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"GOLDEN BRAIN" SCIENTIFIC JOURNAL
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EDITORIAL BOARD

ANOR URUG'I VA PO'STLOG'INING KIMYOVIY TARKIBI JIHATIDAN FARMASEVTIKA VA SANOATDAGI AHAMIYATINI TAHLIL QILISH

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Annotatsiya: Mazkur maqolada anor urug'i va po'stlog'ining kimyoviy tarkibi, farmasevtik va sanoatdagi ahamiyati tahlil qilindi. Anorning tarkibi, xususiyatlari, qo'llanilishi hamda organizim uchun kerakli bo'lgan ahamiyati o'rganildi va anorning turli xil qismlaridan tayyorlanadigan tabiiy mahsulotlarning o'rni haqida ko'rib chiqildi.

Kalit so'zlar: Punica Granatum, anor po'stlog'i, anor po'stlog'i kukuni, anor urug'i, dorivor konfetlar,

Kirish: Anor Hindiston, Janubi-Sharqiy Osiyo va tropik qit'alarda ming yillar davomida yetishtirilgan.Yuqori antioksidant, bioaktiv birikmalari bor. Anor (Punica granatum L.) Punicaceae oilasiga mansub shifobaxsh o'simlik hisoblanadi . Anorda juda ko'p sog'lik uchun zarur bo'lgan makro va mikroelementlar bor, shu jumladan:10 mg kaltsiy - kunlik ehtiyojning 1,5%; 12 mg magniy - kunlik ehtiyojning 4%; 36 mg fosfor - kunlik ehtiyojning 6%; 236 mg kaliy - kunlik ehtiyojning 7% ni tashkil etadi. Jumladan, 0,3 mg temir erkaklar uchun kunlik ehtiyojning 4% va reproduktiv yoshdagi ayollar uchun taxminan 2% ni tashkil qiladi. Dunyo bo'ylab anor yetishtiruvchi barcha mamlakatlar orasida ishlab chiqarishning 76 foizi Eron, Hindiston, Ispaniya, Xitoy, Turkiya va AQSh hissasiga to'g'ri keladi. Anor yozning issiq, quruq va sovuq qishda sug'orish inshootlari bilan ta'minlanganligi va turli tuproq va iqlimiy stresslarga bardosh bera olganligi sababli, u mamlakatning qurg'oqchil va yarim qurg'oqchil hududlarida etishtiriladi. Anor yuqori ozuqaviy qiymatga ega va uni parvarish qilish uchun arzon narx talab qiladi, yuqori hosildorlik salohiyatiga ega va biotik va abiotik stresslarga chidamli bo'lib, uni iste'molchilar orasida mashhur qiladi. [1,2]

Anor o'simligi umuman shifobaxsh, sanoat va kosmetik xususiyatlarga ega. Anor daraxtining barcha qismlari, ya'ni ildizi, po'stlog'i, barglari, gullari, po'stlog'i va urug'lari qayta ishlanib, qo'shimcha qiymatli mahsulot olish mumkin. Po'stloq kukuni dori vositalarida, teri va bo'yoq sanoatida qo'llanilishi mumkin va tish kukunini tayyorlashda qo'llaniladi[3].

Anor tarkibida punikalaginlar, gidrolizlanadigan taninlar, antosiyaninlar va ellagik kislota va antioksidant quvvatga javob beradigan birikmalar mavjud. Shunday qilib, anor sharbati yangi mevalarga qaraganda koʻproq antioksidant birikmalarga ega. Sharbatni olishda bioaktiv birikmalarda tegishli oʻzgarishlar kuzatiladi, ularda punikalaginlar koʻpayadi, ellagik kislota va antosiyaninlar kamayadi.Anor sharbatining taʼmi efirlar, spirtlar va terpenlar bilan tavsiflanadi .Anorning yangi sharbati aromati tarkibida terpenlar ustunlik qiladi, furanlar esa faqat qayta ishlangan sharbatlarda mavjud.Antosiyaninlar kabi anorning fenolik tarkibiy qismlari rang beradi, flavonoidlar va baʼzi flavonoid boʻlmaganlar kabi boshqa polifenollar antioksidant xususiyatlar, shiraning qattiqligi va achchiqligi uchun javobgardir. Anor sharbati polifenollarning boy manbaidir.[4]

Anor meva poʻstlogʻi butun meva vaznining taxminan 20- 50 foizini tashkil qiladi, bu minerallarga, xususan, kaliy, kalsiy, fosfor, magniy va natriyga boy; murakkab polisaxaridlar va turli xil bioaktiv birikmalarning yuqori darajasi, yaʼni fenolik moddalar, flavonoidlar, proantosiyanidin birikmalari va punikalaginlar va uning izomerlari kabi ellagitanninlar (ET) mavjud. Bundan tashqari, ozroq miqdorda punikalin, gallagik kislota, ellagik kislota va ellagik kislota glikozidlarini oʻz ichiga oladi. Anor qobigʻi kukunida topilgan asosiy polifenol fraktsiyalari katexinlar, fenol gallik kislotasi, kofein kislotasi, ellagik kislota, p-kumar kislotasi va rezorsinol birikmalaridir. Yuqori fenol miqdori va antioksidant faolligi, shuningdek, xom tolaning yaxshi manbai boʻlishi glyukoza bardoshliligi va insulin reaktsiyasini yaxshilash, sarum LDL-xolesterin darajasini pasaytirish, giperlipidemiya va gipertenziyani kamaytirish kabi koʻplab sogʻliq uchun foyda keltiradi. Shuningdek, u oshqozon-ichak salomatligi va yoʻgʻon ichak saratoni kabi baʼzi saraton kasalliklarining oldini olishga hissa qoʻshadi. U oʻzining yaralarni davolovchi xususiyatlari bilan ham mashhur.

Anor poʻstlogʻidan qurish damlama yoki meva sharbatining bilan tomoq chayilsa, anginada, ogʻiz boʻlgan xastaliklari (stomatit, gingivit)da yordam beradi. Anor tarkibidagi oshlovchi ogʻriqni qoldiradi, organik kislotalar esa virusni yoʻqotadi.

Anor urug'i, anor sharbatini qayta ishlashning qo'shimcha mahsuloti bo'lib, tarkibida ko'p miqdorda lipidlar, oqsillar, shakarlar va muhim minerallar [5], kaliydan tashqari mineral elementlarning miqdori sharbatga qaraganda ko'proq, ozuqaviy komponentlar, ya'ni sterollar, g-tokoferol, punitsik kislota, gidroksil benzoik kislotalar mavjud [6].Aynan shu anorning mevasini sharbat qilib, undan qolgan qoldiq mahsulotni qayta ishlash natijasida tibbiyot uchun kerakli bo'lgan konfetlar ishlab chiqarish mo'ljallangan Klimaksdan keyin qizib ketish, jizzakilik, bosh kuchli og'rig'i (migren)dan qiynalganda anorni urug'i bilan iste'mol qilish foyda beradi. Bundan tashqari anor urug'i yog'i ham o'zining shifobaxshligi bilan mashhur hisoblanadi. Anor yadrosi yog'i tarkibida Omega 5 (punitsik kislota), Omega 9 (olein kislotasi), Omega 6 (linoleik kislota) va palmitik kislota mavjud bo'lib, uni yallig'lanishga qarshi terini parvarish qilish bo'yicha yetakchilardan biriga aylantiradi.

Xulosa: Anor boy kimyoviy tarkibga ega bo'lgan mahsulot bo'lib u qadimdan xalq tabobatida keng qo'llanilgan. Hozirgi kunda sanoat chiqindisi hisoblangan anor po'stlog'i va danagidan ham samarali foydalanishimiz mumkin. Anor po'stlog'idan dorivor preparatlar hamda foydali kimyoviy birikmalarni ajratib olinsa, urug'idan esa qimmatbaho va shifobaxsh yog' va anor urug'i ekstrakti olish mumkin.

Foydalanilgan adabiyotlar:

1. Du CT, Vang PL, Frensis FJ. anor antosiyaninlari,Pushti granat. Oziq-ovqat fanlari jurnali. 417-418 4.Gil MI, Artes F, Tomas-Barberan FA. Anor urug'larining pigmentatsiyasiga minimal ishlov berish va o'zgartirilgan atmosfera qadoqlash ta'siri. Oziq-ovqat fanlari jurnali. 161- 164

2. Kano-Lamadrid M, Kalin-Sanches A, Klemente-Villalba J, Hernández F, KarbonellBarrachina A, Sendra E va boshqalar. "Mollar de Elche" anor sharbati asosidagi jele konfetlarining sifat ko'rsatkichlari va iste'molchilar tomonidan qabul qilinishi.

