

# STUDYING THE STYLE OF LEARNING IN BACHELOR'S AND MASTER'S PROGRAMS AFTER GRADUATING FROM THE MEDICAL UNIVERSITY OF PLOVDIV USING THE DAVID KOLB'S METHOD

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**Abstract** - New paradigm in education places the learner at the center of the pedagogical process. Knowledge of the style of learning makes it possible to reveal the potential of each student, to develop his/her learning abilities, which is a prerequisite for successful learning. In today's environment David Kolb's procedural method of learning is the most popular one. Aim. To study the style of learning in Bachelor's and Master's programs after graduating from the Medical University of Plovdiv using the David Kolb's method. Material and methods. Direct group anonymous poll for determining the style of learning using the Kolb's method is used through an adapted and validated for the Bulgarian community instrument by A.Pojarliev. For statistical data processing software SPSS v.17.0 was used and for graphical presentation of results - MS Excel 2016. Results. 156 students from Bachelor's and Master's programs after higher education studied at the Faculty of Public Health, Medical University - Plovdiv were interviewed. The age range of the respondents is 23÷62 years and the average age is 35.37±9.26 years. The results show that the way students study is not directly related to gender, but there is a statistically significant relation between age, studied specialty and level of education. The learning style is predominant (36.5%), followed by assimilative (21.8%) and convergent (17.3%). Conclusion. Knowing the style of learning can guide us what activities and teaching materials to plan and how to deliver the theoretical content in order to create engaging, motivated and enjoyable learning for the majority of the audience.

**Key words** - Learning style, students, education.

## I. INTRODUCTION

The new paradigm in education places the learner at the center of the pedagogical process. Knowledge of the style of learning makes it possible to reveal the potential of each student, to develop his/her learning abilities, which is a prerequisite for successful learning. In today's environment, David Kolb's method of learning is the most popular. Kolb describes learning as a cyclical process, consisting of four main stages:

1. Each learner proceeds to learning as a carrier of a specific attempt in the context of a particular experience;
2. On this basis he observes and reflects on the experience;
3. Observations are organized into concepts and a theory is constructed;
4. It is tested in real practical situations that lead to new attempts and experiences (Fig. 1).

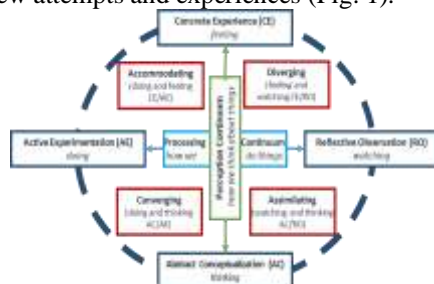


Fig. 1. Kolb's model on learning modes, learning styles, and experiential learning cycle.

Kolb's model places the process of learning in two continua: an approach to the task ('do' or 'observe') and an emotional response ('think' or 'feel'). The combination of approach and emotional response determines the style of learning.

Here is a brief description of the four Kolb learning styles:

### Diverging (feeling and watching - CE/RO)

These people are able to look at things from different perspectives. They are sensitive. They prefer to watch rather than do, tending to gather information and use imagination to solve problems. They are best at viewing concrete situations from several different viewpoints.

Kolb called this style 'diverging' because these people perform better in situations that require idea-generation, for example, brainstorming. People with a diverging learning style have broad cultural interests and like to gather information.

They are interested in people, tend to be imaginative and emotional, and tend to be strong in the arts. People with the diverging style prefer to work in groups, to listen with an open mind and to receive personal feedback.

### Assimilating (watching and thinking - AC/RO)

The Assimilating learning preference involves a concise, logical approach. Ideas and concepts are more important than people. These people require good clear explanation rather than a practical

opportunity. They excel at understanding wide-ranging information and organizing it in a clear, logical format. People with an assimilating learning style are less focused on people and more interested in ideas and abstract concepts. People with this style are more attracted to logically sound theories than approaches based on practical value. This learning style is important for effectiveness in information and science careers. In formal learning situations, people with this style prefer readings, lectures, exploring analytical models, and having time to think things through.

