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HEALTH: HOW IT IS SEEN BY STUDENTS IN COVID TIME

ЗДОРОВ'Я: ПОГЛЯД СТУДЕНТІВ У ЧАС ПАНДЕМІЇ

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Health is the greatest value for everyone. The research analyses and compares the results of free associative experiment conducted among philology and technology students. It includes students' responses to stimulus word HEALTH. The experiment is held during pandemic time and aims at establishing similarities and differences in the associations offered by students with different majors. The complex methodology comprises a free associative experiment and comparative analysis. The associations from the experiment are divided into such thematic groups as: associations connected with HEALTH participants (*doctor, patient, hospital, ambulance*); abstract concepts (*happiness, well-being, care, life, faith, hope, beauty, love, justice, freedom, peace, courage, force*); positive feelings and emotions (*recovering, hardening, joy*); negative feelings and emotions (*drugs, illness, pain, stress, troubles, treatment*); nature and natural phenomena (*nature, fresh air, sun*); health support and improvement (*sport, movement, rest, good body shape, morning exercises, gym, yoga, fitness, active rest*); medical procedures aimed at avoiding or preventing disease (*medical check-up, vaccination, mask, therapy, Covid, Covid test, vitamins, disinfection, antiseptic, distance, quarantine, isolation, virus, pandemic*); diet (*healthy food, fruits and vegetables, water, food, balance diet*) and daily routine (*sleep, hygiene, daily regime, habits, hand washing*). The research findings show similar top HEALTH associations (*healthy food, sport, vaccination, sleep, and fresh air*) given by technology and philology students. The research also reveals different HEALTH association given by two groups of students. For example, philology students associate HEALTH with such words as: *happiness, well-being, mental stability, rest, hospital*, while technology students suggest other associations, such as: *physical condition, certificate, Covid-19 test, human psychology, immunity*. In general, respondents share the same cultural values and have the same experience of going on through pandemic time, which is expressed in the same associative words to the stimulus HEALTH, still there are some differences, some of them can probably be explained by a gender factor, but it is not the object of this research, though it may be done in further studies.

Key words: HEALTH, associative experiment, thematic association groups, philology students, technology students.

Здоров'я є найбільшою цінністю кожного. Розвідку присвячено аналізу та порівнянню результатів вільного асоціативного експерименту, проведеного серед студентів філологічного та технологічного факультетів. Дослідження включає відповіді студентів стосовно слова-стимулу HEALTH. Даний експеримент проведено під час пандемії і його метою є встановлення однакових та різних асоціацій, запропонованих студентами обох спеціальностей. Комплексна методологія включає в себе вільний асоціативний експеримент і порівняльний аналіз. В ході проведення експерименту отримані асоціації поділені на наступні тематичні групи: асоціації, пов'язані з учасниками (*doctor, patient, hospital, ambulance*); абстрактні поняття (*happiness, well-being, care, life, faith, hope, beauty, love, justice, freedom, peace, courage, force*); позитивні відчуття та емоції (*recovering, hardening, joy*); негативні відчуття та емоції (*drugs, illness, pain, stress, troubles, treatment*); природа та природні явища (*nature, fresh air, sun*); пітримка та покращення здоров'я (*sport, movement, rest, good body shape, morning exercises, gym, yoga, fitness, active rest*); медичні процедури, метою яких є запобігання або попередження хвороби (*medical check-up, vaccination, mask, therapy, Covid, Covid test, vitamins, disinfection, antiseptic, distance, quarantine, isolation, virus, pandemic*); харчування (*healthy food, fruits and vegetables, water, food, balance diet*) і розпорядок дня (*sleep, hygiene, daily regime, habits, hand washing*). Результати розвідки демонструють однакові асоціації (*healthy food, sport, vaccination, sleep, and fresh air*), які займають лідируючі позиції як серед студентів-технологів, так і серед студентів-філологів. Дослідження також розкриває різні асоціації зі словом-стимулом HEALTH запропоновані двома групами студентів. Наприклад, студенти філологічного факультету асоціюють HEALTH з такими словами як: *happiness, well-being, mental stability, rest, hospital*, в той час як студенти технологічного факультету пропонують інші асоціації, такі як: *physical condition, certificate, Covid-19 test, human psychology, immunity*. Загалом респонденти розділяють однакові культурні цінності і мають однаковий

досвід переживання пандемії, що відображається в однаковий асоціативних словах зі стимулом HEALTH, однак є і деякі відмінності, деякі з них можна, ймовірно, пояснити гендерним фактором, але це не є предметом цього дослідження, хоча це може бути вивченим в майбутніх розвідках.

