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Analytical Thinking and Mind Habits and their Relation with Creativity in University Students

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Abstract

The following study was devoted to the following:

1. The level of analytical thinking in University students.
2. The differences among University students in analytical thinking according to the variables of gender and specialty.
3. The level of mind habits and their sequence in University students.
4. The differences in the seven mind habits among University students according to the variables of gender and specialty.
5. The level of creativity in University students.
6. The differences in creativity among University students according to the variables of gender and specialty.
7. The direction and strength of the relation between:
 - a. Analytical thinking and mind habits in University students.
 - b. Analytical thinking and creativity in University students.
 - c. Mind habits and creativity in University students.
8. The relation among the study variables: Analytical Thinking, Mind Habits and Creativity in University students.

The researcher has conducted a random test to a group of colleges in Baghdad University, then has randomly chosen a sample of 400 students divided into 236 female and 164 male students.

To achieve the aims of the study, the researcher used three tools: constructing a test in analytical thinking; building a scale for the seven mind habits after using scientific procedures in its building as well as checking the validity, reliability, and credibility of the test; and adopting Torrance test of creative thinking after insuring its validity, reliability, and suitability to the Iraqi environment. The data was statistically processed by the use of difficulty parameter, point-Biserial Correlation Coefficient, Hoyt Anova, T-test to examine discrimination strength of the test items, Person coefficient to calculate the correlation the degree of each item with the total degree of the

scale, Cronbach formula alpha to test the test reliability, three way ANOVA to calculate the variation significance, multiple correlation to test the relation of the study variables, and the analysis of mind habit sequence. The results of the study revealed the following:

1. University students have the ability of analytical thinking due to their age and the nature of their education.
2. There are no statistically proved differences in the level of analytical thinking according to the variables of gender and specialty.
3. The study sample have more mind habits than the community they belong to.
4. The study sample have all the seven mind habits. The fifth habit which is "seek first to understand, then to be understood" came in the first place then the other habits came in the following order: the second habit "Begin with the End in Mind", the sixth habit "Synergize", the third habit "Put First Things First", the first habit "Be Proactive", the seventh habit "Sharpen the Saw", and the fourth habit "Think Win-Win".
5. There are no statistically approved differences in the level of mind habits according to gender or specialty.
6. University students have creative faculties due to the mental and cognitive functions they have.
7. There are no statistically approved differences in creativity between males and females, while there are differences in the variable of specialty in favor of humanities.
8. The relation between analytical thinking and mind habits was a positive, while the relation of some mind habits and analytical thinking with Creativity was of no statistical direction.

9. The relation of the study variables: analytical thinking and mind habits (the third "Put First Things First", the fourth "Think Win-Win" and "sharpen the saw") with creativity was of a statistical significance while the relation between analytical thinking and the mind habits: the first "Be Proactive", the second "Begin with the End in Mind", the fifth "Seek First to Understand, Then to be Understood" and the sixth "Synergize" with creativity was of no statistical significance.

Finally, according to the results of the study, certain recommendations and suggestions were crystalized.