Global challenges

MHGC Journal

Rome 2018

DOI: http://doi.org/10.32437/MHGCJ-2018

Publication frequency

1-2 issue/year

Founders

The MHGC Journal was originally founded by NDSAN Network (MFC – Coordinator of the NDSAN) (Italy)

Issue status

National/International

Issue languages

English

Media environment

International

Target audience

Scientists/researchers (medical, social, educational fields and etc.), mental health (MH) practitioners, policy-makers, researchers, lawyers.

Mental Health: Global Challenges Journal is an open access peer-reviewed journal, whose main aim is to promote dialogue and debate on topics such as Mental Health, Mental Health Care Systems and etc.

Mental Health: Global Mental Challenges Journal is a journal dedicated to international studies on MHC systems in the context of global social challenges, Mental health and migration, Mental health in times of military conflicts, Mental health and community, Specific issues of MHC, Higher Education and MHC, Interdisciplinary and transdisciplinary approaches in MHC, and related topics, therefore we will encourage those papers which focus on the specific particularities from these topics, and /or authors coming from these areas.

The journal considers with a special attention the manuscripts which can be of interest for policy makers and/or practitioners.

The journal accepts manuscripts such as theoretical articles, research articles, case studies, reviews, extended abstracts

Field of study and special focus

Medicine, Psychology, Social Sciences, Education, Economics, Law, Inter- and Transdisciplinary studies

DOI: http://doi.org/10.32437/MHGCJ-2018

Editor-in-chief: Dr. *Viktor Vus*, Associate Professor
Vice Editor: Dr. *Maureen P. Flaherty*, Assistant Professor (CA)
Editorial Board:
Dr. *Ioanna V. Papathanasiou*, Assistant Professor, (GR)
Dr. *Elena Syurina*, Assistant Professor, (NL)
Dr. *Daniela Dumitru*, Associate Professor (RO)
Dr. *Evangelos C. Fradelos*, Associate Professor (GR)
Dr. *Valentina Vitale*, PhD (IT)
Mag. *Galina Itskovich*, LCSW (USA)
Editorial Team:
Dr. *Tatyana Danylova*, Associate Professor (UA)

UDK 159.922.27:316.33(811.111)
DOI: http://doi.org/10.32437/MHGCJ-2018

Indexed in CrossRef

UDK 59.922.27:316.33(811.111)

The authors are responsible for validity of data
Each report has passed a review procedure

© NDSAN (MFC – coordinator of the NDSAN), Italy, 2018

CONTENTS

Preserving Human Mental Health through Control of Pathogenic Text in Mass Media by Means of Indexing and Marking
Olesya Bik 7

The Dark Side of Life Success: How to Achieve Results and Preserve Mental Health
Iryna Borovynska 15

Mental Health: Dislocation of the Concept in the Small Group
Lidiya Chorna, Pavlo Gornostai, Halyna Tsyhanenko, Olha Pletka, Olha Korobanova, Viktor Vus 16

Emotional Intelligence and Caring Behaviors of Mental Health Nurses in Greece
Anneta Christidou, Panagiotis Plageras, Evangelos C. Fradelos, Konstantinos Tsaras, Dimitrios Papagiannis, Ioanna V. Papathanasiou 19

The Mental Health Between Epigenetics and Individual Beliefs
Dramnescu Marin Liana 20

Evaluation of the Ukrainian-Language E-Course "Socio-Psychological Support of Adaptation of Veterans"
Maryna Dvornyk 25

Peacebuilding and Mental Health: Moving beyond Individual Pathology to Community Responsibility
Maureen P. Flaherty, Ellen Sikorski, Lilya Klos, Viktor Vus 27

Infant and Parent Mental Health: Developmental Trajectory as a Communal Concern
Galina Itskovich 29

On the Social Work Input in Mental Health Care in Ukraine
Liliia Klos, Larysa Klymanska, Nina Hayduk, Halyna Herasym 32

Mental Health Care System and Reform Efforts in Ukraine
Vitalii Klymchuk, Kateryna Kalendruz, Viktoriia Gorbunova 38

Multidisciplinary Approach to Research of the Adherence to Treatment Phenomenon in Patients with Diabetes Mellitus
Anna Kogut, M. Bobryk, O. Potapov, I. Frankova, J. Komisarenko, O. Khaustova, O. Chaban 40

Hardiness as a Factor of Psychological Resilience of Youth in Conditions of Military Conflict
Svitlana Kravchuk 42

Major Features of Language Adaptation as a Sign of a Stable Psychological Conditions
Zorjana Kunch, Yaryna Turchyn 43

Rational and Irrational Processes in Decision Making: An Economic Perspective
Lacatus Maria Liana 51

Study of Patients' Dehumanization in a Hospital Setting
Dimitra Lekka, Maria Sakalaki 58

Creativity and Mental Health Challenges – Behavioural Patterns in Higher Education
Jane Lu 59

Interdisciplinary Technologies in Socio-Political Rehabilitation
Oleksandr Malkhazov, Sergiy Osypenko 60

Media Literacy Effect. The Context of War Media Trauma
Lyubov Naydonova 63

Coping Strategies for Exam Stress
Monica Elisabeta Păduraru 64

Vocational and Educational Training in Family and Community Nursing as a European Priority: The ENHANCE Erasmus+ Project. Aspects for Mental Health Care
Ioanna V. Papathanasiou, Evangelos C. Fradelos, Sofia Kastanidou, Konstantinos Tsaras, Francesca Pozzi, Flavio Manganello, Serena Alvino, Loredana Sasso, Annamaria Bagnasco, Giuseppe Aleo, Isabella Roba, Stecy Yghemonos, Adriana Popa, Hannele Turunen, Christos Kleisiaris, Eftychia Evangelidou, Aris Daglas, Clara Rodrigues, Lars Oertel, Madeleine Diab 67

Are Extrovert People More Satisfied with Life? Case Study
Elena-Ramona Richițeanu-Năstase, Camelia Stăiculescu 68

University Dropout. Causes and Solutions
Camelia Stăiculescu, Elena-Ramona Richițeanu-Năstase 71

Borderline Personality Disorder (BPD): Approach by Dialectic-Behavioral Therapy (DBT)
José Luis Triviño, María Ángeles Ortega 76

The Thin Web Line. New Technologies and Promotion of Unhealthy Behaviors. Eating Disorders and Pro-Ana (pro-anorexia) Subculture. How to Fight Against Them
José Luis Triviño, María Ángeles Ortega 78

Alcohol Use and Mental Health Status Among University Students in Greece
Christos Tsiongas, Christos Zilidis, Evangelos C. Fradelos, Konstantinos Tsaras, Dimitrios Papagiannis, Ioanna V. Papathanasiou 80

Psychological Health Restoration as a Way of Socio-Psychological Rehabilitation of a Person
Tetiana Tytarenko 81

Intuitive Self-development as an Important Factor of the Spiritual and Mental Self-healing of an Individual and Society
Tamara Tyurina, Sofiya Stavkova 83

The Contribution of Mental Health Nurse to Telepsychiatric Applications
Olga Velentza, Nasim Aouant 85

Interdependent Mental Health, Social Development, Youth-Oriented Activity (on the Example of a Country in Transition)
Viktor Vus, Liudmyla Omelchenko 86

Mental Health Problems and the Ways of Solving Them through the Eyes of Ukrainian High School Students
Valeriya Yudina, Tetiana Danylova 87

Preserving Human Mental Health through Control of Pathogenic Text in Mass Media by Means of Indexing and Marking

Olesya Bik
Sociology and Social Work Department, Lviv Polytechnic National University, Lviv, Ukraine

Abstract. Subject of this research paper is problem of pathogenic text as method for manipulating human consciousness and its dissemination through mass media, which due to their specific, make such manipulation most effective. Mass media have mastered metaphoric language, which can flawlessly influence readers' imagination.
We need to separately highlight our interest in text-based mass media (printed or blogs) versus audio-visual mass media (broadcast and digital), where flow of negative information seems to be magnitudes larger. In particular, paper touches specifics of written information perception.
Paper describes different negative consequences of pathogenic information consumption for human mental health, such as: lack of creative activity, depression, ambivalence, development of adrenaline addiction, etc.
In this paper, we analyze existing solutions of the problem of negative impact of pathogenic information, implemented in various countries and communities, substantiating their deficiencies in today's realities, especially considering opposition to censorship and governmental limitations.
We see resolution for the pathogenic text influence on human consciousness in person herself, in her self-awareness and ability to independently assess situation and make decisions. One of approaches to protecting society from pathogenic text without censorship, could be marking of pathogenic level of each specific article or publication. We also suggest not to limit markings to "pathogenic" or "non-pathogenic" labeling, but show percentage of text pathogenicity. By informing consumer of level of negative impact by particular text, we give him/her opportunity to decide about necessity or desire to read this text.
We propose automatic classification method based on Bayesian filters (Himmelblau, 1970), (Yerazunis, 2003).

Keywords: mental health, informational warfare, mass media, information, consciousness, influence, protection, text classification.

1. Introduction.

Radical changes that occur in political, economic and social areas of life not only of Ukraine, but of the whole world, increased activity of political life, global change of consciousness stereotypes, brought to the surface previously undetected or neglected patterns of society development, which show differently interdependence of many social phenomena.
Special place among factors that significantly influence mass consciousness, is occupied by processes of mass communication, which is one of most important institutes of modern society. They perform different functions: inform, advertise, entertain and manipulate. Obviously, they play important role in forming, functioning and evolution of social consciousness overall. Moreover, perception and interpretation by mass consciousness of most important phenomena and events happening in the country or world, is performed through and with assistance of mass media.
Growing impact of mass media in modern society aggravates problem of their negative influence. In recent years, this become a topic for wide discussions within scientific community. Impact of negative information on humans is discussed by specialists from various scientific disciplines: psychologists, sociologists, philologists, political scientists, philosophers and even mathematicians. Concept of free press, born within American culture and adopted as foundation for Ukrainian journalism, raises discussions and criticism. Necessity and expediency of putting information flows under control are debated. Many potential solutions are suggested: creating public oversight boards, control through licensing process, media product assessments. Simply put, solution is seen in putting extra regulatory barriers for publisher/broadcaster. Nevertheless, picking one of proposed solutions is deemed impossible, since all of them exhibit insufficient level of objectiveness and independence or have other technical implementation flows.

2. Related Work.

Influence of information on human consciousness was analyzed during decades following researchers: S. Maksymenko, I. Bila, L. Levchenko, Olexander Gliskov, Mykhaylo Dymshyts, D. Briant, V.A. Abramov, M.D. Venedictov, Y.N. Krapivina, T.M. Dubinina. Especially a lot of research is dedicated to influence of mass media: S.W. Kuzina, M.L. Kniazieva, Adam D. I. Kramer, Jamie E. Guillory, Jeffrey T. Hancock, Y.N. Volkov, V.V. Sarytchev, Yu.V. Borsukovskyy, V.Yu. Borsukovska. Researchers like Vidar Shtreme, B. Potyatynyk, M. Lozynskyy, G.S. O'Keeffe, K. Clarke-Pearson, S. Kryvorutchko wrote about problem of pathogenic text and

danger of using such techniques in information warfare. Works of D. Himmelblau, William S. Yerazunis are dedicated to methods and machine algorithms used for text analysis.
In this paper, we are bridging research from different areas of scientific knowledge to identify optimal and acceptable for most communities' approach to solving problem of pathogenic text influence on human mental health.

3. Results and Discussion.

It is implied that there is direct dependency between demonstration of shows with negative content and anomalies in audience behavior. Scenes of violence trigger fights or murder, erotic scenes should cause sexual activity of audience, commercials – urge to felony, etc. Usually extreme forms of social deviations – crimes, are being highlighted as results of negative impact of information on humans (Hliskov & Dymshyts, 2010).
According to the theory of psychic mechanisms (reflection – projection – objectification), described in this paper, humans can create, design, build, view objects and phenomena from known and realized elements (Maksymenko, 2008; Maksymenko, 2008). Since one of characteristic feature of human psychology is transference, analogy, building of associative series, one of the questions analyzed in the paper is: what actions would be performed by the person, what she will be capable of creating or designing, imagining and realizing, if, with everyday information flow, her consciousness will be "consuming" descriptions of awful outcomes of catastrophes, detailed descriptions (photos) of bloodied corpses, details of sexual crimes, corruption cases of governmental officials, deliberations about total decay of its country. Such technologies are used today in psychological operations (PSYOPS) carried as part of informational wars. Work (first of all intellectual), as meaningful activity (including arts), requires that its results should first be visualized in form of vision, thought or feeling (Bila, 2014). This allows to compare it with subject of work, its transformation and result of work. This way vision, which drives person activity, is realized in object form.
There are other threats in consumption of pathogenic text: e.g. informational addiction. Once experiencing emotional reaction, e.g. interest, fear, shock, stress, after consuming information (text describing scandal, tragedy or sensation), person will seek to repeat experience (Briant, 2014). According to researchers, besides strong addiction to such informational drug and inability to exist without it, people exhibit:

- readiness to consume any, even very "dirty" informational drug;
- the need to increase the dose of consumption, as well as the use of stronger drugs. In the case of informational addiction, this is expressed, for example, in increasing the time spent watching TV or the attraction to texts of a pathological nature;
- narrowing of consciousness and vital interests;
- increased insight, loss of will, responsibility and informational independence;
- the state of chronic exhaustion in the form of a syndrome of chronic fatigue.

Socially, information addiction is expressed in increased external control of people. Any addiction, including informational, is usually cause by temptation to get something with minimal efforts (Abramov, Venedictov, & Krapivina, 2001).
We need to separately highlight our interest in text-based mass media (printed or blogs) versus audio-visual mass media (broadcast and digital), where flow of negative information seems to be magnitudes larger. In particular, paper touches specifics of written information perception. Contrary to the TV, where information is served fragmented, creating illusion of real-time and diversity, in press and other text-based mass media information is structured, with well though composition, which makes it more memorizable. Information is imprinted in readers memory, creating so called "anchor", which is commonly used in neuro-linguistic programming practices (Levchenko, 2001).
This topic becomes especially acute and relevant in the context of the formation of the younger generation. Interest in newspapers and magazines (increasingly electronic) usually occurs in adolescence. This makes quality and quantity of information placed on the pages of periodicals very important, taking into account the needs of forming personality, helping to form universal values, ethic and basic components of culture (Dubinina, 2008). Today, there are a large number of youth magazines that are in great demand among teenagers among print and internet publications. The teenager, comprehending his/her "Self", prefers to read about his peers. This is foundation of popularity of many teenager magazines and publications. The content of these magazines, in general, is not diverse and educative; major topics are: music, fashion, celebrities, sex, horoscope, tests, anecdotes. Obviously, such publications do not aim at expanding the horizons, raising the level of education and erudition among adolescents. Given that reading in human life in recent years has decreased not only quantitatively but also qualitatively, decrease in intensity and quality of youth reading presents large social loss (Kuzina & (RAGS), 2007).
One can even argue not only about the social loss of reducing the number of people read during life, but also about the social danger when it comes to the quality of information. Man does not associate his depressive mood, moral decay, apathy with the newspaper read in the morning coffee. Today we live in a negative informational field. We are haunted by bad news. And it's not just in the socio-political situation, but in the very principles of working

with facts, events, their selection and presentation on the pages of print and on the television screen (Knyzeva, 2001, p. 5).

In 2013, a group of researchers conducted an experiment: within 7 days, part of Facebook users started receiving more often posts with negative information in their feed. Most of the posts had news with very emotional context. 689 003 Facebook users were subject to this experiment. Result: news affected the behavior of users, prompting them to show more often negative emotions and publish similar information. People perceived bad news as if they were happening in their own lives and became part of their own experiences. Within the scope of the experiment, the reverse theory was also validated: by filling their lives with positive news, people feel happier and more often show kindness, love and compassion (Kramer, Guillory, & Hancock, 2014, p. 5).

So, the easiest approach is to forbid everything that can lead to destructive behavior of the populationч, but it would be all too easy.

For example, the creation of public review boards, such as the German Central State Agency for Media Protection of Young Persons, covering video, audio and printed products. The Agency operates on the basis of the Law on the distribution of literature that is dangerous for young people. Serving on the Federal Review Board for Publications Harmful to Young Persons are one chairperson appointed by the Federal Ministry for Family, Senior Citizens, Women and Youth, one official appointed by each of the State governments as well as additional officials appointed by the above Federal Ministry. At least one deputy shall be appointed to the chairperson and to each of the officials.

Officials appointed by the above Federal Ministry shall represent the following facets of society:

1. Creative and performing arts.
2. Literature.
3. Book trade and publishing.
4. Suppliers of data media and telemedia.
5. Non-government bodies of youth welfare.
6. Bodies of public youth welfare.
7. School teaching.
8. Christian churches as well as Jewish and other religious communities holding the status of a public-law corporation.

The result of the board review work may be the rating of material as undesirable for youth (there is also an age gradation). This means that a rated movie, book, magazine or computer game cannot be distributed in youth camps (in kiosks, on the street, on the Internet, in libraries, etc.), they cannot be placed on shop display, selling of such materials is allowed in “adult only” sections. Violation of this provision may result in a prosecution by law (BMFSFJ, 2002).

This is a great example of an independent expertise, but it has a number of conditions that are not suitable for Ukraine. First, a large number of employees are required to support such activities. In Germany, this responsibility rests with about 900 workers throughout the country, and the rest of citizens or organizations should contact them to initiate the procedure. Secondly, the effectiveness of German laws is supported by the functioning of documents that have no legal but moral force, such as the Code of the Press, currently lacking in our society. The attitude to freedom of the press in Germany greatly differs from American one. It is not considered untouchable, but, on the contrary, is used as an instrument of social conflict therapy (Volkov & Sarytchev, 2000). Although there is no censorship in Germany, the approaches to information security here are aimed at protecting the moral and ethical standards adopted in society (fines up to 500 000 marks!), Ensuring protection of the psyche of youth, honor and dignity of citizens. And thirdly, the described scheme is aimed only at protecting children and young people from the pathophysiology. Criteria for evaluating harmfulness or neutrality of the text for an adult are absent.

Recently, our European neighbors put emphasis on “information and psychological security”, which means, first of all, the protection of the national information space in view of the morally-psychological state of the population (Borsukovsky & Borsukovska, 2017). There is a licensing system for television and radio broadcasts, in which the type of media, language, distribution area, periodicity, maximum volume and time for television and radio broadcasting are clearly regulated. From January 1, 2009, the program concept, within which the topics should be declared, their short content description and the percentage ratio to the volume of broadcasting became an integral part of the license (Hliskov & Dymshyts, 2010). However, all this, in our opinion, is a formal issue. The actual influence of the television or radio company, and especially of print media, on the audience cannot be foreseen. Under the existing licensing system, the negative or positive impact of information is practically not evaluated. No one in the program concept will declare such topics as “propaganda of violence or pornography”.

There are other ways to protect against pathogenic text. According to Norwegian laws, all newspapers, organizations whose activities involve mass media should have a responsible editor who is fully and individually responsible for the content of the publication. The role of the editor in Norway has been formed over a long period, and independence, which is an integral part of this post, is today considered one of the foundations of true freedom of expression in Norway (Shtreme). This protection and strengthening of freedom of expression consists both in

protection from interference by the state and from the owner, which secures publication from corrupt, ordered low-grade materials and pursuing ratings in order to enrich the owner. But let's note: the role of the editor was formed over a long period. Under our current conditions it will be impossible to get rid of the subjectivity, dependence or authoritarianism of one person. Europe at the end of the 20th century for several decades sought means of combating American "pseudo-culture" as the embodiment of pathogenic information. For example, France, according to some experts, deliberately initiated the SECAM television system (later in Europe, it became PAL-SECAM standard), incompatible with American NTSC (Potyatynnyk & Lozynskyy, 1996, p. 193).

In the United States, the question of the fight against pathotext originated from the socio-medical side. Here, pediatricians work with community groups and schools on implementing special educational programs, which should help children understand and interpret advertising messages, other information consumed, "immunizing" youth against the harmful effects of the mass media. Programs teaching parents how to restrict mass media consumption by children have generally proved to be highly effective in USA (O'Keeffe, Clarke-Pearson, & Counsil on Communications and Media, 2011), (Council of Communications and Media, 2011).

4. Limitations of the study.

As we see, the solution to the problem of the negative impact of information just by means of legislation or regulations is hardly possible. It should be remembered that the introduction of linguistic expertise is a potential threat to the principles of democracy and the freedom of choice. Any control body or system will provide a subjective assessment of the danger that comes from particular information. The question arises of the line between concepts of "control over negative information" and "censorship", which theoreticians of the concept of free press consider as an obstacle to freedom and progress. In addition, legal mechanisms allow only formalizing particular activity. Their implementation should be preceded by a diagnosis of the situation, which involves understanding not only what one wants to do, but also clarifying the goals and objectives of these efforts. Such diagnosis should be carried out with the involvement of psychological science.

It is possible, of course, to address pathotext by raising the moral and ethical standards among journalists (which in our opinion is a necessary foundation of journalist education and professional activity), but experience shows that, primary requirement from journalists, starting from their graduation and though entire professional life, is volume of "product sales". Of course, we use here terms "product" and "sale" figuratively, referring to the publications and media ratings. At one time, the researcher of the psychology of information society and culture, M.L. Kniazeva, noted: "By the very nature of its work, a journalist must sharpen and dramatize event to attract attention. This is a feature of professional work with the fact. But today he often cannot confine himself to mere exacerbation – in accordance with the conditions and settings of the media in recent years, it requires a certain degree of escalation of the negativity of what is happening" (Knyzeva, 2001, p. 23).

So, it would not be just to put sole responsibility for adhering to such ephemeral concepts as "ethics" and "morality" on modern journalist, who needs to survive in the market conditions of the modern economy. We say – ephemeral, because morality is hard to define unambiguously. On one hand, there are some restrictions on the activities of the media, such as the need to protect the individual's reputation from slander and image in the press, unwarranted interference with his private life. But, on the other hand, the theory of free press argues that an individual, as a public figure, must be open to criticism (Kryvoruchko). And here it is difficult to draw a clear line between "reasonable" and "unreasonable" interference with his private life.

Article 3 of Ukrainian "Law on printed mass media" (Law of Ukraine "On printed mass media (press) in Ukraine", 1993) declares that "printed mass media in Ukraine cannot be used for promoting ideas of … forceful change… of territorial integrity of Ukraine". But, as we can see from actual practice, some media quoted "democratic principles of country development" as to right to cover ideas and desire of "nation" towards splitting country into autonomies or, even, merging with neighboring country.

Law creates barrier for dissemination of indecent materials, as mean to protect social moral. But in many cases, it is very hard to define what constitutes indecency. For example, term pornography in Ukraine is defined so broadly, that relevant articles of Criminal Code simply do not work. Good attorney can call in expert, which will place line between pornography and erotic "as needed". Formal criteria for court ruling in such cases do not exist in Ukraine.

Strengths of the study:

We see solution to problem of pathotext influence on human consciousness in human itself, in self-awareness and ability to independently evaluate situation and make decisions. One of ways to protect society from pathogenic text without introduction of censorship, could become introduction of pathogenic rating of each and every post, article, composition or publication, similarly to German approach, but applied regardless of consumer age. We also suggest using percentage of pathogenic, instead of simple "pathogenic" or "non-pathogenic" labels. By informing consumer about levels of negative information, we are providing way to independently make decision about need and desire to read it.

System we suggest is somewhat similar to nutrition facts labeling of food products. Nobody should dictate people, what they should eat, but one can educate them on implications from consuming excessive amounts of fat or

cholesterol and provide information on which product contains what amount of such ingredients. Decision on consumption is made by person independently, depending on health and appetite.

For practical implementation of pathogenic text evaluation, an objective method of text classification should be developed. It should be based on psychological and sociological research and allow classification of further texts without direct human intervention. It is obvious that manual classification of all texts in all printed media, not mentioning Internet, is impossible. Besides of enormous amount of work, human intervention would introduce subjectivism in text evaluation. In addition, it could result in certain form of censorship, when motives of some individual could influence availability or acceptance of certain text in society. That is why, we are suggesting automatic method of text classification.

Automatic text classification based on certain principles is not new. Many methods and classification approaches have been researched and implemented in many areas. We consider closest and most relevant following areas: automatic determination of text authorship, based on comparative analysis with predefined library of known authors; and filtering of unsolicited email messages (spam). Spam filtering can be considered a special (partial) case of classification and filtration of pathogenic text, since people use spam filters to avoid negative emotions from excessive amount of unsolicited and irrelevant messages in their mailbox.

Spam classification approached evolved throughout entire existence of commercial Internet. First attempts were quite primitive and were based on keyword search based on predefined blacklist of words or phrases. Such approach required creation and maintenance of blacklist, which means significant human efforts in analysis of unwanted (pathogenic) messages. There was significant probability of wrong classification due to appearance of blacklisted words in neutral text. Considering versality of human language, accuracy of such approach is very low.

Last generation of spam filters are using much more sophisticated methods, which is based on statistical analysis of texts. Such filters are often called Bayesian, since they are based on Bayes theorem, named after reverent Thomas Bayes (Wikipedia), one of leading researchers in area of binomial distribution (Himmelblau, 1970).

Bayes theorem is formulated as following:

$$P(H_0|E) = \frac{P(E|H_0) \cdot P(H_0)}{P(E)}$$, where

H_0 – hypothesis, that can be made based on previous observation and before occurrence of event E

$P(H_0)$ – marginal probability H_0 (probability that hypothesis is true);

$P(H_0|E)$ – conditional probability of event E occurrence if H_0 - true;

$P(E)$ – marginal probability of event E occurrence, probability of event E occurs without any additional information

$P(E|H_0)$ – posterior (after fact) probability of hypothesis, if event E – occurred (Himmelblau, 1970, p. 54).

In case of text classification, theorem can be formulated in the following way:

Probability that text is pathogenic, if it contains certain words, *equals* probability of such words occurrence in pathogenic text *multiplied* by probability that ANY text is pathogenic *divided* by probability of these words occurrence in ANY text.

Statistical classification of pathogenic text is based on fact, that certain words and phrases have different probability of occurrence in texts with low and high pathogenic influence. For example, word “bloody” often occurs in descriptions of tragedies or crimes, as opposed to, e.g., word “refraction”. Given example is, of course, an oversimplification, since pathogenic text would contain a lot of generic words, which are often present in neutral texts as well. For correct classification, algorithms need to undergo training, when lists of words and phrases are formed through frequency analysis of pre-classified texts. To classify pathogenic texts, two bodies of texts should be compiled: one – with high level of pathogenic influence, second – with low. During training, classifier is first fed with texts of high pathogenic influence only and performs statistical analysis of words in such texts. Same process is repeated for low pathogenic text. This way two bases: one containing words (or phrases) found in high pathogenic texts, another – words from low pathogenic texts. In order to determine probability of text belonging to one of groups, following steps are performed:

1) Calculation of local probability that word (or phrase) characterizes text as highly pathogenic, using following formula:

$$P = \frac{N_{path}}{N_{path} + N_{nonpath}}$$

where:
N_{path} – frequency of occurrence of word from pathogenic base in pathogenic texts;
$N_{nonpath}$ – frequency of occurrence of word from nonpathogenic base in pathogenic texts;
To improve accuracy with low frequencies, we can use modified formula, where result is shifted towards nondeterministic value:

$$P = \frac{N_{path} - N_{nonpath}}{C_1 \cdot (N_{path} + N_{nonpath} + C_2)}$$

where C_1 and C_2 – experimentally selected coefficients, e.g. C_1=16, C_2=1.

2) Determine overall probability of text being pathogenic, using modified Bayes chain rule:

$$P_{fin_path} = \frac{P_i \cdot P_{prev_path,i}}{\sum_{j=0}^{i-1} P_j \cdot P_{prev_{path},j}}$$

where: P_i, P_j – marginal probability that i^{th} and j^{th} words classify text as pathogenic, $P_{prev_path,j}$ – result of the formula on j^{th} word.

Training of classifiers, based on statistical analysis, is done on "learning on mistakes" principle. This means that after classifier has been trained on one high pathogenic text sample and one – low pathogenic text, next stage of training starts. During second stage, program is run in classification mode and only in case of wrong classification result this text is used as next training sample. There are theoretical and empirical proofs that such approach leads to higher classification accuracy. After probability bases have been formed, classifier program can produce actual result, calculating probability that given text belongs to one of two groups, which can be treated as level of pathogenic influence (Himmelblau, 1970, p. 559).

We should note that since proposed algorithms do not have any notion of pathogenic influence internally, classification accuracy solely depends on selection of samples used for training. If for some reason, classifier produces incorrect result, e.g. classified text uses completely different vocabulary or language (all training samples contained crime descriptions and new text is pornographic), algorithm can easily be tuned, by repeating learning process with new text.

Applying such approach in practice requires extremely high demand to quality of samples. We cannot accept any subjectivism here, even by group of experts. In order to eliminate subjectivism, we can select samples using sociological research based on sample population, e.g. for city of Lviv it would be 600 people with error tolerance of ±4%.

Further research on effectiveness of statistical classifiers has shown that to increase accuracy, one has to analyze not just single words, which can be pretty neutral, but phrases. Let us consider sample sentence "The rain has stopped falling". Classical Bayesian classifier will split it into 5 elements: "the", "rain", "has", "stopped", "falling" and will perform frequency analysis of these words. Classifier based on sparse binary polynomial hashing will distinguish sixteen equal elements:

- "The"
- "The rain"
- "The" <skip word> "has"
- "The rain has"
- "The" <skip word><skip word> "stopped"
- "The" <skip word> "has stopped", etc.

<skip word> – means that algorithm will consider two phrases equal, where all words match but one in given position.

Markov classifier, which we will use for best result, will distinguish also 16 elements in this sentence, but will consider match of longer sequence of elements more relevant (William S. Yerazunis, Sparse Binary Polynomial Hashing and the CRM114 Discriminator, 2003). For that each sequence receives a weight, depending on number of words:

Table 1

Phrase	Weight
"The"	1
"The rain"	4
"The" <skip word> "has"	4
"The rain has"	16
"The" <skip word><skip word> "stopped"	4
…	

"The rain has stopped"	64
…	
"The rain has stopped falling"	256

With such weighting, a match of sequence of N words has higher relevance than matching of all shorter sequences of N-3, N-2 and N-1 words. There are experimental proofs that Markov classifier gives twice the accuracy than classical Bayesian one (William S. Yerazunis, The Spam-Filtering Accuracy Plateau at 99.9% Accuracy and How to Get Past It., 2003).
Calculation of local probability for word or word combination in Markov classifier is done according to following formula:

$$P = \frac{(N_{path} - N_{nonpath}) \cdot W}{C_1 \cdot (N_{path} + N_{nonpath} + C_2) \cdot W_{max}}$$

where W – weigh for given word (see Table 1 выше) and W_{max} – maximum weight (see last row in Table 1 выше).

5. Conclusions (and Future Work).

Paper also demonstrates that for practical implementation of pathogenic text detection, there is need for an objective method of text classification and describes method developed by the author after series of psychological and sociological researches, which allows to apply criteria for detecting pathogenic text without human intervention.
In this paper, we used CRM114 software developed by William S. Yerazunis (William S. Yerazunis, CRM114 – the Controllable Regex Mutilator, 2004). CRM114 implements multiple classifier algorithms, defaulting to Markov. As result of running this software, we receive probability of text being pathogenic, which can be used as rating published on the beginning of every printed material. Using such classifier every socially responsible journalist can mark his/her material, preventing possible harm to people, who are treating their psychological, mental and as a result physical health in responsible manner. Similar approach can be used by electronic online media and social network providers. Modern information society does not prohibit or control consumption of harmful information by citizens, but professionals should provide warnings about potential hazards of his "goods", just like it is done nowadays for tobacco and alcohol products.

8. References.

BMFSFJ. (23 July 2002 г.). *Protection of Young Persons Act (Jugendschutzgesetz – JuSchG).* Retrieved from https://www.bmfsfj.de/blob/90278/7a45fcfc6a8f06a8fcca28df3274e947/juschg-englisch-2016-data.pdf
Council of Communications and Media. (2011). Policy Statement – Children, Adolescents, Obesity and Media. *Pediatrics, 128*, 201-208.
K. D. Browne, C. H.-G. (2005). The influence of violent media on children and adolescents: a public-health approach. *The Lancet, 365*(9460), 702-710.
Wikipedia. *Thomas Bayes*. Retrieved from https://en.wikipedia.org/wiki/Thomas_Bayes
William S. Yerazunis, P. (2003). Sparse Binary Polynomial Hashing and the CRM114 Discriminator. *MIT Spam Conference.* Massachusetts Institute of Technology.
William S. Yerazunis, P. (2003). The Spam-Filtering Accuracy Plateau at 99.9% Accuracy and How to Get Past It. *MIT Spam Conference.* Massachusetts Institute of Technology.
William S. Yerazunis, P. (2004). *CRM114 – the Controllable Regex Mutilator*. Retrieved from http://crm114.sourceforge.net
O'Keeffe, G. S., Clarke-Pearson, K., & Counsil on Communications and Media. (2011). The Impact of Social Media on Children, Adolescents, and Families. *Pediatrics, 128*, 800.
Kramer, A. D., Guillory, J. E., & Hancock, J. T. (June 2014). Experimental evidence of massive-scale emotional contagion through social networks. *PNAS, 111*(24), 8788-8790.
Maksymenko, S. D. (2008). *Generic psychology*. (3rd ed.). Kyiv: Center of educational literature.
Yerazunis, W. S. (2003). *Sparse Binary Polynomial Hashing and the CRM114 Discriminator, MIT Spam Conference,2003.* Retrieved from SourceForge: http://crm114.sourceforge.net/CRM114_paper.doc
Himmelblau, D. M. (1970). *Process Analysis by Statistical Methods.* John Wiley & Sons Inc.
Volkov, E. N., & Sarytchev, V. V. (2000). Means of mass illusionistics, part 2. *School psychologist, 46*.
Levchenko, L. (2001). Psychological pecularities of mass media operations. *Human and Politics, 2*, 103-109.
Bila, I. M. (2014). *Psychology of child creativity.* Kyiv: Phoenix.
Hliskov, O., & Dymshyts, M. (2010). *License for the headache. On harm inflicetd by mass media and ways to combat it*. Retrieved from http://alks.guns.ru/forummessage/91/147992-5.html
Briant, D. (2014). *Basics of mass media influence*. Moscow: publishug house Wiliams.

Abramov, V. A., Venedictov, M. D., & Krapivina, Y. N. (2001). Ecological issues of TV broadcasting. *journal "TKT", 9*.
Kuzina, S. V., & (RAGS). (2007). Role of mass media in shaping cultural priorities of youth. *Authority, 9*, 54-56.
Knyzeva, M. L. (2001). "Dark culture" and person of light. *Pedagogics, 3*, 97-101.
Borsukovsky, Y. V., & Borsukovska, V. Y. (2017). Recomedations of categorization of information with restricted access. *Modern information security, 4*.
Shtreme, V. (2005). *Norwey: Independance and responsibility of an editor. Threat of punishment as guarantee of freedom.* Retrieved from http://www.sreda-mag.ru/mag/45/index.phtml
Potyatynnyk, B., & Lozynskyy, M. (1996). *Pathogenic text.* Lviv: Missionary.
Law of Ukraine "On printed mass media (press) in Ukraine". (1993). Retrieved from Web-site of Parliament of Ukraine: http://zakon2.rada.gov.ua/laws/show/2782-12
Dubinina, T. M. (2008). Children in the Internet. *ICT in education, 14*, 4-5.
Kryvoruchko, S. *Generic prinicples of ethics in their application to journalism.* Retrieved from Current issues of mass communication (Issue 3), Electronic library of Institute of Journalism: http://journlib.univ.kiev.ua/index.php?act=article&article=361

The Dark Side of Life Success: How to Achieve Results and Preserve Mental Health

Iryna Borovynska
Institute for Social and Political Psychology of NAES of Ukraine, Kyiv, Ukraine

Introduction. Current life requires us to be productive, effective and to create a picture of well-being for our environment. Mass media is full of pictures of wealth, success, expensive goods and other attributes of an iconic lifestyle. Modern people try to apply those beautiful illustrations to everyday life and to achieve life success in the form created by somebody else. Unfortunately, most people are not able to reach the desired depicted heights. As a result, people face disappointment, experience decreased self-esteem, frustration et cetera. These outcomes are only the tip of the iceberg. The worst in all this situation is that pursuit of this type of life success can lead to mental health problems.

Purpose. The purpose of this theoretical research is to define the place of mental health in the structure of life success, to identify the types of possible mental health problems which occur because of failed attempts to achieve a particular style of life success, to identify possible ways to prevent mental health problems and consider supports for people in the process of achieving life success.

Design/Methodology/Approach. The literature study and analysis were conducted to discover answers to the main questions of the paper and reach the main goals of this theoretical research.

Results. A theoretical review of the concept of mental health made us understand revealed that both physical and mental, are not limited to the absence of disease. For instance, good physical health is associated with feeling good, energy, sprightliness, efficiency. As for mental health, there are many marks that can help us understand it better. The most common characteristics of mental health are: an ability to accept and have a positive attitude towards oneself; personal autonomy; self-actualization, development, self-realization; ability to cooperate with others, empathy, humanity; ability to fulfill life tasks, self-regulation, et cetera.

The place of mental health in the structure of life success cannot be underestimated. If we consider that "there is no health without mental health" and health is a main component, without which the whole concept of life success is damaged, we can conclude that good mental health is one of the essential conditions for successful life.

Some strong personality traits and even mental disorders can provoke achievement of success for some, but we cannot consider such results as a life success, because the lives of such persons are imbalanced. Excellence in some spheres may be compensation for absence of results in others. When talking about life success, we keep in mind more or less balance in all the important life spheres. Striving for life success or an iconic lifestyle without reaching the desired heights can lead to a variety of adverse outcomes, among the "light version" of which are disappointments, a decrease of self-esteem, frustration, doubts, self-distrust, stress, et cetera. The "heavy artillery" appears in depression, drug and alcohol addiction, neurotic disorders, somatic disorders, anxiety disorder, psychosis and, et cetera.