Ключові слова: HEALTH, асоціативний експеримент, тематичні асоціативні групи, студенти філологічного та технологічного факультетів.

Introduction. The research aims at comparing words philology and technology students associate with the stimulus HEALTH during Covid Time. Health problems which become actual during the pandemic as well as restrictions students have to face, changes in usual mode of teaching and learning, all these issues make rather young generation become more aware of their ideas and images of HEALTH, which in general is not one of the things young people usually pay a lot of attention to due to the fact that they are fit, strong, and healthy. Thus, the study offered tries to see whether there are any differences in conceptual pictures connected with HEALTH among studies whose majors differ: technology and philology.

Methods. The methodology includes a free associative experiment, which enables to single out words associated with HEALTH offered by technology and philology students; and comparative analysis, which provides the investigation of similar and different features of HEALTH associations from students.

Literature Overview. Associative experiment method was first used by Francis Galton [1, pp. 149-162] in 1879 in order to research the "association of ideas" in his experiments. The German physiologist and philosopher W. Wundt [2, p. 23] used associative experiment method to define the verbal association speed in 1892. Recent studies which are based on free associative experiments are rather productive in many interdisciplinary fields. For an experiment only one word stimulus is usually chosen and in order to get free word associations respondents are supposed to give answers with first words that appear in the minds P. Meara [3, p. 21]. The type of word which is used as a stimulus word can be a noun, verb, adjective, or numeral. In this regard, M. Bahar and M. Hansell [4, p. 349] explain that in a free word association experiment, the most important thing is the right explanations of response words to each stimulus word. D. Playfoot [5, p. 607] suggests that word association analysis can demonstrate word frequency effects, concrete/abstract properties, word classes, and categories, which provides a deeper understanding regarding the structure and the dynamics of the lexicon studied.

An associative experiment is one of the methods which make it possible to study linguistic thought activity being behind linguistic units, to look at formation of reality image in it, the view of world picture in human linguistic memory and thinking activity mechanism through practical experiments.

An associative experiment method is also widely used in different disciplines such as neurolinguistics, neuropsychology, psycholinguistics, linguaculturology and linguistics, in this way making it interdisciplinary method.

The associative experiment in linguistics [6; 7, pp. 53-61; 8, pp. 1-14] aims to register responses, conditioned by information circulating within the participants' culture. This experiment presupposes the access to respondents' consciousness, provoking the reactions to the stimulus. The experiment requires fixation of verbal reactions to the word-stimulus with further mathematical processing of results. The associative experiment registers the psychological meaning of the word. Associated words acquire a new individual meaning which connects cognitive entity of the object under study with images, feelings, and ideas existing in the mind of respondents. Philosophical grounds for the experiment present the idea that a person recalls images correlating them with each other. Thus, the connection is set between stimulus, introduced by an experimenter, and participants' response.

The topic of HEALTH has become especially urgent in the time of pandemic. HEALTH is seen as "one of the basic anthropocentric concepts" [9, pp. 165-169] and as the greatest value of the individual [10, pp. 129-131], which is closely connected with a human being, life values and is the object of studies in many different linguistic fields.

The dictionary definitions present HEALTH [11] as *the condition of your body, especially whether or not you are ill or the condition of being strong and well*.

Health is one of the most fundamental conditions of life. Of course, people of different cultures interpret the HEALTH concept in different ways. HEALTH is a dynamic concept with multiple meanings dependent on the context in which the term is used and people who use it. People see HEALTH as essential to well-being, but how people define their own health varies according to their own social experience, particularly in relation to their age, personal knowledge, and social and illness experiences. HEALTH is an elusive word as most people who consider themselves healthy are actually not, while many people who are suffering from some disease, may be relatively healthy [12]. HEALTH is a concept which does not merely relate to the absence of disease, of healthy working of organs, or having good thoughts. HEALTH is a holistic concept as it relates to a person as a whole, not just the person you see, but also the person you 'feel'.

