

## ***SUMMARY***

### **Introduction :**

Industry has a strong effect on increasing the interest in technical education with all its types and levels. Technical education is considered one of the most important means that provide us with human beings from the clever workers. These workers are necessary for the process of development in the all sectors of production.

It is obvious that selecting students for the general secondary schools is based on the marks only. This selection should be based on correct psychological basis to decrease the economical loss in that expensive type of education.

Thus the present study depends on the mechanical ability, the spatial ability and the attitude toward the hand work as basis for the process of selecting and guiding the students to the technical education.

### **Goal of the study :**

This study aims at stating mathematical form that enables us to predict the level of the academic achievement at technical secondary school students. It also aims at using this prediction in the educational and profession. selection and guidance of these students.

### **Problem of the study :**

The problem of this study may be confined to the following questions :

1. Is there a positive significant correlation relationship between the academic achievement and the mechanical ability at technical secondary school students?
2. Is there a positive significant correlation relationship between the academic achievement and the spatial ability at the technical secondary school students?
3. Is there a positive significant correlation relationship between the academic achievement and the attitude toward the hand work at technical secondary school students?

**Sample of the study :**

The sample of the present study includes 492 first year technical secondary school students at Benha-Kalubia Governorate.

**Tools of the study :**

**First :** Mechanical ability tests by Ahmed Zaki Saleh, Atia Hana, Abdel Megeed Mansour and Yehia El-Egizy.

**Second :** Spatial ability tests by Mahmoud Abdel Kader, Ahmed Zahy Saleh and Yehia El-Egizy.

**Third :** Scale of attitude toward the hand-work by the present researcher.

**Results of the study :**

- 1- There is a significant positive relationship at the level of 0.1 between the academic achievement and the mechanical ability.
- 2- There is a significant positive relationship at the level of 0.1 between the academic achievement and the spatual ability.

- 3- There is a significant positive relationship at the level of 0.1 between the academic achievement and the attitude toward the hand work.
- 4- The researcher concluded a number of regulation equations that may help in predicting the academic achievement.

Then, the researcher interpreted the results and gave suggestions and recommendations.