One of the essential issues for psychologists, coaches, social workers and other specialists of a supportive sphere is the question of prevention of mental health problems among people who would like to achieve life success. To our point of view, such work should be started from the individual identifying what life success is for him or herself. The next step should be dedicated to setting goals which are specific, measurable, achievable, relevant and time-bound. Focused attention should be put to checking of the goals verity and creating a supportive environment should be part of this task. The strategy and tactics of achieving success should also be considered and worked out during the sessions.

Limitations and strengths of the study. This theoretical study can be used in hypothesis setting and as a background for further empirical research. The observation of the other "unattractive" side of life success is made from different angles, but at the same time, the whole paper could be divided into parts each of which could be deepened.

Practical/Social value. This theoretical research highlights the problems which can occur in the process of trying to achieve life success and provides some practical advice which can be used for the prevention of mental health problems in this pursuit.

Originality/Conclusions. Striving for life success is considered a positive process in modern society. Moreover, successful life is popularized in mass media as something desirable, good and attractive. Therefore, for ordinary people, the picture of successful life is full of bright colours, positive emotions, and achievements. Attempts to reach a lifestyle often ends with failures. Further, ineffective attempts deepen the negative effects of failures and may lead to mental health problems. For this reason, it is crucial to highlight the dark sides of seeking the popularized version of success achievement and to provide specialists of the supportive sphere with tools to help their clients realize what life success is for them personally and in the process prevent possible mental health problems.

Keywords: life success, structure of life success, health, mental health, mental health disorders.

Mental Health: Dislocation of the Concept in the Small Group

Lidiya Chorna, Pavlo Gornostai, Halyna Tsyhanenko, Olha Pletka,
Olha Korobanova, Viktor Vus
Institute for Social and Political Psychology, National Academy of Educational Sciences of Ukraine,
Kyiv, Ukraine

Introduction. There is evidence that a small group may be a microcosm of larger social environment and as such may have both negative and positive impacts on the mental health of any individual participant in the group. In the processes of interaction in the group there are processes that affect the mental health of a member of the group, and with the flow of group dynamics are converted into certain group phenomena that are directly observed in the group's activities.
The purpose of the study: the approximation of concepts reflecting the complex life situations with which an individual cope and which are reflected in mental health, to the context of the functioning of a small group. In the process of group interaction the tension and stress experienced by an individual, the conflict situation, the crisis and the trauma person meet, are becoming a certain group phenomena. These phenomena should be identified depending on the increasing complexity of the socio-psychological situation in the group.
Objects of observation: psychotherapeutic, educational-therapeutic; the total number of groups is 14, 175 осіб. Educational-therapeutic groups combine educational process and therapeutic relationships. Duration of the included observation (as a group coach) was from 200 to 300 hours in each group.
Research method: included observation of group dynamics in complex life (social) situations, analysis and classification of group phenomena in accordance with the increasing complexity of situations.
In the process of group work, at least 10% of the working time for the group was devoted to special work with group dynamics (discussion, game, role modeling, work with transfers in the group). The mode of work of one group was 18 hours (2 days) once a month, during 2 years. The participants were presented in the following roles: students, clients of psychotherapy, psychologists-consultants, participants in group processes. The following research questions were studied: how does group and other group identity affect group dynamics and integrity of the group? How does the group behave, if there is not enough resources to solve the current group tasks? What is the relationship between conscious and unconscious factors in group processes, depending on the complexity of group tasks? What protective mechanisms does the group use to overcome the negative states? How does a group behave in case of a group injury (serious conflict, split group, party death, traumatic events in society)?
The study was approved by the Ethics Committee for Research of the Institute of Social and Political Psychology National Academy of Sciences of Ukraine.

The social and practical significance consists in determining the group phenomena of interaction as markers of the unhealthy group and its members, as well as strategies for overcoming the consequences of the actions of these negative phenomena.
Approach. Group phenomena are social and psychological phenomena that are directly observed in the activities of the group, but some members of the group are not sufficiently aware of their integral, without division into cognitive and connotative components of the psyche, manifestations in the process of interaction between them. Overcoming strategies are tools for regulating interaction in a group aimed at solving the challenges of its activities; in the strategies presented above all the cognitive component of the regulation of interaction.
Similar to a number of concepts reflecting complex life situations with which an individual cope (tension, stress, conflict, crisis, trauma) (Vasilyuk,1990), we approximate these concepts to the context of her immediate social environment, that is, a small group.
In the process of observation, a partial recording of individual parts of the group (10-20 hours per group) was conducted with the decipherment and analysis of interaction transactions, as well as the retroflexive notes of the trainer after the sessions of the group work.

Results. Group tension is reflected in group differentiation, the emergence of micro-groups, group resistance (sabotage by the group performing certain activities, rejecting new forms of interaction). The tension is caused by external and internal factors related to the group: conflict with another group, role imbalance within the group, inconsistency of group norms of interaction of the social situation that has changed. Inter-group favoritism and intersectional discrimination temporarily reduce the sense of tension.
Group conflicts also lead to the emergence of specific phenomena: in the external field of interaction – to group polarization, deprivation, etc., and in the internal – to parallel group processes that arise when the group becomes unable to handle everyday tasks and new problems, to which it is not ready for. The reasons for this are: in order to avoid "dangerous" topics by the members of the group; the impossibility for them to take a meta-position and see the real problem, having risen above personal interests, which come into confrontation with the interests of the group; the impossibility to accept certain realities (own erroneous decisions, values that have ceased to be progressive, new conditions for the existence of the group).

In the future, another crisis occurs in the group – a socio-psychological state characterized by a deficiency of internal resources to solve their problems. In group dynamics, static equilibrium begins to predominate over dynamic equilibrium. To maintain equilibrium, the group increases the intensity of the interaction. Information and emotional exchange between the conscious and unconscious spheres of the group psyche is broken, much of the information and emotions are not recognized and processed. The beliefs of its members are growing uncritically, the metaphorical positioning of their group in social space and symbolism in interaction (for example, the "Russian spring" for supporters of the "Russian world"), the "ideology" of the group is fixed. Sensual perception of reality is filtered by the ideological instructions of the group. The protective mechanism of rationalization is updated.

To reduce tension and release accumulated negative energy, a parallel process is formed in the group, in which the actual group problems are "solved", but in fact the subject of the solution lies in a completely different perspective. Such a process is a pseudo-solution, because not problems are discussed and worked out, but their consequences or other related issues important during the crisis. However, the members of the group have a complete illusion that there is progress in the development of group relations. The group deals with small problems that are considered to be the cause of discontent; looks for "guilty" (both inside the group and outside) creates a mythology that replaces the undesirable (unacceptable, dangerous, hostile) reality; actualizes powerful group defense mechanisms, translates problematic information into a group unconscious (Bion, 1961).

These processes not only are indicators of the group's ill social health, but also cause violations of the psychological health of the members of the group caught in the focus of group conflict. The problems of neurotic and psychosomatic varieties predominate. With the increasing complexity of the situation in the group, the number of non-rational strategies to overcome them grows: avoidance and focusing on emotions.

Group trauma occurs when the whole group as a subject receives the traumatic experience, and not just each of its representatives as a separate person. There is a need in the group to cope with this experience. Constructive means of overcoming it are: collective experience of trauma in any form (group rituals dedicated to traumatic events, collective emotional discussion, collective creativity) (Kellermann, 2007). A good form of overcoming is the creation of group stories and group mythology (or a combination of them), if traumatic experience is transformed into a non-traumatic narrative, it is acceptable not only for discussion in the group, but also for translation into the external social environment. The incomplete (insufficient) means of overcoming group trauma include the actions of group defense mechanisms (displacement, negation, regression, compensation) that weaken or level the symptoms, however – they do not solve the problem, but rather "preserve" it.

Unconstructive means of overcoming include group transfers and countertransferences, bullying and other aggressive group overcoming scenarios developed by the group during previous trauma (it is both an aggression against individual members and external social actors). They turn the process of trauma treatment into the plane of conflict problems, in which other protective mechanisms (projections and projective identifications) are involved than with its compensation. In general, depending on the prevailing methods of overcoming group trauma, considered in the "active-passive" and "aggressive-peaceful" dimensions, four strategies for overcoming them can be distinguished: 1) progressive (active and peaceful); 2) active aggressive; 3) passive aggressive; 4) regressive (passive or depressive).

Groups that are injured and have conflicting, hard-articulated, complex emotions (injustice, disgust, shame, guilt), become psychologically closed and do not allow "strangers" into their inner world. As a consequence, the distance between the members of the group decreases, the collective identity absorbs the individual. Members of the group use group identity as compensation for the lack of a mature identity and deindividualization and social laziness in the group is growing.

There is a group illusion: "The group can do everything, but its individual member can do nothing". An illusory group reality is formed that incorrectly reflects and interprets the surrounding world (for example, "bright future", "ideal world"). These groups delegate secrets to successors. Their history is incomplete, it is full of accusations and insults.

The consequence of group trauma can be group depression, which is the stagnation of group processes. The group does not solve the problems, turning them into "frozen" conflicts, loses the prospect of its development. Group depression should be understood not as a decline in the emotional atmosphere of the group, but primarily as a lack of dynamic processes, as the cause of the degradation of the group.

With the increasing difficulty of the situation in the group (from tension to trauma), the group phenomena that were presented at its earlier stages do not disappear, but continue to manifest.

Conclusions. Thus, the group in the process of functioning reflects complex social situations. At the same time, being in such situations, the group can produce them themselves. As a result of the action of group phenomena, which played a protective role at certain stages of its development, the group ceases to adequately perceive the social reality that has changed, and loses its adaptive potential. This is brightly manifested in group egoism, competitive-conflict stereotypes and barriers of interaction.

In contrast to the above, a number of other group phenomena reflect group interaction mechanisms that promote adaptation processes, relieve tension, resolve conflicts, work on traumatic experience and exit from crisis: group

facilitation, social support and affiliation, the group's conscious identity (as opposed to group identity), synergetic team interaction, social responsibility. The latter reflects the willingness of the members of the group to make decisions based on the realization of how certain actions will help them, the group and society as a whole.

Keywords: mental health, mental stress, small group, social conflict, social situation, trauma.

References.

Bion, W. R. (1961). *Experiences in Groups and Other Papers*. London: Tavistock Publication.
Kellermann, P. F. (2007). *Sociodrama and Collective Trauma*. London: Jessica Kingsley.
Vasilyuk F. (1990). Levels of Construction of Experience and the Methods of Psychological Science. *Journal of Russian and East European Psychology, 28* (5), 69–87.

Emotional Intelligence and Caring Behaviors of Mental Health Nurses in Greece

Anneta Christidou[1], Panagiotis Plageras[2], Evangelos C. Fradelos[3], Konstantinos Tsaras[4], Dimitrios Papagiannis[5], Ioanna V. Papathanasiou[6]
[1] Psychiatric Hospital of Thessaloniki, Thessaloniki, GREECE
[2] Department of Medical Laboratories, TEI of Thessaly, GREECE
[3] Psychiatric Department Athens General Hospital for Thoracic Diseases "Sotiria", Athens, GREECE
[4] Nursing Department, TEI of Thessaly, GREECE
[5] Department of Medical Laboratories, TEI of Thessaly, GREECE
[6] Nursing Department, TEI of Thessaly, GREECE

Introduction: Emotional intelligence (EQ) is a personality feature that encompasses moods and perceptions about the ability to understand and use the feelings both of himself and those of others with a useful and efficient way in a personal, social and professional level. The effect of Emotional Intelligence in the field of Mental Health is of particular interest, as it is an intensely emotional field. The nursing staff has as an object the health care of people with mental problems, where emotions and their management are a key factor. For mental health nurses to be effective, it is appropriate and necessary for them to have emotional and communicative skills, which are associated with the level of Emotional Intelligence.
Purpose: The purpose of this descriptive study of correlation of the synchronic type is to investigate the level of Emotional Intelligence (EQ) and Caring Behaviors exhibited by nurses in mental health, as well as the relationship with their individual characteristics.
Methodology: The sample consisted of 191 nursing staff members of the Psychiatric Hospital of Thessaloniki. The participants completed a questionnaire that consisted of three parts: The first part was concerned with the recording of demographic characteristics of the participants; the second part was related to the questionnaire "Trait Emotional Intelligence Questionnaire-Short Form" (SF-TEIQue) for assessing the degree of emotional intelligence. The third part investigated the caring behavior of nurses and it used the Caring Behaviors Inventory scale (CBI). Descriptive statistics such as frequencies, means, percentages and standard deviations have been utilized. Inferential statistics such as pearson r correlation and regression analysis have been used to determine correlations between relevant variables. Level of significance accepted was $p < 0.05$.
Results: The results showed that the majority of participants were female and the average age was 44.69 years. According to the total but also the individual scoring of the TEIQ scale, Emotional Intelligence was found to be at a relatively high level (total mean 4,92) and associated directly ($r = 0{,}448$, $p < 0{,}001$) with the frequency of Caring Behaviors of the CBI scale which was found to be at a fairly high level with (total mean 5.08).
Conclusion: The study findings showed, as the overall Emotional Intelligence increased, the frequency of occurrence and the importance of Behavioral Behaviors increased.

Keywords: emotional intelligence, mental health nurses, caring, caring behaviors, nursing.

The Mental Health between Epigenetics and Individual Beliefs

Dramnescu Marin
Bucharest Academy of Economic Studies, Bucharest, Romania

Abstract. Mental health is an integrative concept that is not limited to dysfunctions or accentuations of psychic processes or mechanisms of thought. The research effort focused on the idea that mental health is a functional optimum found at the intersection of cellular behavior, the physical environment, the external environment, with all its subtypes, the environment in which the individual manifests itself and the subjective, psychological environment, dominated mainly by unconscious behavioral routines, beliefs, values, and ultimately individual perspective on life. Mental health represents and manifests itself as an emerging process resulting from the correlated functioning of the biological, physiological, and in particular cellular mechanisms, the various, random and / or permanent influences and stimuli of the physical, social and professional environment and the superior motivational structures of the type of beliefs and individual perspective on life. Epigenetics is a contemporary discipline derived from genetics that includes the environmental context as an important part of heredity. Currently, this discipline strongly influences a variety of areas, including medicine, psychiatry and psychology.

Keywords: mental health, cell behavior, epigenetic approach, beliefs.

1. Introduction.

It is unanimously accepted that the becoming of a person is an effect of the interaction among genetic factors, environmental factors and educational factors. Their share in the individual's development differs according to the stage of the development, but their influence on mental health in particular and on the formation of personality in general is permanent and becomes manifest throughout the ontogenetic.

The attempt to understand how these factors influence the construction of personality, as a flexible and permanently adaptable structure to the environment, whether externally, internally or subjectively, has enabled more or less rigid positions, emphasizing either genetic or hereditary use, or the role of the environment in the ontogenetic becoming of the individual, or the importance of education, as an essential vector in the multidimensional formation of the individual.

In line with these beliefs, for example, more than half a century, and between 1880 and 1940, it was believed and constantly attempted to demonstrate that heredity determines race, mental health, behavior and intelligence, or that it is responsible for most dysfunctions either biological or psychological.

But the concepts of *heredity* and the *environment* as contrasting terms were introduced for the first time by Francis Galton in his English Men of Science: Their Nature and Nurture (Galton, 1874). Galton's approach was favorable to heredity, arguing that "no enabling environment can overcome the predispositions of an unhealthy physique, an intellectual deficit or a predisposition to brutality" (Galton, 1874, p. 18). Following these ideas, Nature reports that "a higher number of studies suggest that biology exerts a significant influence on beliefs and behavioral patterns open to political attitudes, suggesting that "genes may have an impetus on people's attitudes when discussing abortion, immigration, the death penalty, and pacifism" (Buchen, 2012).

Based on these approaches, subsequent debates and research on human behavior in general have been dominated and driven by various conceptual pairs such as *hereditary* and *behavioral*, *innate* and *acquired*, or *genetics* and the *environment* (Buchen, 2012). However, in the public discourse, the heredity-environment dichotomy remains unchanged, despite the efforts made by biologists through declarations over the past nine decades that this combination of words is redundant and confusing. Scientific papers, studies or scientific articles that have a *heredity* and the *environment* in the title, or which relate to the research on the interrelationships between the two concepts, are more and more common.

2. Epigenetics and mass media.

Epigenetics is a contemporary discipline derived from genetics that includes the environmental context as an important part of heredity. Currently, this discipline strongly influences a variety of areas, including medicine, psychiatry and psychology (Hollar, 2016). Taking into account the impact it has in these areas, epigenetics deeply influences the education sciences by decrypting the links between genetics and neuroscience (Mulder, Rijlaarsdam, & Van IJzendoorn, 2017).

Epigenetics is associated with the long-term evolution of human development and physical and mental health. It is therefore essential to better understand the links between epigenetic processes and gender-environment interaction, early development and education, and its impact on mental health.

Epigenetics is a branch of genetics that studies the variation of phenotypic traits that are caused by aspects of the environment, these changing the behavior of genes and affecting how cells decode them, that is, epigenetics is the science that studies gene changes by the things that happen in life everyday – so we can understand a series of phenomena, things or situations that can be applied individually in order to ensure a quality life

The purpose of epigenetics is to investigate how much of the behavioral variation of a population sample depends on genetic variation, using studies on twins and adopted individuals (Plomin et al. 2013, p. 21).

The popularity of genetic language in day-to-day communication is rooted in the publication in 2005 of the results of the Human Genome Project, a project launched in 1990 to sequentially identify the sequence of over 3 billion pairs of nitrate bases constituting the human genome, approximately 25,000 genes in the human genome both physically and functionally. The objectives proposed in the *Human Genome* project were extremely ambitious. In the traditional biological thinking system, it is believed that the body needs a gene to provide the mock-up of each of the over 100,000 proteins available to the body. To this is added at least 20,000 regulatory genes which determine the activity of the genes encoding the proteins. Consequently, it was concluded that the human genome should contain at least 120,000 genes, located in the twenty-three pairs of chromosomes. It has been discovered, however, that the entire human genome is formed of only about 25,000 genes (Pennisi, 2004). For example, the *Caenorhabditis elegans* worm has a body built on a precise pattern consisting of exactly 969 cells and a simple brain with about 302 cells. The genome of Caenorhabditis has about 24,000 genes, while the human body, consisting of over fifty billion cells, contains only with 1500 genes more than the non-invertebrate microscopic worm which barely has a thousand cells. *Drosofila melanogaster* has 15,000 genes (Blaxter, 2003). Thus, the mite, which is much more complex than the Caenorhabditis worm has 9,000 genes less. As far as rodents are concerned, the results of comparative research projects show that humans and rodents have approximately the same number of genes! (Bruce, 2017, p. 66-68) There is the temptation to refer to the human genome as the "instruction manual", forming the representation of a human body that could be assembled using the components and instructions provided (Alexander D., 2013, p. 16).

This situation is exaggerated by the media that unveils the discovery of new genes involved singularly and declared responsible for various behaviors: "a study made on adolescents reveals the gene for happiness" (New Scientist), "The Science of Stress – Does Your Child have the "Worry" Gene?" (The Times) and so on.

In fact, the gene is just a segment of DNA encoding a protein or RNA regulatory molecule. There is no gene coding any kind of behavior in any living organism, not to mention the human body (Alexander, 2013, p.19). The problem of such a dichotomous language is that it promotes and reflects a fragmented image of the human being in which genetic factors and environmental factors are in opposition, excluding interdependencies between them. The accessibility of information and the vulgarisation of these through the media lead to endless "debates about hereditary factors vs. the factors acquired" as if the two categories of factors were in competition to assert either the supremacy of heredity or the environment. Contemporary biology does not support the idea that genes are "a manual of procedures" that determine the becoming and ultimately lead to the destiny of the individuals.

3. Genetics and the environment.

Minimizing the importance of the environment in relation to heredity has caused an exacerbation of genetic determinism under the belief that genes "control" the biological system. This conviction not only led to a misallocation of research funds but also changed the way life is understood and appreciated in general. In the situation where there is a belief that genes control life and that genetic inheritance from the moment of conception is definitive, individuals can be considered victims of heredity by directly influencing their mental health (Bruce, 2017, p. 67)

Since the beginning of the genetics era, programming has been created through formal education to accept that individuals are subject to the power of their genes. Thus, a permanent fear was induced in the form of a continuous stressor, that one day the genes will activate at some point in the form of incurable diseases such as cancer or schizophrenia as in the case of mother, brother, sister's father, etc.

According to this type of understanding, many people justify their poor health not by a combination of mental, physical, emotional and spiritual causes, but by the non-synchronization of the bio-chemical mechanics of their body. On this background, for example, if one finds that some children are less receptive to adult control then medication is used to correct some supposed chemical imbalances, avoiding investigating what actually happens in the body, the psyche, the beliefs and their spirit.

Certainly, some Huntington-type diseases, beta-thalassemia and cystic fibrosis can be fully attributed to a single faulty gene. But single gene disorders occur in less than 2% of the population. But diseases such as diabetes, heart disease and cancer are not the result of a single gene but of complex interactions between several genes and environmental factors (Bruce, 2017, p. 67). The media information claiming that there are genes that are responsible for many ailments ranging from depression to schizophrenia have to be taken with reluctance.

Many researchers have identified various links between different genes and different diseases but they have rarely found that a trait or disease is caused by a single gene. Confusion occurs when the media repeatedly distorts the meaning of two verbs: correlating and causing. One is something to relate to a disease, *to be correlated* with a dysfunction, and another is *to cause*, to determine a disease. Causing a disease involves an action that supposes targeting and control (Nijhout,1990).

What does the genes activate? The answer was expressed in 1990 in the work Metaphore and the Role of Genes and Development (Nijhout,1990). The author argues that the idea of genes that control biological systems has been repeated so often and so long that the researchers have forgotten that it is just a hypothesis and not a truth. In reality, the idea that genes control biological systems is a supposition that has never been proven and is undermined by the latest scientific research (Nijhout,1990).

Following research in organic chemistry, it has been discovered that cells are composed of four types of molecules: polysaccharides (complex sugars), lipid (fat) nucleic acids (DNA and RNA) and proteins. Although normal cell

function requires all four molecular types, for the living organisms, proteins are the fundamental component. Mainly cells are an assembly of units that produce proteins. Thus a way to understand a trillion cell body is given by a representation of a protein product tool. More than 100,000 types of protein are needed for the body to function.
In the last decade, research in epigenetics has established that gene transfer patterns through genes are not definitive at birth. *Genes do not provide predestination*. Environmental influences, including diet, stress and emotions, can alter these genes without modifying their basic layout. Moreover, recent studies in epigenetics have revealed that these changes can be passed on to future generations (Reik and Walter, 2001, p. 21-23) just as DNA patterns are transferred through the double spiral (Surani, 2001, p. 122). The discoveries in the field of epigenetics have extended and nuanced discoveries in genetics. After 1940, biologists have dealt with DNA isolation inside cells to study genetic mechanisms. During this enucleation process, the nucleus was extracted from the cells and the chromosomal content formed by 50% of the DNA and 50% of the regulatory proteins removed. But research has not focused on proteins and their role, they focus only on DNA. The results of the research were so incomplete and flawed because, in the chromosome, DNA forms the nucleus, but the proteins cover it, making it impossible to read. When genes are covered by protein, DNA information cannot be read. It becomes available for reading by separating the DNA double stranded protein by *a signal from the environment*. Or as a result of *activating a belief*. Once the DNA is unveiled the cell makes a copy of the exposed gene. As a result, gene activity is controlled by *the presence or absence of regulatory proteins which in turn are controlled by environmental signals.* In other words, the flow of information is triggered by an environmental signal, it goes on to a regulatory protein, reaches DNA, RNA, and finally a protein. From this angle, the contribution of the environment is impossible to be measured (Dennis, 2003, p. 687).
What is inherited from parents is not simple DNA, which can do nothing alone, but a complex system of DNA and RNA, proteins and nutrients that work together to regulate the growth and division of a cell. The human ovule before fertilization contains at least 3,000 different proteins and thousands of RNA molecules involved in gene expression (e.g., how genes are activated or inactivated). All of these components are integrated to organize the development of the fetus. The genes work and are influenced by signals from the extracellular environment. In the zig-zag state, DNA does not trigger development, but inherited proteins from the mother are the ones that determine what kind of DNA genes are to be activated or inactivated. Proteins are the elements that cause genes to produce the integrated complexity of life (Alexander, 2013, p. 20).

4. Heritability and hereditary.

The heritability of a particular feature is a concept that is often misunderstood or misinterpreted. Until 1940, *heritability* was synonymous with inheritance. Since then, it has gained a new, technical, more difficult to understand meaning. Understanding this concept explains why the media misreport genetic discoveries. Heritability is defined as the proportion of the variance of a trait that can be attributed to genetic variation in a population sample. Heritability can be expressed as a percentage, and this is mistakenly interpreted as referring to the share of the inheritance of a feature, when in fact this percentage represents *the total percentage of variance in a population sample.*
Heritability or heredity refers to sets of genetic variants we receive from our parents and refers to individuals. Heritability in its technical sense refers to the level of relevant genetic variation within a population. Unfortunately, this word often passes from one sense to another even within the same text, so when it comes to the value of 50% of the credibility it gives the impression that a particular feature of an individual is caused in proportion of 50% of its genes and 50% of its growing environment, which is not the true meaning of hereditability.

5. Epigenetics and mental health.

The perspective that epigenetics offers on understanding how mental health is impaired or strengthened becomes coherent and integrative. The mental health of the individual is dependent on interdependencies and inter-influences between genetic, environmental and educational factors.
Mental health is an integrative concept that is not limited to dysfunctions or accentuations of psychic processes or mechanisms of thought. Mental health is a functional optimum at the intersection of cellular behavior, the intra and extracellular environment, the physical environment, the external environment with all its subtypes, the environment in which the individual manifests, the type of diet and the subjective, psychological environment, mainly dominated by unconscious behavioral routines, emotions, feelings, beliefs, assumed values, and ultimately individual perspective on life.
Mental health represents and manifests itself as an emerging process resulting from the correlated functioning of the biological, physiological, and in particular cellular mechanisms, the various, random and / or permanent influences and stimuli of the physical, social and professional environment and the superior motivational structures of the type of beliefs and individual perspective on life.
In recent years, a lot of new information has emerged about epigenetics, which allows a clearer understanding of how development trajectories can have adaptive or unadjusted endpoints. Experiences and environmental exposures act on genes such as a dimmer switch to increase or decrease gene expression, the amount of gene product (RNA, protein) that generates in response to a particular environment. It is believed that this regulates neurodevelopment underlying learning, behavior, as well as mental and physical health.
In the process of development, the brain is vulnerable to the negative effects of social exposures of the environment, especially during its early development. In contrast, careful, stimulating and sensitive adult care plays an important

role in the harmonious development of children. It should be noted, however, that not all children react in the same way to early experiences, whether positive or negative. Individual differences with hereditary emphasis may be the explanation behind different responses to environmental stimuli. The effects of the experience on modifying genetic expression can also be passed on to the next generation. Individual experiences and beliefs affect the extracellular environment through hormonal involvement and which stimulate in an implicitly specific way cell and genome functioning as well as the whole development process early on. Care, stability and love help build a solid foundation for brain development, ensure an optimal level of physical and mental health throughout life, normal learning and social and emotional development. Similarly, adverse environments and distorted adult relationships, including poverty, abuse, neglect, stress and trauma, can also change the expression of genes involved in the development and regulation of the nervous system. The risks and effects of negative experiences from childhood are the highest among those living near, below, or below the poverty line.

While many molecular mechanisms control gene expression, epigenetic processes provide a pertinent and innovative argumentation on how and in what social conditions the genes and the environment intersect. Evidence from a variety of studies suggests that epigenetic changes lead to many synaptic changes. For example, stress-related psychological states, suicidal ideation and attempts, depression, post-traumatic stress disorder, schizophrenia, and various brain changes due to psychoactive and antipsychotic drugs have led to epigenetic changes. Epigenetic processes can also transmit risks and disturbances from one generation to another, still underdeveloped and validated. Risks and protective factors can be passed from parents to children through behavioral and social factors or eventually through inherited epigenetic traits.

Individuals develop throughout their life various ideas and principles of life that ultimately influence their behavior, how to act and think. These ideas, heavily rooted in the human psyche, gain strength and become beliefs (beliefs). Individual beliefs and weltanschauung of each individual are formed throughout ontogenetic development as a result of the environmental influences they have to deal with or as a result of their own experiences and the interpretation of these experiences. Another way of forming and imposing them is given by knowledge. Knowledge is the main way to control the constraints of the environment and ensure professional and social progress, as well as the stability of mental health. Individual beliefs can also be the product of the results obtained. Individual success can fuel confidence and the conviction that it can be repeated. Last but not least, individual beliefs can become stable with imagination. This is possible because, in its functioning, the brain does not distinguish between imagination and reality, so that everything that is transmitted to it through thoughts or images tends to be materialized or translated into experience.

Convictions or beliefs alter the extracellular environment by releasing hormones (cortisol adrenaline, histamine, testosterone, estrogen, dopamine, vasopressin, oxytocin, serotonin). Cellular behavior is modeled by their reception at cell membrane level, which promotes physical or mental illness or physical recovery.

Conclusions.

From the very beginning of development, genes exist simultaneously in two environments: the micromedium in the cell and the macromedia outside the cell, primarily the mother, then the growing fetus. DNA and these two types of environment (intracellular and extracellular) interact from fertilization. Many complementary processes take place in parallel, undermining the language of causal relationships.

The child's brain is not a miniature version of the adult brain but a system that self-organizes and assembles correctly if environmental inputs (light, sound, language, touch) are available at the right time. Continuing along the trajectory in adulthood development, the integrated interaction between genes, micromedium and macromedium becomes more controversial.

The growing individual makes essential choices about lifestyle, choices that bring epigenetic changes to DNA, activating and inactivating genes. If the genome is the hardware of the inheritance, then the epigenetic regulation is the software, the changes being kept in the cell division. Some can be inherited even over two generations. Epigenetic regulation provides an essential communication path that starts from macromedium through the micromedium and reaches the genome. The lifestyle choices we take can be passed on to the next generations.

The integrated approach, that of the development is that 100% of the phenotype of any complex organism involves genetics and 100% involves the environment. When we are born neither are we like "blank sheets of paper" nor are we the product of a manual of genetic instruction.

References.

McMahon B. (2013), Body and Soul, in *The Times*, 9 March, p.4
Blaxter M. (2003), Two worms are better than one, in *Nature* 426, p. 395-396.
Bruce H. L., *Biologia credinței*, Ed. For You, București 2017
Denis A., (2013), *Genes, Determinism and God*, Cambridge Press, Volume 22, No 4, 2013,
Dennis C. (2003), Altered States in *Nature*, 421, p. 686-688,
Chakravarti A., and Little P,. (2003), Nature, nurture and human disease, in *Nature*, 421, p.412-414,
Cloud J., (2010), Why Your DNA Isn't Your Destiny, in Time.
Galton F., (1874), *English Men of Science: Their Nature and Nurture*, Macmill & Co, London.
Goodman, L. (2003), Making a Genesweep: It's Official! in *Bio-IT World*.

Nijhout H.F., (1990), Metaphore and the Role of Genes and Development, in *Bioessays*, 129(9), p. 441-446.
Hollar, D. (2016). *Epigenetics, The Environment, and Childrens Health Across Lifespans*, Berlin: Springer.
Buchen L., (2012) Nature, 490, pp.466–468
Mulder, R. H., Rijlaarsdam, J., and Van IJzendoorn, M. H. (2017), DNA Methylation: a mediator between parenting stress and adverse child development? in *Parental Stress and Early Child Development Adaptive and Maladaptive Outcomes*, eds K. Deater-Deckard and R. Panneton (Berlin: Springer International Publishing), p. 157–180.
Pennisi, E., (2004), *Researchers Trade insights About Gene Swapping*, Science 305, p. 334-335. Pearson, H., Geneticists play the numbers game in vain, in *Nature* 423, p. 576,
Plomin R., et al, (2013) *Behavioural Genetics*, Worth Publishers, 6th edn, p 21
Reik. W and Walter J., (2001), Genomic imprinting: Parental Influence on the Genome, in *Nature Reviews Genetics*, 2, p. 21-23
Surani M.A., Reprogramming of genome function trough epigenetic inheritance, in *Nature*, 414, p. 122-124
Watters E., (2006), DNA Is Not Destiny, in *Discover*

Online resources.

http://www.desprecopii.com/info-id-21575-nm-Epigenetica-stiinta-modificarilor-genelor.htm
http://www.newscientist.com/article/mg21028126.300-teen-survey-reveals-gene-forhappiness.html
http://en.wikipedia.org/wiki/Nature_versus_nurture.

Evaluation of the Ukrainian-Language E-Course "Socio-Psychological Support of Adaptation of Veterans"

Maryna Dvornyk
Institute for Social and Political Psychology of NAES of Ukraine, Kyiv, Ukraine

Introduction. Modern mobile applications have fast-growing potential for spreading information about mental health. While other means for psycho-rehabilitation of veterans at risk for post-traumatic stress disorder (PSTD) can reach only limited numbers, electronic interventions are available to engage all who use mobile devices (Kuehn, 2011). Since anti-terrorism operation (ATO) veterans who participated in the armed conflict in the east of Ukraine are predominantly young smartphone users, it may not be necessary to travel far to access mental health care – just download an app and learn to use it accurately. Mental health mobile apps with a strong evidence base are convenient at any time and place, save resources for both caregivers and traumatized individuals, and raise user autonomy and flexibility (Prentice & Dobson, 2014). However, previously there were no evaluations of Ukrainian-language apps with enough supporting evidence for safe usage.

Purpose. The Ukrainian-language e-course "Socio-Psychological Support of Adaptation of Veterans" integrated into the app "Pocket Psychologist", seemed to satisfy the requirements of cognitive-behavioural therapy (CBT)-based information as an alignment with the more traditional way of accessing these psychotherapy methods. The research investigated whether this was an appropriate tool for self-help in PTSD prevention. The e-course itself contains practical information to challenge unhelpful beliefs about the negative outcomes of various situations and involves the user into therapeutic processes such as attention training, acceptance and tolerance training, and mindfulness (Gorbunova, et al., 2016). The purpose of the research was to evaluate the efficacy of using this course and its associated app in decreasing early post-traumatic symptoms.

Methodology. The study was designed for two non-equivalent groups with previous and repeated measurements. The experimental group included 30 participants, and a control group of 27 participants, all 26 to 34-year-old male ATO veterans who returned from the combat zone from 3 months to 1 year prior. Data collection was organized by online involvement through the veteran NGO's pages on Facebook. All participants completed the online questionnaire "Impact of Event Scale" (adapted by the Ukrainian Institute of Cognitive Behavioural Therapy) before and after the experimental timeframe. The experimental group participants had to own a smartphone or tablet, and were instructed how to use the e-course for 30 days, while the control group was encouraged merely to repeat filling the questionnaire after 30 days. In order to determine the levels of psycho-traumatization on the basis of data obtained by the "Impact of Event Scale", the intra-group norms were determined (low, below moderate, moderate, below high, high levels) and correlated to the participants' indicators. Since the normality of data distribution was detected by 1-Sample K-S procedure, the difference in the indicators was defined by Independent Samples T-test (SPSS 16.0).

Results. The pre-measurements showed that the largest number of participants had moderate levels of traumatic symptoms, and the post-measurements showed more levels in the below-moderate and low ranges. The decrease of traumatic symptoms in the experimental group appeared to be more significant than in the control group. The difference in the avoidance symptoms before and after the e-course usage was credible on $p=0.001$, while the control group with only the time variable had changes of $p=0.85$. A similar picture was observed in the intrusions scale – $p=0.013$ vs $p=0.86$, and by the hyper-arousal scale – $p=0.034$ vs $p=0.9$ in the control group. These results suggest that participating in the e-course can be an effective tool to provide specific mental health information to veterans in order to decrease early PTSD-symptoms.

Limitations and strengths. The study has some limitations. The participants might have been motivated to engage in the e-course by different personal reasons not only because they wanted to deal with their post-traumatic stress. The study wasn't expanded to understand these motives as well as the inner processes of the app usage. The pre-study levels of the stress symptoms were predominantly medium which throws doubt on the studied e-course efficacy for severe symptoms. Finally, the there was no measurement of difference between the traditional approach for post-traumatic stress and the tool presented for study. Still, taking into account that this study is limited by the features of the sample and one-dimension methodology, it is still evidential. Accurate assessments, data management, and statistical analysis were used; the confidentiality of the participants was kept up; and the outcomes of app usage were for sure helpful for participants. Additionally, the study is the first to report on the validity of Ukrainian-language apps for overcoming psychological trauma and may start a new wave of investigation related to mental health applications in Ukraine.

Practical and social value. The fact that the untimely detection of post-traumatic stress can seriously pathologize everyday lives of the injured persons and their communities indicates that a tool such as "Socio-Psychological Support of Adaptation of Veterans" might be a highly relevant source for people at risk of PTSD. By attracting social attention to such an economically viable psycho-educational tool, the field of socio-psychological rehabilitation can benefit in order to save time and money in early mental health care of veterans.

Conclusions. The e-course "Socio-Psychological Support of Adaptation of Veterans" can be successfully used to prevent PTSD development for those veterans who are really susceptible to such stimulus. Access to a mobile device,

experience with its usage, personal traits, age, status, and living conditions, etc. can play a big part in the participant's adherence to the e-self-help. Therefore, the findings related to conditions which can engage more injured veterans into the specified mental health apps are assumed to be an open perspective. As the studied e-course encourages users to learn more about their mental state and effective coping-strategies, it is a promising early intervention tool which may assist in mitigating the effects of trauma.