Results and Discussions. The free associative experiment was chosen to conduct the research. Participants of the experiment were not limited in time and quantity of answers. The simple design of a free associative test provided freedom of expression. The participants were asked to answer the question: "What do you associate the word *HEALTH* with?" The respondents were not restricted in the type of answers. An experiment which allows participants to react to the stimulus with any number of words that first come to their minds without any limits in formal or semantic features of response is called by Goroshko the "associative chain experiment" [7]. We conducted the free associative experiment using the method of individual questioning of 205 respondents aged from 17 to 22 years. They were students from philology and technology departments. As a result of their responses, we received reactions that comprise the associative fields of the stimulus word *HEALTH*, which can be divided into three main concepts of *HEALTH*: emotional health, mental health and physical health.

Verbal reactions which we have from the experiments can be divided into the following thematic groups:

1. Associations connected with *HEALTH* participants: doctor (31), patient (1), hospital (13), ambulance (1).

2. Associations connected with abstract concepts: happiness (25), well-being (23), care (20), life (20), faith (9), hope (5), beauty (6), love (4), fair (3), freedom (6), peace (1), courage (13), force (10).

3. Associations connected with positive feelings and emotions: recovering (5), hardening (2), joy (8).

4. Associations connected with negative feelings and emotions: drugs (13), illness (9), pain (3), stress (3), troubles (2), treatment (7).

5. Associations connected with nature and natural phenomena: nature (10), fresh air (38), sun (5).

6. Associations connected with health support and improvement: sport (90), movement (32), rest (13), good body shape (10), morning exercises (9), gym (5), yoga (4), fitness (15), active rest (7).

7. Associations connected with medical procedures aimed at avoiding or preventing disease: medical check-up (10), vaccination (49), mask (24), therapy (5), Covid (7), Covid test (32), vitamins (32), disinfection (14), antiseptic (14), distance (10), quarantine (9), isolation (1), virus (1), pandemic (1).

8. Associations connected with diet: healthy food (48), fruits and vegetables (20), water (25), food (26), balance diet (14).

9. Associations connected with daily routine: sleep (47), hygiene (17), daily regime (20), habits (4), hand washing (7).

Verbal reactions can be classified according to formal and grammatical features of responses-

reactions [13, p. 93]. During the experiment, two main types of reactions were identified: reactions-word forms and reactions-phrases. Associative analysis of the stimulus word *HEALTH* showed that the largest quantity of reactions are word forms as there are nouns in the nominative case (98%). Reactions-phrases make up approximately 2.0%. The predominance of nouns in respondents' answers can be explained by lexico-grammatical peculiarities of the word stimulus *HEALTH*: a noun in the nominative case, singular.

According to the experimental data, the associative field of the word *HEALTH* is presented by similar and different associations by students of philology and technology departments.

Similar Students' Associations. It is not surprising that students from different departments have similar ideas about *HEALTH* as they are brought up in the same cultural environment. The following table presents associations which are mentioned by both technology and philology students (See Table 1).

Table 1

**Similar Technology and Philology
Students' Associations**

associative words		associative words	
healthy food, food, fruits and vegetables	92	healthy lifestyle	23
sport	90	daily regime	20
vaccination	49	life	20
sleep	47	care	20
fresh air	38	medicine	19
vitamins	32	hygiene	17
movement	32	hardening	12
doctor	31	youth	11
water	25	covid-19	7
energy	24	freedom	7
mask	24		

As it is seen from the experiment, the thematic group of associations connected with health support and improvement is the most numerous (122 associations). The most frequent associates are "sport" (90 associations) and "movement" (32 associations). Moreover, the reactions of sport / movement are offered by 112 respondents. Therefore, it can be concluded that in everyday consciousness, *HEALTH* concept is associated with its support first of all. The second most frequent thematic group is the group associations connected with diet (117 associations). Today we have a wide variety of products. Among them there are both useful and harmful products for our health. The experiment showed that students support the idea that if we want to be healthy, then we should eat healthy food. The third in the number of similar associations

