AN INVESTIGATION INTO THE EFFECT OF GRADE LEVEL, SEX AND ACHIEVEMENT ON THE INCONSISTENCY OF RESPONSES ON SELF-REPORT PSYCHOLOGICAL SCALES

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ABSTRACT

An Investigation into the Effect of Grade Level, Sex and Achievement on the Inconsistency of Responses on Self-Report Psychological Scales

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This study investigated the inconsistency scores among different groups of students, on four multiple-choice psychological tests. The tests were: Yarmouk Test Anxiety Scale, Yarmouk State-Anxiety Scale, Yarmouk Achievement Motivation Scale and Yarmouk Self-Concept Test.

The Study answered the following questions:-

1. Does the inconsistency of scores from test to test have a developmental aspect?

2. Does the sex variable have any effect on the inconsistency scores?

3. Do the inconsistency scores vary according to the achievement level of students?
4. Are there any interaction effects of the variables of Grade, Sex, and Achievement on of inconsistency scores?

The sample consisted of 408 students (204 males and 204 females) selected from 7th, 9th and 11th grades.

Each test was administered twice, with one-week interval of time. Two types of inconsistency scores were derived for each test.

The multivariate and univariate tests of significance were used to test the main and interaction effects of Grade level, Sex, and Achievement on the dependent variables. Multiple comparisons were performed using F Scheffe' method for each significant F-Ratio resulting from grade main effect, and from Grade by Sex, Grade by Achievement, and Sex by Achievement interaction.

The results of this study can be summarized in the following points:

1. Significant differences (p<.00) were obtained between 7th, 9th, and 11th grades for each type of inconsistency scores on Achievement Motivation test. On this variable the inconsistency decreased from 7th grade through 11th grade.
2. On Test Anxiety scale and on State-Anxiety scale, seventh-grade students made more inconsistent responses (p<.05) than did 11th grade students, and the 9th grade students made more inconsistent responses than did 11th grade students (p<.05). These differences were obtained on the inconsistency Type II.

3. On the two types of inconsistency on Self-Concept test, the 7th graders were significantly (p<.05) more inconsistent than each of 9th graders and 11th graders.

4. Significant differences (p<.00 for Type I and p<.01 for Type II) were obtained between males and females, for each type of inconsistency, on Self-Concept test. The male students were found more inconsistent than female students.

5. Low achievement students were significantly more inconsistent than high achievement students on each dependent variable of inconsistency (Type I, Type II).

6. Statistically significant differences (p<.05) were found between female 11th grade versus both of male 11th grade, and male 7th grade. Eleventh grade female students were the least inconsistent.

7. A significant Grade X Achievement interaction effect was obtained on each dependent variable for each type of inconsistency, except on the inconsistency Type II on
Self-Concept test.

8. Low achievement 7th grade students made more inconsistent responses than low achievement students in the higher grades (9th, 11th).

9. Low achievement 7th graders were significantly (P<.05) more inconsistent than high achievement students of the same grade (7th grade). These results were obtained on each dependent variable of inconsistency, except on Self-Concept test's inconsistency Type I.

10. In general the lower the level of achievement and the lower the grade the more the inconsistent responses.

11. No significant differences were found between low and high achievement students of 11th grade, on any dependent variable of inconsistency.

12. The differences between low achievement students and high achievement students of 9th grade were found not significant except on the inconsistency Type I on Achievement Motivation test.

13. On the basis of low achievement level, the inconsistency scores systematically decreased form 7th grade through 11th grade, on each dependent variable of inconsistency. Whereas, on the basis of high achievement level, the inconsistency scores were increasingly developed from 7th grade to 9th grade on both types of Test Anxiety scale's
inconsistency and State-Anxiety scale's inconsistency.

The findings of this study suggested that:

1. More attention should be given to the amount inconsistent responses of the students in the lower-grade (7th grade in this study), specially for the students of low achievement level.

2. The degree of inconsistency in male students needs further attention and research, specially for the students at secondary stage.

3. In general, a careful scale development besides some type of feed back and training may reduce the degree of the inconsistency of scores.