

## ABSTRACT

This exploratory research was designed to investigate the relationship between creativity, arts/science orientation and associated variables, in a sample of 275 grade 11 high school students. A battery of sixteen instruments was employed for this purpose - eight tapping creativity, and the rest, related aspects, including subject orientation. Data were analysed for the sample overall, and on a sex and subject orientation basis, using factor analysis, multiple regression and canonical correlation analysis techniques.

The main outcomes were as follows:

1. Girls and arts oriented Ss tended to do relatively better on the creativity tests. Girls performed significantly better than boys on the Circles (Originality) and RAT (Fluency) tests, the opposite holding for Words (Originality). Arts oriented Ss gained a significantly higher score on the RAT than science oriented Ss.

2. From the regressions computed, the percentage variance explained was as follows:

Total sample	-	11.2%: significant predictors. Sd and SEPS
Arts oriented Ss	--	9.3%: significant predictors. Sd and SEPS
Science oriented Ss	-	17.7%: significant predictors. Sd and CogSty
Females	-	12.1%: significant predictors. Sd and SEPS

For males, results were not significant.

3. Canonical correlations established the following relationships:

Arts oriented Ss: Words (Originality), RAT (Fluency) and  
negative Objects (Originality), with CogSty and Sd

Females: RAT, Words and Objects (all Fluency), with Sd, SEPS and  
CogSty

Males: Words (Originality), Circles, RAT, and negative Words  
(all Fluency), with CogSty and Sd

For Science oriented Ss, no significant correlates emerged.

*These outcomes pointed to an apparent relationship between sex and subject orientation, (girls being more arts oriented and boys more science oriented); with the findings seemingly being of greater significance where sex and subject orientation were concerned. Among the recommendations offered was that early subject specialisation be avoided, as, especially for the sciences, this has a restrictive effect on students' realisation of their creative potential.*