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The Role of a Student's Personality Typology in the Perception of Educational Material in a Medical Higher Education Institution

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Abstract. The relevance of the study is conditioned by the fact that each student of a higher education institution, in particular in the medical field, is a person, who has their own worldview, temperament, and personality, perceives the educational material differently, and therefore, requires an individual approach to learning. The purpose of the study is to determine the role of student typology in the perception of educational material. The research methods were individual typological questionnaires by L. Sobchik and "Goal-Means-Result" by O. Karmanov. Students of the second and fourth years of study took part in the survey. It was found that among the fourth-year students, introversion and sensitivity reached the lowest indicators, against the background of increased anxiety, lability, extraversion, spontaneity, aggressiveness, and rigidity. In the second-year students, introversion reached higher scores than anxiety and lability. In the training system, both in the second and fourth years, there is a high motivation to study the material, but the achievement of the desired result is found to be higher among the second-year students. Students of the second and fourth years of study have harmonious and accentuated features that would help them choose their future profession. However, the fourth-year students who are inclined to leadership and have a well-formed mindset always focus their attention on the specific chosen medical field. Confidence in own knowledge sometimes leads to the establishment of an incorrect conclusion, since in medicine there is always a comorbidity of conditions. Knowledge of the students' typology would help the teacher determine the characteristics of each student and find the right approach to the presentation of educational material, which would contribute to a better perception of medical topics

Keywords: individual typological questionnaire (ITQ), Goal-Means-Result questionnaire, type of thinking, extraversion, introversion, sensitivity, motivation, purposefulness, harmonious traits, accentuated traits, leadership

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INTRODUCTION

This issue concerns current students who will become specialists and professionals in the future. This is why science is focused on finding sources of motivation for successful professionalisation and self-actualisation of a person.

Knowledge of personality typology will help teachers choose the right tactics for presenting educational material to medical students and develop clinical thinking, which would allow them to become a professional in the future.

The literature repeatedly describes professional choice [1], the development of a student's personality [2], highlights the idea of social [3] and professional [4] success, and the development of a student's personality [5].

Based on the results obtained by I. Zymnia, the studentship is a social category and is united by the higher education institution, is characterised by a high cognitive and educational level, social activity, and intellectual social maturity. It is during the period of socialisation that professional interests, self-improvement, and self-affirmation in life and future profession are formed [3].

E.P. Humenna described a strong professional orientation; improvement, "professionalism", "sense of duty", responsibility, independence in training and career, social, spiritual, and moral maturity, and readiness for future practical work [6].

L. Mitina presented a model of adapted behaviour based on algorithms and patterns developed and rooted in society [7]. The stages of professionalisation described by the researcher include self-determination, self-expression, and self-realisation. Development of periodisation, which was presented by T. Kudryavtseva described professional development, and it was repeatedly analysed in the papers by E.M. Abiltarova [8].

During the period of development of the individual as a professional, with the emergence of professional intentions, established vocational training, entry into the profession [9], the realisation of the individual in the profession and attention to crisis situations arising from disagreements between the expected and the actual result and leading to the establishment of a new conception of the activity later on [10]. Knowledge of typology would allow the teacher to find the right approach for presenting the material to students for better perception [11; 12; 13].

M.I. Dyachenko and L.A. Kandybovych identified three types of students, namely, their inclinations, which were highlighted and analysed by E.P. Humenna [6]. *The first type* is based on targeted professional training, which is maintained throughout the period of study. *The second type* includes a partial focus (uncertainty) in relation to the future profession. *The third type* consists of students who have no focus in their studies (negative attitude) [14; 15].

Notably, most students are representatives of the second type [6; 16]. S.S. Vitvytska [17] in her study on higher school pedagogy notes that G.A. Nagorna divides students into four groups depending on the type of thinking:

- high – creative thinking;
- sufficient – reproductive and creative thinking;
- medium – reproductive thinking;
- low – intuitive thinking.