3. Artes F, Tomas-Barberan FA. Anorni yig'im-terimdan keyingi texnologik ishlov berish va undan olingan mahsulotlarni tayyorlash. O'rta er dengizi mintaqasida anor ishlab chiqarish, qayta ishlash va sotish bo'yicha simpozium: tadqiqot va texnologiya yutuqlari. (Eds.) Melgarejo P, Mertinez TJ, Saragosa, Ispaniya.199-204

4. Saxena AK, Manan JK, Berry SK. Anor yig'im-terimidan keyingi texnologiya, kimyo va qayta ishlash. Hind taomlarini qadoqlovchi. 43-60

5. Shubert SY, Lansky EP, Neeman I. Anor yadrosi yog'i va fermentlangan sharbat flavonoidlarining antioksidant va eikosanoid fermentini inhibe qilish xususiyatlari. Etnofarmakologiya jurnali.11-17

6. Gil MI, Artes F, Tomas-Barberan FA. Anor urug'larining pigmentatsiyasiga minimal ishlov berish va o'zgartirilgan atmosfera qadoqlash ta'siri. Oziq-ovqat fanlari jurnali. 161- 164

SOCIAL MOBILITY AS THE KEY FACTOR FOR HUMAN CAPITAL DEVELOPMENT

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Annotation.

Relevance and goals.

The article reveals the concepts of "social mobility", "social lift" and their impact on the development and modernization of Uzbek society. The quality of human capital is considered, namely, the human capacity for mobility in society, which leads to economic prosperity and faster social progress. The relationship between the institution of higher education and social mobility is considered. Higher education serves as a tool for successful employment, career advancement, and self-improvement. The importance of social mobility for the development and modernization of Uzbek society, which is aimed at developing the individual, providing him with opportunities for professional and career growth.

The purpose of the work is to analyze the state of social mobility in modern Uzbek society and present the implementation of the work of the social elevator.

Materials and methods.

The implementation of the tasks was carried out on the basis of a structural-functional approach, analysis and generalization of statistical data, scientific analysis of a wide range of sources, including scientific and periodical literature.

Results.

In the course of the analysis, it was revealed that social mobility is an important component of the life of society. The modernization tasks set by the state can be successfully implemented only with the solution

problems of social mobility of the younger generation. From socially active youth, from the personal success of each, the processes of development and modernization. Such a mechanism can and should be a social elevator, operating nationwide.

Conclusions.

Exploring social mobility as a factor in the development and modernization of Russian society, we can conclude that each member society has a fair chance to realize its potential and for this various projects and programs are needed.

Key words: social lift, social mobility, human capital, social development, social status.

Today, the term "modernization" has firmly entered and entrenched itself in public, journalistic and scientific discourses. Modernization needed for the progressive development of Uzbekistan, to increase its competitiveness in the world market. Modernization development will allow to outline optimal strategic scenarios and will connect various spheres of society's life with each other. The solution of such problems is possible only in a country that is ready to self-development, qualitative growth and innovation. Systematic social and technical modernization is not possible without "knowledge economy", without improving the quality of human capital, without directing the development of national intelligence to an innovative direction. Many researchers agree that not only the size, but also the quality of human capital (health, knowledge, mobility) in the post-industrial era becomes the leading factor in the sustainable development of society.

It is from the quality of human capital, which includes its health, knowledge, the ability to be mobile, depend on the processes of modernization. In terms of self-

organization, Uzbek society is unique. At the core self-organization lies personal economic interest. Those issues that the elite puts on the agenda for society turn out to be of no interest to Uzbek society. The reason for this is the presence of the Uzbek elite and civil society in completely different social spaces. The majority of our citizens have different life strategies from the elite. Uzbek people have little idea about recruiting into the elite. Ignorance of the foundations of our social life hinders the modernization and progressive development of our society and state.

Social lift is a certain channel, mechanism or way of changing the social status of a person. A way that will help you take a more prestigious position or, conversely, a lower one. Most members of our society form social and economic strategies for themselves. It is extremely difficult to achieve success in many areas of public life, and even more so to make a good career, taking into account our modern Uzbek realities. All these difficulties can lead to apathy and distrust in society.

Promotion occurs by changing statuses, roles and due to certain objective social conditions. social lift in this area implies career growth, the reasons for which are the constantly increasing level of professional competence, achieving status goals by satisfying a need in achieving success and professional self-realization, using the possibilities of the achieved status for the effective implementation of professional activities [3].

If there are sufficiently high-quality social elevators, then each of its members is sure that, under certain conditions, he can achieve the desired result [4].

The term "social mobility" was formed in 1927 by the American sociologist of Russian origin P. Sorokin. According to his concept, there are two types of social mobility: horizontal and vertical. Horizontal mobility is movement at the same level of social stratification, without the individual changing his socially significant positions. Another thing is vertical mobility, which involves the movement of an individual from one layer in the other in the social hierarchy both upwards (upward mobility) and down (descending). Modern society is distinguished by the fact that both individual social actors and social groups freely change their social position and social status regardless

of their starting position. P. Sorokin states: "Mobility contributes to economic prosperity and faster social progress. Since in a mobile society individuals are better distributed across social strata, they are probably more successful in their duties than those who are less well-placed individuals in an immobile society. Thanks to these and to some other factors, a mobile society progresses more intensively than an immobile one. This position is confirmed by history. We have already pointed out the fact that periods of intense mobility, as a rule, were accompanied by significant progress in the sphere of spiritual life. As for economic prosperity, as V. Pareto established, between periods marked by intensive mobility and an increase in economic well-being there is a direct relationship" [5, p. 492].

The issues of social mobility are devoted to many Russian studies that consider objective and subjective aspects. This topic was addressed by such researchers as Z. T. Golenkova [6], M. K. Gorshkov [7], V. V. Semenova [8], P. E. Sushko [9], N. E. Tikhonova [10] and others.

The social lift is characterized by constancy, regularity of work and the presence of game rules that ensure vertical mobility. That is, there should be a system of legal norms and procedures that allowed to perform for some social institution the function of a social elevator. In this case, society becomes more open, and social the well-being of citizens is improving. If the society does not provide vertical mobility of citizens, then, as a result, there may be indifference to the elections, waves of protest, the emergence of radical groups and opposition sentiments, and aggravation of interethnic relations. The combination of a high level of inequality with low social mobility in society will lead to the fact that a social group located at the bottom of the social ladder, will not be able to navigate freely and comfortably in social relations. In the socio-economic life of modern society, an idle social elevator will sooner or later lead to stagnation in labor productivity, a low level of innovation, depression and lack of activity of young people. Normal personnel movement in the civil service is hampered by the fact that Everyone tries to be leaders, not good specialists. In business, the opposite problem is observed - self-employed, so as well as for individual

entrepreneurs, it is unprofitable to switch to medium-sized businesses, in this case the number of inspections and claims immediately increases, and at the same time, the percentage of risk increases [11].

In addition, social lifts are no longer a rigidly structured reality. Development of the information society and access to a large amount of various information makes it possible for a person to design his own future on his own. In such a case, a person there is a "lucky chance" to be the master of one's own destiny. It is commonly believed that moving up requires talent, intelligence, skill, resourcefulness, hard work, perseverance, risk-taking, and correct strategy. An example is M. E. Zuckerberg, one of the developers and founders of the social network Facebook. In January In 2018, he was the fifth in the Forbes magazine list and the youngest multibillionaire with a fortune of $ 70 billion. The emergence and development of digital technologies has led to the formation new social elevator - is digital. Today the Internet and social networks are tools to promote yourself or your services without large material investments. The digital elite are those who collect many (millions) of likes [14]. Student youth are in particular need of social lifts. Students are a fairly large part of today's youth and urban population. Students are advanced, most educated and trained part of the youth, which undoubtedly allows them to be put on the first plan and include among the progressive and advanced groups of youth [15]. As a student and receiving higher education, a person strives realize your dream. Most students are aware that a higher education institution is one of the means of social development and growth of young people in various directions, and this is a prerequisite for social advancement. The specifics of studying at a university is another important feature that allows you to expand the scope of communication. An analysis of global trends in the development of the institution of education shows that its potential as a social lift is gradually being lost. On the need to identify possible risks in the labor market, depending on level of education sociologists warn [16]. It's getting harder for youth who received a diploma of graduation from a higher educational institution, move up the social ladder [17]. Over

the past nine years, Uzbeks more often began to consider higher education a necessity - the share of supporters of the opinion that a diploma about higher education should be received, because it is accepted (from 6% in 2010 to up to 18% in 2019). Most often this is said by young people aged from 18 to 24 years old (25%). Among them, the most common is the practice of obtaining higher education in order to improve social status (18% versus a share of 13% among all respondents) [18]. In general, the majority of Uzbeks are confident that higher education accompanies a successful career and makes it easier to achieve life goals (76% in 2008 and 58% in 2019). All this indicates that society is more critical of the importance of higher education and it is one of the tools to success in life. It is not easy to set social elevators in motion, we need completely new programs for promoting personnel, especially talented youth [19], who, in turn, should understand that the main quality in the modern labor market is competitiveness [20]. The social lift gives a chance to realize personal and business potential, take a worthy social position and achieve success in your career. The work of the social elevator contributes to the independence of a person for country due to their own perseverance, determination, strong character and all leadership abilities. This is especially true for young people, for which the social lift may well become a springboard to the "other life". Thanks to such social lifts, people occupy a higher position in society, turn into influential politicians, scientists, businessmen, experts, etc. In modern conditions, the social elevator should become the basis for the consolidation of constructive, creative socio-economic, political forces, the formation and development of which will take place from the bottom up. As an example, we can recall the Soviet cities in which new industries and new technologies developed, and these settlements themselves were often rebuilt a new place gave more opportunities for self-realization. The intensity of the formation of modernization processes will depend on from socially active youth, from launching an effective mechanism to support each young person to achieve personal and common success. Such a mechanism can and should be a social elevator, operating nationwide. Reaching higher levels social mobility should be perceived as a major political goal, it requires the

formation of a holistic strategy at the state level with the definition of appropriate key performance indicators to address a wide range of problems.

