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## CONTENTS

<b>Chernobay L., Vasylieva O., Lenska O., Morozov O., Terentyev V.</b> TO THE ISSUE OF THE MECHANISM OF ADAPTATION DEVELOPMENT TO THE PSYCHOEMOTIONAL STRESS OF TRAINING IN FEMALE MEDICAL STUDENTS OF GENERAL AND SPORTS GROUPS.....	5
<b>Goncharova A. V., Pavlov S. B., Pavlova O. S., Razumovskiy A. N., Kaur A.</b> ADAPTABILITY OF CARDIORESPIRATORY SYSTEM IN NORMOTENSIVE AND HYPOTENSIVE FEMALE STUDENTS WITH DIFFERENT IMPACT OF THE AUTONOMIC NERVOUS SYSTEM SUBDIVISIONS.....	8
<b>Nataliia S. Hloba, Inna M. Isaieva, Irina S. Karmazina, Dmytro I. Marakushin, Oleksandr A. Hloba</b> THE INTERCONNECTION BETWEEN INDIVIDUAL CIRCADIAN RHYTHMS AND EATING BEHAVIOR AS ONE OF MAIN REASONS OF OVERWEIGHT AND OBESITY IN YOUNG PEOPLE.....	12
<b>Maslova N., Maslova Y.</b> RESEARCH OF THE DENTAL STATUS OF MEDICAL UNIVERSITY STUDENTS.....	16
<b>Pandikidis N. I., Stovan A. O.</b> INFLUENCE OF THE ENVIRONMENTAL FACTORS ON THE HUMAN DIABETES.....	18
<b>Alekseienko R. V., Rysovana L. M.</b> THE INFLUENCE OF NATURAL AND SOCIAL FACTORS ON THE VITAL ACTIVITY OF THE ORGANISM IN MODERN CONDITIONS.....	21
<b>Bulynina Oksana, Voytenko Taisiya</b> THE EMPATHIC ABILITY OF KHARKIV NATIONAL MEDICAL UNIVERSITY STUDENTS WITH THE FUNCTIONAL ASYMMETRY OF A DIFFERENT TYPE.....	24
<b>Nadiia V. Hryhorenko, Marina S. Zimina, Stanislav M. Zimin, Maryna N. Kucher</b> PHYSICAL AND CHEMICAL PROPERTIES OF BILE IN DIABETIC PATIENTS.....	28
<b>Dunaeva O. V., Korovina L. D.</b> THE DEPENDENCE OF THE DEGREE OF METEOSENSITIVITY ON THE STATE OF THE CARDIORESPIRATORY SYSTEM AND THE PRESENCE OF PREPATHOLOGICAL CHANGES IN THE BODY IN MEN AND WOMEN.....	32
<b>Dmytro I. Marakushyn, Inna M. Isaieva, Iryna S. Karmazina, Natalia S. Hloba, Elijah Adetunji Oluwasegun, Kateryna M. Makarova</b> FEMALE VS. MALE: DIFFERENCE IN IMMUNE RESPONSE.....	35
<b>Kyrychenko M. P., Marakushin D. I., Shenher S. V., Dunaeva O. V., Bondar O. O.</b> SOME FEATURES OF THE EYE TEST IN PERSONS WHO ARE SYSTEMATICALLY INVOLVED IN SPORTS.....	38
<b>Sokol O. M., Polishchuk T. V., Khorshunova A. M., Kadnai O. S., Volkov I. I.</b> CORRELATES OF AUTONOMOUS NERVOUS AND IMMUNE SYSTEMS AT INTELLECTUAL EXERTION OF MEDICAL STUDENTS IN CONDITIONS OF COMBINED ACTION OF ENVIRONMENTAL STRESSORS.....	40
<b>Hanna M. Zelinskaya, Katerina A. Zelenskaya, Sukhachova I. A., Kovalenko A. A., Yuliya G. Bazyleva</b> FEATURES OF ADAPTATION REACTIONS OF ORGANISM OF STUDENTS, WHICH DEPEND ON THE PRESENCE OF CHRONIC DISEASES IN ANAMNESIS.....	43
<b>Tishchenko A. N., Lisina A. V., Yurkova O. V., Tishchenko M. O.</b> CERTAIN ASPECTS OF ADAPTOLOGICAL INFLUENCES ON THE DEVELOPMENT OF PSYCHOPHYSIOLOGICAL ADDICTION.....	47
<b>Shtrakh Kateryna Vasyliivna, Rak Larisa Ivanivna, Mulenga Natasha, Samuel Arko Addo, Okoronkwo Ugochukwu, Innocentia Awuzie</b> CORRELATION OF STRESS-PROVIDING AND RENIN-ANGIOTENSIN-ALDOSTERONE SYSTEMS AND NT-PROBNP IN ADOLESCENTS WITH RHYTHM DISORDERS.....	49