M. Mishchyshyn presented an analysis of the results obtained by S. Solodukha, V. Lisovskyi, M. Fitzula, and I. Kozubovska [18], who highlighted the following typologies:

- typology with a bias towards linguistics (a branch of linguistics, the purpose of which is to consider the general laws of different languages that are not related to each other by origin or mutual influence);
- typology with a focus on anthropology (a branch of science that studies human evolution, bodily nature, the establishment of various human races and their variations in physical structure);
- typology with a focus on theology (a branch of science that studies religion, the subject of which is God);
- typology with a focus on biology (a branch of science that studies living things and their diversity);
- typologies with a focus on psychology (a branch of science that studies the types of character of people based on psychological characteristics or classification of mental properties, traits, complexes, etc.);
- personal typologies (a branch of science that studies human personality types) [13; 19].

Evaluating various typologies, it can be stated that it is the typology that is formed from the influence of the surrounding social environment, personality traits, and religion [14; 20].

M. Weber laid the *specificity of social action* as the basis of typification, more specifically, the degree of its rationality, K. Marx – *belonging to a certain socio-economic formation and a certain class*. According to E. Fromm, the dominant character type is *a form of human interaction with society*. According to Fromm, the core of the personality structure, which is inherent in most members of the same culture, is precisely conditioned by this interaction, in contrast to the individual character, which is different in people of the same culture [15; 21]

According to K. Jung, typology is a system of individual attitudes and behavioural stereotypes, divided into such typological groups as personal attitudes (introversion and extraversion) and functions (thinking, feelings, sensation and intuition), each of which can act in an introverted or extroverted way. This allows the medical student to develop clinical thinking in the future and make the correct conclusion about the formulation of the diagnosis [16; 22]. It is the socio-psychological state of the future student as a specialist that allows purposefully influencing the process of self-realisation and professionalism among students [23]. This study is aimed at evaluating the personal typology of a student in a higher medical educational institution.

The purpose is to consider the personal psychology of medical students and its impact on the perception of scientific material. Having established which personal types of students of medical specialties belong to, the teacher would be able to choose the right approach individually to each student, which would increase the professionalism of the future doctor.

MATERIAL AND METHODS

The study involved 37 second and fourth-year students, of whom 65% (n=24) were second-year students and 35% (n=13) were fourth-year students. Two lines of research were created. The first line is the assessment of personality types using an individual typological questionnaire (ITQ) [9] among medical students. The second line of research is the assessment of the perception of scientific material, considering the type of each student. The age range was 19-22 years, including 62% (n=23) of women and 38% (n=14) of men (Fig. 1).

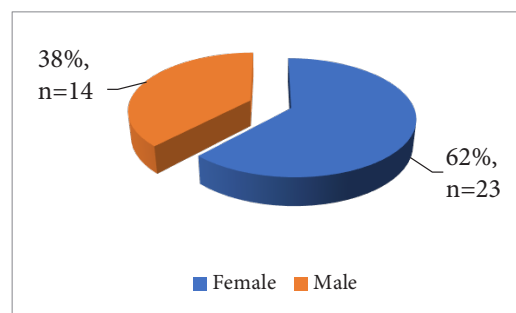


Figure 1. Distribution of students by gender

and lability forms mixed variants in relation to purely hypersthenic and purely hyposthenic. The style of interpersonal behaviour according to the conformal type is based on the typological properties of anxiety and sensitivity, and with increased indicators, it is manifested by an excessive focus on generally

accepted norms of behaviour. Evaluating the overall indicators of the two groups according to the years of study, it can be stated that for the fourth-year students, all indicators exceed 1.5-2 times compared to the second-year students, with the exception of rigidity, and aggravation and sincerity scales.

