

components have been determined. Following those parameters and regime ensures high quality.

Key words: *round-of-trunk belts, mulching, machine, conveyors, work regime, mulch distribution, productivity, qualitative indices*

УДК 658.382(075.8)

ANALYSIS OF STATISTICAL ASSESSMENT OF DOMESTIC FACTORS OF ENVIRONMENT BY STUDENTS IN PERIOD OF GROWTH OF EMERGENCY SITUATION OF SOCIO-POLITICAL CHARACTER

L. E. Piskunova, Ph.D., ORCID 0000-0002-6957-1619

T. O. Zubok, Ph.D., ORCID 0000-0002-6957-1620

Yu. V. Sukhomlin, student, ORCID 0000-0002-6957-1621

National University of Life and Environmental Sciences of Ukraine

e-mail: tanyzubok@gmail.com

Abstract. *To identify transformation of values and prioritization of young people, social survey was conducted by questioning students of various faculties of National University of Life and Environmental Sciences of Ukraine. With help of statistical assessment, the damaging factors of the environment were determined during a period of growing social and political emergencies. The influence of prolonged action of dangerous and harmful factors on human life is considered. The distribution of the orientation of values of modern Ukrainian youth relative to the priority of various types of factors in the distribution of points relative to the statistical assessment of dangerous and harmful factors for human life is investigated. Grades given by students have been processed and thus deduced into an average assessment of certain factor. Also, the relative share for each harmful and dangerous factor in total number of others is calculated. A separate unit explored the "Loss of health in hazardous production" factor, which made it possible to identify certain changes in distribution of priority regarding production hazards through years. The attitude to harmful and dangerous factors is analyzed, depending on place of residence, gender and direction of students' preparation. The advantage in giving points to individual factors among groups of students from different faculties has been revealed and patterns of selection of highest and lowest ratings for certain factors have been traced.*

© L. E. Piskunova, T. O. Zubok, Yu. V. Sukhomlin, 2018

Key words: *damaging factors, dangerous and harmful factors, statistical evaluation, sociological survey*

Introduction. On his way of life, a person is constantly in danger. Any sphere related to the environment and social reality is potentially dangerous. Emergencies can be of a different nature. They are caused by various striking factors that have a natural, technogenic, socio-political basis [3].

Formulation of problem. Analysis of Emergencies (NA) shows that 75-80% of cases are related to human activities and are caused by reasons of social nature. Socio-political dangers – the result of existing contradictions in society itself [3].

Analysis of recent research results. The cause of emergency socio-political is an imbalance of social, economic, political, ethnic, religious relations, causing social tension – unemployment, corruption, inflation, food problems, social and domestic disorder and, as shown by recent researches in the East of our country, mas prolonged exposure to these factors leads to physiological and mes disorder, government crises, terrorism, war [1–4].

Intal fatigue of people, depression, suicide, or attempts to sublimate the accumulated negative energy going to active participation in the socio-political and military conflicts [1].

Purpose of research. The purpose of our work was to study and identify the dangerous and harmful factors for human life through sociological survey of students depending on various factors using the score system. We paid special attention to the most urgent (on the background of recent events in our country): the threat to the NA – the socio-political situation that arises as a result of the emergence of dangerous contradictions in the field of social relations, which has already caused human casualties, caused damage to people's health, entailed one million losses.

Results of research. Students were asked to evaluate the danger to life of the inhabitant of Ukraine of the 35 factors listed in Table 1 on the following scale: the most dangerous factor (in the student's opinion) was estimated at 35 points, followed by 34,33,32 and the last, which is considered the least dangerous – in 1 point.

During the study, a special questionnaire was used, the components of which were various risk factors: man-made, social, natural, ecological, household.

Of course, having a different life experience, students evaluate the risk of this or that factor differently, so the results should be statistically processed. For each factor, the number of points that students have given are divided by the number of respondents, and the resulting value is an

average estimate of the danger of a factor: what is more, the more dangerous it is. An average assessment of the dangers of the n/a factor to the number of interviewed students. Assuming that the listed factors cover all the dangers to human life, one can also estimate the relative share (in percentages) of each factor in the total number of undesirable consequences. The results are entered in the questionnaire.