Keywords: mental stress, disease prevention, social rehabilitation, mobile phone, computer applications.

References.

Gorbunova, V. V., Karachevskyi, A. B., Klymchuk, V. O., Netliukh, H.S., & Romanchuk, O.I. (2016). Sotsialno-psykholohichna pidtrymka adaptatsii veteraniv ATO: posibnyk dlia veduchykh hrup [*Socio-psychological support for the adaptation of ATO veterans: a guide for leading groups*]. Lviv : Institute of Psychic Health of Ukrainian Catholic University, 96. (ukr).

Kuehn, B. M. (2011). Mobile PTSD care. *Journal of the American Medical Association*, 306(8), 815-815.

Prentice, J. L., & Dobson, K. S. (2014). A review of the risks and benefits associated with mobile phone applications for psychological interventions. Canadian Psychology, 55(4), 282-290.

Peacebuilding and Mental Health: Moving beyond Individual Pathology to Community Responsibility

Maureen P. Flaherty[1], Ellen Sikorski[1], Lilya Klos[2], Viktor Vus[3]
[1] Peace and Conflict Studies, University of Manitoba, Canada
[2] Department of Sociology and Social Work, Lviv Polytechnic National University, Lviv, Ukraine
[3] Institute of Social and Political Psychology, National Academy of Educational Science, Kyiv, Ukraine

Introduction. Strategic peacebuilding means attending to and designing systems that nest short term efforts into medium and longer-term strategies that will continue to build the whole health and strength of a community (Schirch, 2013). While this kind of attention is often not focused on a community until after it has been through war or other trauma, this paper makes a case for a focus on mental health as part of a whole-health strategy to build resilience into communities, preparing them to better cope with conflict and avert human-caused trauma, and generally providing habitus for people of all health and abilities to thrive.
Purpose. Researching "mental health and conflict" or "mental health in post-conflict societies" commonly reveals articles about post-traumatic stress disorder (PTSD) and depression (Roberts, Damundu, Lomoro, & Sondorp, 2009), articles that focus on ex-combatants (Medeiros, 2007), with some inclusion of day-to-day stressors rather than 'not trauma' (Miller & Rasmussen, 2010). This article asserts the importance of directing the attention of the global community not only on treatment, but also on a holistic view of health and health care services that will make it impossible for any individual to believe that they are not worthy of every consideration and support to be fully functioning, empowered community members. Authors call upon psychologists, social workers and other professionals interested in peacebuilding to refocus, not away from trauma recovery, but more broadly to whole health for all communities.
Design/Approach. The paper examines current barriers to mental health and wellness and provides examples of communities in Canada and Ukraine where major efforts are being made to move beyond trauma by building community resilience. Using a needs-based approach, the authors, a group of academics, citizens, mental health consumers and service providers begin with an introduction to "health" and the social determinants of health and move from a strictly medical model of health to focus on community considering what it means to be a community member, including the importance of empowerment for individuals for not only their own actualization but also the full actualization of their communities.
Results. Authors stress the clear connection between social inequities and mental health or illness and the associated stigma. The article finds that community development and peacebuilding initiatives must include strategies that address not only basic physical needs, including safety, security, and freedom from violence, but also the creation of safe places where good mental health and full social inclusion are part of the fabric of peaceful, strong communities.
Limitations and strengths. A limitation of the study is that it focuses on only two countries and does not provide empirical research. A strength is that the article deals with more than one country and combines the authors' multidisciplinary experiences to provide a new lens through which to consider mental health as part of basic community health and responsibility rather than something of individual pathology and deficit.
Summary. At the time of writing, Canada, with a population of almost 39.9 million (Worldometers, 2018), is a country without large-scale overt conflict; however, the reported incidence of domestic violence (Canadian Women's Foundation, 2016), violent crime (Statistics Canada, 2017), and homelessness (Gaetz, Dej, Richter, & Redman, 2016) are stark reminders that Canadians and others living in Canada are not living in peace. The legacy of colonization of Indigenous people in the land now considered Canada has also lent to extremely high numbers of Indigenous children in government care, removed from home communities (The Guardian, 2017) with high numbers of people living with substance abuse/addictions, and/or incarcerated. Many of those in the criminal justice system, Indigenous and non-Indigenous, suffer from mental illness and addictions, with the incidence of women's mental illness being the highest (Public Services Foundation of Canada, 2015, p. 43). In addition to the mental dis-ease that accompanies trauma of all kinds, there is no internal peace for people, treated or untreated, who suffer from mental illnesses as schizophrenia (about 1 per cent of the population), bi-polar disorder, extreme depression and other mood disorders (about 12.6 per cent in their lifetime) (Pearson, Janz, & Ali, 2015). Overall, it is estimated that in any given year 1 in 5 Canadians will experience a mental health or addictions problem or illness (Centre for Addiction and Mental Health, 2018).
Ukraine, on the other hand, is a country experiencing overt and sometimes armed conflict in the east with more than 1.6 million people registered as displaced, having migrated internally to find safety in an attempt to rebuild their lives (UNHCR, 2017). A pilot survey with university students in Lviv, more than one thousand kilometers from the armed conflict, revealed that while they seldom speak about it, youth are in mourning from having lost dear friends in the conflict and are deeply challenged to envision a future beyond the shadow of war (Flaherty & Stavkova, 2018). In present day Ukraine, the focus on mental health has shifted from not much attention at all, to realizing the necessity to provide services for people who are directly impacted by conflict and displacement. Service provision is scant and the attention is focused largely on those dealing directly with post-traumatic stress disorder (PTSD) (Gaetz, Dej, Richter, & Redman, 2016). The World Health Organization (WHO) estimates about 5 million people are directly

affected by the conflict, including at least 1.6 million displaced. WHO also estimates that 32 per cent of those displaced suffer from post-traumatic stress disorder and 74 per cent are in need of mental health services that are not available to them (World Health Organization, 2017, p. para 1). As for the general healthcare system in Ukraine, the World Bank found that while there is a central health care system, 90 per cent of the funds allotted to mental health are contributed to psychiatric hospitals, rather than community services (World Bank, October, 2017, p. 9). This report notes that 30 per cent of Ukrainians will experience a mental disorder in their lifetime with alcohol use being more common amongst men and depression and anxiety more common amongst women. Historically, and at the time of writing, psychiatrists are seen as the authorities whose programs are funded in Ukraine, even though there are others such as psychologists and nurses who are in the community and would like to access training and provide services. As such, mental health care is expensive to maintain and brings with it a great deal of stigma to those who access it for either a common mental disorder (CMD) or an alcohol-related disorder (AUD). At present, researchers note that "poor mental health in Ukraine is tightly interconnected with poverty, unemployment and feelings of insecurity, compounded by the effects of the conflict" (ibid, p. 10).

As psychology, social work, and peace and conflict studies scholars we know that much more is needed. Rather than merely dream about it, authors share here a rallying call to approach mental health from a peacebuilding perspective and peace and conflict studies from a whole health (which includes mental health) perspective, responding rather than reacting to the needs of our shared world, creating a global "culture of peace" (Boulding, 2000).

Bibliography.

Canadian Women's Foundation. (2016, May). Fact Sheet: Moving women out of violence. Retrieved from https://www.canadianwomen.org/wp-content/uploads/2017/09/FactSheet-VAWandDV_Feb_2018-Update.pdf

Centre for Addiction and Mental Health. (2018). Mental illness and addiction: Facts and statistics. Retrieved April 2018, from CAMH: https://www.camh.ca/en/driving-change/the-crisis-is-real/mental-health-statistics

Flaherty, M. P., & Stavkova, S. (2018). Pedagogy for social development: Building capacity through participatory action research. in progress.

Gaetz, S., Dej, E., Richter, T., & Redman, M. (2016). The state of homelessness in Canada 2016. Toronto: Canadian Observatory on Homelessness Press. Retrieved from The state of homelessness in Canada 2016: http://homelesshub.ca/sites/default/files/SOHC16_final_20Oct2016.pdf

Medeiros, E. (2007). Integrating menatl health into post-conflict rehabilitation: The case of Sierra Leonean and Liberian 'child soldiers'. Journal of Health Psychology, 12, 498-504.

Miller, K. E., & Rasmussen, A. (2010). War exposure, daily stressors, and mental health in conflict and post-conflict settings: Bridging the divide between trauma-focused and psychosocial frameworks. Social Science and Medicine, 70(1), 7-16.

Pearson, C., Janz, T., & Ali, J. (2015, November 27). Health at a glance: Mental and substance use disorders in Canada. Retrieved from Statistics Canada: http://www.statcan.gc.ca/pub/82-624-x/2013001/article/11855-eng.htm

Roberts, B., Damundu, E., Lomoro, O., & Sondorp, E. (2009). Post-conflict mental health needs: A cross-section survey of trauma, depression and associataed factors in Juba, South Sudan. BMC Psychiatry, 9.

Schirch, L. (2013). Conflict assessment and peacebuilding planning: Toward a participatory approach to human security. boulder, CO: Kumarian Press.

Statistics Canada. (2017, July 24). Police-reported crime statistics in Canada, 2016. Retrieved from Statistics Canada: http://www.statcan.gc.ca/pub/85-002-x/2017001/article/54842-eng.htm

UNHCR. (2017). Ukraine. Retrieved April 2018, from UNHCR: Global Focus: http://reporting.unhcr.org/Ukraine

World Bank. (October, 2017). Mental health in transition: Assessment and guidance for strengthening the integration of mental health into primary health care and community-based service platforms in Ukraine. Kyiv, Ukraine: World Bank Group.

World Health Organization. (2017, August). Health response to the humanitarian crisis in Ukraine: Facts and figures. Retrieved April 2018, from World Health Organization: http://www.euro.who.int/en/health-topics/emergencies/health-response-to-the-humanitarian-crisis-in-ukraine/facts-and-figures

World Health Organization. (n.d.). Mental health, human rights & legislation. Retrieved February 2018, from Mental health: www.who.int/mental_health/policy/legislation/en/

Worldometers. (2018, April 23). Canadian Population. Retrieved from Worldometers: http://www.worldometers.info/world-population/canada-population/

Keywords: mental health, community building, strategic peacebuilding, whole-health strategies, Canada, Ukraine.

Infant and Parent Mental Health: developmental Trajectory as a Communal Concern

Galina Itskovich, LCSW-R
Interdisciplinary Council on Development and Learning (USA)

Abstract: This article covers recent research in the field in the context of lifelong growth and mastering developmental milestones. It denotes intrinsic connection between parental and child's psychological well being, including patterns of early attachment. There is also well documented connection between deviations in early attachment and consequent adult functioning. "The bigger picture" approach based on the DIR method is proposed as one of the crucial components of mitigating early trauma. It includes comprehensive multidisciplinary diagnosis, parent education and play interventions based on immediate interests, needs and resources of the family. It targets all areas of development and builds foundation for the emergence and maintenance of healthy attachment. Other successful approaches, implications for clinical work and social organization of early intervention services are also discussed.

Literature Review. A substantial body of recent research proves that mental health of infants directly correlates with maternal mental health. When the mother has been traumatized, whether by loss of a loved one, catastrophic/traumatic events ranging from war to natural disasters or an assault; when economic and societal pressures or personal and interpersonal history of violence or abuse (Cyr *et al*., 2010) start to outweigh "primary maternal preoccupation" (Winnicott, 1959), her response to the baby and baby's needs becomes less than optimal. There are situations when unfavorable events shift her locus of control deeming her helpless. In other words, relinquishing control over the unpredictable and erratic world that the mother faces are inevitably coupled with losing control over her infant and compromising their unique bond. Traumatized mothers exhibit emotional unavailability, rigid parenting styles, heightened expectations, mood disorders as predictors of sleep disturbance (O'Connor et.al., 2000), flat affect and frequent gaze aversion from the infant during daily routines. Princeton's 2017 study demonstrated that infants' own communicative attempts were positively associated with adults' neural synchronization to them, indicating mutual regulation of synchronization within infant–adult dyads. Thus, interpersonal neural synchronization may provide a mechanism by which infants construct their own earliest social networks. Disruption of this up-regulating mechanism is detrimental to early development.

As per neuroscientists researching intergenerational attachment patterns, mothers' attachment-related trauma, when unresolved, undermines her optimal brain response to her infant's distress. Mother's unresolved trauma blunts amygdala response to infant distress (Kim, Fonagy, Allen & Strathearn, 2014). Researchers note that mothers with no trauma demonstrated greater amygdala responses to the sad faces of their own infant as compared to their happy faces, while mothers who were classified as having unresolved trauma in the Adult Attachment Interview (Kim *et. al.*, 2014; Dynamic Maturational Model) displayed blunted amygdala responses when cued by their own infants' sadness as compared to happiness.

Attachment patterns are grossly affected by maternal attachment system and history of attachment to significant figures. Even in the beginning of pregnancy the woman's attachment system and her own representations based on her relationship with her parents gets activated (Ammaniti, M. et.al,2013). Renata, T. *et al.* (2015) notes that mothers with early traumatic experiences had significantly more maladaptive interactions during the feeding of their children, both at 3 months and 6 months of age, when compared to mothers who had not experienced traumas. Additionally, fathers with prior traumatic experiences elicited high anxiety in their infants during feeding. It is important to note that even in the absence of overt maltreatment, the intersection of multiple social and economic risks experienced by a family consistently results in considerably elevated rates of infant disorganized attachment.

Therefore, trauma is unfolding into cross-generational affair that casts a shadow on further development of babies born to mothers who fell victims to direct trauma or those with history of exposure to traumatic material. For instance, research which focused on babies born after 9/11 WTC attacks shows that reduced cortisol levels were observed in infants, suggesting a larger role for very early environmental, genetic, or genetic-environmental interactions than previously thought (R.Yehuda, 2005). Where the well baby who comes into direct contact with the traumatized parent is concerned, his/her social and cognitive outcomes during infancy and toddlerhood are in danger of being poor, suggesting impaired psychological functioning in adolescence, compromised ability to empathize, weak school performance and/or school anxiety, inadequate self-regulatory capacities, and attachment insecurity.

Disruptions of attachment become especially prominent when it comes to disorganized attachment that is commonly associated with horror and unresolved fright. It is important to note that disorganized infant grows into an adult who is either hostile or helpless (Lyons-Ruth, Jacobitz, 2008), and continues to misinterpret intimacy as danger throughout his/her lifetime. "The innate drive to move towards the attachment figure for soothing only to find that it is this parent who is the source of distress yields a disorganized response" (Siegel, 2003). For the children of war and military aggression, negative consequences are innumerable. V. Felitti (1998) notes high prevalence of disability, mental health problems, medical conditions and premature death. In the case of the prolonged exposure to danger or chronic trauma, odds of building safe attachment decrease even further.

Clinical implications. Pathways to wellness include maternal psychoeducation staring with the understanding of the brain's works and proceeding to the skills of distinguishing between different mental states; teaching parents the value of physical and emotional contact with their babies, using gestures, facial expressions and touch to reactivate triune ANS (Porges, 2011); reflective listening aimed to strengthen reflective capacity (see successful experimental work of A. Slade, proving that parental reflective capacity can be developed); and playing with purpose (see Developmental individual-difference, relationship-based Floortime as formulated by S. Greenspan & S. Weider).

Learning about neurological mechanisms underlying trauma, as well as complexities of the impact of early vicarious traumatization (via the traumatized parent), can increase parents' ability to relate and attend to their young children. However, the first step should be assessing parental trauma and attachment history. There are assessment tools that can be also used in the course of such treatment. Adult Attachment Interview (AAI; George, Kaplan, & Main, 1984) where adult reflective functioning assessed on the basis of an adult's capacity to reflect upon memorized childhood relationships with their parents; Parent Development Interview (PDI; Aber, Slade, Berger, Bresgi, & Kaplan, 1985; PDI-R; Slade, Aber, Bresgi, Berger, & Kaplan, 2004) examining parent's capacity to specifically reflect upon her child's emotional experience or upon her own experience as a parent; Emotional Availability (EA) Scales (Biringen, 2008); and Multiaxial diagnosis of infant disorders as a part of PDM-2 (S. Greenspan, 1999, 2016) can offer opportunities for the parent to reflect, remember, and apply "in vivo" theory of mind (realization that babies have their own mind and posting simple but powerful questions like, "What does my baby think?"). Mentalization can pave the way to developing mindsight (D. Siegel, 2004) and becoming observant of the meta-processes in parent's own brain, in addition to their child's.

As the DIRFloortime practitioner, I would like to offer a quick overview of the approach. DIRFloortime®, also known as the Greenspan approach, offers comprehensive approach to has become more and more popular as a successful treatment approach of working with children with the Autistic Spectrum Disorders, sensory disregulation, language and processing delays, inattention and behavioral problems. DIRFloortime® is a dynamic, child driven, developmentally based model that takes into account normative functional emotional development and builds on the existing strengths of the child. It takes into account unique capacities of their emotional and functional profile as superimposed on the individual sensory, biological, communicative and proprioceptive characteristics. DIRFloortime®as a parent oriented program partners with parents and equips them with highly individual skills set for dealing with their particular baby. Model incorporates biologically based individual differences, child's functional developmental capacities and familial, cultural and community systems as they influence the child. There is strong research based evidence that proves the effectiveness of this approach. Most importantly, systematically using strategies of nondirective play ("Floortime"), it approaches development of language, cognition and motor skills in a comprehensive and fun way.

Another important component of DIRFloortime® program is developing parental self-reflective capacity. Mentalization is a crucial human capacity that is intrinsic to affect regulation and productive social relationships. This skill of understanding one's own behavior, as well as behavior of others, in terms of underlying mental states and intentions is unique to humans (P. Fonagy et. al., 2002). Mentalization can pave the way to developing mindsight (D. Siegel, 2004).

All these activities, although not directly addressing maternal trauma, help to reduce impact on the infant. Studies suggest that those mothers with unresolved trauma who were *reorganizing* toward secure attachment eventually had infants with secure attachment (Iyengar, U. et.al., 2014). Therefore, healing power of relationship helps mitigate the damage and reverse the course of detrimental neurological and psychological events in the future generations. Use of available diagnostic instruments can become a platform for future treatment and determine positive outcomes: recognizing the need to understand child's emotional world, identifying strategies for effective reading of infant's emotional signals, supporting child's ability to self-soothe and accept soothing from the meaningful adult figure, and developing ability to honor the child's innate wisdom and desire for emotional security.

Discussion. This paper examined parent-infant relationship in the light of the developmental trajectory and lifelong consequences. Because of the direness of need to protect those mothers and children who have been exposed to unresolved or chronic trauma (i.e., residing in the occupied zone, mourning losses or just experiencing uncertainty and environmental stress), it is pertinent that protecting mothers and infants should become a matter of national emergency. Future research is needed to assess the need and establish evaluation and treatment procedures, as well as prophylactics for the 0 to 3 population. Current state of affairs in Ukraine calls for systematic child-centered approach that is outcome focused and evidence based. Establishment of such program can initiate promising directions towards healthy parents and happy infants.

References.

Aber, Slade, A., Berger, Bresgi, & Kaplan (1985). *The Parent Development Interview.* Unpublished manuscript.
Aber, Slade, Bresgi, Berger, & Kaplan. (2004). *The Parent Development Interview* -Revised. Unpublished manuscript, The City University of New York, NY.

Ammaniti, M., Tambelli, R. & Odorisio, F. (2013). Exploring maternal representations during pregnancy in normal and at risk samples: the use of the interview of maternal representations during pregnancy. *Infant Ment. Health J.* 34, 1–10.
Biringen, Z., Robinson, J., & Emde, R.N. (1998). *The emotional availability scales* (3rd ed.), unpublished manuscript, Department of Human Development & Family Studies, Colorado State University, Fort Collins, CO.
Cyr C, Euser EM, Bakermans-Kranenburg MJ, Van Ijzendoorn MH. (2010). Attachment security and disorganization in maltreating and high-risk families: a series of meta-analyses. *Development and Psychopathology.* 22:87–108.
Felitti, V. J., Anda, R.F., Nordenberg, D, Williamson, David F., Spitz, A. M., Edwards, V., Koss, M. P., Marks, J. S. (1998). Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults The Adverse Childhood Experiences (ACE) Study. *Am J Prev Med*;14(4).
Fonagy, P. and Target, M. (1998). Mentalization and the changing aims of child psychoanalysis. *Psychoanalytic Dialoges,* 8, 87-114.
George, C., Kaplan, N, & Main, M. (1985). *Adult Attachment Interview.* Unpublished manuscript, University of California, Berkeley.
Iyengar, U., Kim, S., Martinez, S., Fonagy, P., & Strathearn, L. (2014). Unresolved trauma in mothers: Intergenerational effects and the role of reorganization. *Frontiers in Psychology*, Vol. 5: 966.
Kim, S., Fonagy, P., Allen J. & Strathearn, L. (2014). Mothers' unresolved trauma blunts amygdala response to infant distress. *Social Neuroscience*, Vol. 9; 4.
Leong, V. et. al. (2017). Speaker gaze increases information coupling between infant and adult brains. Princeton University, Princeton, NJ.
Lingiardi, V., McWilliams, N., & Greenspan, S. (2017). *Psychodynamic diagnostic manual: PDM-2*. New York: The Guilford Press.
Lyons-Ruth, K., & Jacobvitz, D. (2008). Attachment disorganization: Genetic factors, parenting contexts, and developmental transformation from infancy to adulthood. In J. Cassidy and P. R. Shaver (Eds.). *Handbook of attachment: Theory, research and clinical applications* (2nd ed.): 666–697. New York: Guilford Press.
O'Connor TG, Rutter M. (2000). Attachment disorder behavior following early severe deprivation: extension and longitudinal follow-up. *Journal of the American Academy of Child & Adolescent Psychiatry*. 39:703–12.
PDM Task Force. *Psychodynamic Diagnostic Manual* (2006). Silver Spring: Alliance of Psychoanalytic Organizations.
Porges, S. W. (2011). *The polyvagal theory: Neurophysiological foundations of emotions, attachment, communication, and self-regulation.* New York: W.W. Norton.
Renata, T. *et al*. (2015). Early maternal relational traumatic experiences and psychopathological symptoms: a longitudinal study on mother-infant and father-infant interactions. *Sci. Rep.* **5**, 13984.
Siegel, D. (2004). Attachment and Self-Understanding: Parenting with the Brain in Mind. *Journal of Prenatal & Perinatal Psychology & Health*, 1-18. Winnicott, D. W. (2016). *The Collected Works of D. W. Winnicott*: Volume 5, 1955-1959 (Vol. 5). Oxford University Press.
Yehuda, R. *et. al*. (2005). Transgenerational Effects of Posttraumatic Stress Disorder in Babies of Mothers Exposed to the World Trade Center Attacks during Pregnancy. *Journal of Clinical Endocrinology & Metabolism.*

On the Social Work Input in Mental Health Care in Ukraine

Liliia Klos[1], Larysa Klymanska[2], Nina Hayduk[3], Halyna Herasym[4]
Lviv Polytechnic National University, Lviv, Ukraine
[1]MD, Ph.D., Associate Professor, Department of Sociology and Social Work
[2]D.Sc., Professor, Head, Department of Sociology and Social Work
[3]MSW, Ph.D., Associate Professor, Head, Social Work Programme; Director, International "Integration" Centre
[4]MSW, Doctoral Candidate, Senior Lecturer, Department of Sociology and Social Work

Abstract. In difficult conditions of the external military aggression and aggravated internal political and social problems in Ukraine, the level of mental health disorders is growing, thus encouraging social change.
Purpose. The study aims to identify possibilities and ways of bringing in social work in solving the problem of mental health care in Ukraine.
Design/Methodology Approach. *Theoretical research methods* were used to find out opinions of experts, including persons with mental illness, on the challenges and needs of the mentally disabled in Ukraine. *Qualitative content analysis* of the narrative interviews with clients of the social organization and expert interviews was done to identify opportunities for involving social workers by the example of Lviv.
Results. The study reveals the retrospective and explores the current state of addressing the problem of mental health care in Ukraine. It offers the problem solution based on attracting social work.
Limitations and strengths of the study. The difficult times Ukraine is going through complicate the introduction of innovations in the social sphere, health care and education. This, however, stimulates change to improve its citizens' well-being and health.
Practical/Social Value. The initiative to train social workers for professional activity in mental health care supports the population health improvement.
Originality/Conclusions. The findings show the need for the social work input in mental health care in Ukraine. The social work education is addressing the need, also involving a community health clinic.
Keywords: mentally disabled, social problem, social change, social work, destigmatization, social work education, social inclusion, community health clinic.

1. Introduction.

Mental health care is one of the prioritized areas of the state social policy, in health care in particular. Despite the medical origin of the concept of "mental health" these are social components, which prevail in its definition. The common definition of the term of "health" describes "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (World Health Organization, 2018). The term of "mental health" involves a combination of mental, intellectual (cognitive) and spiritual components (Zymivets', 2010, p.108). The problem of mental health care and the status of the mentally disabled have long grown into a social problem. According to statistics, the number of people with mental disorders among the population is 4–5% (World Health Organization, 2018). Currently, mental disorders occupy the fifth of the ten leading causes of disability in the world (Dolishnia, 2009). The definition of a social problem is consistent with complex social circumstances, which a person with mental disability finds oneself in, incompatible with the values of a humane and tolerant attitude towards people with "otherness"; a significant number of people agree that there is a need for actions to change this (Rubington & Weinberg, 1995, p. 4). The expected growth of mental disorders and disability determines the relevance of research into the social aspects associated with these illnesses.

The purpose of our research is to identify opportunities and ways of attracting professional social work in Ukraine to address the problem of mental health care of the population as a strategic resource of the state and an indicator of the competitiveness and defense capability of the country. For this purpose, the study involves the following *objectives:* 1) to determine the current state of the problem of mental health care of the population (based on the content analysis of available sources); 2) to explore the opinions of experts (psychiatrists, psychologists, and directly people with mental disabilities and their relatives) on the challenges and basic needs of the mentally disabled in Ukraine; 3) to identify existing social practices and opportunities for the participation of social workers in solving the problem of mental health care in Ukraine (roles, functions, client groups, practice cites location, etc.), as exemplified by the city of Lviv; and 4) to offer conceptual foundations of the social work education program (specialization) of training social workers to professional activities in mental health care (based on the Department of Sociology and Social Work of Lviv Polytechnic National University).

The research methodology is based on the holistic (biopsychosocial-spiritual) approach in interpreting the individual's health, the ecosystems (the person-in-environment) perspective, and the axiological interpretation of the mentally disabled person's needs and the nature of support to be provided.

2. Related Work.

In modern Ukraine, the social situation of the mentally disabled remains difficult and complicated. There is an immediate need for change in this area. Both psychiatrists and critics of traditional psychiatry as well as social

researchers agree with this and conclude that "living with a mental illness is also living with serious social losses and a shortage of social opportunities and perspectives that accompany this illness" (Pol'skaya, 2004, p. 157). As of January 1, 2017, 1 673328 Ukrainian residents were registered due to mental and behavioral disorders. In 2015, the mortality rate of the population of Ukraine from deliberate self-harm was 17.7 per 100 thousand populations (Cabinet of Ministers of Ukraine, 2017). In the last decade of 2015, the disability index due to mental and behavioral disorders increased by 19.9%, with the trend towards its growth to be further maintained (Voloshyn & Maruta, 2015). The surveillance system established in society for these people, involving mainly psychiatric experts and psychologists, promoted institutionalization and alienation of the whole population stratum from the citizenship. In modern Ukraine, the hope for a positive change and the solution of the most acute problems in mental health care is more closely linked with social work, which focuses on the human biopsychosocial-spiritual nature.

The concept of "disability" is a social construct that involves the agents in the social problematization process: experts (psychiatrists, psychologists), media representatives, politicians, and in the context of contemporary western research, clients themselves. Modern concepts of disability, of the disease of the soul in particular, can be divided into two types: medical and social. The *medical* model focuses on the diagnosis of pathology and dysfunction, ascribes to individuals the status of "patients", "deviants" that should be "corrected" or isolated from society. The *social* type of explanation recognizes mental illness and disability as a consequence of the historical development of society and its unfair arrangement, as a result of the functioning of the dominant system of social norms (Romanov & Yarskaya-Smirnova, 2006). In this case, a change in the social situation of people suffering from mental disorders is possible only if there are changes in the dominant ideas about "mental illness" and activities that should be used with respect to the "mentally ill".

The exploration of social aspects pertinent to the sphere of mental health care is illustrated by a number of studies, particularly in the work "The population insincerity in the context of social relationships with the mentally ill" by Pironkova (2016). A survey of employees of psychiatric institutions of Ukraine (505 respondents of an average age of 41.6 took part in it, among them 20.6% were men, and 79.4% – women) showed that about 81% of respondents believe that if society were to show its true attitude towards the mentally ill, it would be different from what is presented in society for the worse. About 76.7% of medical employees believe that society treats the mentally ill much worse than they deserve (Pironkova, 2016, p. 81). Summarizing the numerous works devoted to the study of ideas about mental illness and the mentally ill, we note that the content of these ideas has a significant degree of negative valence. By definition of Farr (Farr & Markova, (Eds.), 1995), the form of social representation with negative valence is *stigma*. In the process of problematization of social circumstances associated with the mentally disabled, professional experts (psychiatrists and psychologists) play an ambiguous role. Thus, Sass (2007) concludes that psychiatrists are the creators of a medical stigma, "and hospitals for the mentally ill are factories of mass production of this product" (pp. 373-375). By definition of Goffman (1961), hospitalization largely determines self-reproduction, reducing the entire diversity of the individual's social roles to a single role – that of a patient, and the development of a distorted, negative self-concept.

The above implies that spreading stigmatized attitudes towards the mentally disabled is facilitated by medical employees themselves (Pironkova, 2016, p. 81). It is important to return "the patient's voice" to historical, social and humanitarian studies, which will make it possible to understand the actual needs of the mentally disabled rather than those imposed on them from the point of view of medical employees (Porter, 2008, p. 57).

3. Results and Discussion.

We tried to capture the "voices" of the main players within the social problem of the mentally disabled, including those at the core of the problem. It was for the sake of returning the *"patient's voice"* that we conducted a study of the opinions of people with mental disorders themselves about the problems they experience in their social environment. The study was conducted in September-October 2017. The goal of the study was to find out features of the social environment influence in modern Ukrainian society on the functioning of a person with mental disability and on his/her own self-perception. The method of *a narrative in-depth interview* was chosen to study the issue. In this case, narrative is understood as a fundamental component of social interaction, which performs the functions of creating and transmitting social knowledge, as well as the self-presentation of individuals. To elicit narrative, an in-depth interview was conducted with the clients of the "Patient's Club" Center for rehabilitation and social adaptation, who are attending the day programme of the Center. We interviewed all the clients of the Center day programme (8 persons, three of whom were men, five – women, aged 25-42), who agreed to give an interview. *A narrative impulse* was a request to tell a story of one's own life, indicating all the main situations having influenced it. The major procedure of analyzing the statements was a regular *comparative analysis of the texts*, *their structural description*, *coding the statements*, etc. An analysis of the interview texts suggests that people with mental disorders are fully aware that disorders themselves do not emerge by chance. The emergence of mental disorders is a follow up of unpredictable events in the informants' lives, which caused a strong emotional strain, having, in turn, provoked mental instability. To the main factors, which help the mentally disabled to fight the illness, our informants attributed the support of their family, relatives and closest friends. It is mainly due to the fear of losing one's close and beloved people that the mentally disabled are often hiding their illness, with this just confirming the self-stigma presence. This,

in its turn, only exacerbates their situation, as the illness is getting worse and causes losing one's job in particular, with the relationships with the surroundings getting worse, and the family breaking down. At the same time, the nearest social environment, i.e., relatives, friends, acquaintances, neighbors exhibit stigma and bias towards the mentally disabled. While excluding people with mental disorders from everyday and habitual parts of life, society limits their ability to get/have a job, a safe place to live, health care, family, friends, and be a full-fledged part of society or any social activity. Through social exclusion, because of prejudice, people with mental health problems feel even more depressed, their self-esteem decreases, self-stigmatization increases, due to which they become even more limited in their actions and rights.

Alongside with a survey of clients, we conducted *an expert survey* of professionals who are directly related to the practical solution of health issues of persons with mental disorders in Lviv. The sample consisted of 10 experts. *The sample was targeted, designed by a snowball sampling method*: We asked each interviewed expert to recommend (recruit) another one. These were representatives of 6 non-governmental organizations and 4 governmental institutions. All the experts stressed the need for social rehabilitation of the mentally disabled, as social rehabilitation promotes restoring their social and personal status, the skills having existed before the disease. This, in turn, contributes to the faster integration of people with mental health problems in society. It is not the fact of hospitalization, which appears to be the key in determining the social status and social well-being for a person with mental disability, but the life situation outside the medical institution, i.e., the relationships with one's immediate and distant social environment, and the opportunity to use life chances along with others. Therefore, no reform of the system of psychiatric care will be effective until the broader socio-cultural context is considered and transformed. Hence, it is necessary to recognize the need for the implementation of measures to destigmatize mental disorders, and to provide the mentally disabled with real, not only declared opportunities for education, employment, professional and social self-actualization, and social participation. Only in this case it is possible to really "return the patient" to society.

The current situation in Ukraine with respect to the prevalence of mental health problems is significantly complicated by the military actions in the East of the country due to the external military aggression of Russia. This has led to numerous social problems and the emergence of new client groups, previously unregistered by social services in Ukraine. These are internally displaced persons (IDPs), refugees, survivors of natural disasters, catastrophes, and military operations, dismissed conscripts, veterans of hostilities, active participants of Anti-Terrorist Operation (ATO) and Joint Forces Operation (JFO), families of servicemen, and families of perished soldiers in the Russian-Ukrainian war. Thus, over the period of 2014-2017, more than 10 thousand people were killed, 20 thousand people were injured, with 2 million internally displaced persons registered. It is health care and the promotion of the population health, particularly mental health, which belongs to the needs that are particularly acute in the context of the socio-economic recession and political instability. This need applies equally to both the military and the civilian population, which is directly and indirectly affected by all the negative and destructive effects.

As the agents of change, social workers respond quickly to social unrest, promote social justice, the development of individuals, families, communities, and the improvement of people's health and well-being. Effective performance of professional duties by specialists with respect to health care and health promotion is possible only if based on appropriate training, particularly for professional activities in mental health care (Klos, 2018, p.1). A social worker in mental health care demonstrates competences in the following aspects of professional activity: defines himself/herself as a professional social worker in mental health care and conducts accordingly; applies ethical principles of social work to guide professional practice; can apply critical thinking to providing information, communicating, and expressing professional judgment; considers diversity and differences in practice; ensures the observation of human rights and social and economic justice; is involved in practice, informed in scientific research and evidence-based practice; applies knowledge of human behavior and social environment; participates in promoting and popularizing social and economic welfare policies and providing effective social services; fits in the context that shapes the practice; engages, assesses, intervenes, and evaluates in working with individuals, families, groups, organizations, and communities; evaluates and implements the intervention; and performs final evaluation (CalSWEC, 2011).

In our steps in mental health care and training social workers for professional activity in this area, we rely on the documents of the UN and its subsidiaries, i.e., WHO's Comprehensive Mental Health Action Plan 2013-2020, and the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals, approved by the UN General Assembly in September 2015 (WHO, 2018). Considering the primary importance of professional training of social workers to address the needs in mental health care, the Department of Sociology and Social Work of Lviv Polytechnic is introducing a Master of Social Work (MSW) programme (specialization) of professional training of social workers for professional activity in mental health care. The fundamental principles of the new education programme are determined based on the Concept of Mental Health Care development in Ukraine for the period up to 2030. This document recognizes mental health as a priority of society and defines the programme of the strengthening of the nation mental health as the state strategy. It emphasizes that the modern Ukrainian system of mental health care inherited the organizational structure, strategies and practices of the Soviet system, focused mainly on biomedical aspects. Insufficient attention is paid to the prevention, psychosocial methods, organization of mental health care at the level of primary health care, psychotherapeutic support, rehabilitation measures, as well as to mental health care

services that operate in territorial communities; insufficiently developed are outpatient early intervention at the level of territorial communities and the practice of home support (Cabinet of Ministers of Ukraine, 2017). The document emphasizes the need for change, particularly for the strengthening of the role of social workers, occupational therapists, psychologists and psychotherapists on the way of solving the problem of human resource development in the field of mental health care. Hence, there is the need to improve the education system, specifically the development and support of professional competences in this area. The Concept emphasizes the principles of evidence, respect for human dignity, observation of fundamental human and civil rights, application of a multidisciplinary approach, promotion of the improvement of the living standards of persons with mental and intellectual disabilities, their inclusion in social communities, prevention of complications, and ensuring accessibility.

Modern global trends are associated with a comprehensive solution to the problem of mental health care, based on an interdisciplinary approach, involving a team of professionals with the participation of social workers and delivery of community-based services. We are relying on the best, innovative practices worldwide, including European and North American social work experience in mental health care, based on the international and national regulations in this field. Thus, it is well known that clinical social workers are the largest group of professionals in the behavioral aspects of health. They are often the first to diagnose and intervene (apply therapy) in working with people with mental disorders and various emotional and behavioral disorders. In mental health care, clinical social workers play an important role in the activities of various structures focused on the client-centered approach application, including hospitals, primary health care centers, child welfare authorities, schools, etc. (NASW, 2011).

In our view, an important center for providing support to community in addressing problems associated with health, particularly mental health issues can be Community Health Clinic. As a theoretical and methodological concept, it is implemented in the structural and functional model of social work in community, as justified and initiated at the Department of Sociology and Social Work of Lviv Polytechnic National University. To construct a model of Community Health Clinic (Fig.1) *a design method* was used.

