

POLTAVA STATE MEDICAL UNIVERSITY

PHYSIOLOGY DEPARTMENT

**EASTERN MEDICINE CONTRIBUTION INTO THE THEORY ON
TEMPERAMENTS AND DYS-TEMPERAMENTS AS WELL AS
TEMPERAMENTS STUDY IN PSMU FOREIGN APPLICANTS SOME
ASPECTS**

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THE TOPIC STUDIED ACTUALITY

Traditional Persian Medicine (TPM) represents one of the five Complementary and Alternative Medicine (CAM) domains (M. Koithan, 2009) originated from Greek, Indian, Persian and Egyptian medicine (M. Dousti et al., 2012). Balance between four humors (sanguine, phlegm, yellow bile and black bile) is considered to be essential factor for health maintaining while quantitative or qualitative imbalance in them (dys-temperament or soo-e-mezej) will lead to different diseases. There exist “the six essential principles” which must comprise the initial step in the diseases treatment and their prevention: air, food and drink, sleep/wake, retention/release, rest/activity as well as psychological events (M.B. Siahpoosh, 2012). Mezej is constitution – average quality originated from counteraction between two actives or two active qualities – hotness and coldness and two passives or two passive qualities – wetness and dryness (M.Nimrouzi et al., 2015), wetness is also subdivided into several kinds (F. Hakimi et al., 2019), for example, wet liver dys-temperament.

There are the digestion four stages: alimentary, hepatic, vascular and organic. Four humours get produced after the second phase namely: sanguine (hot and wet), phlegm (cold and wet), bile (hot and dry) and black bile (cold and dry).

Mezaj has **organic specificity**, every humor possesses so called binary quality consisting of the passive and the active one.

External or internal factors can result into soo-e-mezaj, dys-temperament and following organic **dys-function** (M. Pasalar, 2016).

These data characterize **temperament, constitution and ethnic typological aspect** together.

Ethnic-gender-age typological aspect contribution

Menstruations represent a separate time and characteristic only for females; the results received allowed advising **to eat hot-nature food in their diet and a moderate exercise program** to decrease menstrual pain and were found to be useful both for the patients and for the physicians (F. Rajabzadeh et al., 2019).

Ethnic-gender typological aspect contribution

The **neuroendocrine system** and the **cytokine pattern** were assessed in the carriers of **warm** and **cold temperament** (S. Shahabi et al., 2007). The data on temperament are important in Gynecology (F. Rajabzadeh et al., 2018) and Andrology.

DYS-TEMPERAMENTS AND DISEASES AND SYNDROMES

The thyroid gland and basal metabolism pathologies (S. Miraj et al., 2016).

Insomnia (M. Nimrouzi et al., 2019).

Psoriasis (F. M. Rasanan et al., 2022).

Infertility (S. Mahroozade et al., 2019).

Insulin-dependent diabetes mellitus (R. Ilkhani et al., 2019).

Gastric headache (in part migraine) (S.M.B. Fazlou et al., 2013).

Hypercholesterolemia (M. Emtiazy et al., 2012).

Vaginitis (S. Adhami et al., 2017).

Functional dyspepsia (M. Abedinirad et al., 2018).

SPECIFIC TEMPERAMENTS AND DYS-TEMPERAMENTS

Gastric dys-temperament (M. Alizadeh et al., 2017).

Uterine dys-temperament (F. Moradi et al., 2019).

Hepatic dys-temperament.

Temperament for melatonin.

THE WORK AIM

to analyze contribution of temperament study in various spheres of personal life while using the traditional and non-traditional approaches to temperaments classification and the data about dys-temperaments among the PSMU International students from India and Morocco; assessing the interrelations between different temperament types and interhemispherical asymmetry individual profile in the Moroccan and Indian students.

THE RESEARCH METHODS

1. Eysenck's classic questionnaire on temperament assessment.
2. Classical tests of A.Louria on interhemispherical asymmetry individual profile assessment.
3. Physiological methodics of vagotony and sympatheticotony determining.
4. Surveys.