1. Statistical estimation of dangerous and harmful factors for human life [1].

№	Factors	Individual score	Average score	Comparative quota
1	Necessary medical aid			
2	Welfare			
3	Safety of own property			
4	Provision of information			
5	Protection from arbitrariness of local government			
6	Unemployment			
7	Consumption of alcoholic beverages			
8	Loss of health in hazardous production			
9	Usage of food with low quality			
10	Lack of needed food			
11	Infectious diseases			
12	Smoking			
13	Medicines			
14	Narcotic substances			
15	Presence of radioactive substances in air, water, soil			
16	Presence of radioactive substances in food			
17	Presence of chemicals in the air, water, soil			
18	Presence of chemicals in food			
19	Air transport			
20	Automobile transport			
21	Nuclear power engineering			
22	National conflicts			
23	Domestic injuries			
24	Rising prices			
25	Fires			
26	Suicide			
27	AIDS			
28	Sports and mass events			
29	Natural disasters			
30	Personal concerns and concerns			
31	Terrorism			
32	Unprofessional medical care			

End of table 1

No	Factors	Individual score	Average score	Comparative quota
33	Surgical intervention			
34	Diseases associated with the presence of radioactive substances in the environment			
35	Diseases related to the presence of chemicals in the environment			

Interviewed students of different faculties: economic, juridical, forestry, water bioresources, veterinary, technical, agrobiological, plant protection, pedagogical. In this work we used data from research 2007-2008 [2] for comparison. Over the years, students have put the highest scores at risk such as: AIDS, narcotics, and the consumption of alcoholic beverages. Among the man-made hazards are the presence of radioactive and chemical substances in the air, water and soil, road transport.

Already in those years there was a difference in providing the highest points to the dangers of students from different faculties. In the departments of land management, juridical, economic, veterinary dangerous factors that have received the highest marks – narcotic substances, medical drugs, suicide. At the forestry, technical, agrobiological, the most dangerous factors – the use of alcoholic beverages, narcotics, natural disasters. There was also a difference in the comparative assessment of students, depending on their place of living. Students living in Western Ukraine exhibited high marks for unemployment, suicide, students living in the East - narcotic substances, alcohol use, murder and intentional injuries.

Results from researches in 2017–2018 suggest that, if you do not take into account gender, age, year of research, man-made and social dangers are pointed by students as the most dangerous. In the first place among the man-caused hazards: road transport, the presence of radioactive and chemical substances in the air, water and soil. Among the social - the use of alcohol, unemployment, suicide, national conflicts.

The results obtained in 2017 are highlighted. Students highlighted with the highest points national conflicts, terrorism. Such assessments, of course, explain the events of the present.

As a separate unit was investigated the factor "Loss of health in hazardous production". The data obtained show that during 2016–2018, students radically changed their minds: for this factor the points significantly increased comparing to the statistical estimate of 2007–2008 and amounted to 28–31 points, while the points for previous years were 12–18. Such a striking change in the assessment of students can be explained by the great contribution to the development of the concept of

the orientation of the values of the individual, which brought new conditions for the economic development of Ukrainian society, in particular of young people, which predetermined early employment with the subsequent acquisition of professional skills. The fact that the number of young people starting to work as a student, the perception of the dangers associated with production becomes more significant for many of them. There is a clear dependence on the awareness of the importance of maintaining health in hazardous production in the process of working life of working youth and young people who were not involved in any production process.

The next important factor that influenced the dynamics of points growth in assessing the risks associated with occupational risks is the easier availability of information space that expanded the vision of a modern student on such important issues as: fatigue, occupational injuries, occupational diseases. The availability of information sources enables students to identify certain occupational hazards and develop a plan to avoid them. So, the International Labor Organization (ILO-ILO) solemnized the International Labor Day on April 28, 2018 under the motto "Protected and Healthy Generation," which had a positive impact on student awareness when giving high scores during the assessment of "Loss of Health in Dangerous Production".

On the next stage of our work, we compared the statistical estimates of the striking factors of the students of various faculties. There is a striking difference between the various faculties in providing the highest points of danger. On the juridical, veterinary, economic, pedagogical, faculty of management, land management the highest points were received – suicide, terrorism, narcotic substances, medical preparations – 35, 34, 33, 32 respectively. At the forestry, agrobiological, technical, faculty of plant protection, water bioresources – national conflicts, alcohol use, unemployment, narcotic substances.