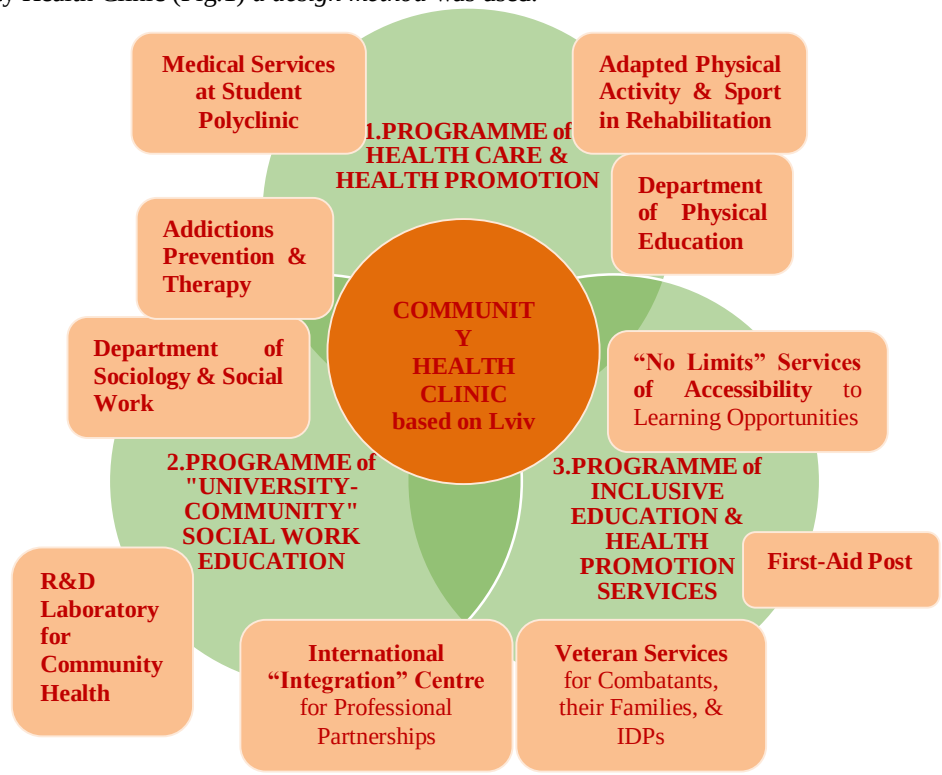


Fig. 1. The Model of Community Health Clinic based on Lviv Polytechnic (L. Klos & N. Hayduk, 2018)

Community Health Clinic based on Lviv Polytechnic will enable the provision of social, medical, rehabilitation, education and information services to all in need of such support. In the first turn, these are veterans (participants of hostilities and their families), IDPs, as well as students and teaching staff of Lviv Polytechnic experiencing health problems, who are expected to be clients of Community Health Clinic. At Community Health Clinic as a placement site for MSW students, their practical training for professional activity in health care and health promotion will be conducted, and evidence-based research in social work in community, particularly in the field of mental health care will be carried out. This implies that Community Health Clinic shall become a community-based center for rehabilitation, evidence-based practice, education, and scientific research of Lviv Polytechnic and the city of Lviv.

For the implementation of this initiative Lviv Polytechnic has noteworthy resources available, including the significant scientific, educational and methodical potential of the Department of Sociology and Social Work, presented by its the

teaching staff and social work students, the Programme of addictions prevention and therapy, and International "Integration" Centre for Professional Partnerships (hereinafter – International "Integration" Centre), as initially established on its basis. At present, International "Integration" Centre incorporates already developed "No Limits" Services of Accessibility to Learning Opportunities (hereinafter – "No Limits" Accessibility Services) for students with disabilities and chronic illnesses. Within the structure of International "Integration" Centre, "Veteran Services" are also being currently established for combatants, their family members and IDPs. In its turn, the Department of Sociology and Social Work closely cooperates with the Student Polyclinic (its both outpatient and inpatient units), the Department of Physical Education, currently launching its Programme of adapted physical activity and sport in rehabilitation, as well as with other divisions and subdivisions of Lviv Polytechnic.

Given the fact that Community Health Clinic is considered by us to be a hub of social work in community, other structures – both governmental and non-governmental ones constitute its important resource. Here belong the medical-preventive and diagnostic institutions of the city of Lviv, associations of veterans and military personnel, and NGOs and state social service agencies in particular. Further development of Community Health Clinic is largely promoted by the international partnership cooperation of International "Integration" Centre and the Department of Sociology and Social Work with The Julius Maximilian University of Würzburg (Germany); European Federation of Adapted Physical Activity (EUFAPA); The University of Manitoba and Canadian Centre on Disability Studies (CCDS) (Canada); Maria Grzegorzewska Academy of Special Education in Warsaw (Poland); Veteran Service of Frederick Community College (USA), etc.

4. Limitations of the study.

Ukraine is going through the difficult times of external military aggression, which largely complicates the development of its economy and introduction of any innovations in the social sphere, health care, and education. However, these same circumstances serve as an additional incentive to introduce change and encourage rapid transformations in these areas of society to improve the well-being and health of Ukrainian citizens.

Strengths of the study:

In seeking effective ways of solving the mental health care problem in Ukraine, this work is based on a survey of clients aimed at capturing the *"patient's voice"*, that of the mentally disabled person *per se* as an expert of his/her own life situation. An expert survey of professionals directly related to the practical solution of health issues of the mentally disabled was also conducted. The qualitative content analysis of the narrative interviews with clients and expert interviews is supported by the theoretical analysis highlighting the need for creative application of adapted innovative foreign experience as an important source of transformations in mental health care in Ukraine. The research analysis results provided the rational for the initiative by Lviv Polytechnic to train social workers for professional activity in mental health care and involve the concept of Community Health Clinic to be implemented as a hub of social work in community.

5. Conclusions (and Future Work).

To ensure the competence-based training of social workers for professional activities in mental health care and the Community Health Clinic high-quality functioning in the near future we anticipate: performing a comparative analysis of the regulatory framework in Ukraine and foreign countries, internationally recognized leaders in this field; and completion of the development of a license package of documents for the specialization "Mental Health Care in Social Work" to be provided based on the Department of Sociology and Social Work of Lviv Polytechnic National University.

6. Acknowledgments.

The co-authors are acknowledging the willingness and openness of the persons with mental disabilities and the commitment of the professionals to their involvement in the survey. The support and promotion of the study provided by the "Patient's Club" Center for rehabilitation and social adaptation and other social organizations, as involved in the city of Lviv are really appreciated. The ongoing support of the concept of Community Health Clinic to be implemented based on Lviv Polytechnic, as provided by the top administration of Lviv Polytechnic National University is highly acknowledged.

7. Authors contributions.

Each of the four co-authors of this study equally participated in conducting a survey of clients and an expert survey. Each co-author took part on an equal basis in analysing the survey results. The conclusions formulated in this study based on applying both theoretical and empirical methods of research are the joint elaboration of all the four co-authors, who fully support all the theoretical provisions of this work and share the vision of their practical implementation.

Conflict of interests. No conflict of interests is taken notice of.

References.

Cabinet of Ministers of Ukraine (2017). Order No.1018 as of 27.12.2017 on the approval of *The Concept of the development of mental health care in Ukraine for the period up to 2030*. URL: https: //www.kmu.gov.ua/ua/npas/pro-shvalennya-koncepciyi-rozvit

CalSWEC. (2011). Integrated Foundation & Advanced Competences for Public Mental Health in California. URL: http://calswec.berkeley. edu/files/uploads/ docx/ Mental% 2520Health/02_mh_comps_formatted_final.pdf.
Dolishnia, N.I. (2009). An optimistic view of the problem of schizophrenia. *Neuro News: Psychoneurology and Neuropsychiatry*, 3 (14), 18-19.
Farr, R., & Markova, I. (Eds.). (1995). *Representations of health, illness and handicap in the mass media of communication: A theoretical overview*. Chur, Switzerland: Harwood Academic Publishers.
Goffman, E. (1961). *Asylums. Essays on the social situation of mental patients and other inmates*. N.Y.: Anchor Books.
Klos, L. (2018). *The theory and practice of training of future social workers for health-caring activities at US universities.* (Abstract. dis. Dr. Ped. Sciences). The Institute of Pedagogical Education and Adult Education of the National Academy of Pedagogical Sciences of Ukraine, Kyiv.
NASW. (2011). Center for Workforce Studies & Social Work Practice. Social Workers in Mental Health Clinics & Outpatient Facilities – occupational profile. Washington, DC: National Association of Social Workers. URL: https: //www.socialworkers.org
Pironkova, O.F. (2016). Verbal-behavioral social practices in the context of labor adaptation and disadaptation of the mentally ill. *Verges*, 4 (132), 78-83.
Pol'skaya, N.A. (2004). The mentally ill in modern society: The problem of stigma. *Sociological Journal*, 1-2, 157.
Porter, R. (2008). *The patient's view. The history of medicine "from below".* V.Y. Shliumboma et al. (Eds.), Illness and health: New approaches to the history of medicine (pp. 41-72). SPb.: European University at St. Petersburg: Aleteya.
Romanov, P., Yarskaya-Smirnova, E. (2006). *Disability policy: The social citizenship of the disabled in modern Russia*. Saratov: Scietific Book.
Rubington, E., Weinberg M. (1995). *The study of social problems. Seven perspectives*. NewYork; Oxford: Oxford University Press.
Sas, T. (2007). *Madness factory*. Ekaterinburg: Ultra: Culture.
Voloshyn, P.V., Maruta, N.O. (2015). The strategy of mental health care of the population of Ukraine: Modern opportunities and obstacles. *Medical newspaper "Health of Ukraine"*. URL: https: //www.5654-strategya-ohoroni-psihchnogo-zdorovya-naselennya-ukrani-suchasn-mozhlivost-
World Health Organization (2018). *Mental health atlas 2017*. Geneva. URL: https://creativecommons.org/licenses/by-nc-sa/3.0/igo
Zymivets', N. (2010). Health category in the context of the health concept promotion. *Education of Donbass*, 6 (143), 109–118.

Mental Health Care System and Reform Efforts in Ukraine

Vitalii Klymchuk[1], Kateryna Kalendruz[2], Viktoriia Gorbunova[3]
[1] Institute of Social and Political Psychology of NAES of Ukraine, Kiev, Ukraine
[2] World Health Organisation, Kiev, Ukraine
[3] Mental Health. Solution, Zhitomir, Ukraine

Introduction. Currently, Ukraine has a centralized mental health (MH) system, mainly concentrated in large psychiatric hospitals, located in big cities, with a lack of services in rural areas. The quality of services delivered by the psychiatric facilities is low.

The conflict in the East has produced new challenges. On one hand, it activated civil society and international organisations to provide psychosocial support for IDPs, host communities and veterans. On the other hand, it revealed the government incapacity to organise its services.

Nowadays there is a consensus that MH services are best provided in local settings. The community-centred approach is manifested in the World Health Organization Mental Health Action Plan 2013-2020 (World Health Organization, 2013).

Purpose. The abstract purpose is identifying the key goals of the Ukrainian MH transformation efforts according to the national legislation and the WHO trends.

Methodology. The methodology of our study includes the review of Ukrainian legislation against the background of the Convention WHO Mental Health Action Plan 2013-2020 (possibilities, limitations, and region specific) as a base for formulating the key goals of the Ukrainian MH transformation efforts.

Results. Ukrainian national policy documents (Mental Health Care Development Concept Note in Ukraine for the period of up to 2030 adopted in 2017 (Cabinet of Ministers of Ukraine, 2017) and Mental Health Action Plan for the period of up to 2030, which is in the process of being approved) outline the government's plans to improve MH service provision by decentralizing the system, supporting the development of community-based MH services, enhancing the skills of PHC professionals, and introducing a certification system for MH professionals.

The law on autonomy of medical facilities, adopted in April 2017 (Parliament of Ukraine, 2017a), the new healthcare financing law adopted in October 2017 (Parliament of Ukraine, 2017b), and many other decrees of the Ministry of Health and the Cabinet of Ministers of Ukraine are meant to give the medical facilities freedom to make their own choices when it comes to staffing, financing and type of services provided.

There is a large number of MH players in Ukraine. They range from newly established in February of 2018 Center for Mental Health and Drug and Alcohol Monitoring of the Ministry of Health, to non-governmental organizations, such as Ukrainian Institute of Cognitive-Behavioural Therapy, Ukrainian Psychiatric Association, National Psychological Association, and others.

There are two key goals of the MH transformation efforts according to the National Concept Note and Mental Health Action Plan for the period of up to 2030.

Goal 1: Improving the framework conditions for the mental healthcare system. The MH legal and regulatory framework requires improvement in the directions of respect for human rights (especially in terms of gender, age, ethnicity or socioeconomic groups) and creation of the enabling environment for the decentralization of services, developing clear regulations for the MH facilities and quality assurance mechanisms. This should be in line with strengthening MH advocacy efforts, policy dialogue and data-informed policy making. MH workforce capacities and skills need strengthening through introducing new certification, accreditation and licensing mechanisms and setting evidence-based standards of treatment, development of new training curricula, improving quality of education and improvement of the capacities and skills of primary care and MH professionals.

Goal 2: Development and strengthening of the community-based care, prevention and destigmatization. Community-based model of care should be developed through using the deliverables from the Goal 1 and building the local optimal mix of services, starting from the self-care and prevention/promotion programs, through development of the primary care and community-based MH care models and improving accessibility (in addition to fighting stigma) plus referral network. Primarily focus should be the accessibility of MH services at all levels of healthcare (community, primary, secondary, tertiary healthcare and medical rehabilitation) with special attention to the population at risk of discrimination (by gender, ethnicity, age or socioeconomic status). Capacities of society to provide prevention/promotion, fight stigmatization and discrimination may be strengthened through a range of activities aiming towards promoting mental health and human rights in medical facilities, educational institutions, workplace. Within this goal, an important aspect is delivering evidence-based care to conflict-affected population.

Limitations of the study. The limitation of the study is reliance on ongoing legislation and current situation, that can change with the policy changes of the government.

Social value. Improving the MH framework conditions and development of the community-based care models in Ukraine might push up the quality of care for people with mental health disorders not only in terms of health treatment but also as a care about human rights, gender issues, and daily wellbeing.
Conclusions. Currently, there is full governmental support and active position of the Ministry of Health of Ukraine in the reform efforts in the area of mental health services in Ukraine. There are Mental Health Care Development Concept Note and Mental Health Action Plan. The key goals of the MH transformation efforts are improving the framework conditions for the mental health care system, standardising the workforce education through professional licensing, development of the community-based care models, placing emphasis on prevention and destigmatisation.

References.
World Health Organization. (2013). Mental health action plan 2013 – 2020. Geneva: WHO.
Parliament of Ukraine (2017a, April 6). Pro vnesennia zmin do deiakykh zakonodavchykh aktiv Ukrainy shchodo udoskonalennia zakonodavstva z pytan diialnosti zakladiv okhorony zdorovia [On Amending in Certain Legislative Acts of Ukraine to Improving Legislation on Activities of Health Care Institutions]. Retrieved from http://zakon2.rada.gov.ua/laws/show/2002-19
Parliament of Ukraine (2017b, October 19). Pro derzhavni finansovi harantii medychnoho obsluhovuvannia naselennia [On State Financial Guarantees of Public Health Care]. Retrieved from http://zakon2.rada.gov.ua/laws/show/2168-19
Cabinet of Ministers of Ukraine (2017, December 27). Kontseptsiia rozvytku okhorony psykhichnoho zdorovia v Ukraini na period do 2030 roku [Mental Health Care Development Concept Note in Ukraine for the period of up to 2030]. Retrieved from http://zakon3.rada.gov.ua/laws/show/1018-2017-%D1%80

Keywords: Ukraine, mental health, services, health care system, community facilities, psychiatry, psychology.

Multidisciplinary Approach to Research of the Adherence to Treatment Phenomenon in Patients with Diabetes Mellitus

Anna Kogut[1], M. Bobryk[1], O. Potapov[2], I. Frankova[1],
J. Komisarenko[1], O. Khaustova[1], O. Chaban[1]
[1] Bogomolets National Medical University, Kyiv, Ukraine
[2] Centre for Innovative Medical Technologies of the National Academy of Sciences of Ukraine, Kyiv, Ukraine

Background: Diabetes Mellitus (DM) – is one of the most common chronic diseases, and its control is affected by the patients' psychological attributes (Esmaeilinasab et al., 2016). The number of patients with this disease is expected to increase in future. Given the increasing prevalence of DM, there is an urgent need for the treatment of DM and associated complications. Glycemic control largely depends on compliance with medication therapy. In fact, the most common problem in patients with DM – is a lack of medication compliance (Shamsi, Khodaifar, Arzaghi, Sarvghadi, Ghazi, 2014). For example, laboratory data of single components of the metabolic syndrome, according to International Diabetes Federation Consensus were dependent measures in multivariable regression models with self-reported alexithymia severity (TAS-20) and socio-demographic data. Alexithymia is a clinical trait, consisting of diminished introspective and interoceptive capacities that have been shown to implicate elevated autonomic outflow and to bias for hypertension (Lemche, Chaban, Lemche, 2014). One of the challenges in promoting adherence to medication regimes is having an accurate understanding of adherence rates and the factors that contribute to non-adherence (Lehmann et al., 2014). It's essential to consider the clinical assessment of psychological aspects in patients with DM, in order to prevent potentially adverse self-care management behaviours leading to diabetes-related complications, including declining levels of life quality (Conti et al., 2017). The patient`s quality of life is one of the principal components in clinical decision-making (Chaban, Khaustova, Bezsheiko, n.d.).

Purpose: Improving the effectiveness of DM patients' therapy and demonstrating the consequence of psychosocial factors on their adherence to treatment.

Method: This study was conducted during the period from July to August 2017 on the basis of the Kyiv Endocrinology Centre and the Department of Endocrinology in partnership with the Department of Medical Psychology, Psychosomatic Medicine and Psychotherapy of the Bogomolets National Medical University. Study population (n=60) consisted of two comparative groups (CG) of patients with DM type 1 (DM1) (n=16) and type 2 (DM2) (n=33), while other patients had newly diagnosed DM of both DM1 and DM2. Study data consists of: hospital chart data (age, demographic data, body mass index, level of systolic and diastolic arterial pressure, blood glucose and glycated hemoglobin (HbA1c); psychometric validated scales (Medication Compliance Scale (MCS), Holmes and Rahe Stress Scale (HRSS), Dysfunctional attitudes Scale (DAS), Toronto Alexithymia Scale (TAS-20), the Depression, Anxiety and Stress Scale (DASS-21) and Chaban Quality of Life Scale (CQLS)). Glycemic control was assessed by HbA1c results.

The statistical analysis was performed using descriptive statistics and Pearson's correlation with MS Excel and SPSS Statistics 22.0.

Results: A statistically significant difference was found between groups of patients with high (HC), middle (MC) and low level of compliance (LC) according to MCS. Patients with LC had statistically higher levels of HbA1c results according to MCS (LC (M=13), SD:1 vs. MC (M=9.83), SD:1.4 vs. HC (M=9), SD:1.4). Average values by MCS results for CG – DM1 (M=19) and DM2 (M=18) present MC; by HbA1c results – DM1 (M=10) and DM2 (M=10) at the same level. So, there was no significant statistical difference found between scores by the results in CG.

A significant bilateral indirect correlation was found between the results by MCS (LC) with high level of the DAS, TAS-20, DASS-21, HRSS scores on level $p<0,001$ and direct by CQLS ($r=0,37$) results on $p<0,01$(HC). A relationship was also found between the scores by: 1) DAS (direct) – with the indicators of age, blood glucose level and depression, on level $p<0,05$, alexithymia, stress and anxiety (DASS-21) on $p<0,01$; 2) CQLS (indirect) – with the DAS ($r=-0,28$) and TAS-20 ($r=-0,29$) results – on $p<0,05$, stress ($r=-0,36$) on $p<0,01$ and depression (DASS-21) ($r=-0,48$) on $p<0,001$; 3) TAS-20 (direct) – with the DASS-21 subscales results on $p<0,01$.

A strong relationship was found between LC in DM patients with high level scores of psychometric scales and laboratory indicators of HbA1c, as evidenced, that patients with LC most often had mental disorders and low rates of treatment effectiveness.

Conclusions: Adherence to treatment was not dependant on the type of diabetes and diagnosis. LC and quality of life added, in consequence, to non-adherence and, respectively, to the inefficiency of DM patients treatment. So, a multidisciplinary approach – involving psychologists for improving adherence to therapy together with endocrinology specialists, can potentially improve treatment effectiveness.

Originality: The comparison of DM patients indicators by psychosocial status, demographic data and level of compliance, depending on the type of diabetes and diagnosis.
Limitations of the study: The low sample of patients which is planned to be addressed in further studies.
Strengths of the study: The concept of ‘‘adherence to treatment’’ is much broader than the concept of “compliance”, which is signified only by a strict adherence to the prescription of a doctor. Adherence to treatment – is a complex of the external and intrinsic factors of the patients’ environment and their characteristics as personalities, in relation to medical treatment. There is an extensive scope for studying and researching both in both clinical and social science fields. Multidisciplinary research would be a recommended approach for future research, because different specialists in their distinctive spheres may be able to unite with the common purpose of studying the problem of comorbidity.

Keywords: diabetes, health, health care, medical, medical research, medical science, medicine, mental health, mental illness, mental stress, psychology, quality of life, research, scientific research, social well-being.

References.

Chaban, O., Khaustova, O., Bezsheiko, V. (n.d.). *Reliability and validity of Chaban Quality of Life Scale*. Retrieved from https://www.ecnp.eu/presentationpdfs/70/P.2.h.301.pdf
Conti, C., Di Francesco, G., Fontanella, L., Carrozzino, D., Patierno, C., Vitacolonna, E., Fulcheri, M. (2017). *Negative Affectivity Predicts Lower Quality of Life and Metabolic Control in Type 2 Diabetes Patients: A Structural Equation Modeling Approach. Front Psychol*. 24;8:831. doi: 10.3389/fpsyg.2017.00831
Esmaeilinasab, M., Ebrahimi, M., Mokarrar, MH., Rahmati, L., Mahjouri, MY., Arzaghi, SM. (2016). *Type II diabetes and personality; a study to explore other psychosomatic aspects of diabetes. J Diabetes Metab Disord*. 3;15:54. doi: 10.1186/s40200-016-0281-3
Lehmann, A., Aslani, P., Ahmed, R., Celio J., Guchet A., Bedouch P., Bugnon O., Allenet B., Schneider MP. (2014). *Assessing medication adherence: options to consider*. Int J Clin Pharm. 36(1):55-69. doi: 10.1007/s11096-013-9865-x
Lemche, A., Chaban, O., Lemche, E. (2014). *Alexithymia as a risk factor for type 2 diabetes mellitus in the metabolic syndrome: a cross-sectional study*. Psychiatry Res. 215(2):438-43. doi: 10.1016/j.psychres.2013.12.004
Shamsi, F., Khodaifar, F., Arzaghi, SM., Sarvghadi, F., Ghazi, A. (2014). *Is there any relationship between medication compliance and affective temperaments in patients with type 2 diabetes*? (2014). J Diabetes Metab Disord. 27;13(1):96. doi: 10.1186/s40200-014-0096-z

Hardiness as a Factor of Psychological Resilience of Youth in Conditions of Military Conflict

Svitlana Kravchuk
Institute for Social and Political Psychology, NAES of Ukraine, Kyiv, Ukraine

Introduction. The study of the psychological resilience and hardiness of the personality is especially relevant in connection with the military conflict in the East of Ukraine, which has led to the destruction of social order, social structure of communities, and, for many, the loss of contact with close people. In youth the formation of moral self-awareness and self-regulation, which become more complete and meaningful with age, allow the individual to form his or her own worldview. During this period the social position of the individual changes, causing a change in the significance of any teaching; the process of self-determination is intensified with self-esteem, self-awareness, psychological readiness for life, and identity formation. The study of the peculiarities of hardiness and psychological resilience of youth is particularly important when we consider the negative impacts of military conflict.
Purpose. Our purpose was to understand and establish the peculiarities of hardiness as a factor of the psychological resilience of young people living in the conditions of a military conflict.
Methodology. 123 young people (from 19 to 23 years old) took part in our empirical study – students of Taras Shevchenko Kyiv National University and Borys Grinchenko Kyiv University. To study psychological resilience we used the test, "Diagnostics of psychological resilience" (S. Kravchuk, O. Osadko). The Cronbach's Alpha indicates that the internal consistency of the scale of psychological resilience is acceptable (Cronbach's Alpha = 0,775). To study hardiness and its components we used the test "Diagnostics of hardiness" (S. Maddi). Significant direct correlative relations between psychological resilience and hardiness (Spearman's Correlation Coefficient = 0,718, sig (p) < 0,001) and its components – commitment (Spearman's Correlation Coefficient = 0,684, sig (p) < 0,001), control (Spearman's Correlation Coefficient = 0,656, sig (p) < 0,001), and challenge (Spearman's Correlation Coefficient = 0,523, sig (p) < 0,001) are revealed. Based the use of multiple regression analysis, we established that challenge (Standardized Beta Coefficient = 0,322, sig (p) < 0,001), commitment (Standardized Beta Coefficient = 0,295, sig (p) < 0,01) and control (Standardized Beta Coefficient = 0,270, sig (p) < 0,01) are determinants of psychological resilience of youth. In this research, it was empirically discovered that the higher the hardiness of young people as described above, the less likely they are to engage in critical provocative situations in such forms of emotional response as anger, impotence, fear, and irritation and also less prone to active aggression as a form of behavioural response. The direct significant correlative link of hardiness with satisfaction with quality of life was revealed. A person with a high level of hardiness is characterized by optimism and activity of a vital position.
Results and Discussion. Concepts of psychological resilience and hardiness are not synonymous. We consider psychological resilience as an integrative feature of the individual which manifests itself in the ability to maintain a stable level of psychological and physical functioning in critical situations, to come out of such situations without persistent violations, to successfully adapt to adverse changes. The concept of psychological resilience describes the ability to overcome difficulties, to adapt positively, and to function successfully in critical situations.
We believe that the concept of hardiness should be considered as a psychological phenomenon that at the content-structural level of analysis is a complex integral characteristic of an individual, which includes emotional, cognitive, moral, volitional, behavioural components. The emotional component of hardiness includes emotional stability, stress resistance, equilibrium, commitment, and an optimistic view of life. The cognitive component of hardiness includes control, challenge, persuasion, expectation, attribution, and self-relation. The volitional component of hardiness includes purposefulness, initiative, independence, resolve, perseverance, endurance, resistance. The moral component of hardiness includes humanistic values. Finally, the behavioural component includes active interaction with the surrounding reality.
At the process-dynamic level of analysis, hardiness, as a psychological phenomenon, acts as a personal style. At the functional level of analysis, hardiness as a psychological phenomenon serves as a component of adaptive personal resourcefulness, the creative potential of the individual, personal maturity and as a predictor of psychological resilience – an indicator of mental health, a functional component of viability and a factor of life creativity.
Practical value. The practical value of the study is that the results of this empirical research can be used in the process of further developing an understanding of the function of characteristics of hardiness as a factor of the psychological resilience of youth. The scientific data obtained related to the peculiarities of hardiness and psychological resilience in young people will contribute to the development of a training program aimed at developing psychological resilience in youth.
Conclusion. In future we plan to continue the study of peculiarities of hardiness and psychological resilience of individuals in the situation of military conflict.
Keywords: hardiness, personality, psychological resilience, youth, commitment, control, challenge, military conflict.

Major Features of Language Adaptation as a Sign of a Stable Psychological Condition

Zorjana Kunch, Yaryna Turchyn
Lviv Polytechnic National University, Lviv, Ukraine

In the context of the Crimea annexation and military actions in the East of Ukraine, increasing the number of first-year students of Lviv Polytechnic coming from bilingual or Russian-speaking families has become a trend. There is a need for research to analyze the psychological state of the student adjusting to the Ukrainian language environment.
Purpose. The study aims to analyze the student's language adaptation as a component of socio-cultural and psychological adaptation.
Design/Methodology Approach. The main diagnostic tool is a survey conducted among first year students.
Results. The data prove that the students' attitude toward the national language is improving. The strategy for students' socio-psychological support is based on various educational factors, particularly the Ukrainian language courses delivery. This is supportive of overcoming disintegration factors, which allows to achieve psychological stability.
Limitations and strengths of the study. The Ukrainian community first encountered the problem of socio-psychological adaptation of IDPs caused by military actions. This does not allow to see the problem under study in dynamics. Due to the consideration of quantitative indicators a wide range of information is analyzed.
Practical/Social Value. The outlined educational factors promote students' love for Ukrainian and a sense of responsibility for their state.
Originality/Conclusions. The findings indicate that the language adaptation of young Ukrainians happens smoothly, supported by motivational teaching, interactive learning, students' social participation and involvement in cultural events.

Keywords: Crimean and Eastern regions, military actions, social change, national language, student, adjustment to school life, research, teaching Ukrainian, cultural event, social participation.

1. Introduction.

Under current conditions, due to the migration caused by the annexation of Crimea and the military actions in the Donbass, the issue of socio-cultural and psychological adaptation of internally displaced persons who are far away from their home, finding themselves among strangers, in unusual circumstances is actualized. These people need not only material support and social assistance, but also a certain psychological stability. In this context, the problem of language adaptation is also aggravated, since many Ukrainian citizens who are accustomed to using the Russian language in their region move to new locations where they hear the Ukrainian language not only in formal communication situations, but also in everyday life. The number of graduates of secondary schools who come to study in the Western region of Ukraine also grows. Therefore, the enquiry into socio-psychological factors of language adaptation of student youth, accordingly including the search for means of successful inclusion of young people in a new social environment is topical. The article analyzes the attitude of youth to various aspects of language self-identification and suggests ways to promote harmonious introduction of the Ukrainian language into everyday use by young people.

Student youth having moved from most of the Eastern regions of Ukraine, particularly from Donetsk and Luhansk regions, and Crimea, involuntarily became a "hostage" to the obscene language policy of the previous periods, starting from the 1930s, when under the brand of "internationalism" the total Russification of the Ukrainian population was implemented (Dziuba, 1998), and ending with modern legislative acts aimed at protecting and developing languages of national minorities, which however, did not provide proper support to the state Ukrainian language. The social changes caused by the Revolution of Dignity and the hybrid war have contributed to the fact that a significant part of the Ukrainian society still using Russian at all levels, begins to feel the need to communicate in the state language, and introduce it into everyday life and family communication specifically.

The psychological condition of many young men and women is complicated by the fact that in a family there are often conflicting views on the situation in the state. Sometimes the relationship between relatives and friends is complicated by an unfavorable attitude to the desire of one of them to communicate in Ukrainian. This leads to the fact that communication between them becomes more restrained, the frequency of communication decreases, and sometimes communication is completely weakened or even terminated. On the other hand, there is a serious challenge to the Ukrainian community, which can react differently to fellow citizens who do not want to speak Ukrainian, and even to those who seek to communicate in Ukrainian, however, with this being still imperfect.

The research purpose is to conduct a comprehensive analysis of the student's language adaptation as an important component of the socio-cultural adaptation of an individual in modern conditions, as well as to determine measures

that a higher educational establishment can offer to improve the effectiveness of this process. The development of a language adaptation strategy will promote overcoming the disintegration factors that may thus arise.

2. Related Work.

The notion of "adaptation" (from the Latin adaptatio – "adaptation") in the broad sense is widely interpreted as "adaptation of organisms to environmental conditions" (Kunch, 2005, p. 16). In the scientific literature, it is customary to highlight socio-psychological adaptation, i.e., the process of specific adaptive activity, conditioned by changes in social reality and aimed at optimizing the interaction of an individual with the surrounding social environment in response to changes in the latter. "Socio-psychological adaptation, as rightly noted by Shkoliar, is a process of active adaptation to the requirements of the environment. It should be viewed as an ongoing process of mutual influence of a person and his/her social environment, with its success and adequacy depending upon both individual and psychological features of a person, and on the factors of the environment" (Shkoliar, 2017). The process of adaptation depends upon the socio-psychological needs of an individual and the requirements of society. Socio-psychological adaptation "is caused by problem-adaptive situations; actual and potential adaptive barriers that hinder the adaptation of the global human-being to different social situations; and adaptive attitudes arising in the process of the individual interpreting of social being, as well as his/her own roles and sense of life in a particular megasocium" (Sydorenko, 2005).

The authors believe that language adaptation is an aspect of social and psychological adaptation. We adhere to the concept definition, as offered by Tarasiuk, "it is appropriate to understand language adaptation as the process of accumulation of active and passive vocabulary, taking into account the dialect features of the migrant's region of residence, ensuring the transfer of information for the implementation of successful verbal communication" (Tarasiuk, 2011). While being in a foreign language environment, an individual mobilizes his/her internal potential for active interaction with the outside world, demonstrates the ability to adapt to new conditions of existence in the environment, and reveals mobility in his/her interaction with society. The environment in which the adaptation takes place can also contribute to this process, due to which it makes the process occur more smoothly, while exempting it from certain disintegration effects. In the work by Puzyrnyi "Intellectual development and socialization of the individual", the emphasis is placed on the need to strengthen the intellectual education of young people as the precondition for the individual's social adaptation and transformation in an updated society (Puzyrnyi, 2017, pp. 52-56). Based on these studies, we specify the following research objectives:

- To analyze the attitude of Russian-speaking youth to adaptive processes;
- To assess the prospects for youth adaptation in the Ukrainian-speaking environment;
- To determine the value of educational activities to improve language adaptation;
- To propose a strategy to promote adaptive processes.

Methodology. To achieve the goal, a set of techniques was used to study the student's psycho-emotional state and his/her subjective vision of the language behavior features. The main diagnostic tool was a survey conducted among students of the first year of studies at Lviv Polytechnic, and an analysis of its results. The research sample of our study was made up of 171 first-year students of the Institute of Humanities and Social Sciences, among them – 34 boys and 137 girls.

3. Results and Discussion.

Internally displaced persons find themselves in large numbers in Western Ukraine, mainly due to the region remaining the focus of stability. Before the Revolution of Dignity and the Russian Federation military aggression, the contingent of students of Lviv Polytechnic National University had consisted mostly of representatives of Lviv, Ivano-Frankivsk, and Ternopil regions, and to a lesser extent, of incomers from Khmelnytskyi, Volyn', Rivne, and Transcarpathian areas. Lately, the number of the University entrants from the Central and Eastern Ukraine has been growing. This is clearly illustrated by the comparative analysis (Fig. 1): In 2012, 4,613 immigrants from Lviv region, 1,831 people from other Western arears and only 200 representatives of the Central and Eastern regions of Ukraine entered the first year of bachelor's programmes of studies at Lviv Polytechnic. However, with each subsequent year, the situation keeps changing in the direction of reducing the proportion of representatives of the Western Ukraine and increasing the number of incomers from Vinnytsia, Cherkasy, Zhytomyr, Poltava and other remote areas.

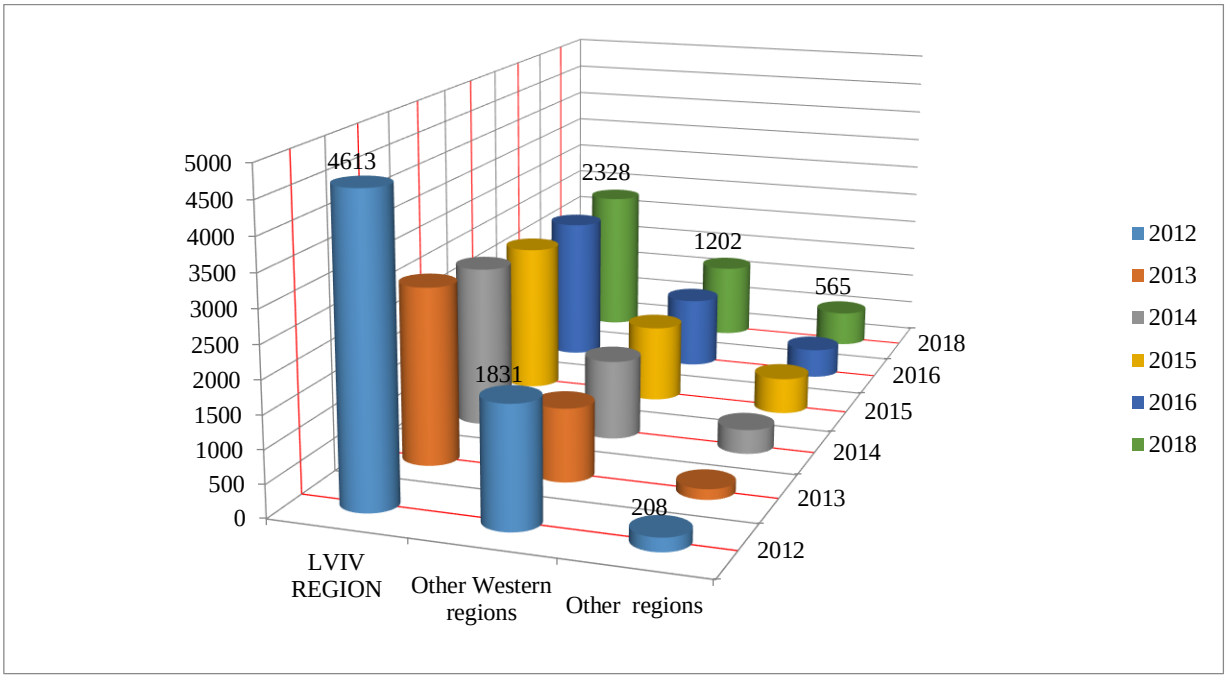
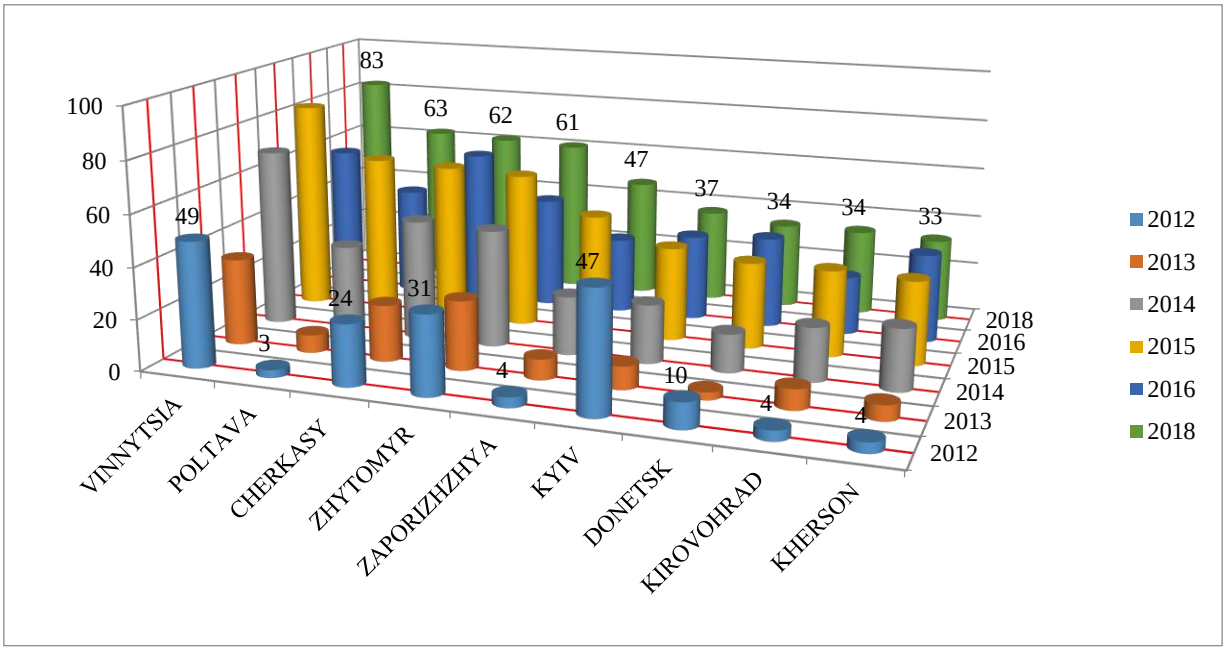


Fig. 1. The contingent of first-year students of Lviv Polytechnic National University (2012-2018)

The above diagram shows the dynamics of change in the number of students. The rapid growth in the number of entrants from the Central and Eastern Ukraine, which falls on 2013-2014, persists in subsequent years.
Migration processes are caused not only by the hybrid war, but also, to a certain extent, by a number of other factors, which may affect the process of language adaptation: firstly, some people from the regions close to the western border choose for themselves studies abroad; secondly, university e-entry, as introduced a few years ago provided an opportunity for youth migration. Besides, many Lviv residents go to study to educational institutions in the capital, as well as to universities in other various regions of Ukraine. Therefore, the share of Lviv Polytechnic students – those who come from the Western regions of Ukraine tends to decrease.
The following two diagrams (Fig. 2) reveal the dynamics of change in the contingent of first-year students of Lviv Polytechnic and show that the number of people coming from the Eastern and Central regions of Ukraine has grown almost threefold.