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<i>Маракушин Д. І., Ісаєва І. М., Кармазіна І. С., Глоба Н. С.</i> ВПЛИВ ОКСИЕТИЛЬОВАНИХ НОНІЛФЕНОЛІВ ТА ЇХ ПОХІДНИХ НА СТАН НЕСПЕЦИФІЧНОЇ ІМУННОЇ РЕЗИСТЕНТНОСТІ ЩУРІВ.....	54
<i>Л. М. Дяченко</i> ВІДПОВІДЬ КЛІТИН ЛЕЙКОЦИТАРНОГО РЯДУ НА ВПЛИВ СТРЕС-ФАКТОРІВ ТА МОЖЛИВІСТЬ ЇЇ КОРЕЛЯЦІЇ ПРИРОДНИМИ АНТИОКСИДАНТАМИ.....	60
<i>Vaschuk Mykola A., Sokol Olena M., Khorshunova Anastasiy M., Chernysh Hanna O., Yacenko Alina Yu.</i> ADAPTATION INDEX AND FUNCTIONAL STATE OF CENTRAL NERVOUS SYSTEM IN MEDICAL STUDENTS DURING THE PERIOD OF INTENSIVE LEARNING ACTIVITY.....	67
<i>Ковальов М. М., Чеботенко О. Р.</i> ЯВИЩЕ ЕМПАТІЇ ЯК СПОСІБ АДАПТАЦІЇ ТА ВЗАЄМОДІЇ В СОЦІАЛЬНІЙ СФЕРІ.....	70

# THE EMPATHIC ABILITY OF KHARKIV NATIONAL MEDICAL UNIVERSITY STUDENTS WITH THE FUNCTIONAL ASYMMETRY OF A DIFFERENT TYPE

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## ABSTRACT

The dependence between the individual peculiarities of functional asymmetry and the level of empathy has been established. The analysis of diagnostic findings of the level of empathy in persons with the functional asymmetry a different type showed that all the groups have an average level of empathy. The persons with the left-side type of functional asymmetry (LSTFA) (experimental group) have the highest number of points as for the scales: empathy for parents (12.1); empathy for children (12); empathy for strangers and little-known people (11.1). The persons with the mixed type of functional asymmetry (MTFE) have the lowest number of points for all the scales of empathy. Most persons with the right-side type of functional asymmetry (RSTFA) (the reference group) show a very high level of empathy (9.5%) for the scale of “empathy for parents” (15 points) and only the persons from the experimental group with the MTFE (12.5%) have the lowest level of empathy (0-1 points) for the scales of “empathy for animals” and also empathy for “the strangers and little-known people”.

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**Introduction.** In conditions of the deficiency of humanly attitude and abrupt negative changes in the social and economic structure the people perceive the problem of empathy as a problem of sympathy and confession.

Nowadays, empathy becomes one of the most important human qualities because it results in the qualitative transformations of human relations at all the levels and facilitates the reshaping of human conscience.

The term “empathy” was introduced to the psychology by E. Titchener and it was intensively used starting from the XX century. The empathy (empathia from Greek means sympathy) is understood as an ability of the person to feel and analyze the emotional status of other people. The philosophy interprets the empathy as a cognition of the internal world of another individual and also as sensual and emotional reaction of the individual to negative and positive feelings, i.e. the emotions of another individual in the form of sympathy, solidarity, etc [1].

The psychology differentiates several approaches to the understanding of empathy, in particular empathy as a psychic process; 2- empathy as a psychic reaction in reply to the acting incentive; 3- empathy as a property of the personality [2]. The factors that have a direct effect on the

empathy formation include the peculiarities of education, individual interpersonal communication experience, and specific features of interpersonal relations.

In the medicine, the term “empathy” has a little bit different meaning: “clinical empathy” is defined as an adequate perception of internal psychic processes in the patient relating to his/her health problems [3]. K.A. Stepien and A. Baernstein characterize the clinical empathy not only as the understanding of patient’s emotions, but as the realization of the displays of understanding with regard to the patient [4].