We draw attention to the fact that, for no secret, in such faculties as juridical, economic, etc. are studying students from more well-to-do families, but for some reason the most dangerous point was the factor of suicide.

Also, due to the large number of processed cards, we were able to compare the statistical estimates depending on the place of residence. Students living in Volyn, Transcarpathian, Rivne, Khmelnytsky regions identified the most dangerous factors – national conflicts, unemployment, natural disasters, increasing of prices.

Students from the Kharkiv, Lugansk, Donetsk, Zaporozhye oblasts scored the highest points – narcotic substances, alcohol use, killing and intentional injuries, domestic injuries. We paid particular attention to the fact that students did not seem to have taken into account at all some

factors like national conflicts or terrorism, and more precisely, for example, if students from the western regions - conflicts, terrorism were evaluated on average in 31–32 points, students from the eastern regions assessed these dangers in 14–16 points.

Also, there was a peculiarity in providing statistical assessments by women and men. At many faculties, students exhibit high scores for factors such as unemployment, price increasement.

Conclusions. Returning to the results of the characteristics of factors done by students, depending on the year, let's note that, even in 2008-2009, such a factor as national conflicts began to increase sharply on the scale, although this danger in those years was not appropriate for Ukraine. In our opinion, the dangers of socio-political nature are determined by the conditions of people's lives. The worse they are, the higher the level of social discontent and the more difficult it is to stimulate it. The dangers of this are of a hidden nature and are manifested in the presence of certain unpredictable conditions that deepen them and transform them into extreme dangers. If this danger is not localized or predicted, it will turn into an emergency.

References

1. *Yaremko, Z. M.* (2005). Safety of life: teaching. Tutorial: Center for Educational Literature. 38–40.
2. *Piskunova, L. E.* (2008). Comparative characteristic of statistical estimations of hazardous and harmful environmental factors by students of National Agrarian University. Scientific herald of NAU. Issue 125. 111–115.
3. *Prachominik, N. A., Klimenko, F. T.* (2014). Emergencies of socio-political nature. Problems of labor protection, industrial and civil security. Collection of Materials of the Tenth All-Ukrainian Scientific and Methodological Conference. Kyiv. Osнова. 268–272.
4. *Waclaw Romaniuk, Victor Polishchuk, Andrzej Marczuk, Liudmyla Titova, Ivan Rogovskii, Kinga Borek.* (2018). Impact of sediment formed in biogas production on productivity of crops and ecologic character of production of onion for chives. Agricultural Engineering (wir.ptir.org). Krakow. Poland. Vol. 22. № 1. 105–125. doi:10.1515/agriceng-2018-0010.

Список літератури

1. *Яремко З. М.* Безпека життєдіяльності: навчальний посібник. Київ. Центр навчальної літератури. 2005. С. 38–40.
2. *Піскунова Л. Е.* Порівняльна характеристика статистичних оцінок небезпечних та шкідливих факторів довкілля студентами Національного аграрного університету. Науковий вісник Національного аграрного університету. 2008. Вип. 125. С. 111–115.
3. *Праховнік Н. А., Клименко Ф. Т.* Надзвичайні ситуації соціально-політичного характеру. Проблеми охорони праці, промислової та цивільної безпеки. Збірник матеріалів десятої всеукраїнської науково-методичної конференції. Київ. Основа. 2014. С. 268–272.

4. Waclaw Romaniuk, Victor Polishchuk, Andrzej Marczuk, Liudmyla Titova, Ivan Rogovskii, Kinga Borek. Impact of sediment formed in biogas production on productivity of crops and ecologic character of production of onion for chives. Agricultural Engineering (wir.ptir.org). Krakow. Poland. 2018. Vol. 22. № 1. P. 105–125. doi:10.1515/agriceng-2018-0010.