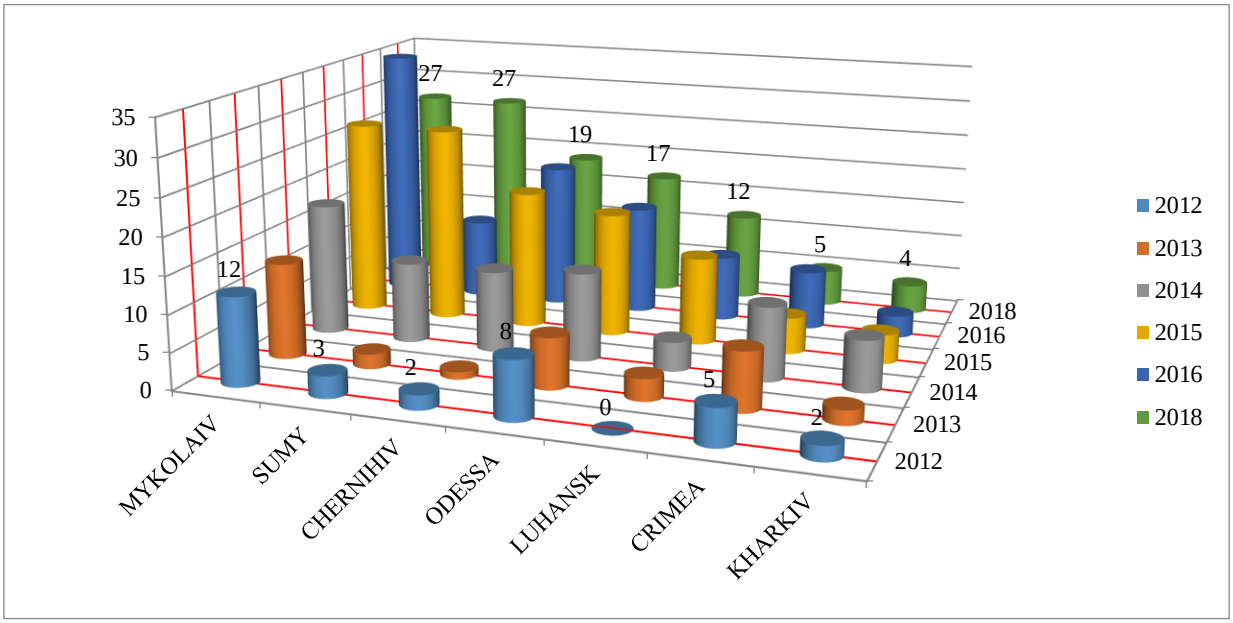


Fig. 2. The contingent of first-year students of Lviv Polytechnic National University (2012-2018)

Reducing the number of first-year students who come from Ukrainian-speaking families and increasing the number of freshmen – those coming from bilingual or Russian-speaking families is an objective process, which has recently acquired stable dynamics. Therefore, it is important to analyze, on the one hand, the impressions, feelings and, in general, the psychological condition of the freshman, who is adapting to the unusual Ukrainian language environment, and, on the other hand, the environment in which the language adaptation of the Russian-speaking student is taking place.

Our questionnaire contained questions in three rubrics: "My Origin", "Education at the University", and "My Feelings". Each rubric was intended to reveal patterns associated with the student's previous experience, the realities of his/her modern life, and the emotions s/he experiences in connection with the language issues. In the first rubric, the following questions were posed: *"In what language do you communicate in the family of parents?"*, *"In what language did you study at school?"*, *"In what language did you usually communicate with friends in school years?"*, etc. In the second rubric, which provided for the assessment of the student's modern language practice, the following questions were asked, *"In what language do you communicate during the training sessions?"*, *"What language do you use to communicate with your friends in Lviv?"*, *"What language do you use to communicate with friends from your home town (village)?"*, *"What language do you usually use for informal communication with classmates?"*, *"Estimate how often you used the Ukrainian language over the last year"*, etc. The third rubric – "My feelings" contained the following questions, *"What language do you consider to be your native language?"*, *"Do you think that every citizen should know Ukrainian in Ukraine?"*, *"Do you agree that you should communicate in Ukrainian in all official situations?"*, *"Do you feel that your attitude to the Ukrainian language has recently improved?"*, *"In what language do you plan to communicate in your family?"*, *"Would you like the Ukrainian language to sound from the mouth of every Ukrainian in different circumstances of communication?"*, etc.

An analysis of the previous experience of the survey respondents indicates that communication in the parents' family for 92 incomers from the Lviv, Ivano-Frankivsk, Volyn' and Ternopil regions (conditional first group of respondents) occurs in the Ukrainian language, which is 93%, although Russian, English, Italian, and Arabic are alternatives. On the other hand, people from the Central and Eastern Ukraine (Chernihiv, Sumy, Odessa, Mykolaiv, Kherson, Zaporizhzhya, Dnipropetrovsk, Donetsk, Cherkasy, Vinnytsia, Kirovohrad, Kyiv, and Zhytomyr regions) (conditional second group of respondents) responded that in the family of their parents they communicate in the following languages: 8 persons – Ukrainian (25.8%), 12 – Russian only (38.7%), 5 – Ukrainian and Russian (16.1%), and 5 – Surzhyk (16.1%). At the same time, the language of instruction at school was Ukrainian for 97.9% of respondents of the conditional first group, and for 74.2% of the conditional second group, and only one respondent of the conditional first group attended school with the Russian language of instruction, and in the conditional second group, 4 respondents indicated Russian as the language of instruction (12.9%). Only 4.2% of all respondents indicated that they studied at school in two languages (Ukrainian and Russian, or in Transcarpathia, in Ukrainian and Hungarian). Such data testify to the fact that first-year students are fluent in the state language, regardless of the region of Ukraine they are coming from.

When asked *"Which language did you usually use in communication with your friends during school years?"*, all the interviewed from Mykolaiv, Kherson and Odessa regions replied that it was Russian, the same answer was found in 50% of respondents from Sumy and Chernihiv areas (the other half spoke in two languages – Ukrainian and Russian), and in 62.5% of representatives of Donetsk, Zaporizhzhya and Dnipropetrovsk regions (another 25% communicated with school friends in Russian and Ukrainian), and only 12.5% stated that the language of communication with their friends was Ukrainian.

Somewhat better is the situation with incomers from Central Ukraine (Kyiv, Zhytomyr, Cherkasy, Kirovohrad, and Vinnytsia regions): 35.7% of them communicated with friends in school days in Ukrainian, another 35% – in Surzhyk, and 14.3% – in Russian, about the same number – in two languages (Ukrainian and Russian). On having moved to a completely Ukrainian-speaking region, in which 95.9% of peers communicate with friends in Ukrainian, these people found themselves in an unusual language environment.

How has the language environment of Russian speakers changed in the life of respondents of the first year of studies at Lviv Polytechnic? The answer to this question is obtained on the basis of the survey analysis in the second rubric. To the question *"In which language do you communicate during training sessions?"* the answer "Ukrainian" was provided by all respondents (100%). As for communication with friends in Lviv, specifically 64.5% use the Ukrainian language, 16.1% – Ukrainian and Russian, and only Russian – 19.3% of the representatives from the Southern, Central and Eastern regions. Instead, representatives of the Western regions communicate with their friends in Lviv in Ukrainian – 94.9%. Young people who moved to Lviv from Russian-speaking regions continue communicating with their friends from their native city or village in Russian (51.6% of respondents), but some individuals from Odessa, Cherkasy, Vinnytsia, and Kirovohrad regions switched in communication with their school friends to the Ukrainian language – 12,9%.

Quantitative indicators differ in the answers to the question of which language is more often a means of communication in public places (transport, shop, and cafe) and in a hostel, as well as in informal communication with classmates. If in public places people from the Central and Eastern regions predominantly use the Ukrainian language (93.5%), and only 3.2% – Russian, and the same number – Ukrainian and Russian, then in a hostel, 68.9% of them use the Ukrainian language (the rest communicate in Surzhyk (6.5%), Ukrainian and Russian (9.7%), Russian (12.9%)), and for informal communication with classmates, 54.8% of respondents use the Ukrainian language (29% –Russian, 9.7% – two languages, and 6.5% – Surzhyk).

It turns out that official situations compel young people to be more responsive to the choice of the language of communication: it is significant that 6.5% of students in an informal setting (both in a hostel and when with classmates) use Surzhyk, whereas in public places they do not do this; in informal situations, students use Russian or two languages much more often. To some extent, in informal situations, the choice of the language of communication can be influenced by the language of conversation with the nearest friend (girlfriend) or husband (wife). After all, 41.9% of respondents indicated that a close friend uses the Russian language (38.7% said so about a husband or wife), 35.5% – Ukrainian (husband or wife – 45.1%), 16.1% – two languages (husband or wife – 16.1%), and 6.5% – Surzhyk (no answer like that was found with respect to a spouse). That is, in an informal setting, a high percentage of the use of the Russian language or two languages (Ukrainian and Russian) is perhaps caused by the fact that respondents do not communicate in Ukrainian with their closest peers in everyday situations.

It is also important to consider the assessment provided by students as to how often they use the state language in the recent period and whether they use it to a greater or lesser extent. Answers to the question *"Estimate how often you use the Ukrainian language in the last year"* are distributed the following way: "permanently" – 29.8%, "more than in other languages" – 58.8%, "only on demand or request" – 6.5%, and "very rarely"– 3.2%. Therefore, we see that less than 10% of the surveyed students use the Ukrainian language very rarely, or only on a demand or request. At the same time only 9.7% of students from the Eastern and Central regions of Ukraine stated that in their choice of language of communication in the student years nothing has changed, compared with school years (probably it was the response of those who communicated and communicate in Ukrainian in the parents' family, and also use it for contacts with friends), and more than 90% answered that recently they communicate more in the Ukrainian language (much more – 71.3% and a bit more – 18.7%). This shows that, on having found themselves in the Ukrainian-speaking environment, young men and women are gradually adapting to it and switching to communication in Ukrainian, first only in official situations, and then eventually in an informal setting.

The questions in the third rubric – *"My Feelings"* were aimed at revealing the attitude of freshmen to the language and the prospects for the Ukrainian language among the current Russian-speaking citizens of Ukraine. The question *"What language do you consider to be your native language?"* Ukrainian was named by 97% of students from the Western region (among the answer options the remaining 3% were Hungarian, Greek, Arabic, and Azerbaijanian), 85.7% of people from Central Ukraine (Vinnytsia, Cherkasy, Kyiv, Zhytomyr, and Kirovograd regions), 57.1% of those from Kherson, Odessa and Mykolaiv regions, and 50% of students from the Eastern and Northern regions (Donetsk, Zaporizhzhya, Dnipropetrovsk, Sumy, and Chernihiv regions). The Russian language was claimed to be native by 13.6% of representatives of the last two groups (there was no answer alike among

other groups), and only about 4% of respondents consider the two languages (Ukrainian and Russian) to be native. These data indicate that the vast majority of young Ukrainians find Ukrainian to be their native language.

The answer to the question *"Do you think that every citizen should know Ukrainian in Ukraine?"* was unanimous: 97.8% of respondents from the Western regions of Ukraine and 94.4% of respondents who came from other areas of the country responded affirmatively. Almost all respondents agree that the official language should be spoken in all official situations. A slightly smaller number of respondents, but also an absolute majority of respondents would like the Ukrainian language to sound from the mouth of every Ukrainian under different circumstances of communication: 88.2% answered "yes", and 11.7% – "I do not care".

To the question *"Do you feel comfortable when you are treated in Ukrainian?"* almost all respondents answered affirmatively; in the questionnaire, some even wrote comments like "very", "I am pleased to", "I am so pleased to"; and only two students out of 171 provided the answer "not really". We believe that such a picture attests to the importance of raising awareness and educational work among young people.

Young people are the least protected demographic group, especially in countries with a transitional socio-economic status. Juvenile maximalism, excessive psychological pressure of the need to separate from parents, and personality immaturity are all the problems, which young people are unable to solve on their own; therefore, state, social and public institutions must assume certain obligations to provide psychological support to a young citizen (Falkovska, Muzychko, & Havrylovska, 2017, p. 57). Conditioned by this one of our study objectives was to outline how the student's living environment could contribute to the process of language adaptation. We believe that the major principle of working with Russian-speaking youth is "maintaining the balance between the individual and the environment, and understanding that the environment can become a factor of stress and maladjustment, and a resource in solving problems" (Shkoliar, M., 2017, p. 63).

In our opinion, the strategy of language adaptation of student youth is based on the inextricable unity of action of the three factors – *education and training, upbringing,* and *raising awareness*.

A significant factor that creates the maximum effect of psycho-social support, is the availability in the curricula of a bachelor's normative academic course entitled "The Ukrainian language (for professional orientation)", as well as a course on rhetoric, which is offered for students as an elective at the bachelor's level. The outlines of these courses "orient students toward the improvement of school linguistic and stylistic knowledge, the development of skills of the speech culture, more conscious and socially claimed mastery of the literary language norms, the familiarity with the scientific principles of spelling and punctuation and raising the level of literacy – so necessary qualities in every sphere of human activity" (Vozniuk, 2016, p. 51). All freshmen can study these disciplines under equal conditions. Thus, students who come from the Russian language environment can improve their knowledge of the Ukrainian language and acquire new language skills under the guidance of an experienced teacher-philologist. "The Ukrainian language (for professional orientation)" course develops various students' general and professional competencies, i.e., to be able to implement the requirements of the Constitution of Ukraine with regard to the statehood status of the Ukrainian language and its application in professional communication; to be able to communicate in writing and orally in the state language, to possess skills of speech culture, to adhere to the norms of the Ukrainian literary language; to logically and correctly express thoughts in the process of professional communication; to be aware of and be able to apply the principles and means of professional communication; to use means of office and business speech; and to use the acquired knowledge for applied purposes. As rightly noted by Ohijenko, "the main native-speaking duty of every conscious citizen is to work for the sake of increasing the culture of own literary language" (Ohijenko, 1994, p. 12). This thought of the outstanding scholar goes throughout the whole educational process and helps every student in overcoming psychological barriers that s/he can feel under certain circumstances.

The latent impact on persons in adaptation is carried out in the educational process, due to the use of interactive teaching methods in particular. E.g., a business game, in which students exchange thoughts about a certain scientific problem, provides an opportunity for students to learn the way to properly conduct a discussion or business meeting; it is also a platform for applying students' skills of competent communication in the Ukrainian language. A short student's presentation of certain information, in addition to main objectives of this educational event, allows a teacher to exercise control over students' observing orthoepic norms of the Ukrainian literary language and, if necessary, to promote their adjusting. At the same time the student group environment is favorable for the student's language improvement and overcoming certain linguistic failures and imperfections.

However, the task of a teacher-philologist is not limited to the educational component only. In the conditions of the real language situation that has developed in modern Ukraine and the linguistic and psychological instability of students who have found themselves in an unusual language environment, along with the formation of the language competence, it is especially important to promote the development of feelings of responsibility of young people for their own state and understanding that language is the most important attribute of statehood. The teacher is supposed to inspire in young Ukrainians love for their native tongue, to teach them to respect its state status, and to spread the environment of its functioning. To address the problem, various educational and upbringing activities can be effective, namely: cultural trips to theaters, cinemas, and concerts; organization and conduct of

language and literary quizzes; involvement of young people in the demonstration of their own talents during various students' festivals, concerts, educational events; and visiting museums, exhibitions and historical sites.
The most appropriate and effective is to involve a young person in personal participation in cultural, upbringing and educational activities, so that s/he feels responsible for delivering certain ideas to the people around him/her in a qualitative way and, accordingly, begins to understand them brighter and more clearly.
The third group of factors of language adaptation is raising awareness. The implementation of raising awareness activities is a function pertinent not only to public organizations and cultural and educational movements. It is also important for the young citizen to reveal for himself/herself the support provided by the state bodies and commercial structures. E.g., cultural and educational television programmes like "The Personality Greatness" on the TV "Rada" channel, presentations of book publications during the annual Forum of Publishers in Lviv, etc. are favorable for the student's language adaptation. While partaking in such kinds of events, the young person is getting involved in the corresponding intellectual atmosphere, acquires the feeling that the Ukrainian language environment is fashionable, creative, and harmonious, and this positive attitude prompts him/her to further assert oneself as a Ukrainian-speaking citizen of Ukraine.
An important prerequisite that promotes the process of adaptation is tolerance (from the Latin "tolerantia" – patience), e.g., tolerance to others' views, thoughts, traditions, and other culture. Young people, who are forced to settle in a new socio-cultural environment, should tolerate the conditions of this environment, and the environment, in its turn, is obliged to support and affirm the intentions of the Russian-speaking person to use the Ukrainian language in all areas.
Here, a significant support for many psychologically unstable persons could be provided based on the Ukrainian legislation (the tenth article of the Constitution of Ukraine, the requirement for a civil servant to pass an examination for fluency in the state language) and political slogans, the ideas proclaimed by the highest state figures (the announcement by the President of Ukraine of the Ukrainian language decade and signing the decree "On urgent measures to strengthen the state status of the Ukrainian language and promote the creation of a common cultural space of Ukraine".
Consequently, the factors of soft impact aimed at ensuring that students learn to love their native language is an effective means of affirming the Ukrainian language in all spheres. In addition, these are precisely the means that do not cause active resistance and aggression, as they are neither radical nor binding. They are aimed at ensuring that a person himself/herself feels the need to communicate in Ukrainian, and also develops and confirms his/her habit of using the state language in all communicative situations.

4. Limitations of the study.

The Ukrainian community first encountered the problem of social and psychological adaptation of internally displaced persons in connection with the military actions in the East of our country. The short duration of the period during which the socio-psychological adaptation, including language adaptation takes place does not allow us to see the problem under study in dynamics, to reveal certain regularities of the process of language adaptation, which can become a basis for further research.

Strengths of the study:

This work is based on a specific empirical study, i.e., on the materials of the survey conducted among students of Lviv Polytechnic. The analysis of the specific data obtained as a result on this survey allows us to speak about the reliability of the information incorporated in the scientific analysis. During the work, a wide range of information was analyzed on the thoughts and feelings of young Ukrainians about their speech behavior and attitudes toward language problems. Considering the quantitative indicators that emerged on the basis of the empirical data analysis, we can claim that there is high probability that the scientific hypothesis formulated in this study is confirmed.

5. Conclusions (and Future Work).

The analysis of the results of the survey that we conducted has made it possible to state the following: young Ukrainians born in an independent state are aware that the state language should sound at all the levels: in official business situations, in everyday life, and in the family. So, we believe that almost all respondents answered that they speak Ukrainian fluently or better than other languages. Therefore, 98.9% of the incomers from the Western region and 93.5% of those from the Central and Eastern regions of Ukraine having participated in our survey are obviously using the official language in public places. The task of attracting young people to the active use of the Ukrainian language in different informal settings is a pressing duty for state institutions and public formations. Education and training, upbringing and raising awareness are the major factors promoting language adaptation of youth, exercising an effective influence on the upbringing of a sense of patriotismm and love of the native language. This is what assists young men and women in intensifying their own efforts to improve their native language knowledge, and in developing the habit of using the Ukrainian language not only in official situations, but also in everyday life, in an environment of peers, and in the family.
Considering the fact that the attitude of young Ukrainians, especially bilingual and Russian-speaking students, to the state language is improving, we can predict the positive dynamics of this process. Developing a strategy for language adaptation is a problem that requires its immediate solution, as it will contribute to the harmonious

introduction of the Ukrainian language into everyday use of persons who previously were in favor of using Russian.

6. Acknowledgments.
The co-authors are acknowledging the students' enthusiasm and commitment to their involvement in the survey. Real appreciation is expressed to the University top administration for their support of the study.

7. Authors contributions.
Each of the co-authors of this study equally participated in conducting the survey and analysing its results. The conclusions formulated in this study are the joint elaboration of both authors, who fully support all the theoretical provisions of this work.

Conflict of interest. No conflict of interests has been observed.

References.

Dziuba, I. (1998). *Internationalism or Russification?* URL: *http://izbornyk.org.ua/idzuba/dz04.htm*
Falkovska, L.M., Muzychko, L.V., & Havrylovska, K.P. (2017). "Health" construct in the structure of consciousness of student youth. *Physician issues, 7*, 57-63.
Kunch, Z. Y. (2005). *Universal dictionary of the Ukrainian language.* Ternopil: Training book – Bohdan.
Ohijenko, I. (1994). *The science on mother tongue duties: Mother tongue catechism for teachers, scripters, clergy, lawyers, students, and a wide range of people*. Kyiv: JSC "Oberehy".
Puzyrnyi, V. (2017). Intellectual development and socialization of the individual. *Physician issues, 7*, 52-56.
Shkoliar, M., (2017). The opportunities of social work in the community in the process of including internally displaced persons into new territorial communities. *Physician issues, 7*, 63-68.
Sydorenko, S.V. (2005). Social and cultural adaptation: Global aspect. *The culture of the peoples of the Black Sea littoral, 68*, 163-167.
Tarasiuk, I. (2011). *Language adaptation as a kind of socio-cultural adaptation of migrants to a foreign environment.* URL: http://oaji.net/articles/2016/1551-1478884424.pdf
Vozniuk, H.L. (2016). Improving skills of the speech culture in classes of the Ukrainian language (for professional orientation) and rhetoric. In I. S. Popova (Ed.), *Ukrainian sense: Scientific collection* (pp. 47-56). ISSN 2313-4437: Dnipropetrovsk.

Rational and Irrational Processes in Decision Making: an Economic Perspective

Lacatus Maria Liana
Bucharest University of Economic Studies, Teacher Training Department, Romania

Abstract. The paper presents important issues of decision making processes with an emphasis on rational and irrational components of these processes. After a short introduction outlining the need for a deeper understanding of rational and non-rational factors that affect the decisions people make, the rationality of people decisions in daily life is questioned and the role of non-rational factors such as intuition are analyzed. The economic understanding of the decision making process is presented and principles of rational decision-making are explained. Different methods used and recommended by economists in order to make decisions are presented and applied in different life situations in order to demonstrate their value in daily life. Special emphasis is put on factors such as imperfect information, illusion of control, or risk aversion that may affect the rationality of the decision making processes. In the final section of the paper the concept of bounded rationality is introduced and explained along with new theories in economics that are challenging the classic economic perspective on the decision making process.

Keywords: decision, rational decision, decision making process, bounded rationality.

1. Introduction.

Decision making processes are among the most important processes that characterize human reasoning and imply crucial consequences for human actions and well-being. Individuals have to make decisions every day. No matter whether apparently simple decisions such as what to wear, to eat, or to do in a free-time hour they might have, or more complex ones such as choosing a school, a profession, a partner, or a place to live, all decisions people make affect their lives. This is why there are no simple or complex decisions, all decisions are important, due to their consequences or possible consequences.

Decision making processes are an important subject of research in the field of mental health. Good decisions are sometimes called "healthy decisions" (Tracy, 2014) while poor decisions are considered "unhealthy" mainly due to the fact that they are related to poor real-life outcomes (Caceda et al, 2014). This research is focused on the bases of good decisions and the role of reasoning and experience in the decision-making process together with an analysis of factors that may affect people's capacity for making good decisions.

In mental health theories, indecision is sometimes related to ill mental health or mental illness. Anxiety, for example, can affect the decision-making capacity, making people confused, not trusting themselves. (Lobozzo Aman, 2012). This phenomenon can disconnect people from their decision-making abilities and make them avoid the decision or unable to conclude amongst pros and cons. But, indecision is not always a sign of a mental health challenge. Indecision also occurs when people can't make a decision at a moment because they need time to weigh alternatives or obtain additional information or advice. Sometimes they do not like the decision that seems to be the best one in the given conditions and want to find reasons for another decision or, simply, they want to delay making a decision waiting for something better. Dilemma situations in which all choices have unsatisfactory consequences also promote hesitation and delayed decision making (Simon, 1993). In this case, as well as in many other cases, we can't conclude that a particular reaction or behaviour such as hesitation makes the difference between mental health and mental health challenge or illness. Mental health can include both good healthy decisions and poor ones, depending on many factors and healthy thinking is only one of them.

2. Rational, non-rational and irrational.

Decision-making processes are complex, involving choices and, in most situations, deliberation, weighting alternatives and evaluation. Basically, decisions are the results of specific processes of reasoning. Good decisions are usually considered rational even when they are not necessarily conclusions of the inferences or alternatives best valued according to relevant criteria in a situation. They are considered good because they have positive, desirable consequences. Similarly, poor decisions are often considered irrational. People tend to think that negative or undesirable consequences are the result of an insufficiently considered decision or of a decision made in the absence of sufficient or necessary information; in other words, they are the result of a lack of reasoning. Rational decisions seem to be the most appropriate way to come to desirable actions and consequences.

In fact, research concludes that in many circumstances people use non-rational factors, such as experience or intuition to make decisions and many of them consider such kinds of decisions good and valid based on the satisfaction they feel when applying and acting as a consequence of decisions they have made. Decisions based on experience or intuition are appreciated as well due to the rapid way in which they are made.

Intuition, defined as thoughts and preferences that come to mind quickly and effortlessly (Kahneman, 2002), represents one of the two-system operations that are involved in the decision making process. This is so called System 1 that leads to decisions being made automatically and rapidly. System 1 or intuitive judgment is different

from System 2 or deliberate reasoning and the main difference is the way in which each system operates (see Fig.1): System 1is fast, associative, effortless, and difficult to control and modify; System 2 is slower, serial, requires effort, is deliberate, controlled and relatively flexible.

Process	INTUITION System 1	REASONING System 2
	Fast	Slow
	Parallel	Serial
	Automatic	Controlled
	Effortless	Requires effort
	Associative	Rule-governed
	Slow-learning	Flexible

Source: Kahneman, Nobel Prize Lecture, https://www.nobelprize.org/uploads/2018/06/kahnemann-lecture.pdf

Figure 1: Intuition and reasoning

Due to the fact that people make hundreds and thousands decisions every day, in many cases, they do not have time to deliberate or make decisions in the most economically possible way: fast, automatically, effortless and associative. In other words, they make intuitive decisions. Rapid, automatic and effortless means also accessible in terms of psychology of choice. Accessibility is an attribute that indicates the easy way in which thoughts come to our mind (Kahneman, 2002). Intuitive thoughts are more accessible than deliberated ones and this explains also why intuitive decisions are more frequent than rational ones: intuitive thoughts come more easily and spontaneously to mind and make the decision making process effortless.

At the same time, research has demonstrated that experienced decision makers who work under pressure rarely have to choose amongst alternatives or to deliberate. In their mind there is only one choice – the most accessible one, probably. The choices that were rejected are not represented. In these cases, experience is the basis of their decision. But, due to the fact that doubt is a phenomenon of System 2 and rapidity a characteristic of System 1, we could consider this also a non-rational decision, even is not exactly an intuitive one.

Intuition is considered to be a powerful decision making tool. Intuition is used not only in quick-decision situations but also when information is incomplete (Gigerenzer, 2001). Actually, in daily-life situations people often ignore some of the available information in order to make practical decisions. They rely on gut feelings that are the result of unconscious mental processes derived from the environment and previous experiences. Gut feelings are instinctive feelings (Sadler-Smith, 2007) and lead to good practical decisions.

In contrast to the rational analysis that implies evaluation of all possible factors, unconscious mental processes take into considerations only the most useful information. Efficient cognitive processes that ignore information represent what is called nowadays, heuristics (Gigerenzer, Brighton, 2009). Heuristics are mental "shortcuts" focusing on only one relevant factor in order to make a decision. They are time-savers and highly useful for making decisions in real-life situations. "Homo heuristicus" ignores part of available information in order to handle uncertainty and succeeds to do this efficiently. With *less* information he/she can make *more* good decisions. We could say that heuristics have a *less-is-more effect* that contrasts with the rational point of view. In accordance with the rational tradition, more information is always considered better. In the name of belief in the power of information and knowledge, rationalists try to make use of "total evidences" (Carnap, 1947) not leaving observations on record without using them (Good I.J., 1967). Economists have demonstrated that this is not always efficient. The search for information is costly in terms of time and money too and above a certain point the costs implied will exceed the benefits. At this point, the search should be stopped (Stigler, 1961). This is a rational conclusion: more information is not always better; sometimes less is more or, in other words, less information will lead to better heuristic decisions.

Heuristic decisions can be accurate despite the almost general belief that accuracy is positively related to effort. According to this belief, if a person invests more time to search out information and performs more computations, in other words, if his or her effort increases, the accuracy of the decisions he or she is making will increase too. Having limited time and being forced to make quick decisions, people have to trade-off between accuracy and effort. The *accuracy-effort trade-off* is considered a general law of cognition (Gigerenzer, Brighton, 2009). On the contrary, based on the less-is-more effect, heuristics lead to the conclusion that less information and computation allow higher accuracy and the mind does not necessarily need to trade-off between effort and accuracy. This trade-off is not generalized. There are situations in which with less information people are making decisions with higher accuracy and there is also a point above which more information or computation will decrease the accuracy.

The less-is-more effect and accuracy-effort trade-off are challenging the traditional perspective on rational decision making processes as processes of weighing all alternatives based on all available information. These situations are dependant on the environment more than on the mental processes themselves. This is why the rationality of heuristics is "ecological" not logical (Gigerenzer, Brigthon, 2009).

In the category of non-rational factors that affect decisions making processes, together with intuition and experience, research has identified many other important factors, such as social groups, asymmetrical reactions to gains and losses or anchors like analogical situations and actions. Non-rational decisions are the results of the need for rapidly made decisions, too rapid to allow for sequential analysis and evaluation of the situation. Another category of factors, usually, considered irrational, are emotions and all kinds of feelings. Traditionally, emotions were considered to be opposed to reason and reasoning and, as a consequence, seen as highly inappropriate for making rational decisions. Nowadays, psychologists recognize the important role of emotions in decision making processes. Actually, they point out that emotions are essential in decision making and have argued that reason is used only to justify the decision (Mercier, 2011). For entrepreneurs, for example, courage is essential to take the risks of starting a business and be independent or to come up with new products for the market. Actually, entrepreneurs are defined as courageous and determined persons.

3. Rational from an economic perspective.

Decision making is a subject of real interest not only for psychologists, but for economists, too. Economics was traditionally defined as the science of rationality and rational decisions. The economic understanding of decision making is somehow different from the psychological one. When looking at decision making, economists understand rationality as a substantive (Simon, 1993), as something rational, while psychologists, as we have presented above, look at mental processes that take place in order to make a decision. From an economic perspective, the decision-making process is based on principles of rational decisions.

Principle 1. People have to make trade-offs. The first lesson of economics is that on the market nothing is free; people have to pay for everything. In order to have the things they need or want, people have to buy things and because they have limited income they can't buy everything. They have to make choices – to choose some things and to give up others. For example, if a person who has many obligations and has to make different monthly payments that, in total, are larger than his or her income, he or she may consider borrowing money from a bank to solve the problem. The credit is not free; the borrower has to pay interest. The interest is the cost of the credit. The alternative would be to use his or her own saved money. But this alternative has a cost too: the interest the person would get from the bank for the money in the deposit, would be given up. Or, in other words, the alternative to use the savings is also not free. With his or her income, the person has to choose to pay utilities, car and house insurance, to buy food, gasoline, car insurance, clothes, to buy tickets to the theatre or a monthly subscription to a club where he or she can spend the week-ends or swim in the evening. If the person chooses not to pay the club subscription, he or she gives up a pleasant and healthy recreation activity and this could affect their physical and mental health and, at the same time, increase future costs if the club will charge him or her more. Or, the person could choose to pay the car insurance later, but in this case the car cannot then be used for a period of time, the individual has to pay for public transportation and, maybe, also a penalty or give up the amount of money the insurance company would give him or her as bonus. No matter what decision the person makes, there will be costs to pay.

We do not know what decision a person will make in a given situation; this can vary from person to person and, for a person, from one situation to another depending on the importance given to each alternative at the time. People should not give up entertainment and recreation because they have to pay utilities or to buy food and insurance. Similar, communities should not give up a clean environment because this implies costs and will decrease their available money. But, knowing that trade-offs are necessary, people will be more able to make good informed decisions.

Principle 2: The cost paid by a person for a thing is another thing that the person has to give up. Because people have to make trade-offs, whenever a decision is made, it is rational for them to weigh existing alternatives and compare costs and benefits. In the case of a workshop on decision making issues, for example, the decision to take part in the workshop will have certain benefits, such as developing decision-making skills, meeting people with similar preoccupations and problems, making friends, the opportunity to join to an association or to plan future actions with the other participants. Among costs involved are travel and accommodation. These costs are evident. Some other costs are more or less hidden; for example, the time allocated to the workshop or activities given up in favour of the workshop are opportunity costs. An opportunity cost is the second best alternative to a decision or the choice that has not been taken. Actually, the opportunity cost is the best alternative that has been given up. Whenever a decision is made someone gives up something and as consequences, pays a cost. Opportunity costs are implicit costs.

It is rational in this case, when choosing among existing alternatives, for people to choose the one most valued. For economists to measure the value of an alternative means to establish the net value of the alternative, extracting costs from benefits. There are not only benefits or costs. Each alternative implies both costs and benefits and they should be weighed. It is rational to choose amongst alternatives with net benefits (benefits greater than costs) and to take the alternative with the highest net benefit. At a high level of costs, making decisions is difficult, even when benefits are greater than costs. But the real problem is not the level of the cost; it is the level of net benefit. Sometimes, there are no net benefits. In these cases, it is rational to choose the alternative with the minimum loss. An increase in costs will change the decision if the cost will change the relative net values of alternatives.

Principle 3: Being rational is to make a marginal analysis rather than to think in terms of average. Real-life situations are rarely simply good or bad. Most of them are complex situations with advantages and disadvantages relative to specific goals and objectives a person might have. For example, a student who wants to be well prepared for exams has to allocate time to study. But, if he or she has more than one exam to prepare for and the available time is limited, the student has to decide how to distribute the time between different subjects taking into consideration the level of performance he or she is expected to achieve. One additional hour allocated to a subject will diminish the time available for another subject or another activity the student might want to have.

Changes involving one additional unit – one more hour to study psychology, one more class, one less hour to sleep, one more call with a friend or, if we are thinking of economic activity, one more worker hired by a firm, one more unit of a goods bought and consumed and so on – are called *marginal*. A person who makes a decision will better understand the consequences of one or another alternative in a given situation if he or she thinks at the margin analyzing what would happen if the situation would change step by step or if small changes will occur. Each additional step or small change will have a consequence in terms of benefits and costs / advantages and disadvantages that may be different from a step or a small change to another. A decision should be make taking into consideration these particular consequences of a small change.