### Converging (doing and thinking - AC/AE)

People with a converging learning style can solve problems and will use their learning to find solutions to practical issues. They prefer technical tasks, and are less concerned with people and interpersonal aspects. People with a converging learning style are best at finding practical uses for ideas and theories. They can solve problems and make decisions by finding solutions to questions and problems. People with a converging learning style are more attracted to technical tasks and problems than social or interpersonal issues. A converging learning style enables specialist and technology abilities. People with a converging style like to experiment with new ideas, to simulate, and to work with practical applications.

### Accommodating (doing and feeling - CE/AE)

The Accommodating learning style is 'hands-on,' and relies on intuition rather than logic. These people use other people's analysis, and prefer to take a practical, experiential approach. They are attracted to new challenges and experiences, and to carrying out plans. They commonly act on 'gut' instinct rather than logical analysis. People with an accommodating learning style will tend to rely on others for information than carry out their own analysis. This learning style is prevalent within the general population.

The aim of the present study is to study the style of learning in Bachelor's and Master's programs after graduating from the Medical University of Plovdiv using the David Kolb's method.

## II. MATERIAL AND METHODS

Direct group anonymous poll for determining the style of learning using the Kolb method was used, through an adapted and validated for the Bulgarian community instrument by A. Pojarliev. In groups of four, the participants have to rank some concepts by placing a number from 1 to 4 (the concept that comes closest to personal attitude and reaction in terms of learning receives 4). The resulting points on the four subscales corresponding to the four learning modes are summed up and two resultant scales – CO-AK and PH-AE corresponding to the approach to the task

and the emotional response are formed. The combination of positive and negative values in the score scales places the participant in one of the four quadrants of learning styles. For statistical data processing software SPSS v.23.0 was used and for graphical presentation of results – MS Excel 2016.

## III. RESULTS AND DISCUSSION

They were interviewed 156 students from Bachelor's and Master's programs after higher education studied at the Faculty of Public Health, Medical University – Plovdiv.

The age range of the respondents is 23÷62 years and the average age is 35.37±9.26 years. The gender distribution is shown in Figure 2.

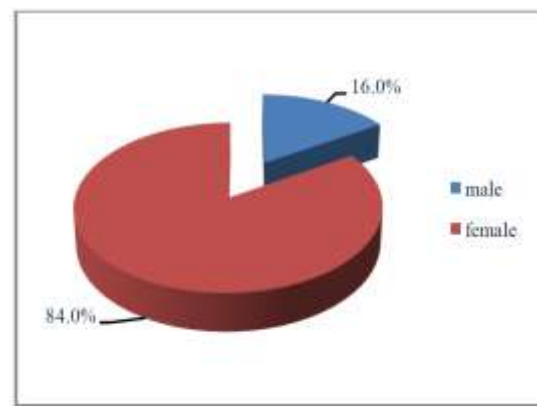


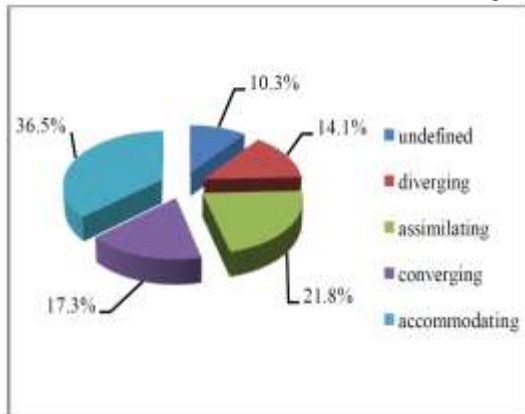
Fig. 2. Gender distribution

Among the respondents the share of women is 84% (n = 131) which is logical because they are predominant in Bachelor's and Master's programs. The distribution of the respondents by their specialty is shown in Figure 3.



Fig. 3. Distribution of the respondents by their specialty

The results show that the way students study is not directly related to gender, but there is a statistically significant relation between age, studied specialty, level of education and style of learning. Among the respondents the accommodating learning style is predominant (36.5%), followed by the assimilating (21.8%) and the converging (17.3%).



**Fig. 4. Distribution of students by learning style using the Kolb's method**

A number of studies of the relationship between the learning style and the profession have shown that divergents choose occupations related to work with people – social activities and communication, assimilators are engaged in science and education, and accommodating ones choose management, business, marketing and management.

## CONCLUSION

Knowing the style of learning can guide us what activities and teaching materials we should plan and how to deliver the theoretical content in order to create engaging, motivated and enjoyable learning for the majority of the audience.

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