Table 2

Philology Students' Point of View

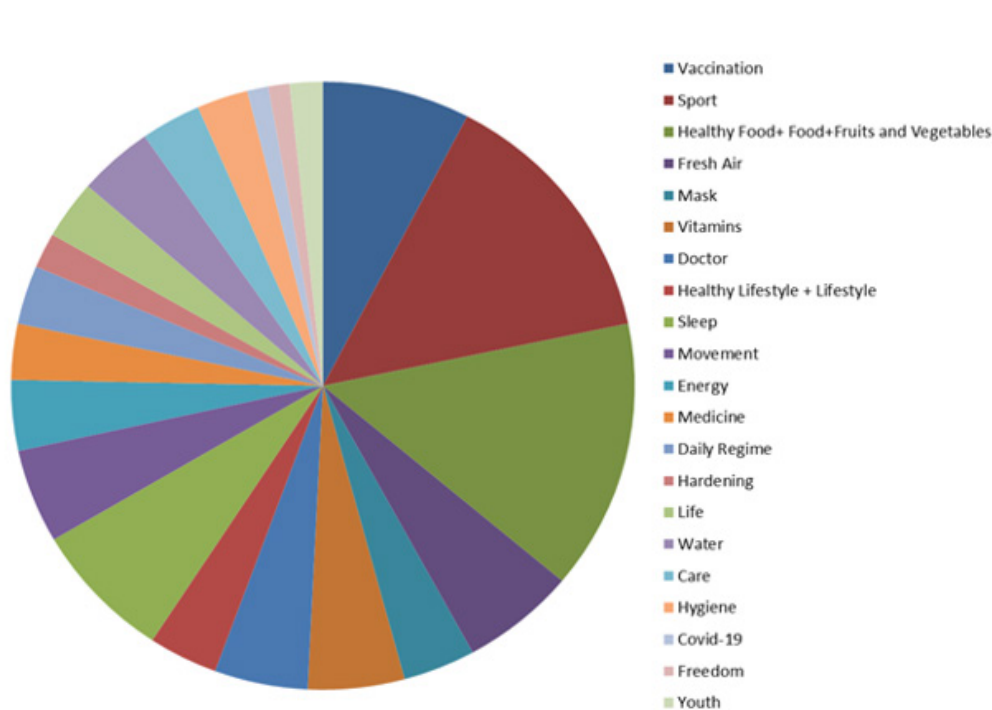
associative words		associative words	
happiness	25	gym	5
well-being	23	calmness	5
mental stability	13	habits	4
rest	13	breathing	4
hospital	13	yoga	4
drugs	12	communication	4
positive thinking	11	no bad habits	4
good body shape	10	love	4
harmony	10	self-development	3
medical check-up	10	pain	3
nature	10	stress	3
good mood	9	importance	3
hobby	9	weakness	3
strength	9	justice	3
morning exercises	9	safety	2
faith	9	troubles	2
illness	9	no stress	2
family	9	motivation	2
outdoor activity	7	wealth	2
beauty	6	insecurity	1
future	5	isolation	1
money	5	ambulance	1
therapy	5	virus	1
recovering	5	peace	1
power	5	pandemic	1
hope	5	patient	1

is the thematic group connected with medical procedures aimed at avoiding or preventing disease (112 associations). Associations "vaccination" (49), "vitamins" (32) and "mask" (24) are used more often. This means that people care about their health and do everything possible to prevent the serious diseases. The smallest thematic group is the group connected with positive feelings and emotions (12 associations). It can be explained by the fact that the word HEALTH gets negative coloring in pandemic time. It is also seen that the thematic group connected with negative feelings and emotions is absent in the similar students' associations. It may be so because the participants in the experiment were young people. And young people usually have positive thinking.

The following diagram visualize similar students' associations (See diagram 1).

Similar associations demonstrate students' active position. They are full of energy and do everything possible to support their health and to prevent virus diseases. Students also control their food habits, since healthy food ranks third position among similar associations.

Different Students' Associations. According to the experimental data, the associative field of the word HEALTH is presented also by different associations by students of philology and technology departments (see Table 2 and Table 3).

**Diagram. 1 Similar Students' Associations**

Associations connected with abstract concepts are more frequent for philological students.

Table 3

Technology Students' Point of View

associative words		associative words	
physical condition	38	hand-washing	7
certificate	34	treatment	7
covid-19 test	32	active rest	7
human psychology	19	organism	6
immunity	15	self-defence	6
fitness	15	limit	5
disinfection	14	sun	5
antiseptic	14	oxygen	4
courage	13	security	4
force	10	saturation	2
distance	10	pulse	2
quarantine	9	stain delta	1
disease	8	stain omicron	1
joy	8	smell	1
prevention	8		

Associations connected with abstract concepts are also rather often mentioned by technology students though one of the leading positions includes associations connected with medical procedures aimed at avoiding or preventing disease. It underlines the fact that the pandemic has had a negative impact on every day routine.