Marginal analysis helps to make a decision about when to stop or continue an activity. For example, imagine an airline has to make a decision regarding the price of a domestic flight. If for this flight the company uses a plane with 125 seats and the total cost of a round trip will be 10000 euros, the average cost per unit will be 10000 divided by 125 or 80 euros. In this case, the price per unit can't be less than 80 euros. At a lower price the company will have losses. Apparently this is a correct judgment. And it is correct if we accept that we should think in terms of average and make decisions based on average measurements. But, if we make a marginal analysis and establish what will happen when one more ticket is sold we will see that if the airline wants to have more income per flight it should not keep the price above 80 euros in any circumstances. If at a price higher than 80 euros 100 tickets have been sold, it is likely that if the company decreases the price, more tickets will be sold. With each additional ticket sold at a lower price, the company will increase its income per flight with the price of additional ticket sold. Economists say that the price of each additional ticket sold is, for the company, a marginal income earned or, speaking in more general terms, a marginal benefit. With each additional ticket sold the costs will increase too, but additional or marginal cost will be lower than the average cost due the fact that the plane will fly whether all the seats are sold or not. For each flight there are some fixed costs and some variable costs. The fixed costs, such as salaries of the employees (pilot, flight attendants, and so on) or airport taxes will stay at the same level. Only the variable costs, such as fuel, food or beverages served to passengers will increase. What really counts in this case is the difference between additional income earned by selling one more ticket (marginal income or revenue which is the marginal benefit) and additional costs implied by transporting one more passenger (marginal cost). If it is positive, in other words if the marginal revenue is higher than the marginal cost, the decision to sell tickets at lower prices is a good one; the company is better-off. The real problem is not *if* the price should be decreased, but *how much* it should be decreased. The answer is up to the level of marginal cost. If the price (marginal revenue) is higher than marginal cost, the difference is a gain; the company has additional profit. If the price (marginal revenue) is equal to an additional marginal cost, there is no additional profit, but there will be other benefits, such as loyal customers.

Marginal analysis helps understanding the "mystery" of flights tickets. The airlines make calculations on the total costs and estimations regarding the total income in order to function efficiently. Based on these calculations they establish the prices, different prices for categories of seats. They expect to sell the cheaper tickets first and then the more expensive ones. They also expect a certain number of tickets not to be sold. For these last ones, they might decrease prices at very last moment. It is rational to make such a decision. The rationality in this case means to increase the revenue or benefits. Low-cost companies have identified ways to decrease the costs such as maximum usage of available space in the plane or giving up serving free food or beverages to the passengers. They made a trade-off between the seat number and the available space per seat – more seats, less space per seat – and additional charges for luggage.

Marginal analysis is based on weighing marginal benefits (revenue) and marginal costs. The "golden rule" regarding making decisions is:

1. - If, as consequence of a decision made, marginal benefits are higher than marginal costs occurring, the decision was good; it should have been made.
2. - If, as consequence of a decision made, marginal benefits are lower than marginal costs occurring, the decision was bad; it should not have been made. The person who made this decision should give up.

Principle 4: People respond to incentives. As we have explained above, people making decisions weigh costs and benefits. Changes in costs and benefits will lead to changes in people's decisions and behaviours. This is a result of incentives that motivate people. For example, a producer who increases prices of his or her products will normally expect a decrease in the quantity sold. It is the effect of an important economic law – the law of demand. As the price of a good or service increases the quantity demanded decreases. In other words, price and quantity demanded are negatively related. The price impact on consumers can be explained through a cost-benefit analysis:

at the same benefits estimated by the consumers, the costs will be higher. As consequence, the net benefit will decrease and consumers will give up to buy the more expensive things.

4. Economic models of decision making.

Economists use and recommend different models and methods of decision making. All of them imply analysis such as cost-benefits analysis, weighing advantages/benefits and disadvantages/costs, alternatives net value according with established criteria calculation. A rational decision is made following some steps: identifying existing opportunities, defining the compromises needed to be made, calculating the costs to be paid and benefits that can be gained.

One of the most popular models is the decision-making matrix that implies five steps each decision maker has to follow: Step 1: *The problem.* The first and the most important step is to clearly define the problem that has to be solved. In the absence of a clear understanding of the problem that requires a decision, the decision could be wrong. Step 2: *The alternatives*. Alternatives represent possible solutions of the problem. Actually, they are the choices the decision makers have. Sometimes there are only two choices, but it is better to have more than two. Economists do not believe that there are situations when a person has no choices and he or she is forced to take whatever seems apparent. They say that a so called no-choice –situation is, in fact, an excuse for not taking a totally unattractive alternative. It is, for example, like when you have to choose between a chocolate cake and a bad apple and, of course, you choose the chocolate cake because you have "no alternative". Step 3: *The criteria.* Criteria have to be oriented to specific goals and to target whatever a person is expected to achieve. Sometimes is recommended to rank the criteria in order to see differences between alternatives. Step 4: *The evaluation*. Each alternative has to be evaluated according to the listed criteria. In order to establish the net value of each alternative, it is recommended to use numeric values, such as +1 or -1 depending on how much they meet a criterion and if they meet it or not. Depending on the number of criteria, for each alternative there will be a number of numeric values to be cumulated. The sum will be the net value of the alternative. For example, in the case of two criteria, an alternative will get +1 for conformity with one criterion and -1 for non-conformity with the other one and the net value will be 0 (+1-1=0) Step5: *The decision.* It is rational to take the alternative with the highest net value. In the case of two or more alternatives with the same net value, more criteria can be added and the process of evaluation repeated. In the end one alternative will have the highest net value and these will be the decision.

A matrix such as the one presented in Figure 2 helps in decision-making. All existing alternatives can be listed in a column. For each alternative there can be one row in the matrix. All criteria should be be listed too. For each criterion there will be one column in the matrix. A separate column will be allocated for the net value of each alternative.

The criteria **The alternatives**	**C1**	**C2**	**C3**	**C4**	**The net value**
A1					
A2					
A3					

Source: CREE, Economie, Liceu 1

Figure 2: The decision making matrix

The matrix can be used to make decisions in economic situations as well as in other specific domain- or real-life situations. For example, a person who wants to start a business has to make a decision regarding what to produce or in what industry to invest. (1) The problem: What will the firm produce? What business to start? (2) The alternatives: A1. Car wash; A2. Electronics; A3. Beekeeping; A4. House cleaning. (3) The criteria: C1. Qualification; C2. Market demand; C3. Expected profit; C4. Work satisfaction. (4) The evaluation: each alternative will receive grades from 1 to 5 depending on how much it meets each criterion (5 = much; 1 = little). The decision making matrix could be like one represented in Figure 3 in case of a person with a university degree with major in information and communication technology.

The criteria **The alternatives**	Qualification	Market demand	Expected profit	Work satisfaction	**The net value**
Car wash	1	2	2	2	7
Electronics	**2**	**3**	**3**	**3**	**11**
Beekeeping	1	3	3	3	8
House cleaning	1	1	1	2	5

Figure 3: The decision making matrix for an entrepreneur who wants to start a business

5. Bounded rationality.

In decision making processes regarding economic activity factors interfere which are not related to the decision makers' rationality. Strictly speaking, the idea of rationality implies information. In other words, a rational decision

is made if the decider has complete information about existing alternatives in order to choose the best. Economically speaking, he or she is perfectly informed. But, in reality, things are not always as they are supposed to be. Usually, in reality, people do not have complete information and, as a consequence, they are *not perfectly informed*. They are making decisions which are not necessarily irrational, strictly speaking, but are not a result of a process of deliberation or carefully analyzing a situation and weighting benefits and costs. Neuro-psychologists would say that such kinds of decisions are, as a fact, the results of a sort of "economical" way of functioning for the human brain which is searching for "short-cuts" and "the easiest ways" to process information and this kind of rationality is more like a "limited rationality" due to the mix of rational and non-rational factors. Among the last ones are mentioned an (1) exaggerated self-esteem, (2) the origin of money, (3) loss aversion or (4) familiarity.

1. *(1) Exaggerated self-esteem.* People tend to see themselves as better than they really are. They tend to believe that they are doing things better than they really do. No matter what decision is made, the decision-making process implies a certain level of confidence in the person's capacity to understand risks and benefits. However, exaggerated confidence and the illusion of loss of control can lead to a bad decision and, as a consequence, can cause greater losses. Having to choose between a car an an airplane, many people choose the car because they believe that driving is safer than flying despite the fact that there are enough data demonstrating that flying is much safer. Similarly, many people choose to start a business despite the fact that there are many arguments which indicate that this is a bad decision, such as the high number of firms that are closing every year. Exaggerated self-esteem may also be attributed to the CEO's who believes that they can do everything and make risky decisions and act at limit or, even worse, beyond limits and because of their risky behaviours the firm collapses. The same situation is in the case of the CEO who does not want to admit that the firm is having difficulties, despite the evidence, and, instead of acting in the direction of trying to correct the situation, they do things that will make it worse.

One could believe that in time, by becoming more experienced, people will gain a better understanding of their own capabilities. But, research has demonstrated that exaggerated self-esteem does not diminish in time, possibly also because people have different memories and attitudes when it comes to success and failure. Usually, people tend to remember successful actions as resulting from their intelligence and skills, while failures are considered to be caused by forces out of their control. In many failure situations they think that, with a little luck, next time things will be better.

1. *(2) Where the money comes from.* From an economic perspective, it doesn't matter where the money comes from. People make decisions no matter if they involve money gained through their own work or received as a gift or inheritance. The gift money or money gained by gambling is more easily spent than earned money. Similarly, money gained by gambling is easily risked gambling again while earned money is usually more carefully staked in playing games by chance. For example, an investor who has invested 10,000 euros in the stock market, gained 100,000 euros, and then lost 105,000 euros in another less profitable investment would probably consider that he has lost only 5,000 euros. People do not really consider their own property as things they did not pay for. The sorrow felt by giving up a thing of ones own is greater than the joy felt by buying that thing. Economically speaking, the price elasticity of demand can change when the consumer is emotionally attached to the good and experiences the ownership. The demand becomes less elastic. Buyer decisions can be influenced by the sense of ownership, even temporarily, and before a product is bought. If the consumer can be convinced to take home the product and to try it, the probability that he or she will buy the product increases because of the feeling of loss he or she will have if they then don't buy and rather give up the product. Sellers count on people's attachment to goods and their sense of ownership when they encourage buyers to take things home to try them, "to see how they look", or "to buy now and pay later".

2. *(3) Loss aversion.* People's concern about risks and losses is greater than the satisfaction of possible gains. If an investor chooses to sell stocks and invest in real estate he or she will be more affected if the stock prices increase than if the real estate market performs perform better. People's reactions towards loss and gain are different even if these are equal. For example, if a price of 1.5 euro for 1 litre of gas is expected to increase up to 2 euros the amount of 0.5 euros will be perceived as a loss and if the same price is expected to decrease up to 1 euro the same amount of money will be perceived as a gain. Although the the loss and the gain are equal (0.5 euros), the sorrow felt in the case of the loss is greater than the joy felt in the case of the gain. Further, the sorrow will be greater if the buyer feels that he or she is treated unfairly. People have a sense of justice and reject things they perceive as unfair, reacting negatively when considering that someone is taking advantages of them. From the buyer's perspective, an unfair situation would be, for example, an increase in the price of shovels in winter time after a strong snowfall or of food in a region affected by floods.

3. *(4) Familiarity.* When people have to make decisions without being perfectly informed, they choose, in many cases, based on familiar things, although this is not what economic theories recommend. Familiarity may lead to apparently irrational decisions mainly because unknown things that may be of value are not taken into consideration. Nowadays economists consider that peoples' rationality is not absolute, but limited or bounded. Bounded rationality is a more appropriate concept to describe human rationality (Simon, 1992) and the rationality of economic actions.

5. Conclusions.

From an economic point of view, a rational decision is made following some steps: identifying existing opportunities, defining compromises needed to be made, calculating the costs to be paid and benefits that can be gained. Rational decisions are based on understanding the human way of thinking and behaving and taking into consideration human characteristics and constraints that limit people's actions. Decision makers should take into consideration that people respond to incentives, have to make trade-offs, pay opportunity costs, choose amongst alternatives and give up alternatives, identify consequences, and think at margins or with respect to small changes. At the same time, in order to make more accurate decisions they should think at the margins. Marginal analysis implies weighing marginal costs with marginal benefits based on a 'golden rule' that says: "If, as consequence of a decision, marginal benefits are greater than marginal costs, the decision was good; it should be made. But, if as consequence of a decision, marginal benefits are smaller than marginal costs, the decision was wrong; it should not be made".

In real-life situations and, sometimes, in economic situations, decision makers do not always have all the information available at the time or in the time needed to deliberate or follow the steps recommended by economists for a rational decision. Heuristics helps to make good and accurate decisions despite the reality that a lot of information may be ignored in the decision making process. The efficiency of heuristics in decision making, including economic decision making is recognized nowadays by economists, too. They admit that our rationality is bounded and the perfect conditions implied by absolute rationality do not exist in reality.

References.

Caceda at al. (2014). Toward an understanding of decision making in severe mental illness. *The Journal of Neuropsychiatry and Clinical Neurosciences*. *26:3.* (pp. 196-213). Retrieved from https://neuro.psychiatryonline.org/doi/abs/10.1176/appi.neuropsych.12110268

Gigerenzer, Gerd. Brighton, Henry. (2009). Homo heuristicus: Why biased minds make better inferences. *Topics in Cognitive Science 1* (pp.107–143). Retrieved from https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1756-8765.2008.01006.x

Gigerenzer, Gerd. (2001). Rethinking rationality. In Gigerenzer, Gerd. Selten, Reinhard (Eds.) *Bounded rationality: The adaptive toolbox.* London: MIT Press (pp. 1-12). Retrieved from https://books.google.ro/books?hl=en&lr=&id=dVMq5UoYS3YC&oi=fnd&pg=PR9&ots=p02l-GGKV_&sig=0F3WNg2ERpdC7Rx86bFW5cU1NA0&redir_esc=y#v=onepage&q&f=false

Kahneman, Daniel. (2002). *Maps of bounded bationality: A Perspective on intuitive judgment and choice.* Prize Lecture, December 8, 2002, Retrieved from https://www.nobelprize.org/uploads/2018/06/kahnemann-lecture.pdf

Lobozzo Aman, Jodi. (2012, December 5). How to deal with anxiety-style decision and indecision [Blog post]. Retrieved from https://www.healthyplace.com/blogs/anxiety-schmanxiety/2012/12/decisions-made-or-not-made-anxiety-style

Mercier, Hugo; Sperber, Dan. (2011). Why do humans reason? Arguments for an argumentative theory. *Behavioural and Brain Sciences*, *34* (pp. 57 –111). doi: 10.1017/S0140525X10000968. Retrieved from https://www.dan.sperber.fr/wp-content/uploads/2009/10/MercierSperberWhydohumansreason.pdf

Sadler-Smith, Eugen. (2007). *Incorporating intuition into HRD: Conceptual framework and practical suggestions for individual and organisational learning*. Refereed Paper. Retrieved from https://www.ufhrd.co.uk/wordpress/wp-content/uploads/2008/06/507-incorporating-intuition-into-hrd_sadler-smith.

Selten, Reinhard. (2001). What is bounded rationality? In Gigerenzer, Gerd & Reihhard Selten, Reinhard (Eds.) *Bounded rationality: The adaptive toolbox* (pp. 13-36). London, UK: MIT Press. Retrieved from https://books.google.ro/books?hl=en&lr=&id=dVMq5UoYS3YC&oi=fnd&pg=PR9&ots=p02l-GGKV_&sig=0F3WNg2ERpdC7Rx86bFW5cU1NA0&redir_esc=y#v=onepage&q&f=false

Simon, Herbert A. (1993). Decision making: Rational, nonrational, and irrational. In *Educational Administration Quarterly*, *29:3* (pp. 392-411). Retrieved from http://digitalcollections.library.cmu.edu/awweb/awarchive?type=file&item=34170

Simon, Herbert A. (1972). Theories of bounded rationality. In B.C. McGuire & Ron Radner (Eds). *Decision and organization: A volume in honour of Jacob Marschak* (pp. 161-176). North-Holland Publishing House, Retrieved fromhttp://innovbfa.viabloga.com/files/Herbert_Simon___theories_of_bounded_rationality___1972.pdf

Tracy, Natasha. (2014, May 6). Unimportant decisions and bipolar depression [Blog post]. Retrieved from https://www.healthyplace.com/blogs/breakingbipolar/2014/05/unimportant-decisions-and-bipolar-depression

Study of Patients' Dehumanization in a Hospital Setting

Dimitra Lekka[1], Maria Sakalaki[2]
[1] Psychiatric clinic Sotiria Chest Hospital, MSc, PhD candidate University of Social and Political Sciences, Department of Psychology, Athens, Greece
[2] Department of Psychology Panteion University of Social and Political Sciences, Athens, Greece

Background: Dehumanization is historically a well-known phenomenon and it has been studied a lot in terms of intergroup relationships. Dehumanization is defined as a denial of humanness to others. There are two forms dehumanization, animalistic, which denies characteristics that distinguish humans from animals, and mechanistic, which denies capacities that separate people from machinery. There is a lack of research on dehumanization of patients among Greek healthcare professionals.
Purpose: This study aims to explore and compare the extent and the forms of patients' dehumanization among Greek health professionals, mental health professionals and the general population.
Methods: A translated version of Haslam's questionnaire addressing both types of dehumanization were distributed to health and mental health professionals in two public hospital settings and the general population. Moreover, the Greek versions of Fraley's et al. Adult attachment patterns questionnaire and Deci & Ryan self-determination questionnaire were distributed to all three groups.
Results: The sample included 353 participants (103 males, 250 females, age 18-60 years). 135 of them were mental health professionals (physicians and nurses), 134 were health professionals (physicians and nurses of pathological and surgery departments) and 84 were from the general population. The results showed that participants scored similarly on mechanistic (M=5.00, SD=1.069) and animalistic dehumanization (M=5.10, SD=1.267). One way ANOVA analysis revealed that health care professionals showed significantly higher mechanistic dehumanization (M=5.12, SD=1.049) as compared to the general population (M=4.75, SD=1.023), $F(2,350)= 3.290$, $p=.038$. There was no statistically significant difference among the other groups in terms of both forms of dehumanization. Regression analysis showed that the dimension of avoidance in adult attachment significantly predicted mechanistic dehumanization, accounting for 58% of the variance in mechanistic dehumanization ($\beta=.149$, $t=2.453$, $p=.015$), as well as animalistic dehumanization, accounting for 54% of the variance in animalistic dehumanization ($\beta=.185$, $t=2.546$, $p=.011$). The level of education was also a significant predictor of both mechanistic dehumanization ($\beta=.265$, $t=3.500$, $p=.001$) and animalistic dehumanization ($\beta=.204$, $t=2.241$, $p=.026$) Orientation of control was a significant predictor of animalistic dehumanization ($\beta=.195$, $t=1.998$, $p=.047$).
Conclusion: The findings show high rates of dehumanization among all three groups. The design and implementation of relevant strategies may decrease or prevent this phenomenon.

Keywords: patients' dehumanization, mechanistic and animalistic dehumanization.

Creativity and Mental Health Challenges – Behavioural Patterns in Higher Education

Jane Lu
Professor and Director, Department of Marketing, National Chung Hsing University, Taichung, Taiwan

Introduction – In higher education, when creativity is a personality trait valued and emphasized in student recruitment and in training, mental health challenges often appear as a phenomenon. Students strive to accomplish and to fulfill requirements. A lack of awareness of the link between the desired creativity and ill mental health may lead to the student's own mishandling of failures resulting in behavioural patterns like mood-swings, frustration, anger, sadness, withdrawal, depression, or even suicide.
Purpose – The first objective of this study was to reveal psychological issues for students of higher education where creativity is essential in the profession. The second objective was to identify behavioural patterns in handling failure when creativity and mental health issues coexist.
Design/Methodology/Approach – Relevant literature was reviewed. A qualitative approach was applied in this study using observation and in-depth interviews through which psychological issues and behavioural patterns were identified.
Results – Findings in this study are: (1) students with high creativity are focused on reaching perfection; (2) students with creativity employ a strong driving-force to break through barriers; (3) students with creativity are diversified in handling failure; (4) awareness of the link between creativity and mental health challenges is low; and (5) coping with dissatisfaction does not often result in productive/positive communication. Cultural issues play a role in creativity and mental health. It is uncommon for students to reach out for help and often not considered as an alternative. Perfection and success in career development are overemphasized by the society. There is pressure from both the outside environment and inner self-desire to achieve of excellence.
Limitations and strengths of the study – Creativity is multidimensional. The strength of this study is to reveal behavioural patterns which resulted from handling failure for students with personality trait in creativity. Limitation of this study is that findings are based on observation and in-depth interviews. Further research may need to examine creativity and mental illness in higher education from medical perspectives. Furthermore, cross-cultural studies may provide insights into differences in behavioural patterns in creativity and mental issues.
Practical/Social value – This study examined psychological issues for students of higher education when creativity is a fundamentally indispensable characteristic of their aspired profession. The research found that young adults, influenced by culture, have a strong desire to conform the social norm; however, the mental health challenges that often exist alongside creativity have been less discussed in higher education, resulting in limited awareness of behavioural patterns once failure needs to be coped with.
Originality/Conclusions – Suggestions based on findings in this study are: (1) in higher education, awareness of the link between creativity and mental issues needs to be strengthened; (2) students in future career paths where creativity is an important personality trait need to have a better understanding of the possible link between creativity and mental illness; (3) coping with failure needs to be discussed and practiced in higher education; (4) negative behaviour patterns emerging in students experiencing failure can be important signals for administrators in higher education to comprehend and to intervene if necessary; and (5) medical support and assistance should be provided for students who reach out for help, but for those who need but refused to ask for help, strategic implementation may be necessary in an effort to support them.

Keywords: education, mental health.

Interdisciplinary Technologies in Socio-Political Rehabilitation

Oleksandr Malkhazov[1], Sergiy Osypenko[2]
[1] Institute of Social and Political Psychology, National Academy of Educational Sciences of Ukraine, Kyiv, Ukraine
[2] G. S. Kostiuk Institute of Psychology, National Academy of Educational Sciences of Ukraine, Kyiv, Ukraine

Introduction. One of the ways to improve psychological support of the rehabilitation measures in the field of psychological health is to apply technological resources from different areas of psychological knowledge. This means first considering psychophysiological indicators and individual characteristics of the people who need help at different stages of socio-psychological rehabilitation in order to carry out a complex diagnostics of the factors of psychological illness and means of addressing them. The obstacles in the way are, on one hand, lack of interdisciplinary technologies aimed at solving psychological health problems, and, on the other, lack of diagnostic equipment.

Purpose. The purpose of the research is to develop a technology of socio-political rehabilitation for individuals who experienced a traumatic event or suffer from PTSD. The technology is supposed to use a modern diagnostic device system to measure psychological and psychophysiological characteristics of an individual.

The research allowed verification of the assumption that step by step control of the dynamics of the changes occurring in the state of the patient under the influence of the rehabilitation measures increases effectiveness of the psychological support.

To develop the ability to regulate the emotional states of individuals who have experienced a posttraumatic event it is suggested to apply the technology of socio-psychological rehabilitation, which can be implemented with the help of special equipment. Therefore, one of the tasks of the study was to develop a diagnostic system to perform step-by-step control of effectiveness of the rehabilitation procedures.

Methodology. The first preparatory stage envisaged developing the technology for increasing the emotional resilience of the individuals experiencing consequences of traumatic events on the basis of analyzing their current problems and technological approaches to emotional state regulation.

Our next step (methodological stage of the study) focused on selecting the methods relevant to the tasks perused at each stage of the developed technology.

To reach the established objectives the following groups of methods were used:

- methods aimed at determining the degree of the patient's psychophysiological and emotional exhaustion, optimal exertion and recuperation mode, as well as duration of the testing and training sessions (chronometry and methods of registering neurodynamic characteristics: tapping test, reaction to moving objects, accuracy of time estimation, critical flicker frequency);
- methods aimed at determining the level of emotional stress (galvanic skin response, photoplethysm, oculography);
- methods aimed at identifying the patient's individual characteristics (extra- and introversion, neurotism, impulsivity, excitedness, communicability, reflexivity, anxiety, demonstrativeness, stuckness, hypertensiveness, dysthymia, cyclotimity, exaltation, emotivity, steadiness, and social maturity). In order to diagnose the above mentioned qualities the questionnaires by Eysenck, Leonhard, Thurstone, Strelau, Leary and Rosenzweig were used.

The third instrumental stage of the study was devoted to the development and piloting of a sample diagnostic system. The piloting stage envisaged training based on the biofeedback principle. The biofeedback method is used to change respondents' attitudes to themselves by enhancing their belief in their own capability to control their emotional states. Emotion control skills on the psychophysiological level are further transformed into the models of emotional state control in different situations of social interaction. To this end, situation modeling methods, reflective analysis and projective methods are applied.

Results. Our approach to the development of the system is based on the ideas of *W. Boucsein (2012)* and interactive psychophysiology *(Ìàlkhazov, 2014*), which were applied in the course of the diagnostic system development (*Ìàlkhazov, 2008)*. We took into consideration the experience of creation and application of similar devices and techniques by *Duric-Jovicic, M., Jovicic, N., Radovanovic, S., Jecmenica-Lukic, M.,* Belic, M., Popovic, M., & *Kostic, V. (2018), Hagger M. S., Luszczynska, A., de Wit, J. et al (2016), Schwartz, M. S., & Andrasik, F. (Eds.). (2017), Wahbeh, H., Goodrich, E., Goy, E. Et al (2016)*.

Unlike the works mentioned above the proposed device system is multifunctional. It can be used to solve a wide range of psychic health problems, particularly those occurring in the process of socio-psychological, psychophysiological and medical rehabilitation, and when making and testing bio prosthesis, bio robots, trainers, etc. The device system makes it possible to register with high accuracy quantity indicators of psychophysiological and individual peculiarities of a respondent in real time. Thanks to the original software and mathematical

provision, the current and final results of the test are immediately displayed on the researcher's monitor. On the basis of the diagnostic data obtained, a choice of rehabilitation strategies is made.

The device system consists of two items, which can function both in the autonomous and multifunctional modes, a computer provided with the original software, and two monitors: one is for the respondent and the other for the rehabilitation specialist.

The first device, which serves to diagnose neurodynamic and chronometric parameters, is used at the first stage and partly before the second and the third implementation stages of the technology developed. The device helps to display information essential for determination and control of the exertion and recuperation modes, which is drawn from the analysis of the investigation results on the monitor of the rehabilitation specialist.

The second device, which serves to register emotional exhaustion parameters, enables the rehabilitation specialist to follow changes in emotion and emotional states of the respondent, degree of increase or decrease of his/her emotional exhaustion when reacting to specific questions, statements, words, etc. That ensures substantially higher screening reliability. The information obtained is taken into account on the reflective and partly on the formation stages of the technology implementation.

The advantages of the interdisciplinary approach can be demonstrated using the example of the technology of enhancing emotional resilience of the individuals experiencing consequences of traumatic events.

In the framework of this study, emotional resilience is defined as the ability of an individual to control his/her emotional states in situations of significant of social interaction and in his/her professional activities. This ability is the result of the functioning of a multilevel system of psychophysiological, individual psychological and socio-psychological factors. It may be assumed that the system effectiveness can be changed by correcting its single elements.

It is common knowledge that emotional resilience of individuals experiencing consequences of traumatic events, to a greater extent, depend on their own ability to control their emotions and emotional states in the course of social interaction. Therefore, it is the development of the individual capacity for self-control that is seen as a resource for enhancing emotional resilience.

The proposed technology is implemented in three stages. At every rehabilitation stage, the diagnostic device system is used. It includes two monitors, one of which is placed in front of the respondent and the other is in the researcher's field of view. The respondent's unit is equipped with three video cameras, which record his/her eye motions. Besides, there are photoplethysm and galvanic skin response sensors on the respondent's fingers.

During the first *diagnostic stage*, a respondent following the researcher's request speaks about him-/herself, remembers the situations when he/she experienced strong emotions (fear, happiness, joy, rage, anger, annoyance, etc), describes the cases when he/she managed to gain control over his/her emotions, analyzes concrete emotionally significant situations of his/her past, and tries to model different variants of their desired solution. The next step is the identification of the individual psychological profile of the respondent by means of questionnaires, with simultaneous registration of the psychophysiological indicators; this allows revealing the truthfulness of the statements and the semantic statement clusters that cause tension.

The results of the diagnostics in real time provide the researcher with information that helps to draw conclusions about the ability of the individual to differentiate his/her own emotions and emotional states, his/her experience and the level of reflection on his/her own emotional manifestations, as well as the ability to distinguish the situations that lead to a decrease in emotional resilience. The researcher identifies typical situations in which the respondent loses the ability to control his/her emotions and to apply most frequently used coping strategies (experience of avoidance, experience of successful solution, and other ways of coping).

During the second *reflexive stage* the psychotherapist specifies his/her understanding of the individual peculiarities, resources and self-regulation problem zones of the respondent by determining and analyzing the conditions and factors of his/her emotional reactions; modeling successful and unsuccessful ways of coping with the emotional states with further analysis of the reasons for failure; applying technological techniques to enhance the respondent's belief in his/her own ability to regulate his/her emotions.

With a view to the objective above, the psychotherapist suggests that the respondent analyze the situation in which he/she regularly lacks emotional resilience and determine its causes (internal and external ones). The researcher and the respondent discuss possible ways of overcoming the internal and external causes and precisely formulate those that are in the zone of the respondent's potential control. They work out the repertoire of the ways to cope with the emotions that is already used by the respondent, as well as the ways which he/she could use. In order to prove the respondent's ability to regulate his/her own emotions, biofeedback learning techniques can be applied.

The aim of the third *formation stage* is to specify the idea of the desired models of the respondent's behavior in the emotionally significant situations and to determine the necessary abilities and skills for emotion correction. At this stage, rehabilitation techniques of enhancing confidence in one's ability to control emotional states are applied. The respondent masters the techniques of emotion regulation in the typical situations and develops the ability to anticipate and choose the optimal model of behavior in the situations causing the decrease of emotional resilience

(avoidance, solution, changing attitude about the situation, suppression or depreciation of the situations that cannot be solved).
The diagnostic system is used on the third stage to master respondents' skills to distinguish emotions, identify situations that cause emotional reactions, independently regulate emotional states and learn some techniques to preserve self-control. In the process of rehabilitation, the control of the emotional state practices acquired through applying the biofeedback method are transformed into the models of behavior in the potentially provocative situations of social interaction.
Thus, the application of the psychodiagnostic device system makes it possible to receive information about the individual psychophysiological and psychological peculiarities of a patient in real time. On the basis of the data obtained, the psychoanalyst determines the strategy of his work, chooses optimal load regimes, identifies compensation possibilities and controls the effectiveness of the rehabilitation measures.

Keywords: interdisciplinary approach, emotional resilience, rehabilitation, technology, psychodiagnostic device system.

References.

Boucsein, W. (2012). Electrodermal activity. Springer Science & Business Media.
Duric-Jovicic, M., Jovicic, N., Radovanovic, S., Jecmenica-Lukic, M., Belic, M., Popovic, M., & Kostic, V. (2018). Finger and foot tapping sensor system for objective motor assessment. Vojnosanitetski pregled, 75(1), 68-77.
Hagger, M. S., Luszczynska, A., de Wit, J., Benyamini, Y., Burkert, S., Chamberland, P. E., & Gauchet, A. (2016). Implementation intention and planning interventions in Health Psychology: Recommendations from the Synergy Expert Group for research and practice. Psychology & health, 31(7), 814-839.
Ìàlkhazov, Î.R. (2008). New solutions to the problem of the psychological support of an operator's safety. Proceedings of the Second World Congress "Aviation in the XXI – st century" "Safety in aviation and space technology". Vol.2. – K.: NAU., 6.28-6.32.
Ìàlkhazov, Î.R. (2014) Integrative psychophysiology: methodological foundations. In [222] All-Ukrainian Psychological Congress with International participant «Personality in the modern world». Ê.: DP «Information and analytical agency», 53 – 57.
Schwartz, M. S., & Andrasik, F. (Eds.). (2017). Biofeedback: A practitioner's guide. Guilford Publications.
Wahbeh, H., Goodrich, E., Goy, E., & Oken, B. S. (2016). Mechanistic pathways of mindfulness meditation in combat veterans with posttraumatic stress disorder. Journal of clinical psychology, 72(4), 365-383.

Media Literacy Effect. The Context of War Media Trauma

Lyubov Naydonova
Institute for Social and Political Psychology of National Academy of Educational Sciences, Kyiv, Ukraine

Introduction. On the base of analysis of media covering of terrorist bombing and its effect on health (Pfefferbaum, 1999) we proposed war media trauma taxonomy for teenagers. We single out three type of media trauma on the base of composition of real trauma, interpersonal transition, and media exposition:
a) real traumatic event, interpersonal transition of trauma and media exposition,
b) interpersonal transition of trauma and media exposition,
c) only media exposition.
Example of media trauma, type A: media war content impact on the children, which mother has killed by bomb earlier, or teenager, who has lived their destroyed home. Example of media trauma, type B: media war content impact on teenager, which father is combatant right now or some relatives are the participant of war tragedy. Example of media trauma C: media war content impact on children, who only watch TV about antiterrorist operation on the East Ukraine and talk about it by social media.
Purpose. The purpose of the study is to reveal the relationship between war news watching and psychological well-being as an indicator of mediatrauma type C, to determine the role of media literacy in the prevention of negative media effects.
Methodology. Ukrainian teenagers (13-17 years old, from experimental schools with media educational curriculum, N=1144) were answering set of question during 2015 year, when war events were on the Donbass (East Ukraine) and actively enlightened by media. Media coverage of military news message includes daily the number of attacks, killed and injured combatants, farewell to the dead in the central area of the country's Independence Square, the life of soldiers in the line of confrontation, pre-war life, affected civilians, the treatment of combatants, veterans' achievements.
Results. As a result, 57% of teenagers watch TV news about war every day or almost every day, 44% talk about it always or often. Very small significant relationships were found between watching war news and psychological well-being (ρ=.195 **), and between news discussion and psychological well-being (ρ=.223 **) for teenagers with low levels of media literacy. Teenagers, who have low levels of media literacy and refuse to watch the news and discuss them, have lower psychological well-being. At a high level, media literacy significant relationships were not found. Media trauma (type C), which symptoms are demonstrated by TV spectators in cases of media coverage of terrorist acts or techno disaster, is not found in adolescents who view extended coverage of war.
Conclusions. We proposed for media trauma effect measurement not only PTSD symptoms approach but also the level of psychological well-being (Ryff, 1995, Shyshko, 2015). Media literacy level could be evaluated by object knowledge express test (Naydonova, 2016), which is appropriated for course "Media culture" for pupils of 10 classes of secondary schools.
Watching of military news and their discussion becomes the home practices as form of stress coping. It was found the moderated effect of media literacy. The next stage of research involves the study of the role of media in covering the military actions for different types of mediatrauma.

References.
Naydonova, L.A. (2016) *Diagnosis of Knowledge Component of Media Information Literacy.* Kyiv.
Pfefferbaum, B, Moore, V L, McDonald, N B, Maynard, B T, Gurwitch, R H, Nixon, S J. (1999) *The role of exposure in posttraumatic stress in youths following the 1995 bombing.* The Journal of the Oklahoma State Medical Association, 92 (4), 164-167.
Ryff, C. D., Keyes, C.L.M. (1995) *The Structure of Psychological Well-Being Revisited*. Journal of Personality and Social Psychology, 69 (4), 719-727.
Shyshko N.S. (2015) *Psychological well-being in the in the representations of modern high school students.* Kyiv.

Keywords: media literacy, news, war trauma, teenager, well-being.

Coping Strategies for Exam Stress

Monica Elisabeta Păduraru
The Bucharest University of Economic Studies – Teachers' Training Department, Bucharest, Romania

Abstract. During the examination period, students experience a state of stress generated both by the exams themselves and by the fear of getting bad grades and implicitly a failure. This problem needs to be taken into consideration, not only because of the high percentage of students who suffer from it, but also because it has a negative effect on academic performance and self-esteem. Through this article, we tried to identify coping strategies used by students to cope with the exam stress (before, during and after the exam). We used the focus group technique on 32 students (divided into 4 groups). The students are from The Bucharest University of Economic Studies and they are enrolled in the pedagogical training module. Following the centralization of the opinions expressed during the discussions, we grouped the coping strategies into four categories: general coping (used during the semester), coping methods used before the exam (in the exam period), coping methods used during the exam itself, and coping methods used after the exam. As a result of this study, we believe that students and teachers have raised awareness of the importance of using positive coping strategies to lessen the stress associated with exams. The initiative to organize student stress management workshops was also launched.

Keywords: stress, examination, coping strategy.

1. Introduction.

Stress is the automatic and natural response of the human body to situations that can be threatening or challenging. This entails a state of personal over activation in different real situations that the human being evaluates or considers as excessive and that appear in conditions where there are scarce resources or solution skills. For example, it may appear in the case of students due to an overload in academic tasks when there is very little time to complete them.

Being a student at present time means living in a state of constant pressure generated by a series of factors that are related to both the academic environment (the degree of difficulty of the subjects, the expectations of the teachers, the number of exams and their degree of difficulty, the pressure to maintain scholarships) as well as the non-academic one (family pressure, personal aspirations, economic difficulties). Often, these pressures on students can affect their emotional balance and their mental health (by which we understand emotional, psychological, and social well-being, which affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make choices) (Mentalhealth.gov, 2018). There are studies that support previous statements, arguing that students are subjected to different types of stressors. Among these stressors we can find the pressure of academics with an obligation to succeed, an uncertain future and the difficulties of integrating into the system. Other sources of stress that students face are social, emotional and physical and family problems that may affect their learning ability and academic performance[1] (Sreeramareddy et al., 2007).

A survey conducted by National Union of Students Scotland on 1.872 students from 19 colleges and 15 university campuses shows that examinations were found to be the biggest concern for students. An overwhelming 90% of students reported this caused them more stress than expected (National Union of Students Scotland, 2010).