REFERENCES

1. Becker G. S. Human Capital. Theoretical and Empirical Analysis, with Special Reference to Education. New York; London: Columbia University Press, 1964, 187 p.

2. Bychenko Yu. G., Loginova L. V. Izvestiya Saratovskogo universiteta. Novaya seriya. Ser.: Sotsiologiya. Politologiya [Proceedings of Saratov University. New series. Series: Sociology. Politology]. 2008, vol. 8, no. 2, pp. 47–54. [In Russian]

3. Alekhin E. V., Boyarova E. A. Obshchestvo: sotsiologiya, psikhologiya, pedagogika [Society: sociology, psycology, pedagogy]. 2019, no. 7 (63), pp. 27–32. [In Russian]

4. Sorokin P. A. Monitoring obshchestvennogo mneniya: ekonomicheskie i sotsial'nye peremeny [Public opinion monitoring: economic and social change]. 2004, no. 2 (70), pp. 101–110. [In Russian]

5. Sorokin P. A. Sotsial'naya mobil'nost' [Social mobility]; transl. from Engl. M. V. Sokolova. Moscow: Academia: LVS, 2005, 588 p. [In Russian]

6. Golenkova Z. T., Sushko P. E. Sotsiologicheskie issledovaniya [Sociological researches]. 2016, no. 12, pp. 95–104. [In Russian]

7. Gorshkov M. K. Vestnik Rossiyskoy akademii nauk [Bulletin of the Russian Academy of Sciences]. 2020, vol. 90, no. 3, pp. 232–242. [In Russian]

8. Begemann B., Van'ke A. V., Golenkova Z. T., Epikhina Yu. B., Kolennikova N. D., Petrovich Ya., Polukhina E. V., Rozhdestvenskaya E. Yu., Semenova V. V., Strel'nikova A. V., Sushko P. E., Tartakovskaya I. N., Cherkashina T. Yu., Chernysh M. F., Shuvakovich U., Yaroshenko S. S. Sotsial'naya mobil'nost' v uslozhnyayushchemsya obshchestve: ob"ektivnye i sub"ektivnye aspekty: monografiya [Social mobility in an increasingly complex society: objectival and subjective aspects: monograph]. Moscow: FNISTs RAN, 2019, 512 p. [In Russian]

9. Sushko P. E. Teoriya i praktika obshchestvennogo razvitiya [Theory and practice of social development]. 2018, no. 2 (120), pp. 8–12. [In Russian]

10. Tikhonova N. E. Vestnik Instituta sotsiologii [Bulletin of the Institute of Sociology]. 2017, no. 21, pp. 140–165. [In Russian]

11. Il'in P. A., Kandakova N. S. Yunyy uchenyy [Young scientist]. 2020, no. 4 (34), pp. 47–49. Available at: https://moluch.ru/young/archive/34/1992/ (accessed 20.10.2020). [In Russian]

12. Federal'naya sluzhba gosudarstvennoy statistiki [Federal State Statistics Service]. Available at: www.stat.uz

13. Programma vyyavleniya i podderzhki talantlivoy molodezhi v oblasti predprinimatel'stva i menedzhmenta «Sotsial'nyy lift» [The program for identifying and supporting talented youth in the field of entrepreneurship and management "Social Lift"]. Social lift. Available at: http://www.soclift.ru/index.htm (accessed 20.09.2020). [In Russian]

14. Sotsial'nye lifty: ponyatie i osnovnye vidy [Social lifts: concept and main types]. Mentamore. Available at: https://mentamore.com/socium/socialnye-lifty.html (accessed 20.09.2020). [In Russian]

15. Sitarov V., Shutenko A., Shutenko E. AlmaMater. 2007, no. 7, pp. 13–18. [In Russian]

16. Golenkova Z. T., Kosharnaya G. B., Kosharnyy V. P. Integratsiya obrazovaniya [Integration of education]. 2018, vol. 22, no. 2 (91), pp. 262–273. [In Russian]

17. Svad'bina T. B., Nemova O. A. Vestnik Surgutskogo gosudarstvennogo pedagogicheskogo universiteta [Bulletin of Surgut State Pedagogical University]. 2018, no. 2 (53), pp. 111–118. [In Russian]

18. Dannye oprosov. Vysshee obrazovanie: sotsial'nyy lift ili poteryannoe vremya? [Survey data. Higher education: social lift or wasted time?]. VTsIOM. Available at: https:// wciom.ru/index.php?id=236&uid=9808 (accessed 15.09.2020). [In Russian]

19. Sotsial'noe samochuvstvie naseleniya v usloviyakh reform: regional'nyy aspekt [Social state of health of the population in the context of reforms: regional aspect]. Ed. by M. K. Gorshkov. Moscow; Saint-Petersburg: Nestor-Istoriya, 2011, 176 p. [In Russian]

20. Korzh N. V., Karimova L. F. Nauka. Obshchestvo. Gosudarstvo [Science. Society. State]. 2017, vol. 5, no. 1 (17), pp. 155–161. Available at: http://esj.pnzgu.ru (accessed 20.09.2020). [In Russian]

21. ИНСОН КАПИТАЛИНИ ШАКЛЛАНИШИ, РИВОЖЛАНИШ ДАРАЖАЛАРИ ВА ИНСОН КАПИТАЛИНИ ИНВЕСТИЦИЯЛАШ ГП Эркаева, СЗ Рузикулов Gospodarka i Innowacje. 24, 225-229

21. LABOR MOTIVATION IN SMALL BUSINESS ENTERPRISES KG Fayzullaevich, EG Panjiyevna, FK Gaybulla o'g'li American Journal of Economics and Business Management 4 (2), 89-93

LIMON YETISHTIRISHDA AGROTEXNIK HIMOYA USULI VA ZARARKUNANDALARGA QARSHI KURASHISHNING DOLZARBLIGI

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Kichik ilmiy xodim

Annotatsiya: So'nggi yillarda respublikada limonchilik tarmog'i shiddat bilan rivojlanmoqda. Limonzorlar maydoni kengaytirish hisobiga mahsulot ishlab chiqarish va export hajmini ko'paytirish borasida izchil choralar amalga oshirilmoqda. Limon o'simligi juda serxosil export salohiyati yuqori bo'lgan mevalar qatoriga kiradi. Barchaga ma'lumki, limon ozuqa moddalari va vitaminlarning ajoyib manbai hisoblanadi. Kundalik hayotimizda ishlatadigan ko'p mahsulotlar tarkibida ham limondan olinadigan moddalar mavjud. Limon yetishtirishda ko'p hollarda beparvolik qilib ko'chatlarni va mevalarni limon zararkunandalariga yem qilib yuboramiz. Vaqtida zararkunandalarga qarshi kurashishni ortga surib limon hosilga erta kirishini va exportbop mevalar yetishtirishni izdan chiqaramiz. Maqolada limon zararkunandalari bioekologiyasi va unga qarshi kurash tizimi haqida so'z boradi.

Kalit so'zlari: Limon, meva, insektitsid, lichinka, tuxum, imago, shira, sitrus g'ovaklovchi kuya, ko'chat, kapalak:

THE RELEVANCE OF AGROTECHNICAL PROTECTION METHOD AND PEST CONTROL IN LEMON CULTIVATION

Abstract: In recent years, the lemon industry has been rapidly developing in the republic. Due to the expansion of the area of lemon groves, consistent measures are being taken to increase the volume of production and export. The lemon plant is one of the fruits with high export potential. Everyone knows that lemons are an excellent

source of nutrients and vitamins. Many products that we use in our daily life also contain ingredients from lemons. When growing lemons, we carelessly feed the seedlings and fruits to lemon pests. By delaying the fight against pests, we will prevent the early entry of lemons into the harvest and the production of export-oriented fruits. We will consider the bioecology of lemon pests and the system of combating them.

Key words: *Lemon, fruit, insecticide, larva, egg, imago, aphid, citrus borer moth, seedling, butterfly.*

Kirish *Limon* — rutadoshlar (sitruslar turkumi)ga kiradigan doim yashil ko'p yillik daraxtlar turi, mevali ekin hisoblanadi. Vatani — Janubiy va Janubiy.-Sharqiy Osiyo. O'rta Dengiz, AQSH, Meksika, Argentina va boshqa mamlakatlar subtropiklarida, Kavkazning Qora dengiz bo'ylarida, O'rta Osiyoda (transheyalarda) ekiladi. Shuningdek, uy sharoitlarida o'stiriladi. Daraxti balandligi 3–7 m, shoxshabbasi yoyiq. Novdalari tikanli, ba'zilari tikansiz. Bargi qalin, och yashil, cho'ziq-tuxumsimon. Gullari ikki jinsli, oq, xushbo'y. Mevasi tuxumsimon, ba'zan dumaloq. o'rtacha og'irligi 120—400 g ga boradi. Po'sti sariq, silliq yoki g'adir-budur, taxir. Eti 8—12 pallali, och sariq, sersuv, nordon. Sharbati tarkibida 3,5—8,1% kislota (asosan, limon kislota), 1,9—3,0% qand, vitamin S (100 gida 45–140 mg), pektin moddalar, temir, fosfor, kaliy, kalsiy, magniy tuzlari bor. Asosan, ho'lligicha yeyiladi, konditer mahsulotlari tayyorlashda, sharbat, limonad, limon kislota olishda ishlatiladi. O'zbekiston sharoitida limon o'simligiga shira va sitrus g'ovaklovchi kuya asosan jiddiy zarar yetkazadi.

