

**POSITIVE ACADEMIC EMOTIONS AND SELF-REGULATION AS
DETERMINANTS OF CHEMISTRY ACHIEVEMENT AMONG
SECONDARY SCHOOL STUDENTS IN IKUTHA SUB-COUNTY, KITUI
COUNTY, KENYA**

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DEGREE OF MASTER OF EDUCATION (EDUCATION PSYCHOLOGY) IN
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DECLARATION

I declare that this research project is my original work and has not been presented in any other university/institution for consideration. This research project has been complemented by referenced sources duly acknowledged. Where text, data (including spoken words), graphics, pictures or tables have been borrowed from other sources, including the internet, these are specifically accredited and references cited in accordance with anti-plagiarism regulations.

Signature



Date


28/04/2017

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This research project has been submitted for appraisal with our/my approval as University Supervisor(s).

Signature



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ABSTRACT

Purpose of the study was to find out whether positive academic emotions of pride and enjoyment as well as self-regulation determine achievement in chemistry among form three students in Ikutha sub-county. The objectives that guided the study were: To determine the relationship between achievement in chemistry and students' positive academic emotions of enjoyment and pride, to determine whether there is a relationship between achievement in chemistry and students' self-regulation, to determine whether there are gender differences in students' self-regulation and positive academic emotion of enjoyment and pride and lastly to obtain a prediction equation of achievement in chemistry from self-regulation and positive academic emotions of enjoyment and pride. The academic emotions and achievement: cognitive-motivational model by Pekrun (1990) and the social cognitive theory of self-regulation by Bandura (1986) guided the study. Both exploratory and correlational research designs were used. The study further used probability sampling whereby systematic random sampling and simple random sampling were adopted to select 200 students enrolled in various secondary schools within Ikutha Sub-county as respondents. A closed Achievement Emotions Questionnaire (AEQ) was used to check on positive academic emotions of pride and enjoyment in learners. Items which touch on the enjoyment and pride were applied in this study and other items which do not touch on the two emotions were left out. Self-regulation was measured using MSLQ. Learners who participated in the study were asked to indicate how they agree with items using 5-point scale. The two scales used had adequate internal consistency. Students' chemistry marks at the end term examination were collected using a pro-former table designed for the purpose. Scores were then correlated with both positive academic emotions and self-regulation. T-test for independent samples was used to check on the relationship between gender and positive academic emotions and self-regulation. Further, multiple regression was done to check on the prediction equation of chemistry achievement from self-regulation and positive academic emotions. The findings of the study revealed that positive academic emotions and self-regulation have a strong positive relationship with achievement in chemistry i.e. ($r= 0.850, p < 0.01$) and ($r= 0.828, p < 0.01$) respectively. Besides, gender difference in both positive academic emotions and self-regulation was not found to be significant. An equation for the prediction of chemistry achievement from self-regulation and positive academic emotions was established ($\hat{y}= 21.77 + 0.075 (SR) + 0.648(PAE)$ $p < 0.05$). Conclusion made was that positive academic emotions are better predictors of achievement in chemistry ($\beta = 0.648, p < 0.05$) than self-regulation ($\beta = 0.075, p < 0.05$). The study recommends that: Science workshops and seminars should be conducted regularly so as to equip science teachers most notably on various ways to create and sustain the self-regulated learning strategies. Besides, teachers, parents and all the stakeholders in education should work together in creating conducive school and home environments so as to foster the development of positive academic emotions and self-regulated strategies among learners.