S.W. Mercera [5] believes that the clinical empathy includes: 1- the ability to understand the patient’s condition, his/her feelings (emotions); 2- the ability to communicate with the patient in order to understand his/her psychic state and emotions and countercheck the fidelity of understanding; 3- the ability to act in a certain therapeutic way (taking into consideration a psychic state of the patient). Sometimes, empathy is called humanism at heart [6].

It should be noted that any communication between the doctor and the patient results in the formation of empathic mutual relations and empathic response. There is an opinion that the formation of empathic response is a multiphase process that includes the internal resonance phase, communicative phase and receptive phase [7]. Empathy is a very important component of the professional activities of people involved in the medical sphere. It is considered to be an important element of the professional competence of a doctor [8].

It should be noted that Ukraine has no special-purpose methods of its own intended for the diagnosing of empathy in Ukrainian-speaking students that study medicine and employees working for health care institutions. We need to adapt some foreign diagnostic methods for Ukrainian medical students and employees [9].

The medicine of today is facing the situation of a wide choice of treatment policies and unavailability of one generally-accepted approach to the cardinal solution of the disease problem. In its turn, this tendency contributes to the sense of vacancy (perplexity), anxiety and uncertainty in patients. In these cases the doctor-patient dyad interaction gains in importance [10].

The work of a doctor is one of the most complicated types of professional activities of a person, therefore this profession puts forward raised and rather specific demands to those that want to serve it. Therefore, the optimization of doctor-patient relations would allow us to improve the quality of medical aid and assist in looking into the reasons for the “failures” in doctor-patient relations and understanding how this process can be negotiated. Hence, this research is rather topical from the standpoint of both theoretical and practical aspects.

**Objective:** The objective is to establish a possible relationship between the type of the expressiveness of functional asymmetry and the ability to empathy.

**The task of this research** was to study the correlations between the individual peculiarities of functional asymmetry and the level of ability to empathy in students that study at the Kharkiv National University of Medicine (KNUM).

**Scientific novelty of the research data** consists in that the scientific paper gives new knowledge of the ability of KNUM students with the functional asymmetry of a different type to empathy.

**A hands-on value of the research data** consists in that the methodical recommendations provided and practical conclusions drawn on the ability of KNUM students with the functional asymmetry of a different type to empathy (sympathy) can be used for other education institutions of medicine.

#### **Materials and Methods.**

Fifty four second-year students of medical and dental departments that voluntary gave their consent to participate in the experiment were inquired. The reference group was represented by 21 persons with the right-side type of functional asymmetry (RSTFA), the experimental group was represented by 12 persons with the left-side type of functional asymmetry (LSTFA), 8 persons with the mixed type of functional asymmetry (MTFA) and 13 persons with the socially variable type of functional asymmetry (SVTFA) [11]. The methods of V.V. Boiko were used for the diagnosing of the ability of students to empathy (sympathy).

**Results.** Fifty four second-year students of the medical and dental departments that voluntary gave their consent to participate in the experiment were inquired. The reference group was represented by 21 persons with the right-side type of functional asymmetry (RSTFA) (90.5% of the women and 9.5% of the men), the experimental group was represented by 12 persons with the left-side type of functional asymmetry (LSTFA) – (50% of the women and 50% of the men), and 8 persons with the

mixed type of functional asymmetry (MTFA) (75% of the women and 25% of the men) and 13 persons with the socially variable type of functional asymmetry (SVTFA) (38.5% of the women and 61.5% of the men) (Table 1, where K is the reference group and E is the experimental group).

Table 1. The students were distributed according to the options of functional asymmetry taking into consideration their sex.

Groups	Number of students					
	Total amount		Men		Women	
	person	%	person	%	person	%
RSTFA (K)	21	38,9	2	9,5	19	<b>90,5</b>
SVTFA (E)	13	24,1	8	<b>61,5</b>	5	38,5
LSTFA (E)	12	22,2	6	50	6	50
MTFA (E)	8	14,8	2	25	6	75
<b>Total</b>	54	100	18	33,3	<b>36</b>	<b>66,7</b>

The table shows that the percentage of women participating in the inquiry was equal to 66.7 %. The percentage of women with the right-side type of functional asymmetry was the highest and it made up 90.5 % and the percentage of men with the socially variable type of functional asymmetry was also the highest and it made up 61.5%.