Shiralar: *Shaftoli (issikxona yashil) shirasi (Myzodes persicae)* Tuxumlari mayda, ovalsimon shaklga ega, rangi qora va yaltiroq bo'ladi. Shiralar faqat kech kuzda tuxum qo'yadi, mavsumda tirik tug'ib ko'payadi. Lichinkalari mayda, cho'zinchoq, barglarning pastki yuzasi va kichik kurtaklarda joylashib yashil rangda ko'zga tashlanadi, ular asosan qanotsizdir. *Yetuk qanotsiz* zotlarining kattaligi 1,4-2,5 mm bo'lib, rangi sariq-yashil yoki yashil, mo'ylovlari qoraygan, shira naychalarining yuqori yarmi birmuncha keng. *Qanotli* zotlarning kattaligi 1,4-2,0 mm bo'lib, rangi

yashil, ko'ndalang to'q yashil yo'llari mavjud, ba'zan bu yo'llar bitta umumiy dor bo'lib ko'rinadi. Shira naychalari qora, silindr shaklida. *Rivojlanish sikli*. Shiralar koloniya bo'lib yashaydi va urg'ochilari partenogenetik va jinsiy yo'l bilan ko'payadi. Shira tuxumlik shaklida daraxt po'stloqlarida qishlab chiqadi. Mart oyida tuxumdan chiqqan lichinkalar oziqlana boshlaydi, to'rt marta po'st tashlab yetuk zotga aylanadi. So'ngra tirik tug'ib ko'paya boshlaydi va kech kuzgacha 10-12 avlod beradi. Rivojlanish davri 17-28 kun.

Katta g'o'za yashil shirasi (Acyrthosiphon gossypii) tuxumlari mayda, ovalsimon shaklga ega, rangi och yashil. Barglarga yopishtirib qo'yadi. Shiralar faqat erta bahorda va kech kuzda tuxum qo'yadi, mavsumda tirik tug'ib ko'payadi. Urg'ochilari tuxumlarini alohida yoki tizimli holda qo'yadi. Lichinkalari mayda, barglarning pastki yuzasi va kichik kurtaklarda joylashib sarg'ish yoki jigarrang bo'lib ko'zga tashlanadi, ular asosan qanotsizdir. Yetuk zotlari. Katta g'o'za yashil shira boshqa shiralarga qaraganda yirikroq bo'lib, tanasining uzunligi 3-4 mm, muylovchalariniki 4,5 mm dan uzunroq. Shira naychalari juda uzun, 1,7 mm. Tanasi chuzinchoq shaklda, yashil, ba'zan sarg'ish yoki qo'ng'ir sarg'ish rangli bo'ladi qanotlilari qanotsizlaridan birmuncha kichikroqdir. Chala o'zgarish yo'li bilan rivojlanuvchi bu hasharotning havo haroratiga qarab bir avlodi rivojlanishi uchun 3-20 kun kerak bo'ladi. Shira o'simlik shirasidan oziqlanib, kuchli zararlaganda barglarning bevosita bujmayishi va pastga tomon jingalaklanishiga olib keladi. Shiralar koloniya bo'lib yashaydi va urg'ochilari partenogenetik va jinsiy yo'l bilan ko'payadi. Bitta urg'ochi bir kunda 8-22 tagacha lichinka tug'ishi mumkin. Lichinkalik davri 7-9 kun, yetuk zotlari esa 12-20 kun yashaydi. Hammasi bo'lib mazkur zararkunanda yiliga 12-14 avlod beradi.

Sitrus g'ovaklovchi kuya (Phyllocnistis citrella Stainton): Tuxumi deyarli yumaloq, yassi, rangi tiniq oq, kengligi 0,27 mm. Tuxumlaridan 16-22 kunda lichinkalar chiqa boshlaydi. *Lichinkasi* yangi chiqqanda yashilroq, so'ngra yashil-kulrang, boshini tortganda, ko'krakoldining ichiga qiruvchi, dorzoventral yunalishida. Tanasining birinchi va ikkinchi segmentlari kvadrat shaklida, dumiga qarab ingichkalashgan. Oyoqchalari rivojlanmagan. Boshining aksariyat qismi sariq, qolgan

qismi qizil - sariq. Yetuk lichinkaning uzunligi 3,6 mm bo'ladi. *Yetuk zoti* kapalak tanasining uzunligi 2,1 mm, kengligi qanot yoyganda 4,8 mm. Boshi, ko'kragi oqimtir kumushsimon, ko'zlari qavarik qoramtir tusli tuklari bor. Oldingi qanotlari kumushsimon oq shakli ingichka bargga o'xshaydi, ichki burchaklarida ikkitadan qora keng chiziqlari, qanotlari o'rtasidan chetlariga qarab, uzun, to'k-sariq tukli popuklari bor. Orqa qanotlari ingichka, ninasimon, popuklari oldingi qanotlarnikidan uzunroq. Qorinchasi oq kumushsimon tusli. Urg'ochisi erkagidan kattaroq, uzunligi 2,1 mm, kengligi qanot yoyganda 4-5 mm. *Zararlanish belgilari* qurtlar yosh, mayin novdalarning o'rta qismlarini ham zararlaydi. G'umbaklanish paytida ular harakatlanishdan to'xtaydi, barg chetini bukadi va ichida kichik, och-jigarrang pilla hosil qiladi, 1-2 kun orasida pilla ichida g'umbakka aylanadi, so'ngra pilla qizil tus oladi. Rivojlangan kapalak boshi va qorinchasidagi tikanchalari yordamida pillaning ustki qismini buzib, tashkariga chikadi. *Rivojlanish sikli.* sitrus g'ovaklovchi kuya qaysi fazada qishlashi aniq o'rganilmagan. Ko'pincha boshqa kuyalarga o'xshab g'umbak shaklida qishlashi ehtimoli kattadir. Bir mavsumda 6 ta avlod beradi. Bahorda kapalaklari faol bo'ladi. Haroratga bog'lik holda, yuqori haroratda lichinkalar tez rivojlanib, 11-12 kundan so'ng g'umbakka aylanadi. Salqinroq davlatlarda rivojlanishi sekinroq bo'ladi. Masalan, Yaponiyada har bir yozgi avlodni rivojlanishi 6 hafta davom etadi. Kapalaklari yorug'liksevar, ularning otalanish davri juda qisqa. Otalangandan keyin 6 kun o'tgach, urg'ochi kapalak sitrus daraxtlarining novdalaridagi kurtaklariga yoki yosh barglarning ustki tarafidagi markaziy tomirchasiga tuxum qo'yadi. Tuxumni ko'pincha kurtaklariga ertalab (asosan soat 7 bilan 10 orasida) qo'yadi. Tuxumlari mayda va tiniq ularni oddiy kuz bilan ko'rish qiyin. Tuxumdan chiqqan lichinkalar bargni kemirib, uning ichiga kiradi, so'ngra u yerda yashirin holda, parenxima to'qimalarini kemirib yashaydi va tullaydi. Qurtlar barg ichida tiniq yo'llar paydo qiladi, barglar qovjirab, qurib qoladi. Qurtlar barg ichida kemirib ketishi vaqtida ularning oldiga to'siq (barg tomirchalari) chiqsa, ular yunalishini boshqa tomonga o'zgartiradi.

Qarshi kurash: Zararkunandalarga qarshi kurashishda meyorida kimyoviy ishlov bergan maqul xisoblanadi. Sitrus g'ovaklovchi kuya, shiralar, o'rgimchakkana va boshqa zararkunandalarga qarshi eng samarali tajribada sinalgan preparatlardan sof moddasi abamektin bo'lgan pestitsidni qo'llash yaxshi samara beradi. Sof moddasi abamektin bo'lgan pestitsid o'simlik barglarida g'ovak iz qoldiruvchi pashsha va kuyalarga qarshi tengi yo'q samara beradi. Bundan tashqari sof moddasi atsetamiprid bo'lgan insektitsidlarni ham qo'llash yaxshi samara beradi.

Agrotexnik himoya usuli (o'simliklar himoyasida) — zararkunanda hasharotlar va kasalliklarning mavjudligi, yalpi ko'payishi va keng tarqalishiga tusqinlik qiluvchi sharoitlarni yara-tishga qaratilgan agrotexnik chora tadbirlar. Bu usulda zararkunandalarning qishlashi, yashab qolishi va rivojlanishi uchun noqulay sharoit yaratiladi. Agrotexnik himoya usuli- urug'lik va ko'chatlarni ekishga tayyorlash, tuproqni ishlash va ekish usullari, muddatlarini tanlash, o'g'itlarni qo'llash, ekin navlarini tanlash bo'yicha muayyan tadbirlarni qamraydi. Agrotexnika orqali ekologik sharoitni o'zgartirilib, o'simliklarni hasharot va kasalliklardan himoya qilishga faol ta'sir ko'rsatish mumkin. Limon yetishtirishda ham o'g'itni vaqtida berish va shoxlarga ishlov berish muhim xisoblanadi.