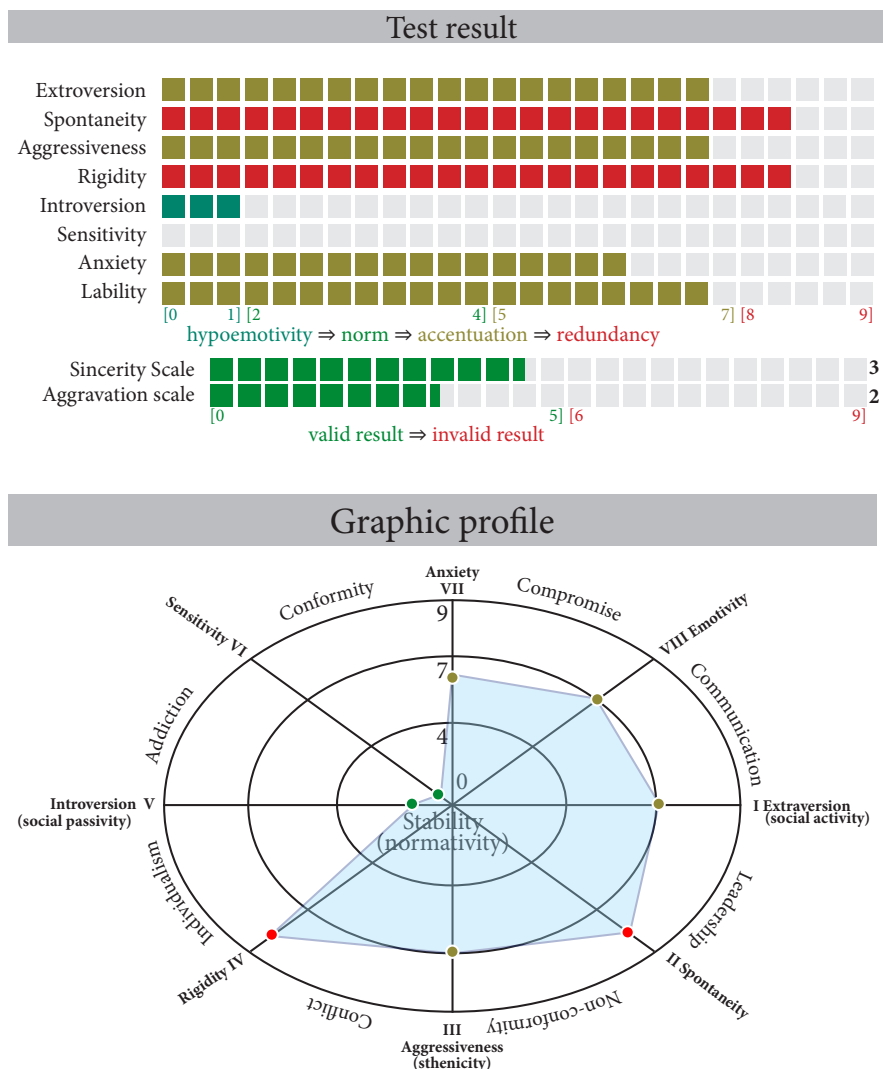


Figure 3. Example of survey results among the fourth-year students

Increased anxiety combined with emotional instability forms such quality as compromise, when a person seeks self-affirmation, but at the same time avoids conflict with the reference group. The style of dependent interaction with the micro-society comes from an increase in indicators on the scales of introversion and sensitivity (sensitivity and change of media, which affects the pronounced need for deep and permanent attachment and protection from a strong personality), since these tendencies create the ground for behaviour that aims to avoid conflict and find a gentle social niche [13]. Leadership manifests itself with moderate indicators of independence in decision-making, enterprise, and the desire to be a leader rather than a follower, and is formed by a combination of moderate indicators of spontaneity and extraversion. With

high scores (6-7) on these scales, the style of interpersonal behaviour is characterised by confidence and an inability to obey older people, and with a score of 8-9 points, the traits of self-love and megalomania are revealed. The highest scores on the extraversion scales are manifested by communication skills. Social passivity is based on introversion and manifests itself as a reduced external response with richer internal activity and high reflexivity. Social activity is associated with the severity of extroversion and manifests itself with a tendency to broad social contacts in the absence of a tendency to introspection. Individualism, as a style of interpersonal behaviour, is formed by a combination of increasing indicators on the scale of introversion and rigidity, and the stability of personal, sometimes quite different and subjective opinion is manifested [24].

The combination of increased indicators of rigidity and aggressive scales is manifested in the style of conflict and nonconformant behaviour.