АНАЛІЗ СТАТИСТИЧНОЇ ОЦІНКИ УРАЖАЮЧИХ ФАКТОРІВ ДОВКІЛЛЯ СТУДЕНТАМИ В ПЕРІОД ЗРОСТАННЯ НАДЗВИЧАЙНИХ СИТУАЦІЙ СОЦІАЛЬНО-ПОЛІТИЧНОГО ХАРАКТЕРУ

Л. Е. Піскунова, Т. О. Зубок, Ю. В. Сухомлин

Анотація. Для виявлення трансформації цінностей та розставлення пріоритетів у молоді, проводилось соціальне опитування шляхом анкетування студентів різних факультетів Національного університету біоресурсів і природокористування України. За допомогою статистичної оцінки визначались уражаючі фактори довкілля в період зростання надзвичайних ситуацій соціально-політичного характеру. Розглянуто вплив тривалої дії небезпечних та шкідливих чинників на життя людини. Досліджено розподіл орієнтації цінностей сучасної української молоді щодо пріоритетності різних видів чинників при розподілі за балами по відношенню до статистичної оцінки небезпечних і шкідливих чинників для життя людини. Оцінки, надані студентами, були оброблені і таким чином виведені в середню оцінку певного чинника. Також, обраховано відносну частку для кожного шкідливого та небезпечного чинника у сумарній кількості інших. Окремим блоком досліджувався чинник «Втрата здоров'я на небезпечному виробництві», що дало змогу виділити певні зміни у розподілі пріоритетності щодо виробничих небезпек упродовж років. Проаналізовано, залежно від місця проживання, статі та напряму підготовки студентів ставлення до шкідливих та небезпечних чинників. Виявлено перевагу у наданні балів окремим чинникам серед груп студентів із різних факультетів та прослідковано закономірності вибору найвищих та найнижчих оцінок певним факторам.

Ключові слова: уражаючі фактори, небезпечні та шкідливі чинники, статистична оцінка, соціологічне опитування

АНАЛИЗ СТАТИСТИЧЕСКОЙ ОЦЕНКИ ПОРАЖАЮЩИХ ФАКТОРОВ ОКРУЖАЮЩЕЙ СРЕДЫ СТУДЕНТАМИ В ПЕРИОД РОСТА ЧРЕЗВЫЧАЙНЫХ СИТУАЦИЙ СОЦИАЛЬНО- ПОЛИТИЧЕСКОГО ХАРАКТЕРА

Л. Е. Пискунова, Т. А. Зубок, Ю. В. Сухомлин

Аннотация. Для выявления трансформации ценностей и расстановка приоритетов у молодежи, проводился социальный

опрос путем анкетирования студентов различных факультетов Национального университета биоресурсов и природопользования Украины. С помощью статистической оценки определялись поражающие факторы окружающей среды в период роста чрезвычайных ситуаций социально-политического характера. Рассмотрено влияние длительного действия опасных и вредных факторов на жизнь человека. Исследовано распределение ценностей ориентации современной украинской молодежи относительно приоритетности различных видов факторов при распределении по баллам по отношению к статистической оценке опасных и вредных факторов для жизни человека. Оценки, предоставленные студентами, были обработаны и таким образом выведены в среднюю оценку определенного фактора. Также, обчислено относительную долю для каждого вредного и опасного фактора в суммарном количестве других. Отдельным блоком исследовался фактор «Потеря здоровья на опасном производстве», что позволило выделить определенные изменения в распределении приоритетности производственных опасностей на протяжении лет. Проанализированы, в зависимости от места проживания, пола и направления подготовки студентов отношение к вредным и опасным факторам. Выявлено преимущество в предоставлении баллов отдельным факторам среди групп студентов с различных факультетов и прослежены закономерности выбора самых высоких и самых низких оценок определенным факторам.

Ключевые слова: *поражающие факторы, опасные и вредные факторы, статистическая оценка, социологический опрос*

УДК 631.23.002

BASIC METHODOLOGICAL REQUIREMENTS TO TEST SET OF MACHINES FOR POULTRY

V. I. Rebenko, ORCID 0000-0001-6957-1367

I. L. Rogovskii, ORCID 0000-0002-6957-1616

**National University of Life and Environmental Sciences of Ukrainee-
e-mail: vicnb@ukr.net**

Abstract. *The article summarizes the existing domestic, European and North American methodological requirements to test set of machines*

© V. I. Rebenko, I. L. Rogovskii, 2018