2. Related Work.

The study of stress has traditionally been governed by three conceptual aspects: stress as a stimulus; stress as a response, and stress as person-environment interaction (Laredo, 2015). *Stress as a stimulus* refers to scenarios that cause discomfort and alter or can alter the organism. These situations or events, called stressors, can be framed in different scenarios (examinations being some of them). *Stress as an answer* it is the physiological or psychological response that an individual manifests when facing an environmental stressor. The answers that occur in the individuals are hormonal, to which organic, functional and somatic stress reactions correspond. *Stress as a stimulus-response interaction* it is considered as a stimulus-response relationship, felt by the individual as threatening or overflowing its possibilities and threatening its well-being. The increase in the stress response depends mainly on perceptual aspects. The physiological activation triggered by the subject's evaluation of the situation and of their coping skills (primary and secondary evaluation) highlights, once again, the importance of cognitive aspects as determinants of the stress response (Lazarus, 1984).

Stress can occur before and during examinations and can have lasting negative impacts on the self-esteem of the student. Stress before and during examination is experienced by many normal students and the signs are easy to notice: irregular sleep, feeling of tiredness, isolated or sad, feeling ache all over, suffer from stomach upset, feeling of restlessness or leading to a condition where you are not able to recall whatever you studied (Jagrati, 2014).

According to Hernadez, Parra, Campoy, Garcia and Perez-Gallardo (2013) stress before the exams not only affects the academic performance but it is related to the emotional and health status of the students. Therefore, the exams stress, together with the lifestyle of the students that in exam periods is modified can produce some unhealthy habits – excess in the consumption of caffeine, tobacco, psychoactive substances and even, in some cases, ingestion of tranquilizers – all the above, in the long run could lead to health disorders (Hernández, Parra, Campoy, García, & Pérez-Gallardo, 2013).

According to the Romanian Education Law, the academic success of a student during a study program is determined by continuous and summative assessment (Romanian Education Law, 2011, section 7, Article 144, paragraph 1). The summative assessment of the students is done at the end of each semester, in the examination session, through oral, practical or written evaluation tests. Although exams are the same for all students, the way they relate to them and the level of stress experienced differs from case to case. Lazarus and Folkman's model emphasizes that cognitive processes for stress mediate the relationship between stressors and stress reactions (Lazarus, 1984). In this case, the cognitive processes include the estimation of the value of the stressors and the selection of coping strategies to cope with stressors (Higuchi, Echigo, 2016). The coping strategies used may vary: approach and avoidance strategies, problem and emotion-focused coping strategies, and behavioral and cognitive strategies (Higuchi, Echigo, 2016).

Most students perceive the time of the exam as something threatening and experience an increased anxiety state in front of it. In general, any difficult test subjects the candidates for two situations: the intrinsic difficulty of the questions and the possible distortion level of anxiety. It has been proven that while a moderate increase in the level of anxiety can be useful if motivates the student to increase their efforts and to focus their attention on the content of the test, a greater increase in anxiety may produce unsatisfactory results. In a study conducted in 2007 on students from two community colleges in southern Illinois, Pierceall and Keim found that the most often used activities to cope with stress included talking to family and friends, leisure activities, and exercising. Less desirable coping strategies were drinking alcohol, smoking, and using illegal drugs (Pierceall, Keim, 2007). Another study undertaken at Kathmandu University in 2005-2006 among 407 clinical sciences students has identified that the five most common coping strategies adopted by the students during the events of stress were *positive reframing, planning, acceptance, active coping* and *self-distraction*. The other identified strategies were: *emotional support, instrumental support, religion, venting, self-blaming, use of humor, denial, behavioral disengagement, alcohol/drug use* (Sreeramareddy et.al, 2007).

Pena (1998) shows that there are significant differences in ways of coping with stress used by the subjects in the previous stage of the examination compared to those used in the later stage is to say the subjects have the tendency in average to not use coping modes in the same proportion in the stages before and after the exam (Pena, 1998).

3. Method.

To identify the sources of exam stress and coping strategies used by students to reduce stress related to exams, we used the focus group technique (Chelcea, 2007). A total of 32 students were divided into 4 groups. The students were from the Bucharest University of Economic Studies and they were enrolled in the pedagogical training module. Focus groups were conducted after the summer exam session. We selected to participate in focus groups the students who, after completing a self-perceived stress assessment questionnaire, fell into the "high stress" category. The duration of a focus group was 90 minutes. Questions focused on finding which ways of coping students use in order to reduce stress before and after the exams period.

4. Results and Discussion.

During the discussions, the participants pointed out that stress related to the exam is not present only during the examination period but before and even after the examination. The causes of stress exams are varied and are related both to academic and non-academic aspects. We have grouped these stress causes in four categories: *lifestyle, psychological factors, insufficient developed study skills, and academic factors*. The first category – *lifestyle* – were included dysfunctional personal relationships, change in living environment, bad living conditions, change in sleeping habits, inadequate rest, insufficient physical exercise, new responsibilities, financial difficulties, combining work with studies, not scheduling available time, health problems, poor eating habits or poor nutrition, and too many stimulants. In the second category – *psychological factors* – were mentioned: feeling little or no control over the exam situation, unrealistic expectations, procrastination, future worries irrational beliefs, irrational thinking about exams and outcomes, irrational demands, and negative thinking and self-criticism. The causes of stress falling into the third category – *insufficient developed study skills* – are: language difficulties, reading without understanding, poor computer skills, inconsistent content coverage, not making revision notes, and all-night studying before exams. In the fourth category – *academic factors* – we have included: increased class workload, missing lectures, lecturers' expectations, course requirements, and many hours of studies.

Following the centralization of the opinions expressed during the discussions, we have grouped the coping strategies for exam stress into four categories: *general coping strategies* (used during the semester), *coping methods used before the exam* (in the exam period), *coping methods used during the exam itself*, and *coping methods used after the exam. General coping strategies* (used during the semester) are: a healthy lifestyle (enough

exercise, good nutrition, adequate rest, and positive thoughts), good time management (planning the study and the free time), accurate information (regarding lecturers' expectations, course requirements). In the *coping methods used before the exam* (in the exam period) were mentioned: developing a timetable which include study and fun, leaving time to revise, taking breaks, good eating and sleeping habits, exercise, Consumption of coffee and energy drinks. In the category *coping methods used during the exam itself* students mentioned: keeping calm, read the instructions carefully, re-read the instructions a second time, and prioritize what need to be done. The last category – *coping methods used after the exam* – includes: avoid self-criticism, reward for the hard work, and plenty of rest.

5. Conclusions (and Future Work).

The stress associated with exams can be diminished by using coping strategies that can intervene before, during and after exams. These coping strategies can be developed and practiced over time. Some of them are related to the students' lifestyle, while others are related to academic life and its specific requirements. There are currently few activities within the university aimed at familiarizing students with coping techniques before, during and after examination periods. This is one of the issues underpinning our recommendations: organizing, within the university, work-shops to address stress management; promoting a balanced lifestyle for students, that should combine academic demands with a healthy lifestyle.

References.

Chelcea, S. (2007). *Metodologia cercetării sociologice. Metode cantitative și calitative*. București: Editura Economica.

Hernández, J. Á., Parra, J. M. A., Campoy, J. M. F., García, D. S., Pérez-Gallardo, E. R. (2013). El estrés ante los exámenes en los estudiantes universitarios. propuesta de intervención. *International Journal of Developmental and Educational Psychology*, no 1, vol. 2.

Higuchi D., Echigo A. (2016). Characteristics of coping strategies and the relationships between coping strategies and stress reactions in physical therapy students during clinical practice. *Journal of Physical Therapy Science*, 28(10): 2867–2870.

Jagrati, J. (2014). Examination Stress and Anxiety: A Study of College Students. *Global Journal of Multidisciplinary Studies*, vol. 4, issue 01.

Laredo, M. M. (2015). Stress in college students of Health Sciences. *Revista Iberoamericana para la Investigación y el Desarrollo Educativo*, vol 6, no 11.

Lazarus RS, Folkman S (1984). *Stress, Appraisal, and Coping*. New York: Springer.

Mentalhealth.gov. (2018). *What Is Mental Health?*.. Retrieved from: https://www.mentalhealth.gov/basics/what-is-mental-health.

National Union of Students Scotland. (2010). *Silently Stressed. A survey into student mental wellbeing*. Retrieved from: https://www.nus.org.uk/PageFiles/12238/THINK-POS-REPORT-Final.pdf.

Pena, A. Q. (1998). Estrés y afrontamiento del estrés frente al examen en educación superior: un estilo o un proceso?. *Revista de Investigación en Psicología*, vol 1, no 2.

Pierceall, E. A., Keim, M. C. (2007). Stress and Coping Strategies among Community College Students. *Community College Journal of Research and Practice*, Volume 31, 2007 – Issue 9.

Romanian Education Law. (2011). Retrieved from https://www.edu.ro/sites/default/files/_fi%C8%99iere/Minister/2017/legislatie%20MEN/Legea%20nr.%201_2011_actualizata2018.pdf

Sreeramareddy, C, Shankar, P. R, Binu, V. S., Mukhopadhyay, C., Biswabina, R., Menezes, R. G. (2007). Psychological morbidity, sources of stress and coping strategies among undergraduate medical students of Nepal. *BMC Medical Education* 7:26.

Vocational and Educational Training in Family and Community Nursing as a European Priority: The ENhANCE Erasmus+ Project. Aspects for Mental Health Care

Ioanna V. Papathanasiou[1], Evangelos C. Fradelos[1], Sofia Kastanidou[1], Konstantinos Tsaras[1], Francesca Pozzi[2], Flavio Manganello[2], Serena Alvino[3], Loredana Sasso[4], Annamaria Bagnasco[4], Giuseppe Aleo[4], Isabella Roba[5], Stecy Yghemonos[6], Adriana Popa[7], Hannele Turunen[8], Christos Kleisiaris[9], Eftychia Evangelidou[10], Aris Daglas[10], Clara Rodrigues[11], Lars Oertel[12], Madeleine Diab[12],

[1]TEI of Thessaly, Greece, [2]ITD-CNR, Italy, [3]Si4Life, Italy, [4]University of Genoa, Italy, [5]ALISA, Italy, [6]EUROCARERS, Belgium, [7]EASPD, Belgium, [8]University of Eastern Finland, Finland, [9]TEI of Crete, Greece, [10]ENE, Greece, [11]Future Balloons, Portugal, [12]AWV, Germany

Family and Community Nurses play a vital role in many aspects of EU healthcare systems, as more and more patient are treated outside the traditional hospital settings. Family and Community Nurses provide nursing interventions and also educational and counselling services for patients and families, as well as for total communities. So, they should be trained properly to perform a variety of nursing procedures. EU and World Health Organization (WHO) reports identify the Family and Community Nurse (FCN) as a key-actor in the new Primary Health Care (PHC) model.

Concerning community mental health care, current studies' results have shown many benefits for individuals that are suffering from mental disorders and their families also, of the nursing care that is provided from Family and Community Nurses. According to these results the patient – centered, adequate and continuing nursing care is an essential condition for better health outcomes of chronic mental health disorders, can reduce relapses and hospitalizations, saving significant funds.

The ENhANCE Erasmus+ Project (https://www.enhance-fcn.eu/) targets to the existing mismatch between the skills currently offered by nurses working in Primary Health Care (PHC) and those actually demanded by both public health care institutions and private service providers when applying innovative healthcare models centered on PHC. The Alliance of the project is composed of 13 partners, from 6 different EU countries representing VET providers in the field of Nursing, Regulatory Bodies for FCN training, Professional Associations and Public and Private Employers.
To achieve the project objectives, the ENhANCE Alliance is carrying out a number of activities including:

- Definition and delivery of a Professional Profile for the Family and Community Nurse (FCN) which could be taken as a reference at European level for the Vocational Education and Training (VET).
- Design of a Curriculum for Family and Community Nurse (FCNs) which could play a reference role at European level.
- Development of specific guidelines/instructions supporting VET providers in the instantiation of the EU Curriculum into local curricula.
- Delivery of a training course for teachers and development of guidelines and methodological recommendations for them on how to effectively use and tailor the tools and methods proposed by the project.
- Development of an innovative open online tool supporting case studies and best practice sharing for nurses
- Design of 3 national FCN curricula and implementation of 3 pilot courses.
- Development of Recommendations for efficient investments on FCN professionals both for public and for private employers.
- Evaluation and Quality assurance of the project results.
- Dissemination of the project outputs among different stakeholders.
- Exploitation of the results and assurance for project sustainability.

As for mental health aspects, the results from an e-Delphi study that was conducted under the ENhANCE project, and in which experts in FCN from EU countries participated in order key FCN competencies to be identified, have shown that 28 competencies are the core for delivery quality nursing care in the community. Many of those competencies are vital on providing community based mental health care, and will be mentioned.

Are extrovert people more satisfied with life? Case study

Elena Ramona Richițeanu-Năstase[1], Camelia Stăiculescu[2]
[1] The Bucharest University of Economic Studies, Bucharest, Romania, ramona_richiteanu@yahoo.com
[2] The Bucharest University of Economic Studies, Bucharest, Romania, camistaiculescu@yahoo.com

Abstract. Psychological and psycho-social research have studied the strong dependence between subjective wellbeing and personality. Research findings have shown that an optimistic, extrovert person has a higher level of life satisfaction. In this paper, we shall try to present the research results of a study made on 150 students enrolled at The Bucharest University of Economic Studies. We have studied if this correlation between extraversion and the level of life satisfaction applies to our sample. We have used two well established and known instruments: Life Satisfaction Inventory (Diener, 2006) and the E-Scale of EPQ (Eysenck Personality Questionnaire). Results show that the correlation is maintained, a more extravert person has a higher level of satisfaction with life. Our research also opens some questions regarding the possibility of training this personality trait and proposes a personal development and coaching program.

Keywords: extraversion, satisfaction with life, personal development, wellbeing.

1. Introduction. The theme of happiness, the subjective wellbeing is a actual, very important theme of study for many research studies. That is not only because striving to achieve happiness is the purpose of any human, but because the subjective wellbeing is studied as synonymous with mental health (Diener, Lukas, Oishi, 2002) and reveals the protective role it has against stressor agents and the ability to prevent depression.
Many psychological and psycho-social research have studied the strong dependence between subjective wellbeing and personality. Research findings have shown that an optimistic, extrovert person has a higher level of life satisfaction.
Also, studies show that genetic factors have a great influence in which people evaluate their life (Lykken and Tellegen, 1996). They state that 80% percent of the variance of subjective wellbeing is explained through genetic factors. Costa and McCrae (1980) stated that extraversion and happiness are correlated. M. Argyle and L. Lu (1990) determined that Eysenck extraversion scale and Oxford Happiness Inventory are correlated. Argyle and L. Lu also affirm that half of the grater happiness of the extraverts can be explain by their greater participation in social activities. We think that the participation to social activities is the effect, but not the cause of the happiness of the extraverts.
Eysenk, Eavesand Martin (1989) state that extraversion and introversion is explained through genetic factors and extraverts have a lower cortical arousal than introverts and they seek arousal in social activity. But this does not explain why they seek positive encounters?
Maybe the explanation of positive social encounters of the extraverts can be explain by another study. Gray (1972, apud M. Argyle and L. Lu, 1990) state that positive orientation of extraverts is related to the difference in brain structure, extraverts magnify rewords while introverts magnify punishments.
Whichever the cause of extraversion, we think is important to identify if a correlation exists, and if it does, the practical importance of it…can it be developed? Can we have more extravert, opened, happy, mentally heathy people?
In this paper, we shall present the results of our study focused on identifying if a correlation between extraversion and the level of life satisfaction applies to our sample.

2. Research Methods.
2.1 Methodology. The research is conducted on 150 students from The Bucharest University of Economic Studies, Romania enrolled in bachelor, master and doctoral programs. (42 male students -28% and 108 female students -72%). Most of the respondents were enrolled in master programs (60, 7%).
In our research we have used two well established and known instruments: Life Satisfaction Inventory (Diener, 2006) and the E-Scale of EPQ (Eysenck Personality Questionnaire).
Life Satisfaction Inventory was proposed by Ed Diener in 1985. We used the 2006 form of the instrument. The instrument has 5 items with a 7 Likert scale. The scores range from 5 to 35. The 30 – 35 score is a very high score and means a highly satisfied individual, 25- 29 is a high score and means a satisfied individual, 20 – 24 is an average score, 15 – 19 is a slightly below average in life satisfaction, 10 – 14 dissatisfied and 5-9 Extremely Dissatisfied. The Satisfaction with Life Scale (SWLS) was developed to assess satisfaction with the respondent's life as a whole.
Eysenck Personality Questionnaire (EPQ) is a questionnaire that assess the personality traits of a person in terms of extraversion/introversion, neuroticism/stability and sincerity. It consists of 57 statements that the respondent

answers with yes and no. At the beginning of our study, we used only those items that refer to extraversion/introversion (E-scale), but very interesting results were obtain using also the neuroticism scale.
We also used items regarding identification elements – gender, age, the level of education, working status as to explore if they affect the level of satisfaction with life and extraversion.
To obtain the necessary data to our research we integrated the instruments in only one instrument using Google forms application and we distributed, collected and analyzed the obtained data using SPSS.

2.2 Findings. The results show that the correlation is maintained, that E-Scale of EPQ can be used as an instrument to assess the level of satisfaction with life, and that a more extravert person has a higher level of satisfaction with life (see Table 01.Correlations).
Although in the beginning we had no intention of identifying a correlation between life satisfaction and the level of neuroticism, but it exists and is negatively correlated (-,275**). This means that a balanced person with a low level of neuroticism has a greater level of satisfaction with life. Exploring this, we asked whether the socially driven idea that sanguine temperament would be the best, research data shows that the sanguine (balanced, with low level of neuroticism extraverted) has a greater life satisfaction than other temperaments. From our group of participants, 58% are sanguine (87 respondents).

Table 01. Correlations

		Level of satisfaction	Extraversion	Age	Gender	Level of education	Working status	Neuroticism
Level of satisfaction	Pearson Correlation	1	,284**	-,093	,124	,142	,271**	-,275**
	Sig. (2-tailed)		,000	,258	,131	,083	,001	,001
	N	150	150	150	150	150	150	150
Extraversion	Pearson Correlation	,284**	1	,118	-,140	,260**	,169*	-,291**
	Sig. (2-tailed)	,000		,151	,087	,001	,039	,000
	N	150	150	150	150	150	150	150
Age	Pearson Correlation	-,093	,118	1	-,350**	,185*	,095	-,165*
	Sig. (2-tailed)	,258	,151		,000	,023	,248	,044
	N	150	150	150	150	150	150	150
Gender	Pearson Correlation	,124	-,140	-,350**	1	-,208*	-,059	,170*
	Sig. (2-tailed)	,131	,087	,000		,011	,470	,038
	N	150	150	150	150	150	150	150
Level of education	Pearson Correlation	,142	,260**	,185*	-,208*	1	,140	-,282**
	Sig. (2-tailed)	,083	,001	,023	,011		,088	,000
	N	150	150	150	150	150	150	150
Working status	Pearson Correlation	,271**	,169*	,095	-,059	,140	1	-,034
	Sig. (2-tailed)	,001	,039	,248	,470	,088		,681
	N	150	150	150	150	150	150	150
Neuroticism	Pearson Correlation	-,275**	-,291**	-,165*	,170*	-,282**	-,034	1
	Sig. (2-tailed)	,001	,000	,044	,038	,000	,681	
	N	150	150	150	150	150	150	150
**. Correlation is significant at the 0.01 level (2-tailed).								
*. Correlation is significant at the 0.05 level (2-tailed).								

Another important result of our study reveal that, the level of satisfaction is also dependent on the status on the labor market. The employed participants have a higher level of satisfaction (correlation is significant at the 0.01 level).
The level of extraversion is higher among students who complete a doctoral program and full time employees. So extraversion is dependent on the level of education. This aspect contradicts to some extent the idea that extraversion is entirely genetic and can change to a small extent. Research data reveals that exposure to broad-based educational experiences, including work experiences, changes the individual, and compels him to adopt attitudes, to form an open, adaptable character, thus overcoming innate traits. We cannot ask ourselves… does the scale of extraversion measure an innate or acquired trait?
Future studies must reveal if the level of satisfaction depends on extraversion as a genetic factor or does extraversion refers only to sociability, an attitude that is dependent on social and educational factors.

Another interesting result of the research reveals that the level of neuroticism is negatively correlated with age. The older we are the less patient and flexible we become. Also, our study show that women are more neurotic than man, but the more educated they are the less neurotic they become.

3. Conclusion and recommendations.

The results of our study show that extraversion and neuroticism are predictors of the level of satisfaction with life and that higher level of extraversion can be found at students enrolled in higher level of education.

Our research opens some questions regarding the possibility of training these personality traits: extraversion and neuroticism. Our research show that as we offer more educational experiences, the student become more opened, more extravert and less neurotic. Of course not all students will attend a doctoral program, but the university can propose workshops and personal development programs aimed to increase openness, sociability and lower the neuroticism of students.

As a suggestion, we propose a personal development and coaching program for counselling students.

Students counseling is an intensive process of providing psycho-pedagogical assistance to students. The role of counseling is proactive, which means that its objectives are: prevention of personal and educational crisis situations and personal, educational and social development. The workshop is designed to follow the stages of counselling: definition of problem, expressing feelings, clarification of the problem, finding alternatives and establishing a proper plan to face the problem.

In every stage, we think that a very important role it plays the relationship established between the counsellor and participants. This relationship has to be an opened, positive, based on trust and nonjudgmental.

For the first stage we propose using two assessment tools: Life Satisfaction Inventory and EPQ (Eysenck Personality Questionnaire). After scoring and interpretation, participants are asked to express their feelings and thoughts about the scores obtained (agree or disagree, how they feel about the scores, if they want to change something about themselves). The counsellor offers as a positive encouragement the results of some studies that show the correlation between life satisfaction, extraversion and neuroticism.

To better clarify their problem, we propose an exercise following „Johari window"[2] model of personal development. In 15 minutes, in pairs, they will try to find out more about their partner (qualities, defects, a recent personal success, a secret). They will exchange roles and in the end characterize their partner in a few words. The idea here is that they understand how they can become more opened, more extravert and feel better about themselves regarding the defects they may have. At the end of the exercise the counselor will present the "Johari window" and will emphasize that in order to develop their blind self, they'll have to ask for feedback more, to develop their hidden self, they'll have to reveal themselves more and to develop their unknown self they'll have to say yes to new situations for which they haven't developed a learnt behavior. The workshop ends with an individual exercise of planning: every participant has to identify an activity he/she would have wanted to try and didn't and plan simple steps to introduce it to his/her everyday life. The purpose of the exercise is to identify simple changing actions that can have an effect on extraversion and neuroticism.

We think this workshop will have positive results and can stand as a reference for future research on satisfaction and effects it has on participants.

The results of the study and the workshop proposed can be applied to other categories and levels of education. It will be interesting to see if the same correlation and positive results are maintained.

In conclusion, we think that our study shows that extrovert people are happier, but also that this personality component can be changed and learnt. The workshop proposed is just a glimpse of a counselling program that can be done on this theme. We think that is important for the university, through counselling centers to develop such counselling programs and workshops for happier, more adapt and sociable students.

References.

Costa, P. T., & McCrae, R. R. (1980). Influence of extraversion and neuroticism on subjective well-being: happy and unhappy people. *Journal of personality and social psychology*, *38*(4), 668.

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment, 49,* 71-75

Diener, E., Suh, E., & Oishi, S. (1997). Recent findings on subjective well-being. *Indian Journal of Clinical Psychology, 24,* 25-41

Diener, E., Oishi, S., & Lucas, R. E. (2003). Personality, culture, and subjective well-being: Emotional and cognitive evaluations of life. *Annual review of psychology*, *54*(1), 403-425.

Heath, A. C., Eaves, L. J., & Martin, N. G. (1989). The genetic structure of personality III. Multivariate genetic item analysis of the EPQ scales. *Personality and Individual Differences*, *10*(8), 877-888.

Lykken, D., & Tellegen, A. (1996). Happiness is a stochastic phenomenon. *Psychological Science*, *7*(3), 186-189.

[2] See https://www.businessballs.com/self-awareness/johari-window-model-and-free-diagrams-68/

University dropout. Causes and solution

Camelia Stăiculescu, Elena Ramona Richițeanu-Năstase
Bucharest University of Economic Studies, Department Teacher Training, Bucharest, Romanian

Abstract. The phenomenon of university dropout is met in all universities in the world and its effects are felt both at the economic level, at the level of society and at the personal level of students who abandon the university. Factors leading to university dropout may be of a social nature (student background, income level, so on.), psycho-pedagogical (inadequate academic training, inconsistency between prior training and university studies, lack of counseling services, so on) and personal (poor adaptability to the university, low levels of socio-emotional intelligence, so on). Universities need to cope with this phenomenon and adapt and develop prevention and intervention services so that students' retention rate rises. The paper analyzes this phenomenon in The Bucharest University of Economic Studies and identifies possible solutions for diminishing the phenomenon.

Keywords. university dropout, retention, causes of university dropout, prevention of university dropout.

1. Introduction.

In today's society, the superior training of human resources is a necessity. From this perspective, Romania has some gaps in European evolution. The Report on the state of higher education in Romania 2015 shows that at the level of the academic year 2014–2015, the average duration of higher education attendance was 1.2 years, which shows the extent of the phenomenon of leaving the university studies of those who were enrolled in this tuition level. By reference to the total population of 21 years, only one-third of them managed to obtain a bachelor's degree (35.5% in the academic year 2013/2014).

One of the objectives of the Europe 2020 Strategy is that at least 40% of the population aged 30-34 have completed a tertiary education, ie they have obtained a university degree or a similar qualification.

In 17 EU countries, the 40% has already been reached, and in 5 countries (including Lithuania and Luxembourg) the proportion of graduates has exceeded 50% of the 30-34-year-old population. At the opposite end, there are 8 EU countries – including Romania, along with Italy and Malta – where the share of graduates in the 30-34 age group is less than 30% (see fig.1).

In this context, it is important not only the procent of young population that is included in the university education, but also the retention rate of those who are already enrolled in higher education.

Table 1. Key indicators provided by the European Commission, available at: https://ec.europa.eu/education/policy/strategic-framework/et-monitor_en

	Romania		Media UE	
Reference years	2013	2016	2013	2016
Early school dropout in education and training systems (aged 18-24)	17.3%	18.5%	11.9%	10.7%
Bachellor degree graduates (30-34 years of age)	22.9%	25.6%	37.1%	39.1%

In all higher education systems, we see the phenomenon of academic dropout as a withdrawal of a person in the form of education in which he / she was enrolled before obtaining a diploma or qualification. The university dropout is an extreme form of school failure and the necessity of diminishing it is imposed by at least four reasons (Staiculescu, 2012):

- *economic* – economic yield is low due to the professional incompetence of individuals. There is also an unprofitable growth in education spending;
- *social* – poor workforce induces social effects such as: marginalization, unemployment, social exclusion, delinquency, dependence on social protection services so on;
- *individually* – school failure also has psychological effects, such as: adaptability difficulties, distrust in their own forces, anxiety, stress, so on.;
- *pedagogical* – school failure is the indicator of the lack of pedagogical performance, of the inadequacies encountered in the educational system.

At the level of the Academy of Economic Studies the highest rate of university dropout is registered at the level of the first year. The statistical situation of the last years shows us that:

- In the academic year 2013-2014, there were 4527 registered students at the beginning of the first year, out of which 737 students were withdrawn / expelled at the end of the year, which corresponds to a dropout rate of 16.28%;

- For the academic year 2014-2015, the same indicators are: 5525 students, 801 students withdrawn / expelled, and 15,50% dropout rate;
- For the academic year 2015 – 2016 the statistics highlight the following values: 6144 students, out of which 880 students were withdrawn or expelled and 14.32% dropout rate respectively;
- For the academic year 2016-2017 of the 5211 enrolled students, only 787 were withdrawn / expelled and the abandonment rate was 15.10%.

Among the causes of expulsion, the most frequently cited are objective causes such as: withdrawal, non-payment of taxes, non-accumulation of ECTS credits, non-signing of study contracts, not meeting the standards at more than 3 subjects after the first exam session.
The analysis of the subjects at which the students register failures in the first year of university studies reveals that they are diverse, but there are subjects such as mathematics, microeconomics, macroeconomics, informatics, accounting, so on. These are in fact basic disciplines for training specialists in economic domain.

2. Causes of university dropout.

Studies on the causes of university dropout are diverse.
Robbins et al. (2004), in a meta-analysis of 109 studies that aimed at identifying if there is a relationship between the educational outcomes of students and psychological and academic factors took into account a number of explanatory factors of university dropout as follows: motivation for student success, academic goals (for example, the desire to obtain a bachelor's degree), institutional commitment (the level of satisfaction of the student, how attached they are to the university), perceived social support (existence of a university-level network for support or family support); social involvement (how involved in activities with other colleagues or organized by the university), self-assessment ability (how students relate to their academic abilities), self-perception (the way students relate to oneself), academic abilities (behavioral and cognitive skills required for academic success), contextual influences (aggregate indicator from three other indicators: financial support from the institution, institutional size and institutional selectivity).
Bean (1982) indicates 10 determinants that can cause variations in student wearing out and may lead to dropout. These are: the intention to give up, the practical value of the field chosen on the labor market, security of choice (the university in which he studies is the best choice for the student), loyalty to the institution they are studying (how important it is to graduate at that university and not at the other), average grade, perception of courses (if the student considers them appropriate), the importance given to university studies, the certainty of graduating a particular specialization or career plans, the opportunity to transfer to another university, family approval of the institution in which the student learns.
Robbins et al. (2004) show that the most important factors influencing university dropout are: students' academic goals, self-evaluation capacity and their academic abilities, but also other variables such as: institutional commitment, social support, social involvement, financial support institution or selectivity of the institution. The authors find that students are more tempted to drop out of university if they feel they can not cope with the demands of the courses, their academic capacity being defining.
DeBerard (2004) shows that dropout rates can not be explained by the way students respond to stress or behaviors that may affect health, but these variables influence the academic achievements of students.
Jia and Maloney (2014) indicate a number of other factors influencing university dropout as follows: ethnicity – majority students are more likely than minority students to complete their studies, gender – women have higher completion rates (Paura, Arhipova, 2014), the form of schooling (the students from the higher education have higher rates of completion of the studies than those from other forms of education), the age (students who are aged 2 to 3 years older than the average age enrollment in faculty are more likely to drop out of studies).
Westrick et al. (2015) show that first-year school results are important predictors for retention in study programs. The better these results are the more students do not dropout. The same authors state that good results in pre-university education tests influence higher academic performance and that there are no significant correlations between parental income levels and child dropout, especially given that the university provides material support to students in need of help. Bonaldo and Pereira (2016) show that the genre of students, the educational level of parents, the academic failure of students, or the fact that they have a child during their studies are not statistically significant explanatory variables for abandonment.
Factors such as age (Bonaldo and Pereira 2016, Araque, Roldan and Salguero, 2009), changing civil status (marriage, divorce, widowhood, child's appearance, lacking financial support are variables) abandoning university courses.
Araque, Roldan and Salguero (2009) make an analysis of abandonment according to the field of study. They show that humanitarian students have the highest chances of abandonment compared to those in engineering and economics. They introduce a number of other variables such as: the admissions faculty (those entering the first round are more likely to abandon the courses than those who enter the round), admission to college (those who are

selected on the basis of of an examination are less likely to drop out of studies than those enrolled on an exam score (eg, a baccalaureate grade), failing exams.
Oreopoulos (2007) show that the most likely to dropout are students who consider the school uninterested and unmotivated.
With regard to the time of dropout, other studies show that students are more likely to quit after examination periods when they have failed some examinations. High dropout rates have been recorded among students with low outcomes in pre-university education but also among those who have good grades, but the university program did not respond to their expectations (Paura, Arhipova, 2014).
The analysis of the Career Counseling and Career Center of the Bucharest University of Economic Studies shows that the students of the first year come with a picture of the academic environment often not in line with reality.
In most cases, university students in Romania are people aged between 18 and 25, a period of profound transformation both personally and socially, characterized by instability, intense quests, adaptation efforts, lack of a correct vision on the professional environment, lack of motivation and perspective for studies and work, insufficient self-knowledge, so on. (Diaconu, Stăiculescu, 2012). If at the beginning of the university studies, the young students are still teenagers, during graduation there is a gradual transition to maturity (Diaconu, Stăiculescu, 2012). The characteristics of adolescence and maturity coexist in a certain period. The challenges come from the growing responsibilities, the economic and social pressures that make this life stage tense and full of searches. The demanding situations for young people in this period can be generated by:

- separation from parents and the acquisition of psychological, economic and financial independence. Many young people are in a position to change the city, home, access to their first job, manage their own budget and resources;
- addressing other school requirements. Compared to the pre-university school environment, the university environment is characterized by a greater neutrality of social relations, the requirements are multiple and diverse, the teachers have another interpersonal approach to the pre-university education, have other types of school activities, the colleagues are unknown so on;
- compliance with professional requirements. Many young people practice internships in real professional environments, have expectations and certain perceptions of a job, and often they are far from reality;
- separation from many people considered to be representative in the previous period (teachers, school colleagues, etc.);
- changes in the self-image influenced by relationships with others, confirmation or invalidation of certain qualities. All these factors can lead to situations of loss, fear, insecurity, inappropriateness, anxiety, depression or difficulty in concentration. Young people are confronted with questions to define their personality: Who are they and who will I be? (in the sphere of "Be"); What do I have and what do I want to have? (in the sphere of "Have"); What am I able to do better what I will do (in the sphere of "Can do") (Diaconu, Stăiculescu, 2012).

Integration into a new environment is dependent on the process of social adaptation, through which the young students learn their new roles. Some students make it faster, others slower, the latter being the most exposed to the risk of dropout, depending on a number of social and personal factors such as: the social environment of origin (rural / urban), the level of training previously recorded, belonging to a vulnerable social category, low family income, lack of social skills and a low level of interpersonal and emotional intelligence, so on.

3. Solutions to prevent university dropout.

After examining a wide range of programs that various universities around the world have applied to increase student retention, Cabrera et. Al. (2006) identified the following types of interventions that universities could adopt:

- efforts to promote social and institutional adaptation. This type of effort tries to promote the social life of the students' body with programs aimed at organizing recreational and cultural events;
- efforts to recruit students;
- university guidance programs (eg through university tutors);
- programs that provide pre-university information and guidance on university specialties;
- programs that provide counseling and support to the student, especially providing training in learning and psychological support strategies;
- institutional efforts – for example, the creation of "campus leaders" and the training of "retention facilitators" in student relief efforts;
- guidelines for preventing drop-outs for students;
- efforts specifically addressed to students in on-line courses.

Braxton and McClendon (2002) recommend 8 areas where measures can be taken to ensure student retention in academia: academic counseling, administrative and political practices, recruitment, faculty development, faculty rewards, programs providing information and guidance to students, institutional approach to student issues.

Johnson, J.L. (2000) indicates one of the most important solutions, in his opinion, consisting in the positive academic and social integration of the student into the community of the institution, the recommended interventions consisting of:

- Concluding a contract requiring students to meet certain requirements. Candidates who do not meet the criteria are not accepted as students;
- Creating an alert system to identify students at risk in the first 4 weeks of the first year (previous results, attendance at courses, evaluation). Teachers receive the role of counselors and discuss with identified students about their situation;
- Learning communities for students with poor results in pre-university education set up in a training system comprised in a preparatory year. Those who cannot face the requirements will not be admitted to the university;
- Learning communities for those with higher than average results in the university and have a high motivation for learning.

The solutions for reducing the phenomenon of university abandonment are, in our opinion, of two types: prevention and intervention. We advocate for the development of counseling, coaching, and socio-emotional skills development in universities, addressed to students targeting both preventive and interventionist actions. The counseling, coaching and development of students' socio-emotional skills must come to meet these needs. They should make students aware of their own personality, help them develop their self-image and self-awareness, help them take responsibility, help them solve their school integration problems, social and professional.

Studies show that, where students have received counseling services, school performance has increased (Renuka et al. 2013), that counseling services tailored to students' daily concerns contribute to a higher effectiveness (for example, online counseling services – Olusegun, 2014).

On the other hand, counseling services should be developing institutionally, contribute to the adoption of educational programs specific to the traits of those who follow them.

Gaughf, Smith and Williams show in a study published in 2013 at a US academic center that counseling services are perceived as necessary by students but too few know how to access them (35% of those studied).

4. Results and Discussions.

A survey conducted by The Bucharest University of Economic Studies in 2015 among 353 master students shows that 94.6% of them appreciate the benefits of counseling services that helped them get better acquainted with the university, grow self-esteem, be more motivated for learning and engaging, plan for proper careers, so on.

In the field of preventive actions there are also a series of measures that the Academy of Economic Studies in Bucharest carries out:

- organizing additional courses at the disciplines where the most outstanding (remedial actions) have been recorded;
- setting up and developing counseling and guidance services;
- providing material support to low-income students;
- encouraging extracurricular activities (in student NGOs, employer's meetings, sports competitions, etc.);
- developing tutorial services for students organized by teachers and older students from first year students;
- counseling and individual guidance, in which the person at risk of university dropout is aware of the effects of abandoning on a personal and social level
- coaching services, personal development, development of socio-emotional skills
- career counseling and career guidance
- visits to employers, meetings with employers, career plans;
- workshops in specialized fields and study visits, meetings with teachers, university leadership, older colleges, employers;
- recreational activities, visiting representative cultural institutions, meetings with representatives of student organizations, involvement of beneficiaries in projects of student organizations.