Thus, the fourth-year students were found to have pronounced accentuated traits, self-confidence, and rapid adaptation that characterise "leadership". However, in the second-year students, these features were not very pronounced and there was harmony in the individual typological state. Such students, with a "low" adaptive level, a slight "ignorance" of themselves, listen to the opinion of researchers and teachers of higher educational institutions, which allows them to direct them to the right decision in their future profession. The fourth-year students have passed all this in previous years of study, so their typology is already "more or less" clear, and they have a goal in front of them and are clearly moving towards it. However, only

those teachers and researchers who work in a narrow profile (for example, cardiology, nephrology, etc.) will have an impact on the assessment of the material and the correct conclusion.

According to the questionnaire on learning styles and features "Goal-Means-Result" by O. Karmanov, it was found that by having a goal and perseverance, the goal will always be achieved. Using the example of the questionnaire of the second-year students, the goal was 3 points out of 9, and the result was 1 point out of 9.

According to the questionnaire, the same trend is observed among the fourth-year students, but sometimes the result is undesirable, according to the expected one. Comparing the results of a survey of the second and fourth year students, they have high scores on the goal and means of achieving it, but the results will always be different (Fig. 4).

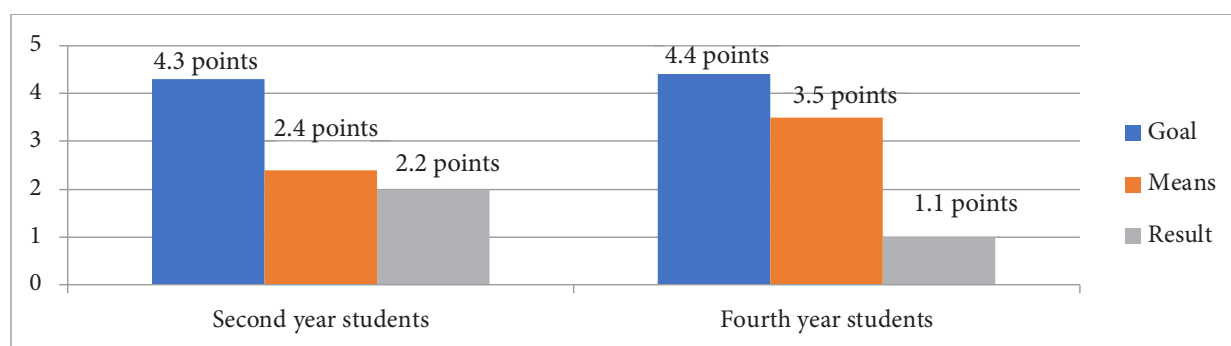


Figure 4. Comparative characteristics of the survey results among students of the second and the fourth year of study

When interviewing students, it was found that the first type was observed more often in the fourth-year students, the second type – in the second-year students, and

only the third type was found among the second and fourth year students (Fig. 5).

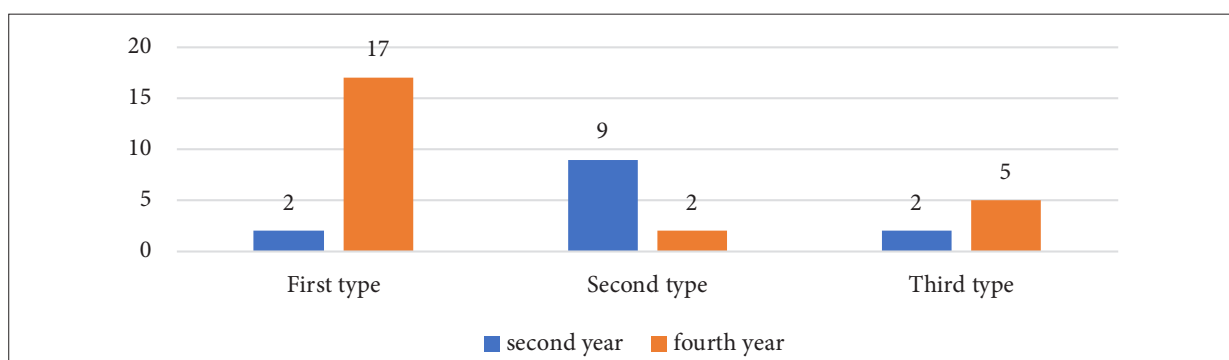


Figure 5. Types of medical students

CONCLUSIONS

At the present stage of scientific development, this problem is reflected in research: the professional "self-Image" (Jenert T., Brahm T., Gommers L., Kühner P) [25], which is an integral part in the development of the future medical professional) [26].