Hulosa: Limon yetishtirishda yosh ko'chatlarni doimo nazoratga olish kerak. Yosh ko'chatlarga shiralar va sitrus g'ovaklovchi kuya qattiq zarar keltiradi. Limon ko'chatlarini barglarini ichkari tomonga bujmaytirib ko'chatlarni o'sishini va hosil berishini kechiktirib yuboradi. Limon o'simligi chirindiga boy tuproqda zo'r berib rivojlanadi. Mineral o'g'itlar o'z vaqtida berilsa sovuqga chidamli bo'ladi.

FOYDALANILGAN ADABIYOTLAR

1. Kulkov O.P., Muhamedov Sh. Z., O'zbekistonning subtropik o'simliklari, 1968;

2. Faxriddinov 3., Toshkent limoni, T., 1969. Rixsivoy Jo'rayev.

3. O'rta maxsus, kasb-hunar ta'limi markazi Axborot-metodik xizmati "Limon yetishtirish texnologiyasi".

4. Sulaymonov O.A., Bobobekov K., Yaxyoev J.N. sitrus o'simligi zararli organizmlariga qarshi kurash// "Agrobank" ATB (10 kitob) 2022 y.

5. Xo'jaev Sh.T. Umumiy va qishloq xo'jalik entomologiyasi hamda uyg'unlashgan himoya qilish tizimining asoslari// 2019 yil.

6. Limon kasallik – zararkunandalari va ularga qarshi kurashish

7. Saimnazarov Yu.B., Agzamxodjaev J.B., Abdullaev P.M., Djalilov N.L. Limonni yetishtirish texnologiyasi buyicha tavsiyanoma 2020 yil.

(https://agroolam.uz/kasallik-zararkunanda/)

THE ROLE OF BIOETHICS TODAY

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Abstract: Bioethics includes today's ethical requirements, the fulfillment of professional obligations of medical personnel, behavior, ecological, medical and socio-legal relations. Conflicts and problems in medicine are different and at different levels, different interpretations about the essence of conflicts and conflicts and their role in society are highlighted.

Key words: bioethics and innovation, ethics, moral standards, technologies, bioethics, conflicts and conflicts.

Entrance

Today, there are debates about the observance of bioethical rules in various spheres of society. Medical bioethics (lat. bioethika, Greek bioethics) is a set of ethical standards and principles for the behavior of medical personnel in fulfilling their professional obligations.

For the first time, the concept of bioethics was mentioned by Fritz Jahr in 1927, and in 1969, the American oncologist and biochemist W. Potter introduced it. Van Rensselaer Potter wrote in his work Bioethics: A Bridge to the Future" that "the science of survival should be studied not only as a simple science but also as a new wisdom that combines biological knowledge and universal human values. Therefore, I suggest calling these fields bioethics. In 1999, while speaking at a conference on bioethics in

Costa Rica, W. Potter said, "I would ask all of you to accept bioethics as a new teaching of ethics that requires responsibility and competence, incorporates all cultures, and promotes humanism. This is a challenge for today's doctor.

LITERATURE ANALYSIS AND METHODS

While Potter initially founded bioethics as a science, over the years, these views have been widely spread in different parts of the world. Nakamura Hajime, an expert on the history of Buddhism, has touched on the issue of bioethics several times in his work. In a narrow sense, bioethics is the relationship between a doctor and a patient, while in a broad sense, it covers social, environmental, medical, and socio-legal relationships.

The Persian doctor Abu Bakr ar Razi (865–925 AD) believed that a person who devotes himself to medicine should first be educated, humble, truthful, and humanitarian. In addition, he should be an intelligent healer after studying any issue in depth.

The following words of Ibn Sina are also of great importance: Each person has a unique characteristic. A doctor must have the eyes of a hawk, the hands of a girl, the wisdom of a serpent, and the heart of a lion.

Hippocrates says, "Where there is love for people, there is love for your art"

Paracelsus said, "The strength of a doctor is in his heart; the main medicine of medicine is love."

It should be said that not only doctors study the issues of bioethics; ecologists, biologists, philosophers, theologians, psychologists, sociologists, lawyers, policymakers, and others are also actively involved in solving existing bioethical problems. Therefore, bioethics is an interdisciplinary phenomenon, and the rapid development of medicine is causing problems that need to be solved urgently. This calls for people of all professions to unite.

Potter is the author of more than 350 publications in biochemistry and cancer research and more than 50 articles and books in bioethics. According to Potter's main idea, to solve the problem of saving life on earth, it is necessary to combine the efforts of the humanities and biological sciences and consider the long-term consequences of scientific and technical progress (especially in the field of biomedical technologies) [1].

RESULTS

Currently, the quality of qualified medical care that is provided for individuals and patients is continuously rising, and the most recent technological advancements in the fields of treatment and diagnostics are being utilized. On the other hand, against the backdrop of the unrelenting advancement of medicine in this sector, there is also a growth in the number of contentious circumstances and challenges. As a result, it is essential to perform research in this field of human interactions with the goals of determining the primary disagreements and the potential solutions to those disagreements.

Mutual conflicts are very common; they occur at all levels and in all spheres of social life. This is one of the types of social influence based on the open opposition of the parties, which can manifest itself in different forms.

There are different interpretations about the nature of conflicts and their role in society, and various disagreements have been identified in determining their causes. The main causes of conflicts can be material resources, power forces, or value orientations. The subjects and participants of the conflict are individual people, various social groups, and organizations. Conflicts have their own structures, logic of development, stages, and various methods of resolution.

The health industry is rife with disagreements, each of which has its own personality and set of defining traits. The aim of this endeavor was to locate and evaluate them as a source of information. This is not simply an academic investigation but also a practical one. This entails, first and foremost, avoiding disagreements as much as possible and, should they take place, being aware of how to act and what steps

to take in order to find a solution, and, secondly, putting the constructive aspect of disagreements to use.

A lot of problems have accumulated in this place today.

Conflicts and problems in medicine can be different and at different levels. These problems are: 1) "health care system-society"; 2) "health department-medical staff"; 3) "physician-patient"; 4) doctor-relatives of the patient"; 5) "physician"; 6) and others.

The main contradictions that can cause conflicts at the level of health care are the lack of a comprehensive and consistent concept of health care development, insufficient financing of the health care system, and the provision of material equipment. During the current "pandemic" period, this conflict has become evident. Of course, our state is doing enough work in this regard. Until now, attention to the supply of hospitals has been overlooked. These cases are also being investigated, and appropriate actions are being taken. Many of the above-mentioned conflicts are caused by a lack of medicines, the closure of some district hospitals, low monthly salaries forcing doctors to look for additional income, a decrease in the quality of work, and dissatisfaction with the quality of services in relation to "Doctor-Patient". This example shows how a conflict at one level can escalate to another.

During their professional activities, medical personnel often face conflicts and problems such as "Doctor-patient", "Doctor-doctor". They are based on a conflict of ideas, views, interests, and expectations. For example, it may occur because of poor performance of "doctor-patient" obligations.

Nowadays, it's not a secret that medical workers are being harassed, because of which some doctors are getting injured. In addition, there is a lack of trust in medical personnel.

A medical worker can avoid such conflicts if he is conscientious about his work. Such conflicts may also arise due to the doctor's lack of knowledge. In addition, failure to receive timely information from the patient, an incorrect diagnosis, and incorrect treatment can cause very serious situations. Such relationships may be associated with negative feelings, dissatisfaction, or hostility. Of course, such a reaction complicates

the situation and the resolution of the conflict because, in this case, the conflict is self-justifying.

In addition to psychological characteristics, the conflicting behavior of patients is influenced by social factors such as work, education, and a troubled personality. Thus, the low level of income of patients limits the possibilities of obtaining paid medical care and treatment with quality drugs.

Conflicts as a problem of interrelationship between doctor and patient are increasingly in the focus of the healthcare system. This is related not only to the lack of attention of medical staff to the quality of medical care but also to other deficiencies in the health care system. In many ways, this is related to the growth of the population's demand for the quality of the provided medical services and the role of the doctor in this. All this, together with the changing role of healthcare institutions in modern society, will raise the relationship between the doctor and the patient to a new level in terms of quality.

In order to prevent the above conflicts, it is necessary to promote bioethics among the population and carry out appropriate training. Here, it is worth noting that bioethics can be studied not only in medical institutions but also in other disciplines. For example, there is a need to include and teach bioethics in the school curriculum. Because it is related to human health, rights, and others. In addition, it is necessary to collect statistical data on the type, history, and therapy of diseases, i.e., to carry out digitization work. It is useful in making the correct diagnosis and treatment of these diseases. At the same time, it is desirable to teach the science of bioethics in modern medicine in the training and retraining courses of doctors.

DISCUSSION

Thus, conflicts in the field of health care can manifest themselves at macro- and micro-levels, including the interpersonal structure of the doctor and patient. With the development of medical science and the health care system, the relationships between people in this field become more complicated. New problems and contradictions arise

that require their resolution. Only on this basis can there be further development and improvement in medicine.