Gaughf, Smith and Williams show, in a study published in 2013 at a US academic center, that counseling services are perceived as necessary by students, but too few know how to access them (35% of those studied). A similar study conducted by The Bucharest University of Economic Studies in 2015 among 353 master students shows that 94.6% of them appreciate the benefits of counseling services that helped them get better acquainted with the university expectations, grow self-esteem, be more motivated for learning and plan for proper careers, etc.

The setting up of workshops and meetings with colleagues from older generations ensure the development and construction of learning networks, contributing to integration (Justyna 2015). Students will be encouraged to participate in activities, to have adequate academic behavior – which is another predictive factors of good integration. It seeks to promote an environment that combines traditional teaching with other learning ways. It is important for students to feel comfortable in the university environment ("at home"), to participate in extracurricular activities, to be connected with teachers and colleagues, which will reduce the risk of university

dropout. Teachers and university staff must provide an academic background to help students integrate academically. Optimal combination of educational resources and related services, facilitating social interactions make academic integration and socialization easier, predictive factors for school success. All these activities will contribute to better social and school integration, defining factors in preventing university dropout. (Trevor and Parker, 2014).

5. Conclusion.

The aim is helping students to have a linear, chronological, progressive transition from one institutional structure to another, covering both information and academic, content, as well as activities that facilitate socialization, integration into student life.

References.

Araque, F., Roldán, C., & Salguero, A. (2009). Factors influencing university drop out rates. *Computers & Education*, *53*(3), 563-574.

Bean, John P. 1982. Student Attrition, Intentions, and Confidence: Interaction Effects in a Path Model. *Research in Higher Education* 17 (4): 291-320

Bonaldo, L., & Pereira, L. N. (2016). Dropout: Demographic Profile of Brazilian University Students. *Procedia – Social and Behavioral Sciences*, *228*, 138-143.

Braxton, J. M. y McClendon, S. A. (2002). The fostering of social integration and retention through institutional practice. *Journal of College Student Retention, 3,* 1, 57-71

Cabrera, L., Bethencourt, J. T., Pérez, P. A., & Afonso, M. G. (2006) The problem of University drop out. *Electronic Journal of Research and Education Evaluation RELIEVE*, v. 12, n. 2, p. 171-203.

Comisia Europeana. (2013). *Comunicare a comisiei catre Parlamentul European, Consiliul, Comitetul Economic si Social si Comitetul Regiunilor. Invatamantul superior european in lume.* Bruxelles.

Comisia Europeana/ EACEA/ Eurydice. (2014). *Modernizarea Învațamântului Superior în Europa: Acces, Retenție și Angajabilitate 2014.* Luxemburg, Oficiul pentru Publicatii al Uniunii Europene.

DeBerard, M. S., Spielmans, G., & Julka, D. (2004). Predictors of academic achievement and retention among college freshmen: A longitudinal study. *College Student Journal*, *38*(1), 66-80.

Diaconu, M., Stăiculescu, C., *Psihopedagogia adolescenților, tinerilor și adulților*, Editura ASE, București, 2012

Gaughf, N.W., Smith, P.L., Williams, D.A., (2013). Faculty and student perceptions of academic counselling services at an academic health science center, *Perspectives on Medical Education*, Jun; 2(3): 165–170., Retrieved from: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3722373/

Jia, P., & Maloney, T. (2015). Using predictive modelling to identify students at risk of poor university outcomes. *Higher Education*, *70*(1), 127-149.

Johnson, J. L. (2000). Learning Communities and Special Efforts in the Retention of University Students: What Works, What Doesn't, and is the Return Worth the Investment? *Journal of College Student Retention: Research, Theory & Practice*, *2*(3), 219-238.

Monitorul educatiei si formarii 2017, Retrieved from: https://ec.europa.eu/education/policy/strategic-framework/et-monitor_ro

Olusegun, A. (2014), Disposition of students to online counselling: The Obafemi Awolowo University, Nigerian experience, *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*, Vol. 10, 49-74, Retrieved from: http://files.eric.ed.gov/fulltext/EJ1059057.pdf

Oreopoulos, P. (2007). Do dropouts drop out too soon? Wealth, health and happiness from compulsory schooling. *Journal of Public Economics*, *91*(11-12), 2213-2229.

Paura, L., & Arhipova, I. (2014). Cause Analysis of Students' Dropout Rate in Higher Education Study Program. *Procedia – Social and Behavioral Sciences*, *109*, 1282-1286.

Renuka, D., Devaki, P.R, Madhavan, M., & Saikumar. (2013). The Effect of Counselling on the Academic Performance of College Students, *Journal of Clinical and Diagnostic Research*, 7(6), 1086–1088, Retrieved from: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3708204/

Robbins, S. B., Lauver, K., Le, H., Davis, D., Langley, R., & Carlstrom, A. (2004). Do psychosocial and study skill factors predict college outcomes? A meta-analysis. *Psychological Bulletin*, *130*(2), 261-288.

The Bologna Declaration. (1999). Retrieved February 20, 2016, from http://www.magna-charta.org/resources/files/text-of-the-bologna-declaration

Trevor, G. & Parker, S. (2014). *Navigating change: a typology of student transition in higher education*, Studies in Higher Education, 39:5, 734-753, DOI:10.1080/03075079.2012.721351

Westrick, P. A., Le, H., Robbins, S. B., Radunzel, J. M., & Schmidt, F. L. (2015). College performance and retention: A meta-analysis of the predictive validities of ACT® scores, high school grades, and SES. *Educational Assessment*, *20*(1), 23-45.

Borderline Personality Disorder (BPD): Approach by Dialectic-Behavioral Therapy (DBT)

José Luis Triviño[1]
María Ángeles Ortega[2]
[1]UNED Faculty of Science. Barcelona, Spain, [2]UB Faculty of Psychology. Barcelona, Spain

Introduction. Borderline Personality Disorder (BPD) is arguably the most common subtype of Personality Disorder seen by services (Coid et al, 2006; de Ruiter & Greeven, 2000) and has been extensively studied due to its association with suicide, self-harm, violence, and substance misuse (American Psychiatric Association, 2013). Symptoms of BPD result in high levels of service usage (Bender et al., 2001; Comtois et al., 2003) and high mortality rates (American Psychiatric Association, 2001). Several characteristics of the disorder (e.g. impulsivity, recurrent suicidal behaviour) unfortunately lend themselves to early disengagement from treatment and difficulty committing to and engaging with the therapeutic process. Additionally, BPD is characterised by difficulties in establishing trusting and collaborative interpersonal relationships and, "frantic efforts to avoid real or imagined abandonment" (American Psychiatric Association, 2013), which naturally extend to difficulties in the therapeutic relationship. Indeed, a recent qualitative study confirmed patients' reluctance to be open and honest with their therapist because of fears of rejection and abandonment (Morris et al., 2014). Owing to the stigma associated with BPD, clinicians may find it difficult to communicate the diagnosis in a patient-centred manner (Sulzer et al., 2015), further exacerbating problematic therapist-patient relationships. Although research has sought to identify effective therapeutic treatments for the condition, the majority of BPD research to date focuses on outcome data with relatively few studies identifying reasons why therapies are successful, and what the specific processes through which improvements occur might be (Lynch et al., 2006). Linehan (2000) notes the need to identify 'active' components of psychological therapy so that those aspects can be emphasised when striving for the most effective treatment.

Purpose. To carry out an approach of the current state of behavioral dialectic therapies focused on borderline personality disorder.

Methodology. *Searching, identifying and selecting studies for inclusion*.

Searches of paper titles, abstracts and full text content were initially performed in July and August 2012 then updated in February 2014, in PsychInfo, PubMed and MEDLINE databases. Search terms used were:

a) "Borderline personality disorder".
b) "approach and mechanism".
c) "DBT therapy".

Studies included in the review involved participants who:

- Met standardised diagnostic criteria for BPD.
- Had received either CBT or DBT treatment for their BPD.
- Were treated as outpatients (due to the limited number of manualised DBT/CBT studies of inpatients or partially hospitalised patients with BPD).
- Were adults (aged 18+ years) at the time of treatment (as there is a limited research presence investigating emerging BPD in adolescents).

Results. Axelrod et al. (2011) posited that greater control of emotions in BPD would lead to less impulsive behaviour which would, in turn, reduce the need to self-medicate using substances to regulate emotions. Females with substance dependence and BPD received a 20 week course of outpatient DBT and emotion regulation was assessed using the Difficulties in Emotion Regulation Scale (Gratz & Roemer, 2004). Substance use was recorded for 30 days preceding

treatment and for the final 30 days of treatment, corroborated by weekly self-report, clinician assessment, urine toxicology and alcohol breathalysers. The study concluded that improvements in emotion regulation explained the variance in decreased substance use frequency. Changes in substance use lost their significance when improvement in emotion regulation was controlled for.

Limitations and strengths of the study. In the documentation systems used we have found a limited presence of research that addresses DBT in adolescents. Despite of that, there is a varied therapeutic application.

Impact. Recent research shows that DBT has a positive impact on the reduction of time in treatment, for example, reduction in suicide ideation, depression or episodes of binge eating or purging behaviors associated with eating disorders.

Practical and Social Value. The social and practical value of DBT is evident in the therapies which it is used such as Dialectical Behavior Therapy for Bulimia Nervosa, Treatment of antisocial behavior, Treatment of substance dependency in individual with BPD, etc.

Keywords: Borderline Personality Disorder, CBT, DBT, approach, therapeutic change.

References.

Addis, M & Linehan, M.M. (1989). Predicting suicidal behaviour: psychometric properties of the Suicidal Behaviours Questionnaire. Poster presented at: Annual Meeting of the Association for the Advancement Behaviour Therapy; November 2-5, 1989; Washington, DC.

American Psychiatric Association (2013). *Diagnostic and Statistical Manual of Mental Disorders* (5th Edition). Arlington, VA: American Psychiatric Publishing.

Axelrod, S. R., Perepletchikova, F., Holtzman, K. & Sinha, R. (2011). Emotion regulation and substance use frequency in women with substance dependence and borderline personality disorder receiving dialectical behaviour therapy. *The American Journal of Drug and Alcohol Abuse*, 37, 37–42.

Arntz, A. (1994). Treatment of borderline personality disorder: A challenge for cognitive behavioural therapy. *Behaviour, Research and Therapy*, 32, 419-430.

Wenzel, A., Chapman, J. E., Newman, C. F., Beck, A. T. & Brown, G. K. (2006) Hypothesised mechanisms of change in cognitive therapy for borderline personality disorder. *Journal of Clinical Psychology*, 62, 503-516.

The Thin Web Line. New Technologies and Promotion of Unhealthy Behaviors. Eating Disorders and Pro-Ana (Pro-Anorexia) Subculture. How to Fight Against them

José Luis Triviño[1]
María Ángeles Ortega[2]
[1]UNED Faculty of Science. Barcelona, Spain, [2]UB Faculty of Psychology. Barcelona, Spain

Introduction. The main goal of this research is to show the negative impact that content which promotes unhealthy behaviors may cause in adolescents around the world. These contents have found in the new technologies an effective means of disclosure such as sites, social networks, chatrooms, blog, apps, instant messaging etc.
More specifically, this research will focus on the relationship that may exist between the contents that promote pro-anorexic (pro-ana) and pro-bulimic (pro-mia) behaviors and the increased risk of developing an eating disorder.
Other questions, for instance, how can these sites affect the recovery of young people in therapeutic treatment? they also arise.
Finally, for the researchers, it is really important to try to involve the research community in all areas to undertake new research and initiatives in search of solutions to an unfortunately growing problem.
Purpose. On the one hand, this research tries to show the proliferation and promotion of content that encourages eating-risk behaviors in adolescents and the growth of a social current and subculture that supports and promotes these contents on the other hand, it proposes initiatives that may help to better understand this phenomenon and what to do.
Methodology. Firstly, regarding to the documentary methodology, the researchers have carried out extensive consultations, mainly in databases such as Medline and PsycINFO. Research articles have also been consulted using research communities, namely Researchgate and Scopus. Consultations to research projects ongoing as Anamia (research project started in 2010 and funded by The French Agence Nationale de la Recherche ANR) have been useful to collect data about the state of the art.
To know the economic and social reach of eating disorders in Europe, several research conducted by BEAT (beating eating disorders UK) and published by PricewaterhouseCoopers (PwC) have been consulted.
Secondly, the researchers have developed a wide collection of content in different electronic forms, such as sites, chatrooms, blog, forums, newsleeter, etc. To make this one, several tools have been used from the most popular search engines, for instance BING, Google or Startpage to scanning tools of the so-called deep Internet as TOR.
In addition to the above, different hashtags as collarbones, blackthinspo, binging has been audited on Instagram, Pinteresc, Twitter and Flickr social networks using Hastracking tools, such as Keyhole.
Finally, we have also used two instant messaging apps called TapaTalk y Whatsaap. These applications were widely used within the community of the closed MPAOne / MPA1 site for pro-ana supporters.
Results. A brief summary of the results would tell us that this study is not explicitly mentioned because it is important to note that because the authors do not explicitly point to it. out the presence of thinspiration that it was not abundantly present in the pro-ana sites. Thinspiration often took the form of photographs of models or actresses, some of which had been doctored to make them look even more emaciated.
Other forms of thinspiration included mantras such as "nothing tastes as good as thin feels." Similarly, Abbot Daga and colleagues (2006) mentioned the existence of chat rooms or support groups on the pro-ana sites under examination; yet simply because the authors do not make a point of identifying their existence, it does not mean that they did not find chat rooms on the sites at which they looked.
As an example, we present a brief analysis of the audit of the hashtag #proana using the Keyhole tool a real-time tracker:
Date: August 9th 2018 Time: 8:30 pm. GMT +1 Social Network: Twitter© Hashtag: #proana

Localization: Central Europe

Posts	Users	Engagement	Reach	Impressions
419	184	2,555	92,000	100,000

Influencers

User(Nickname)	Posts	Avg Eng	Followers	Impressions
Make way for the gay	1	74	272	272
S.A.D.	1	35	640	5,120

Limitations and strengths of the study. We believe that the biggest limitation of research is in the continuous growth of the pro-ana community using new terms to refer to it, for example prettyKetty or 141. Researchers are sure that this study will have to be reviewed in a year at least. One of the values added in this research has been the use of really effective tools in data analysis and interpretation.

Impact. Regarding to the different published studies we share the one published by Csipke and Horene.
In Csipke and Horene's 2007 study, participants answered questionnaires about the impact of pro-ana sites. Twenty-six percent of participants said that websites offered them practical advice that helped them maintain disordered eating behaviors. Forty-three percent reported said that the site helped them in terms of emotional support. 2.6% responded they were receiving both practical tips in maintaining the disorder and emotional support. 19.2% said the websites harmed them, leading the study to conclude that visiting the sites led to a trend of worsening body image.
Practical and Social Value. An immediate practical social value is the disclosure and policing of harmful sites that promote the pro-ana lifestyle. This promotion will help the family to know more about the socialization of the disorder and the therapists to know the harmful tendencies. Although it seems a contradiction, through this promotion we believe it reduces the risk of young people willing to follow these communities also allowing a comparison between pro-ana lifestyles and healthier anti-ana lifestyles.

Keywords: Pro-ana, Pro-mia, Thinspiration, Thin, Thinspo, Anaymia, Collarbones, Blackthinspo, Binging, Thinthighs, Bikinibridges

References.
Pro-Anorexia Websites: Content, Impact, and Explanations of Popularity, Grace Overbeke (Wesleyan University) January 2008.
Bardone-Cone, A. M., & Cass, K. M. (2007). What does viewing a pro-anorexia website do? An experimental examination of website exposure and moderating effects. *International Journal of Eating Disorders, 40(6),* 537-548.
Csipke, E. & Horene, O. (2007). Pro-eating disorder websites: Users' opinions. *European Eating Disorders Review, 15,* 196-206.

Alcohol Use and Mental Health Status Among University Students in Greece

Christos Tsiongas[1], Christos Zilidis[2], Evangelos C. Fradelos[3], Konstantinos Tsaras[4], Dimitrios Papagiannis[5], Ioanna V. Papathanasiou[6]

1. Nursing Department, TEI of Thessaly, GREECE.
2. Department of Medical Laboratories, TEI of Thessaly, GREECE.
3. Psychiatric Department Athens General Hospital for Thoracic Diseases "Sotiria", Athens, GREECE.
4. Nursing Department, TEI of Thessaly, GREECE.
5. Department of Medical Laboratories, TEI of Thessaly, GREECE.
6. Nursing Department, TEI of Thessaly, GREECE.

Introduction & Purpose: Alcohol abuse is a common incident in college student's communities. The purpose of this research study was to evaluate the rates of alcohol use among university students in Greece and to search if there is a relation between alcohol use disorders and mental health status (depression, anxiety, stress).
Material & Method: A cross-sectional study was contacted, in which 200 students of the Applied University of Thessaly (TEI of Thessaly) participated (*n = 200*). Students had to answer questions related to demographics and socio-economics features, and about their health behaviors and their parents' health behaviors also. For measuring the alcohol use between students the AUDIT questionnaire was used and in order to estimate their mental health status the DASS-21 questionnaire was used. After the collection and the evaluation of the questionnaires, the final sample was conclusive to 171 students (*n = 171*). Descriptive statistics such as frequencies, means, percentages and standard deviations have been utilized. Inferential statistics such as pearson r correlation and regression analysis have been used to determine correlations between relevant variables. Level of significance accepted was $p < 0.05$.
Results: From the total of the 171 students, 75 were males (43,9%) and 96 were females (56,1%), with the average age of 21,15 years old (st. dev. ± 3,77). Inductive statistics indicate relation between alcohol use and socio-economics features of individual's parents, as well as a relation with personal health behaviors (tobacco smoking *p=0,000* and illicit substance use *p=0,000*). Correlation analysis also showed statistically significance between alcohol use and mental health status is present (*p=0,000).*
Conclusion: There are socio-economics factors and health behaviors that can influence alcohol use among university students. Alcohol use is related with mental health state in university students. However, it is not clear yet if alcohol use affects mental health or the exact opposite.

Keywords: university students, alcohol use, mental health status.

Psychological Health Restoration as a Way of Socio-Psychological Rehabilitation of a Person

Tetiana Tytarenko
Institute for Social and Political Psychology of NAES of Ukraine, Kyiv, Ukraine

Introduction. Socio-psychological influences are not strictly aimed only at the restoration of the lost mental functions or at the returning of social status after the military intervention. The ultimate goal of socio-psychological rehabilitation is an achievement of a qualitatively new level of psychological health which provides an increase in subjective satisfaction with life. The war trauma creates potent barriers to veterans' lives and these barriers obstruct recovery and personal growth (Zinzow, 2012). There are the alarming data about the state of veterans, which requires a long-term rehabilitation (Morina, 2007; Romero, et al., 2015; Rudd, et al., 2011).
The **purpose** of the investigation is to develop the technologies for psychological health restoring after the war-related trauma.
Methodology. In order to find the indicators of personality's psychological health the indirect contextual interview technique with the procedure of an intellectual filtration was chosen. For receiving definitions of the healthy personality there were analyzed the theories the 32 classics of psychological science. The content analysis with the procedure of an intellectual filtration and frequency of indicators was used. Indicators with a high frequency were determined. Recovery technologies which we developed are based on these indicators and criteria of psychological health.
Results. It was shown that the core of psychological health includes personal integrity, the need for self-realization, and the capacity for self-regulation. Three levels of peripheral indicators were identified. On the individual psychological level – creativity, harmony, adaptability. On the value-semantic level – the creation of meaning, understanding the experience and the ability to enjoy life. On the socio-psychological level – the tendency for cooperation, capacity for empathy and trust to the outside world.
The following criteria for psychological health were allocated: 1) the ability to update personal integrity and self-esteem; 2) the possibility of strengthening the need-motivation and value-semantic personal resources; 3) the possibility of self-efficiency and self-realization increasing; 4) the ability to restore the capacity to build the constructive relations with the environment.
Socio-psychological technologies of personality's rehabilitation are defined as the complex targeted impacts which provide the preservation and restoration of the psychological health. The process of the socio-psychological restoration of the individual is divided into the following stages: preparatory, basic, and supporting which also acts as the prophylactic one. On each stage the appropriate rehabilitation technologies and certain individual and group techniques were tested. We use social, common practices as life-designing techniques, ways of a life-implementation which are approved, repeated, fixed and arise in a course of continuous dialogue of a person with a community. Every practice is a way of self-designing in specific life circumstances.
At the preparatory stage of rehabilitation, the following technologies were approved as effective ones: the technology of self-change motivation enhancing, the technology of effective motivators constructing, and the technology of blind fields of attention activating.
At the basic stage the following technologies were approved as effective ones: the technology of the future designing through life choices, the technology of updated projects by means of life tasks setting approbation, and the technology of the set tasks realization.
At the supporting stage the following technologies were approved as effective ones: the technology of reinterpretation and integration of traumatic memories into the personality's auto-narrative, the technology of the new attitude to stress as the resource developing one, and the technology of mediated influence on the personality through the more ecological life organization.
The **strength** of the study is the development of original technologies for restoring the psychological health after a war-related trauma.
Limitations of the study. There is no data on the special categories of people who are in need of psychological rehabilitation (combatants; their families; forced migrants).
Practical value. The results of this work should provide a useful foundation for psychological service delivery for persons who suffer from military trauma.
Conclusions. The restoring of psychological health after a war-related trauma involves the deployment of each technology in some pathways. First, the technologies are directed on the restoration of personality's balance and self-regulation. Second, the work is targeted on the restoring of lost self-efficacy and personal ability to self-realization in various activities. Third, we focus on the communicative competence increasing, the relationships' establishing, the constructive conflict resolution. Fourth, we try to concentrate attention on the re-evaluation of values, the search for new life benchmarks and new senses.

Keywords: social rehabilitation, personality, quality of life, trauma, mental health.

References.

1. Morina, N. (2007). The role of experiential avoidance in psychological functioning after war-related stress in Kosovar civilians. *Journal of Nervous and Mental Disease*, 195(8), 697-700.
2. Romero, D.H., Rigs, S.A., & Rugerro, C. (2015). Coping, family social support, and psychological symptoms among student veterans. *Journal of Counseling Psychology*, 62(2), 242-52.
3. Rudd, M.D., Goulding, J., & Bryan, C.J. (2011). Student veterans: a national survey exploring psychological symptoms and suicide risk. *Professional Psychology: Research and Practice*, 42(5), 354-360.
4. Zinzow, H.M., Britt, Th.W., McFadden, A.C., Burnette, C.M., & Gillispie, S. (2012). Connecting active duty and returning veterans to mental health treatment: Interventions and treatment adaptations that may reduce barriers to care. *Clinical Psychology Review*, 32, 741-753.

Intuitive Self-development as an Important Factor of the Spiritual and Mental Self-healing of an Individual and Society

Tamara Tyurina, Sofiya Stavkova
Lviv Polytechnic National University, Lviv, Ukraine

Introduction. The modern school of all levels is aimed primarily at the development of the mechanisms of the left cerebral hemisphere, that is rational, logical thinking, analytical perception of reality. As a result, a person with technocratic thinking, pragmatic, consumer attitude towards the world is brought up, that leads to disharmony of an individual with his/her own nature and environment. The actualization of the intuitive potential of the individual is aimed at the hearty, spiritual and mental perception, cognition and interaction with the world, formation of a sense of unity, connection with the environment, promotes the harmonization of the individual's relations with oneself and the world, his/her spiritual and mental improvement.

The objective of the article: to show the role and significance of intuitive-spiritual self-development for the spiritual and mental health of the individual.

Methodology: the article uses theoretical analysis of scientific journals over the last 5–10 years, recommended by the Ministry of Education and Science of Ukraine, as well as other scientific sources.

Results and Discussion. According to V. Vernadsky's teachings and modern informational and energy paradigm, an Individual – Society – Earth – Universe is a solid cosmoplanetarian organism that represents a coherent informational and energy system, in which all the elements closely interact, interconnect and are mutually determined. An individual in this context is interpreted as an active component of the Universe, the cosmoplanetary phenomenon, an open bio-informational and energy system, which, being in a constant information-energy interchange and interconnections with the cosmoplanetary world, at the same time it is a "transmitter" and a "receiver" and, accordingly, a "carrier" of information about the surrounding reality, despite whether he/she is conscious of this process or not. Modern scholars consider the human organism to be an information and energy transmitting biological antenna, which practically constantly receives and transmits information and energy signals. And if a person has reached the appropriate level of spirituality, lives in harmony with himself/herself and the cosmoplanetary world, he/she activates intuition and becomes capable at a conscious level to interact with the world applying in formation and energy (Vernadsky, 1991; 2002).

Contemplating this way, intuition can be interpreted as a special mental state of a highly spiritual person, in which he/she deliberately enters into information-energy contact with any object of the Universum – the physical or the subtle world, cosmos "connects" to its information field, "reads out", "decrypts" and analyzes the necessary information. This information-energy interaction is perceived by a person as the process of connection, merging with the object being studied, which enables instant cognition of its true essence.

Disclosure and development of intuition are closely interrelated with the individual's spirituality development level. The higher this level is, the more clearly the individual's ability to intuit self-knowledge and express cognition, since intuition is connected with the spiritual-mental, information-energy component of a person – with his/her biofield.

It is the level of spirituality that identifies the strength of personal biofield, – the information and energy framework, which ensures a complete and adequate information-energy interchange and interaction of an individual with the cosmoplanetary world in the scale of the planet and the Universe: with other people, with the Earth, the Cosmos, the Universe, the Sun, the planets, and the stars (Kaznacheev, Spirin, 1991).

Consequently, according to the modern information-energy paradigm, a person is seen as a creative informational and energetic substance of the Universe, which is associated with the whole Universe at the spiritual and intuitive level.

The spiritually intuitive individual is characterized by an inner harmony, peace and independence from external circumstances, adequate self-esteem and self-sufficiency, self-confidence and self-respect, openness to people and the whole world, tolerance, ability to heroically act in the name of a high idea and self-sacrifice, tolerance, goodwill, empathy, as well as the ability to love, kindness, compassion, willingness to help, desire to live in harmony with oneself and the world, to harmonize relationships in the information and energy system (Tyurina, 2017). An Individual – Society – Earth – the Universe, that is, spiritual and mental health, which is transmitted on the information and energy level both to people and the environment, promotes the harmonization and spiritualization of society and the world.

Conclusions: Spiritually-intuitive self-development of a person leads to overcoming the subjective isolation of people, formation of a sense of general unity, kinship with all surrounding space, forms a life-creating unity, consonance and co-development of an individual with the cosmoplanetary world. So, developing spiritually and intuitively, the individual contributes in this way both to his or her own spiritual and mental self-healing and to the spiritual healing of the society as a whole, because at the information-energy level we are the only system, all components of which are closely interconnected and mutually interconnected.

Practical value. The findings of the research could be used in the development of individual plans, training programs aimed at personal and spiritual self-development of the student's personality, lecturing students on medical psychology, social pedagogy, philosophy, etc.

Keywords: individual as an informational and energy system, intuition, spirituality, spiritual and mental health.

References.

1. Vernadsky V.I. (2002). Biosphere and noosphere. – M.: Rolf, 576 p.
2. Vernadsky V.I. (1991). A few words about the noosphere // Scientific thought as a planetary phenomenon. – M.: Science, P. 235-243.
3. Kaznacheev V.P., Spirin E.A. (1991). Cosmoplanetary Phenomenon of a Human: Problems of Comprehensive Study. – Novosibirsk: Science. Siberian Branch, 304 p.
4. Tyurina T. G. (2017). The upbringing of students' spirituality in the noosphere dimension: monograph. – Lviv: Lviv Polytechnic Publishing House, 284 p.

The Contribution of Mental Health Nurse to Telepsychiatric Applications

Olga Velentza[1], Nasim Aouant[2]
[1] Aiginiteio Hospital, Athens, Greece, [2] Central and Cecil Trust, London, U.K.

Introduction: Telecommunication technology radically changes the health care delivery system. Telemedicine and telenursing have many benefits as they reduce the cost of health care without lowering the quality. They also provide high-quality medical services in deprived and remote areas, upgrading the medical services locally.
The role of the nurse concerns both the knowledge of technology and the patient's support. Also nurse undertakes the monitoring of patients with files in printed or electronic form and has knowledge of community health care, counseling, nursing and health informatics and applies them to the environment that works accordingly.
Purpose: The purpose of this study is to highlight new ways of delivering nursing care through technology aimed at the quality and effective care of health care users.
Method: An extensive review of the recent bibliography in the "Heal Link", "Google Scholar" and "Pub Med" computer databases was carried out, referring to nursing through telecommunication and electronic systems in telepsychiatry applications.
Results: Support the telemedicine and telenursing ideas continues to evolve and the evolution of technology is likely to change the way nurses will implement nursing interventions.
Many European countries have developed specific guidelines designed to provide clear guidance to nurses involved in telenursing and enhance their ability to provide safe, effective care consistent with ethical rules.
To practice the telenursing in psychiatry nurse should be equipped with additional skills and competencies related to knowledge about modern technology, the application of functional protocols and telehealth procedures, communication skills and appropriate behavior, flexibility and ability to recognize when telemedicine is not suitable for the patient's needs. It is required to provide effective nursing services, to evaluate them regularly and to fill gaps that they ought to identify.
Conclusions: Although technology is available, telemedicine and telenursing meet a plurality of obstacles to their exercise, as there is no legislation, there is no training for healthcare professionals in telematic, and there are no health care organizations in which IT is integrated, while the existing electronic systems do not guarantee quality at all stages of telematic care.
Although telenursing changes the method by which nursing services are delivered at a professional level, it does not change the nature of the nursing practice.
Telenursing is an emerging and rapidly expanding role for the profession of nurse and offers unlimited opportunities for its members.

Keywords: telenursing, telepsychiatry, moral ethical issues, nursing principles.

Interdependent: Mental Health, Social Development, Youth' Socially-Oriented Activity (on the example of a country in transition)

Viktor Vus[1], Liudmyla Omelchenko[2]
[1] Institute of Social and Political Psychology, NAES, Kyiv, Ukraine
[2] National University of Life and Environmental Science of Ukraine (Department of Psychology), Kyiv, Ukraine

Introduction. The current stage of global social development is characterized by circular causality: most social challenges negatively affect the mental health of people and the social community in general; on the other side, shortcomings in the systems of mental health (both at the individual and social levels) lead to the aggravation of social problems and decrease the functional abilities of people.
The need for of this investigation is also influenced by: the urgent need for youth of transitional countries to meet new social challenges and reflect on their changing social reality; issues of developing innovative social technologies to enhance social competences of youth, their perceptions of duties and risks in social activity; the need to develop conditions for building personal tolerance to or coping with the situation of uncertainty, and to positively impact their mental health.
Methodology. The study sample consists of 1560 young people (18–22 years old). The survey design (3 questionnaires) collected data representing: (a) demographic, social, work characteristics; (b) study respondents' reflections on social conditions; (c) respondents' reflection on and representation of their own mental health. The questionnaire was structured in such a way as to represent different aspects of caring for one's own mental health (interpersonal communication; physical activity; eating and drinking; listening to one's own body; social representation; mental and physical relaxation; self-perception; interpersonal relationships).
This study utilized a descriptive, cross-sectional research design, and used 3 different methods of analysis: (a) descriptive statistics; (b) correlational analysis; (c) content analysis.
Results, Discussion and Conclusions. The respondents perceived the following to be the main problems of social development: "quality of society life" (poverty, social support, health protection, criminal activity, etc) – 80%; "conditions of labor activity" (unemployment, instability, etc) – 75%; "specific problems" (lack of common values; reduction in the value of human life; overpopulation; digitalization of human life, robotization) – 62%. In order to address these social issues, respondents chose the following spheres in which to conduct their volunteer activity: "fitness and physical activities" (54%); "child development programs" (50%); "educational-training programs" (34%). The main motivations to increase participation in volunteer work as part of their social activity were: "to gain moral satisfaction" (62%); "to gain material compensation" (60%); "to have convenient labor conditions" (38%). However, the respondents reported actually spending a little more than 2 hours per week involved in activities to support socially-oriented work in their own environment. The results of this investigation could be interpreted as possibly related to: an insufficient level of competency in organizing their volunteer work; ambiguous, undefined, restructured attitudes to conducting socially-oriented work; active creation of new forms of volunteer activities; formatting new, nontraditional bases for conducting social activities. At the level of health protection, this transitional country's modern youth's low level of self-esteem and of mental well-being, combined with a rather high level of moral and psychological exhaustion suggests the need to create accessible centres of social and psychological assistance at higher educational establishments, centres of social psychological service near their place of residence, and the normalization of using these resources.
Practical\social value. The results of this investigation assist in in identifying avenues to form personal models of social success for youth; to shape mental health for a creative and active young generation of a transitional society; to optimize successful deployment of personal potential of youth in the sphere of their life's social and professional activity.

Keywords: mental health, social development, social activity, transitional societies.

Mental Health Problems and the Ways of Solving Them through the Eyes of Ukrainian High School Students

Valeriya Yudina[1], Tetiana Danylova[2]
[1] National Aviation University, Kyiv, Ukraine
[2] National University of Life and Environmental Sciences of Ukraine, Kyiv, Ukraine

Introduction. One of the biggest challenges of today's world is mental health problems, which lead to hospitalization, provoke a rise in the number of people with disabilities, and increase the risk of suicide. One in four suffers from some form of mental illness (Owen, 2016). Mental illness affects people throughout their lifetime and imposes a huge burden not only on the individual but also on the family and society. Thus, mental health maintenance is an issue of universal significance, as well as a problem of national security of any given country. It is especially important in Ukraine in relation to the economic, political, social, cultural realities, under conditions of war, conflict and insecurity in the East.

The World Health Organization (WHO) defines mental health as "a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community" (WHO, 2016). Mental well-being is an important component of health and is more than the absence of mental disorders. It is determined by biological, economic, social, and environmental factors (WHO, 2016). Though these factors are tightly interconnected, contemporary psychiatry and psychology work in the frame of different paradigms, which are based on the preference of one of them.

Purpose. This paper aims to investigate contemporary Ukrainian high school students' attitudes toward mental health problems and ways of solving them.

Methods and organization of research. An exploratory research design was used to conduct this study. The authors used the "Mental health problems are the results of…" questionnaire developed at the University of Liverpool by Prof. P. Kinderman and his colleagues (Psychology and Mental Health, 2017), along with the "Causes of mental health issues and the ways of solving them" pilot questionnaire elaborated on by the authors.

Results and Discussion. We have always been interested in how people try to overcome their challenges, which approaches they believe to be the best, and who they believe actually has responsibility for the problems people have. It is not easy to give only one correct answer, because the response depends upon the individual's way of thinking, how the person was raised or grew up, and the social and political situation around them. During a survey of high school students (age 16–17), 28 respondents were asked about mental health problems, what they believed about their roots and the ways of treatment. Almost 78% responded that one of the main roots was the family setting, because parents are the first people children talk to, and parents are mediators who help their child to interpret the world and internalize its rules. Frequently, it was believed that if an individual was full of complexes, their parent's every day quarrels were largely responsible; children believe that they are responsible and are guilty for all those screams and sufferings. Following these quarrels, parents divorced and each parent attributes responsibility for the break up to the other parent who has 'the wrong way of thinking or actions, etc.' Living for a long time in such a tense atmosphere may cause complexes, which make life more difficult. 13% of the respondents thought that the country's political situation contributes to the individual's way of thinking and common psychological status. And it is that in the last 4 years' Ukrainian people have been living with the ongoing stress of the war in the East. 9% of respondents were certain that the roots of mental health problems are inside each person: each individual is the only one responsible for his/her life and any critical situation that happens. Actually, it was quite unexpected that most of respondents thought parents cause complexes and other mental problems. As noted, further research was conducted regarding the ways of solving mental health problems. 44% of respondents thought that specialists can help individuals cope with mental health issues and there is nothing shameful in asking for help. 26% preferred talking to their friends or parents. They said that there is no difference between a friend's and specialist's support. 19% of respondents thought that anonymous chat was the best choice. Still, 11% held the view that nothing can be changed, so individuals with mental health problems should better be reduced to silence or isolated.

Limitations and strengths of the study. Our study has limitations as well as strengths. The small respondent pool does not allow us to draw unambiguous conclusions. However, these pilot surveys provide an avenue for more complex, interdisciplinary research in mental health issues and ways to overcome them (Danylova, 2017; Danylova, 2018).

Practical/Social value. The results obtained demonstrated that there are still people who ignore their mental health problems and try to avoid any specialist's help, for fear of stigmatization and discrimination. Because of these attitudes we must explain the danger of self-sabotaging behaviours such as passivity, avoidance or denial when it comes to mental health.

Conclusions. In conclusion we can say that despite a still-existing view of some youth that mental health challenges cannot be treated and are the responsibility of the individual, most of the respondents realized the

importance of acknowledging mental health problems and believed it would be best to ask specialists for help rather than just talk about it and live with the problem unaided.

Keywords: mental health, mental health problems, individual, mental disorders, roots, treatment.

References.

Danylova, T.V. (2017). Eastern mysticism and Timothy Leary: Human beyond the conventional reality. *Anthropological Measurements of Philosophical Research*, 11, 135-142.

Danylova, T., Salata, G. (2018). The ecological imperative and human nature: A new perspective on ecological education. *Interdisciplinary Studies of Complex Systems*, 12, 17-24.

Mental Health: strengthening our response. (2016). *Fact sheet. World Health Organization*. Retrieved from http://www.who.int/mediacentre/factsheets/fs220/en/

Owen, M. (2016). *United we stand, divided we fall*. Cardiff University Blogs. Retrieved from http://blogs.cardiff.ac.uk/mental-health/2016/06/06/mental-health-united-we-stand-divided-we-fall/

Psychology and mental health: Beyond nature and nurture. (2017). *Online Course*. *FutureLearn*. Retrieved from https://csdsite.liv.ac.uk/cll/moocs/mental_health/questionnaire/week1

World Health Organization (2016). Mental health: A state of wellbeing. Retrieved from http://www.who.int/features/factfiles/mental_health/en/