According to the results of the free associative experiment, the largest thematic group for both groups of students is the group connected with abstract concepts (165 associations among philological students and 99 associations among technology students). The second in number among philology students is the thematic group connected with

negative feelings and emotions (43 associations). HEALTH is of the greatest value, so any health problems cause negative feelings. As for technology students it is the thematic group connected with health support and improvement (60 associations). They are more practical and they understand that their HEALTH is in their hands. The third thematic group among both groups of students is represented by the group connected with daily routine (31 associations among philology students and 38 associations among technology one). It shows that they plan their time and follow daily routine. As for the result of free associative experiment among philology students the smallest thematic group is represented by the group connected with positive feelings and emotions. Technology students have the least associations in group connected with nature and natural phenomena.

Conclusions. The comparison of results obtained from the free association experiment with stimulus word HEALTH held during pandemic time depicts similar top HEALTH associations given by philology and technology students: *healthy food, sport, vaccination, sleep, and fresh air*, as well as different HEALTH association given by two groups of students. Philology students associate HEALTH with the words *happiness, well-being, mental stability, rest, hospital*; at the same time technology students associate HEALTH with *physical condition, certificate, Covid-19 test, human psychology, immunity*. The analysis has shown students pay more attention to their health, to vaccination and pandemic situation. All the differences can be explained by students' individuality and personal point of view. The further research will involve medical students as respondents in a free association experiment.

REFERENCES:

1. Galton F. Psychometric experiments. *Brain*, 2, 1879. P. 149-162. URL: <https://doi.org/10.1093/brain/2.2.149>
2. Wudt W. The Making of a Scientific Psychology. New York, 1982. P. 23.
3. Meara P. *Connected Words: Word Associations and Second Language Vocabulary Acquisition*. Amsterdam, Philadelphia: John Benjamins Publishing, 2009. P. 21.
4. Bahar, M., and Hansell, M. 2000. The Relationship between Some Psychological Factors and Their Effect on the Performance of Grid Questions and Word Association Experiment. *Educational Psychology*, 20 (3), 2000. P. 349. URL: <https://doi.org/10.1080/713663739>
5. Playfoot, D., Balint, T., Pandya, V., Parkes, A., Peters, M., & Richards, S. 2018. Are Word Association Responses Really the First Words that Come to Mind? *Applied Linguistics Vol. 39* (5), 2018. P.607. URL: <https://doi.org/10.1093/applin/amw015>
6. Sharifian F. Association-Interpretation: A Research Technique in Cultural and Cognitive Linguistics. In: Proceedings of the 6th Annual Round Table of the Center for Applied Language and Literacy Research. Perth: Edith Cowan University, 2001.
7. Goroshko E. 2005. Problems of Conducting Free Associative Experiment. Volgograd state pedagogical University, 3, 2005. P. 53-61.
8. Shepherd H. and Marshall E. The Implicit Activation Mechanism of Culture: A Survey Experiment on Associations with Childbearing. *Poetics*, 69, 2018. P. 1-14. URL: <https://doi.org/10.1016/j.poetic.2018.07.001>.

9. Romanyshyn N., Sherstniova O. Concept "health" in the English and Ukrainian languages. *Науковий вісник ВНУ ім. Лесі Українки. Філологічні науки. Ч. 1. Мовознавство*. 2011. № 3. С. 165-169.
10. Rakosi C. Replication of Psycholinguistic Experiments and the Resolution of Inconsistencies. 2017. № 46 (5). Pp. 129-131. URL: <https://doi.org/10.1007/s10936-017-9492-0>
11. HEALTH. MacMillan Dictionary. URL: <https://www.macmillandictionary.com/dictionary/british/health> (access 27.03.2022)
12. Baum F. *The New Public Health* (3rd edn), Oxford University Press, Melbourne, 2008.
13. Martinovich G. Experience of complex study of associative experiment data. *Questions of psychology*, vol.2, 1993. P. 93. ISSN 0042-8841