CONCLUSION

Today, the development and use of biomedical technologies in life create legal, ethical, and moral problems. For this reason, contradictions are increasingly occurring in the healthcare system as a result of the interdependence between the doctor and the patient. This plays an important role in the further study of this subject and inculcating moral aspects in students.

LIST OF REFERENCES

1.   *Potter, V. R.* Global bioethics. Building on the Leopold Legacy / V. R. Potter. - Michigan: Michigan State University Press, 1988. - 203 p.

2.   Potter W. R. Bioethics - most v budushchee / V. R. Potter; ed. S. V. Vekovshinina, V. L. Kulinichenko; per. T. G. Budkovskaya, S. V. Vekovshinina. - K.: Vadim Karpenko, 2002. – C.215.

3.   Sattorova D.G. BIOETHICS IN TODAY'S MEDICINE: PROBLEMS, CONFLICTS AND CONSIDERATIONS-2022-P.35-38. https://krsjournal.com.

4. Sattorova D. G'. TODAY'S MODERN PROBLEMS, CONFLICTS AND COMMENTS-2022-165-169-. https://doi.org/10.24412/2181-1385-2022.

5. G. J. Abdullayeva, D. G. Sattorova. THE ETHICS OF GLOBAL BIOETHICS PROBLEMS-2022-38-41-. https://doi.org/10.24412/2181-1385-2022.

6. Sattorova, D. G'. BIOETHICS IN MEDICINE: PROBLEMS, CONFLICTS AND CONSIDERATIONS// TSDI & TMA Conference –Tashkent, 2022-№2-B. 83-87. www.tsdi.uz www.tma.uz

7. M. X. Mamatkulova. K. A. Ibrokhimova. Sh. A. Djalilova. D. G. Sattarova. ETHICAL PROBLEM PLASTIC SURGERY // TSDI & TMA Conference –Tashkent, 2022-№2-B. 137-140. www.tsdi.uz www.tma.uz

8. D. G. Sattarova. Rikhsieva D. F. Goals and objectives of the universal declaration on human rights and bioethics // Scientific Medical Journal "AICENNIA" - Russia, 2020-No. 74-B.20-23. www.vicenna-idp-ru.ПТ Худайбергенова ОБРАЗ МАВЛОНО ДЖАЛОЛИДДИНА РУМИ В КОНТЕКСТЕ ГУМАНИСТИЧЕСКИХ ТРАДИЦИЙ ВОСТОКА И МУСУЛЬМАНСКОЙ БИОЭТИКИ. // Гуманитарный трактат .РОССИЯ,2018-Б.28-30.c.nttp//gumtraktat/ru/

9. Umirzakova Nargiza Akmalovna1, Khudoybergenova Patma Tashpulatovna1, Kurbanova Enezhan. BIOETHIC PROBLEMS TRANSPLANTOLOGY // Humanitarian treatise. RUSSIA, 2018- No. 97.B.13-14.c.nttp//gumtraktat/ru/

WORD COMBINATION OF UZBEK AND ENGLISH

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Introduction

Word combinations frequently regarded as collocations is concerned with pairing or word combinations that often happen altogether within a language. These word combinations are regarded as traditional or natural as the words constructing uniting meanings. Word combinations can comprise diverse components of speech including verbs and nouns, or adjectives and nouns, verbs and adverbs and etc. collocations or word combinations are not random pairings at simple terms of words but they are considered with their dependency mutually and the limitations that they put in each other. There are grammatical, semantic and cultural features that connect each other. For example, in the phrase "make a mistake", "do a mistake" is not used even if the meaning is similar as "make and a mistake" is grammatically, semantically and culturally connected with each other.

Literature review

The importance of vocabulary knowledge

Language learning is a complex process including acquiring not only grammar but also, perhaps more essentially learning the vocabulary of the language. Wilkins in Thornbury (2004:13) claims that a learner can deliver something without knowing grammar but there is no possibility to say something without vocabulary. To be more precise, as words convey meaning, a speaker can deliver a message by not knowing much about the grammar structure in a foreign language by saying a word or phrases.

Vocabulary in any language is considered to be fundamental part of making use of language in practice while applying language in various contexts including listening or reading something Richards and Renandya (2002, 255). Vocabulary acquisition is a step-by-step procedure that is build gradually when making relations with other words, looking through examples as well as applying the words in connection with the context(Snow, Griffin and Burns, 2005).

Authors provide different definitions concerning the notion of vocabulary knowledge.For instance, Schmitt(2014) make a conclusion that knowledge of vocabulary is the awareness of the vocabulary components, lexical organization, as well as owning receptive and productive proficiency and smoothness. To put it another way, the notion of "knowing a word" includes not only recognizing the word but also being aware of the constructs of the word. Another definition is provided by Pullido and Hambrick (2008) concluded that vocabulary mastery is measure of the vocabulary knowledge quality of a person. By this, a learner can apply the language in practice both receptively along with productively.

One of the benefits of vocabulary comprehension is connected with writing skills. Students who have mastered satisfactory level of vocabulary generally can acquire writing skills in case of initial stages of learning (Enger,1995; Milton 2013; Park, 2012; Stehr, 2008). According to Chen et al (2015) , learners have to acquire word meaning and its usage in writing context. Milton also came to an end that students learning a foreign language should increase the vocabulary mastery with the purpose of comprehending and conveying meaning in writing.

Although there exist many ways of teaching and acquiring vocabulary knowledge, one of the best ways is the recognition and proficiency of be aware of the derivational affixes which has a direct influence on improving the quality and quantity of the vocabulary base of a learner. Derivational affixes are morphemes that make a change in the formation of the root family member resulting in the production of variants of meaning in word families. In case that a learner possesses awareness of the derivative affixes, it is more likely that they comprehend the word type as well as comprehend

the grammar in a sentence (Schmitt and Zimmerman, 2002; Mochizuki and Aizawa, 2000). Furthermore, According to Schmitt and Zimmerman (2002), learners potentially own a good opportunity to build correct language grammatically providing that they comprehend the properness of affix application. Similarly, Bauer and Nation (1993, p. 253) stated that "as a learner's knowledge of affixation develops, the size of the word family increases".

The notion of word combinations

The word combinations possess its specific forms and meanings grammatically. The systems of the word which is dominant creates the paradigm of the phrase. The phrase members change on the basis of the word group from which the dominant word derives from. There are a number of characteristics to consider when making classifications on the word combinations. First of all, they are characterized based on the lexical-semantic category of the dominant words. Secondly, this depends on the syntactic unit that the subordinate clause is based on. Lastly, it is dependent on the structure of the word combinations. The construction of the phrase, the way the elements is positioned based on which word class the components in the composition refers to as well as the grammatic and semantic characteristics included.

Word combinations are grouped into a number of categories on the basis of their structure as well as functions. For example, one of them is phrases which are word groups that come together as a sole unit with lacking subject-verb connection. We also can observe various functions in a sentence including noun phrases, verb phrases, prepositional as well as adjective phrases. Another type is clauses which consist of a subject and a verb which can serve as a whole sentence or a component of a sentence. In other words, they may contain independent and dependent clauses based on their meanings. For example, I will go out if it stops raining.

Third type of word combinations is constituted by including two or more individual words to establish a new word including a divergent meaning. Collocations are also another type of word combinations which often occur thanks to its implementation. They often consist of two or more words that frequently seen side by

side creating a particular phrases such as "make a mistake", "make an effort". Idioms are also included into word combinations including a figurative meaning in itself rather than the actual meanings of the words. They may have cultural or contextual meanings included such as "kick the bucket", "raining cats and dogs" which may be expressed in different cultures in different ways. Prepositional phrases are also another type of word combinations including the preposition and its object which serve as the object of it. These objects give additional details about the location, time, direction and etc.

Any word can be connected grammatically and lexically to produce a compound. Vocabulary typically consists of two or more words that work together to create grammatical coherence and semantic unity. Along with the independent word that comes before it, an auxiliary word that is a part of a compound term is regarded as a component. For example, in order to dance to music with enjoyment, one needs a) dance a song and b) sing with enjoyment.

Dominant and subordinate elements can be combined to create complex words. We can comprehend this prevailing state thanks to the grammatical forms or meanings connected to that conjunction—watching a movie, black umbrella. As a result, a word's acceptance into other forms depends on its relationship to other words and the lexico-grammatical properties of that relationship. Any grammatical or semantic "whole-syntactic construction" in speech cannot be a phrase. The differences between a word and a phrase must be listed. The meaning is clearer and the word is more general, while the sentence is more precisely defined. However, they do serve as a sentence component and remain there. In many situations, words are frequently not predicative.

In Uzbek, we can get word combination from this :

1. Haqiqatdan qo'rqqan odam yolg'onning panasiga berkinadi.
1) Panasiga berkinadi
2) Yolg'onning panasiga
3) Qo'rqqan odam
4) Haqiiqatdan qo'rqqan

2.   Ertalabki kuchli shamol maktab bogʻidagi daraxtlarning mevalarini toʻkib yubordi

1)   Mevalarini toʻkib yubordi

2)   Daraxtlarning mevalarini

3)   Maktab bogʻidagi

4)   Shamol toʻkib yubordi

5)   Kuchli shamol

6)   Ertalabgi shamol

7)   Bogʻidagi daraxtlarni

Finding the subject and verb must come first when determining a word combination in Uzbek. Finding the word combinations is sometimes simpler once they have been underlying.

