The relationship between self-concept, self-efficacy, self-esteem, anxiety and science performance among Iranian students

Abstract

This study examined if students’ general self-concept, science self-concept, self-efficacy, science self-efficacy, self-esteem, anxiety and science anxiety can be considered as predictors for science performance among lower secondary school students. The participants in the study were 680 lower secondary school students, (317 male and 363 female, in the age 14 years old) at Tehran and Shahriar City, the province of Tehran, Iran. Five valid and reliable instruments were used to assess Self-concept Attribute Attitude Scale, State-Trait Anxiety Inventory, Coopersmith Self-Esteem Inventory, General Self-Efficacy questionnaire and Science Self-Efficacy questionnaire. Descriptive statistics, correlation matrix of constructs and multiple regression analysis was used to analyses the data. The result demonstrated that general self-concept; science self-concept can be influence on science performance. But, self-efficacy, science self-efficacy, self-esteem, anxiety and science anxiety cannot be influence on science performance among 8th grade Iranian students in 2010/2011 academic year.

Keyword: Self-concept; Self-efficacy; Self-esteem; Anxiety; Science performance