The analysis of diagnostic findings of the level of empathy in persons with the functional asymmetry of a different type showed that all the groups have an average level of empathy (37 to 62 points): 55.7 points have the persons with the RSTFA; 59.1 points have the persons with the LSTFA; and 46.1 points have the persons with the MTFA and 58.2 points have the persons with the SVTFA. (Table 2, where K is the reference group and E is the experimental group).

Table 2. The data of diagnostics of the level of empathy in person with the functional asymmetry of a different type.

RSTFA (K)	LSTFA (E)		MTFA (E)		SVTFA (E)	
	Average value	Difference %	Average value	Difference %	Average value	Difference %
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>scale 1 - empathy for parents</b>						
11,3	<b>12,1</b>	+7,1	<b>8,8</b>	-22,1	10,7	-5,3
<b>scale 2 - empathy for animals</b>						
7,4	8,0	+8,1	<b>6,3</b>	-14,9	8,0	+8,1
<b>scale 3 - empathy for old people</b>						
8,0	8,8	+10,0	<b>7,1</b>	-11,2	9,2	+15,0
<b>scale 4 - empathy for children</b>						
8,8	<b>12</b>	+36,4	<b>6,4</b>	+27,3	8,4	-4,6
<b>scale 5 - empathy for the heroes of fine literature</b>						
8,8	8,1	-8,0	<b>6,3</b>	-28,4	7,8	-11,4
<b>scale 6 - empathy for strangers and little-known people</b>						
9,9	<b>11,1</b>	+12,1	<b>8,6</b>	-13,1	10,5	+6,1
<b>Points</b>						
55,7	59,1	+6,1	46,1	-17,2	58,2	+4,5

Note. E – the experimental group, K - the reference group.

It was established that for all the scales of empathy (scale 1 – empathy for parents; scale 2 – empathy for animals; scale 3 – empathy for old people, scale 4 – empathy for children; scale 5 empathy for the heroes of fine literature; scale 6 empathy for strangers and little-known people) all the groups have an average level of empathy (5 to 12 points).

It was established that the persons with LSTFA (experimental group) have the highest number of points for the scales: scale 1 – empathy for parents (12.1); scale 4 – empathy for children (12); scale 6 – empathy for strangers and little-known people (11.1). The discrepancy percentage in comparison with RSTFA (the reference group) makes up +7.1%; +36.4% and 12.1%, accordingly and it corresponds to the positive correlation relationship.

Table 2 shows that the persons with MTFA (experimental group) have the lowest number of points for all the empathy scales and in comparison with the RSTFA these have the negative correlation relationship for all the scales except for the scale 4 (empathy for children).

It was established that the persons with RSTFA (9.5%) have a very high level of empathy for parents (15 points) and just the persons with the MTFA (12.5%) have the lowest level of empathy (0-1 points) for the scales of empathy with animals, strangers and little-known people.

It should be noted that most persons with MTFA (experimental group) have a low level (2 to 4 points) of empathy for children and the heroes of fine literature (25% and 50%, accordingly).

It was established that the persons with SVTFA (experimental group) have a low level (2 to 4 points) of empathy for parents (7.7%), for animals (15.4 %) and children (15.4%).

It should be noted that the persons with LSTFA (experimental group) also have a low level (2 to 4 points) of empathy for animals (16.7 %) and the heroes of fine literature (8.3%) and a very high level of empathy (15 points) for strangers and little-known people (16.7%).

**Conclusions.** 1. In conclusion, we would like to state that 66.7% of the women participated in the inquiry and the women with RSTFA had the highest percentage, i.e. 90.5%. Among the men the highest percentage showed the persons with the SVTFA, i.e. 61.5%.

2. All the groups have an average level of empathy: the persons with RSTFA have 55.7 points, LSTFA have 59.1 points, MTFA have 46.1 points and the persons with SVTFA have 58.2 points.

3. The persons from the experimental group with the LSTFA have the highest number of points: empathy for parents (12.1), empathy for children (12) and empathy for strangers and little-known people (11.1) the persons with MTFA have the lowest number of points for all empathy scales.

4. Most persons with RSTFA (reference group) have a very high level of empathy (9.5%) for the scale “empathy for parents” (15 points) and the lowest level of empathy (0 to 1 point) showed the persons from the experimental group with MTFA (12.5%) for the scales “empathy for animals” and “empathy for strangers and little-known people”.

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