There are several word combinations in English.

The kind of Coordinated expressions

The kind of auxiliary verbs

The various predicative expressions

Conclusion

Word combinations is an important part of a language which enable the learners to make meaningful sentences and deliver their opinions fluently and effectively. Understanding of various word combinations make the non native speakers native – like and students can have a deeper comprehension of how words are connected with each other and how they can create a coherent and meaningful expressions and combinations together.

REFERENCES

3. Pulido, D. & Hambrick, D.Z. (2008). The virtuous circle: Modeling individual differences in L2 reading and vocabulary development. Reading in a Foreign Language, 20(2), pp.164-190;

4. Schmitt, N., & Zimmerman, C. B. (2002). Derivative Word Forms: What do learners know? TESOL Quarterly, 36(2), 145-171. https://doi.org/10.2307/3588328;

5. Bauer, L., & Nation, I. S. P. (1993). Word families.International Journal of Lexicography, 6, 253–279

6. Mochizuki, Masamichi/ Aizawa, Kazumi 2000. An Affix Acquisition Order for EFL Learners: An Explaratory Study. System. 28/2, 291-304;

7. Cheng, J., & Matthews, J. (2018). The relationship between three measures of L2 vocabulary knowledge and L2 listening and reading. Language Testing, 35(1), 3-25. https://doi.org/10.1177/0265532216676851;

8. Engber, C. (1995). The relationship of lexical proficiency to the quality of ESL compositions. Journals of Second Language Writing, 4, 213–238.

9. Park, B. (2012). Does the PVLT Provide an accurate measure of productive vocabulary knowledge ? English Teaching, 67(2), 159–183;

10. Stæhr, L. S. (2008). Vocabulary knowledge and advanced listening comprehension in English as a foreign language. Studies in Second Language Acquisition, 31(4), 577-607. https://doi.org/10.1017/S0272263109990039

11. Snow, C. E., Griffin, P., & Burns, M. S. (Eds.). (2005). *Knowledge to support the teaching of reading: Preparing teachers for a changing world.* Jossey-Bass/Wiley.

12. Richards, J. C., & Renandya, W. A. (2002). Methodology in Language Teaching: An Anthology of Current Practice. Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511667190

SOME METHODS OF FINDING ROOT LIMITS

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ABSTRACT

In this article, one of the main sections of algebra and number theory is written about methods of finding polynomials, their common divisors and roots and intervals of roots. The article can be used by students of higher educational institutions and those interested in algebra.

Keywords: *Polynomial, root, common divisor, derivative, limit.*

INTRODUCTION

It is known that for arbitrary $a_i \epsilon K, i \epsilon \{0\} \cup N$

$$f(x) = a_0 + a_1 x + a_2 x^2 + \cdots + a_n x^n$$

the expression is called a polynomial with (complex) coefficients. x in this expression is an unknown variable, $a_i \in K$ are the coefficients of the polynomial, and $a_i x^i$ are called the terms of the polynomial. If $a_n \neq 0$, a_n is called a leading coefficient and $a_n x^n$ is called a leading term, and a_0 term of the polynomial is called a free term. The largest degree of the unknown involved in the polynomial is called the degree of the polynomial and is defined as $deg f(x)$, that is, if $a_n \neq 0$, then $deg f(x) = n$. [1]

METHODS

If $\varphi(x)/f(x)$ and $\varphi(x)/g(x)$ hold for the polynomial $\varphi(x)$, then $\varphi(x)$ is the polynomial $f(x)$ and $g(x)$ is called the common divisor of the polynomial. If the

polynomial $\varphi(x)$ is a common divisor of the polynomials $f(x)$ and $g(x)$, then the polynomial $c\varphi(x)$ is also a common divisor of these polynomials. Moreover, the divisors of the polynomial $\varphi(x)$ are also the common divisors of the polynomials $f(x)$ and $g(x)$. Finding the roots of given polynomials is also important in finding the common divisors of polynomials. Finding the roots of given polynomials is not always easy, and it is necessary to first find the limits of the roots of the polynomial.

RESULTS

We have real odds

$$f(x) = a_0 x^n + a_1 x^{n-1} + a_n, \qquad a_0 > 0.$$

be given a lot. If $f(x), f'(x), f''(x), \ldots, f^{(n)}(x)$ take positive values at the point $x = c$ then c is the upper limit of positive roots will be

Because, according to Taylor's formula

$$f(x) = f(c) + (x - c)f'(c) + (x - c)^2 \frac{f'(c)}{2!} + \cdots + (x - c)^n \frac{f^{(n)}(c)}{n!}.$$

It can be seen that for all values of x greater than c, the polynomial f(x) takes only positive values. Therefore, the number c is the upper limit of positive roots.

A given polynomial $f(x)$ takes only positive values. Therefore, the number c is the upper limit of positive roots. To find the corresponding number c for a given polynomial $f(x)$, we proceed as follows. Since $f^{(n)}(x) = n!\, a_0$ is a positive number, the function $f^{(n-1)}(x)$ is increasing. So, there exists a number c_1 such that $f^{(n-1)}(x) > 0$ for $x \geq c_1$.

Now using the fact that $f^{(n-2)}(x)$ is increasing in case $x \geq c_1$, $f^{(n-2)}(x) > 0$ dividing c_2, $(c_2 \geq c_1)$. After repeating this process a finite number of times, the final number c_n gives us the number c we need, that is, the upper limit of the positive roots.

Metter. Using Newton's method for the polynomial

$$h(x) = x^5 - 3x^4 + 6x^3 + 5x^2 - 7x - 2$$

we find the upper limit of its positive roots and the lower limit of its negative roots:

$$h(x) = x^5 - 3x^4 + 6x^3 + 5x^2 - 7x - 2$$
$$h'(x) = 5x^4 - 12x^3 + 18x^2 + 10x - 7$$
$$h''(x) = 20x^3 - 36x^2 + 36x + 10$$
$$h'''(x) = 60x^2 - 72x + 36$$
$$h^{IV}(x) = 120x - 72$$
$$h^V(x) = 120.$$

It is not difficult to see that all the given polynomials are positive at $x = 2$ Thus, the number 2 is the upper bound of the polynomial positive roots of $h(x)$. To find the lower limit of negative roots, we look at the polynomial $\varphi_2(x) = -h(-x)$ and calculate its derivatives:

$$\varphi_2(x) = x^5 + 3x^4 + 6x^3 - 5x^2 - 7x + 2$$
$$\varphi_2'(x) = 5x^4 + 12x^3 + 18x^2 - 10x - 7$$
$$\varphi_2''(x) = 20x^3 + 36x^2 + 36x - 10$$
$$\varphi_2'''(x) = 60x^2 + 72x + 36$$
$$\varphi_2^{IV}(x) = 120x + 72$$
$$\varphi_2^V(x) = 120$$

All the given polynomials are positive at $x = 2$. So, the lower limit of negative roots is $= -2$.

CONCLUSION

The above method of finding the limits of polynomial roots is considered to be a simpler and more efficient method than other methods, and remembering the algorithm of this method is much easier than remembering other methods. Roots of polynomials are found by determining the limits of the roots of polynomials. This helps to find common divisors of several polynomials.

LITERATURE

1.   Sh.Ayupov va boshqalar. Algebra va sonlar nazariyasi. Toshkent. 2019.

2.   Noriyeva A. Oʻ QUVCHILARNING KREATIVLIK QOBILIYATLARINI RIVOJLANTIRISHDA NOSTANDART MISOL VA MASALALARNING AHAMIYATI //Журнал математики и информатики. – 2022. – Т. 2. – №. 1.

3.   И.В.Проскуряков. С

4.   Нориева A. Koshi tengsizligi va uning qiziqarli masalalarga tadbiqlari //Современные инновационные исследования актуальные проблемы и развитие тенденции: решения и перспективы. – 2022. – Т. 1. – №. 1. – С. 361-364.

5.   Рабимкул А., Иброҳимов Ж. Б. ў., Пўлатов, БС and Нориева, АЖ қ. 2023. АРГУМЕНТЛАРНИ ГУРУҲЛАРГА АЖРАТИБ БАҲОЛАШ УСУЛИДА КЎП ПАРАМЕТРЛИ НОЧИЗИҚЛИ РЕГРЕССИЯ ТЕНГЛАМАЛАРИНИ ҚУРИШ МАСАЛАЛАРИ //Educational Research in Universal Sciences. – 2023. – Т. 2. – №. 2. – С. 174-178.

6.   Abdunazarov R. Issues of effective organization of practical classes and clubs in mathematics in technical universities. Mental Enlightenment Scientific-Methodological Journal. Current Issue: Volume 2022, Issue 3 (2022) Articles.

7.   Абдуназаров Р. О. численной решение обратной спектральной задачи для оператора Дирака //Журнал "Вопросы вычислительной и прикладной математики. – №. 95. – С. 10-20.

8.   Отакулов С., Мусаев А. О. Применение свойства квазидифференцируемости функций типа минимума и максимума к задаче негладкой оптимизации //Colloquium-journal. – Голопристанський міськрайонний центр зайнятості, 2020. – №. 12 (64). – С. 48-53.