Therefore, the study of typology would allow the teacher to individually choose an approach to each of the students for further self-realisation and successful self-improvement in the future profession.

Studying the typology of students of the second and fourth years of study, it can be argued that the second-year students according to ITQ have harmonious and accentuated traits that help them in mastering scientific material. These traits allow novice students to consciously and thoroughly prepare for classes and draw conclusions only on the basic knowledge obtained "for the first time". Similar traits can be found among the fourth-year students, but high self-esteem and rapid adaptation sometimes allow ignoring the

study of topics according to the curriculum. It is the type of “leadership” among such students that allows them to fulfil their goal, sometimes with negative results. According to the study, it was revealed that medical students of the second and fourth years of study have a goal, certain means to achieve it, and get approximately the expected result. However, it is the above-mentioned features among the fourth-year medical students that reduce the result obtained in comparison with the second-year students. Therefore, the considered type of “leadership” allows senior students, without studying the educational material, to draw their conclusions based on previously studied basic material. However, the conclusions drawn by the fourth-year medical students are not always correct. Studies have shown that there are three types of medical students. The first type (complete purposefulness)

was found among all the groups under study, but the highest indicators were reached in the fourth-year students. In contrast to the second type (partial purposefulness), the indicator of which was more pronounced in the second-year medical students. The third type (negative attitude to learning) was found among the groups in the second and fourth years of study, but these indicators were insignificant and isolated.

For teachers, in the future, knowledge of typology will allow them to take a more thorough approach to analysing the material and choose the right approach to presenting it to each student. An individual approach to the students’ personalities as future doctors would allow them to form clinical thinking based on the acquired knowledge and practice, which would help them become a professional in the medical field.

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Роль особистісної типології студента у сприйнятті навчального матеріалу в закладі вищої освіти медичного спрямування

Анотація. Актуальність публікації зумовлено тим, що кожний студент, який навчається в закладі вищої освіти, зокрема медичного спрямування, є особистістю, має власний світогляд, темперамент та індивідуальність, по-різному сприймає навчальний матеріал, а тому потребує індивідуального підходу до навчання. Мета статті – визначити роль типології студента у сприйнятті навчального матеріалу. Методами дослідження стали опитувальники індивідуально-типологічні за Л. Собчик та «Ціль – засоби – результат» за О. Кармановим. В опитуванні взяли участь студенти II та IV курсів навчання. Установлено, що серед студентів IV курсу інтроверсія та сенситивність сягала найнижчих показників, на фоні підвищеної тривожності, лабільності, екстраверсії, спонтанності, агресивності та ригідності. У студентів II курсу інтроверсія сягала вищих балів, ніж тривожність і лабільність. У системі навчання як і в II, так і в IV курсу спостерігається висока умотивованість до вивчення матеріалу, але досягнення бажаного результату виявлена вища в студентів II курсу. Студенти II і IV курсів мають гармонійні та акцентуальні риси, що допоможуть їм у виборі майбутньої професії. Однак студенти IV курсу, які схильні до лідерства й мають сформоване мислення, завжди зосереджують свою увагу на конкретному вибраному медичному напрямі. Упевненість у власних знаннях інколи призводить до формування неправильного висновку, оскільки в медицині є завжди коморбідність станів. Знання про типологію студентів допоможе педагогу визначити особливості кожного студента та знайти правильний підхід до подачі навчального матеріалу, що сприятиме кращому сприйняттю медичних тем

Ключові слова: індивідуально-типологічний опитувальник (ІТО), опитувальник «Ціль – засоби – результат», тип мислення, екстраверсія, інтроверсія, сенситивність, умотивованість, цілеспрямованість, гармонійні риси, акцентуальні риси, лідерство