THE RESEARCH RESULTS

- **The distribution on temperament types** were as follows as: choleric – 8 (12,6%, $p<0,05$); sanguinics – 19 (3,01%, $p<0,05$); phlegmatics – 6 (9,5%, $p<0,05$); melancholics – 30 (74,89%, $p<0,05$).
- We have performed **the assessment of people with a various temperament taking into account the dominant extremity** (the table 1). As the results received testify to, the ***sinisters distribution*** was as follows as: 27 melancholics (54%, $p<0,05$), 13 sanguinics (26%, $p<0,05$), 6 choleric (12%, $p<0,05$), 4 phlegmatics (8%, $p<0,05$). The ***dexters distribution*** was as follows as: 6 sanguinics (60%, $p<0,05$), 2 phlegmatics (20%, $p<0,05$), 1 choleric (10%, $p<0,05$), 1 melancholic (10%, $p<0,05$). ***Ambidexters*** distribution: 2 melancholics (66%, $p<0,05$), 1 choleric (34%, $p<0,05$), no sanguinics, no phlegmatics.
- Thus, melancholics were prevalent in the sinisters population, sanguinics – in the dexters one while melancholics were in the biggest amount among ambidexters at the sanguinics and phlegmatics absence.
- The next investigations stage has been dedicated to the **temperament types' distribution dependently on the interhemispherical asymmetry individual profile** (the table 2). Ch-choleric, s – sanguinics, ph – phlegmatics, m – melancholics. We used the criterium of Student, the difference between the numerals was $p<0,05$.

- We analyzed only the sinisters population structure because the one of the dexters and ambidexters has been described by us after the table 1. The *real sinisters* distribution: 9 melancholics (36%, $p<0,05$), 8 sanguinics (32%, $p<0,05$), choleric (16%, $p<0,05$), 4 phlegmatics (16%, $p<0,05$). The *hidden sinisters* distribution: 8 melancholics (80%, $p<0,05$), 2 sanguinics (20%, $p<0,05$), absent choleric, absent phlegmatics. The *unreal sinisters* distribution: 10 melancholics (66%, $p<0,05$), 3 sanguinics (20%, $p<0,05$), 2 choleric (14%, $p<0,05$), no phlegmatics.
- Thus, we have received melancholics dominance also at the division on the subgroups.
- As the performed work results have demonstrated, 63 examined students have been divided into: 24 extraverts (38%, $p<0,05$), 32 introverts (57%, $p<0,05$), 7 ambiverts (5%, $p<0,05$).
- All the respondents were informed about the data on possible using the knowledge about dry and wet temperaments, gastral and hepatic, the ones of diseases and medicines.

The table 1.

The temperament type in the UMSA students dependently on the interhemispherical asymmetry profile, n=63

	Sinisters, n=50					Dexters, n=10				Ambidex- ters, n=3		
	Cho- le- rics	San- gui- nics	Phle- gma- tics	Me- lan- cho- lics	Cho- lerics	San- gui- nics	Phle- gma- tics	Me- lan- cho- lics	Cho- le- rics	San- gui- nics	Phle- gma- tics	Me- lan- cho- lics
	6	13	4	27	1	6	2	1	1	0	0	2

Table 2.

The UMSA students temperament type dependently on the interhemispherical asymmetry individual profile, n=63

Real sinisters, n=25				Hidden sinisters, n=10				Unreal sinisters, n=15				Dexters, n=10				Ambidex-ters, n=3			
ch	s	ph	m	ch	s	ph	m	ch	s	ph	m	ch	s	ph	m	ch	s	ph	m
4	8	4	9	0	2	0	8	2	3	0	10	1	6	2	1	1	0	0	2

CONCLUSIONS

1. Moroccan students distribution on temperament types: choleric - 8 (12,6%, $p < 0,05$), sanguinics - 19 (3,01%, $p < 0,05$), phlegmatics - 6 (9,5%, $p < 0,05$), melancholics - 30 (74,89%, $p < 0,05$).
2. 24 extraverts (38%, $p < 0,05$), 32 introverts (57%, $p < 0,05$) and 7 (5%, $p < 0,05$) ambiverts were in the investigated group.
3. Melancholics were dominant among sinisters, sanguinics – among dexters. Melancholics were also dominant among ambidexters at sanguinics and phlegmatics complete absence.
4. We have received also melancholics dominance at sinisters division into groups.
5. The examined Indian students demonstrated approximately equal distribution by all temperament types by traditional Eysenck's questionnaire without valuable varieties by gender.
6. The Indian girls reported about migraine and linked it with vagotony and dys-temperament while demonstrating the knowledge about this so called double representation.

7. **We consider that the data about Eastern medicine contribution into temperaments study in its theoretical and applied sides must be introduced into educative process in medical educational establishments officially in all countries because they emphasize to the links between structure and function; micro-, meso- and macrolevels of alive matter organization and prove the representation about human being as a biopsychosocial system once again.**



**THANKS FOR YOUR
ATTENTION**