self-efficacy. The primary concern of this study, therefore, was to establish whether the problem of poor mathematics performance lies on students' achievement motivation and self-efficacy or not.

A correlation research design was used in this study. Questionnaire and Thematic Apperception Test were used to collect data. The sampling target were secondary schools in Kinangop Division of Nyandarua District. By Stratified random sampling 10 schools out of the overall 18 schools in the division were considered for the study. A total of 118 boys and 203 girls was used in the study. A pilot study was conducted to validate and adapt the research instrument before the actual investigation commenced. Data were analyzed using inferential and descriptive statistics. The strength and direction of the relationship of the variables, was tested using the Spearman Rho (at alpha=0.05). The findings supported the set hypotheses on the relationship between achievement motivation, self-efficacy and mathematics performance.