9.   Мусаева А. О. Зарубежная система финансирования образовательных учреждений //Наука и новые технологии. – 2011. – №. 10. – С. 75-81.

10.   Мусаев А. О. Интеграция образовательных систем России и Дагестана XIX века //Известия Дагестанского государственного педагогического университета. Психолого-педагогические науки. – 2010. – №. 3. – С. 21-24.

EXPLORING THE HUMAN BEHAVIOR: A COMPREHENSIVE ANALYSIS OF PSYCHOLOGICAL PHENOMENA

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Abstract: The field of psychology offers a captivating lens through which we can understand the multifaceted dimensions of human behavior. This scientific article delves into various psychological phenomena that shed light on the intricacies of people's actions, thoughts, and emotions. Drawing upon decades of research and empirical evidence, this paper explores key aspects of human behavior, including cognitive processes, social interactions, emotional responses, and individual differences. By examining these phenomena, we gain a deeper appreciation for the complexities that shape human psychology and contribute to the rich tapestry of human experiences.

Keywords: Psychology, human behavior, cognitive processes, decision-making, social interactions, group dynamics, emotions, emotional regulation, individual differences, personality traits, neuroscience, cross-cultural psychology.

Human behavior is a fascinating and complex subject that has intrigued scholars, scientists, and researchers for centuries. The field of psychology has provided invaluable insights into the underlying mechanisms that drive people's actions, thoughts, and feelings. From cognitive processes to social dynamics, from emotional responses to individual variations, understanding the psychological underpinnings of human behavior is essential for comprehending the human experience as a whole.

Cognitive Processes and Decision-Making: Cognition plays a pivotal role in shaping human behavior. Cognitive processes such as perception, attention, memory, and decision-making are fundamental to how individuals interact with their

environment. Research in cognitive psychology has elucidated how biases, heuristics, and information processing strategies influence the choices people make. The interplay between conscious and unconscious cognitive mechanisms highlights the complexity of decision-making and its impact on behavior. Social Interactions and Group Dynamics: Humans are inherently social beings, and their behavior is profoundly influenced by interactions with others. Social psychology explores how individuals perceive, influence, and are influenced by those around them. Conformity, obedience, and social norms shape behavior within groups, while concepts like empathy, altruism, and aggression provide insights into the intricate balance between individual and collective interests. Moreover, the advent of virtual communication platforms has introduced new dimensions to social interactions, warranting further investigation into their effects on behavior. [1.76]

Emotions and Emotional Regulation: Emotions play a central role in human behavior, influencing actions and decisions in various contexts. The study of emotions encompasses understanding their physiological and psychological components, as well as exploring emotional intelligence and regulation strategies. How individuals perceive, express, and manage their emotions impacts their interpersonal relationships, cognitive functioning, and overall well-being. The dynamic interplay between emotions and behavior underscores the need for a comprehensive understanding of this intricate relationship. Individual Differences and Personality Traits: Human behavior is inherently diverse, reflecting a myriad of individual differences and personality traits. Personality psychology delves into the stable patterns of thoughts, feelings, and behaviors that distinguish one person from another. Through frameworks like the Big Five personality traits, researchers have classified and analyzed these variations, shedding light on how personality influences career choices, interpersonal relationships, and responses to stress. The intricate interplay between genetic predispositions, environmental factors, and personal experiences underscores the nuanced nature of individual differences.

This scientific article has provided an in-depth exploration of various psychological phenomena that contribute to our understanding of human behavior. From cognitive processes that shape decision-making to the intricacies of social interactions, emotions, and individual differences, psychology offers a comprehensive framework for deciphering the complexities of people's actions, thoughts, and emotions. As our understanding of psychology continues to evolve, we are better equipped to navigate the intricate landscape of human behavior and its profound implications for society as a whole. [2.81]

While this article has offered a comprehensive overview of several key psychological phenomena, the field of psychology continues to evolve, and there are several intriguing avenues for further exploration and application. Neuroscience and Behavior: The integration of neuroscience with psychology has opened new doors for understanding the biological underpinnings of behavior. Advances in neuroimaging techniques allow researchers to study brain activity in real-time, providing insights into how neural processes relate to cognitive functions, emotions, and decision-making. Future studies could unravel the neural mechanisms behind complex behaviors, leading to potential therapeutic interventions for various psychological disorders.

Cross-Cultural Psychology: The exploration of human behavior extends beyond individual cultures and societies. Cross-cultural psychology examines how behavior varies across different cultural contexts, shedding light on the universality and cultural specificity of psychological phenomena. This line of research contributes to a more holistic understanding of human behavior, encompassing both shared human experiences and cultural nuances. [3.107] Digital and Online Behavior: With the proliferation of digital technology and online platforms, understanding behavior in virtual spaces has become increasingly pertinent. Research into the psychology of online interactions, social media engagement, and the effects of digital environments on behavior can offer insights into how technology shapes human communication, self-perception, and social dynamics.

REFERENCES:

1. Kahneman, D. (2011). Thinking, Fast and Slow. Farrar, Straus and Giroux.

2. Asch, S. E. (1951). Effects of group pressure upon the modification and distortion of judgment. In H. Guetzkow (Ed.), Groups, leadership and men Carnegie Press.

3. Ekman, P. (1992). An argument for basic emotions. Cognition & Emotion, 6(3-4)

THE SIGNIFICANCE OF A TASK-BASED APPROACH IN ENGLISH FOR SPECIFIC PURPOSES (ESP)

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ABSTRACT

This article explores the significance of a task-based approach in English for Specific Purposes (ESP) and its implications for effective language learning. The task-based approach focuses on engaging learners in meaningful and authentic tasks that mirror real-world professional situations. By immersing learners in these tasks, the approach enhances not only their linguistic abilities but also their communicative skills and critical thinking. The article highlights the benefits of task authenticity and relevance, emphasizing the importance of connecting learners with tasks that align with their specific professional domains. It further discusses the acquisition of language skills in practical contexts and the promotion of communication skills through group work and discussions. Additionally, the article addresses the task-based approach's role in fostering learner motivation and engagement by providing purpose and relevance. The development of critical thinking and problem-solving skills is also explored through tasks that require analysis and proposal of effective solutions. Ultimately, the task-based approach in ESP proves to be a valuable tool for learners to navigate the challenges and demands of their chosen professional domains successfully.

***Key words:** Task-based approach, English for Specific Purposes (ESP), Relevance, Authenticity, Language acquisition, Communication skills, Critical thinking, Problem-solving, Professional domains, Task authenticity, Task relevance, Meaningful tasks, Task-based language teaching, Language proficiency, Workplace interactions, Motivation, Engagement, Practical contexts, Task-based activities, Task-based instruction.*

INTRODUCTION

In the realm of language learning, English for Specific Purposes (ESP) has gained significant recognition and importance. ESP focuses on providing learners with the language skills necessary to communicate effectively in specific professional domains, such as business, medicine, or engineering. Within ESP, a task-based approach has emerged as a highly effective method for teaching and learning English. This article delves into the importance of a task-based approach in ESP, highlighting its benefits and advantages for learners.

METHODS

Understanding the Task-Based Approach: The task-based approach centers around the idea that language is best acquired when learners engage in meaningful, real-life tasks that simulate authentic communication situations. Rather than focusing solely on grammar and vocabulary, learners are encouraged to actively participate in tasks that require them to use English for specific purposes, such as writing a report, conducting a presentation, or engaging in a negotiation. By immersing themselves in these tasks, learners develop not only their linguistic abilities but also their communicative and critical thinking skills. **Authenticity and Relevance:** One of the key advantages of the task-based approach in ESP is its emphasis on authenticity and relevance. Unlike traditional language learning methods that often utilize contrived or artificial scenarios, task-based learning connects learners with real-world situations they are likely to encounter in their professional lives. By engaging in tasks relevant to their field, learners develop the language skills necessary to communicate effectively and confidently within their specific domain. **Language Acquisition in Context:** The task-based approach recognizes that language is acquired more effectively when learners encounter it in meaningful contexts. By providing learners with tasks that mirror real-life situations, the approach facilitates the acquisition of language skills in a practical and efficient manner. Learners actively use the language to express ideas, solve problems, and negotiate meaning, leading to a deeper understanding and internalization of the language. **Promoting Communication Skills:** ESP learners

often require strong communication skills to succeed in their professional domains. The task-based approach places significant emphasis on developing these skills by encouraging learners to engage in authentic communication. Through tasks that involve group work, discussions, and presentations, learners practice expressing their ideas, negotiating agreements, and collaborating effectively with others. This not only enhances their language proficiency but also fosters their interpersonal and intercultural communication skills. **Motivation and Engagement:** One of the challenges in language learning is maintaining learner motivation and engagement. Traditional methods that focus on rote memorization or repetitive exercises can be monotonous and demotivating. In contrast, the task-based approach provides learners with a sense of purpose and relevance. Engaging in tasks that reflect their professional goals and interests motivates learners to actively participate, invest effort, and take ownership of their learning. This approach promotes an enjoyable and dynamic learning environment. **Critical Thinking and Problem-Solving:** In ESP, learners often encounter complex problems and challenges that require critical thinking and problem-solving skills. Through tasks such as case studies, simulations, or role plays, learners are encouraged to think critically, weigh different options, and propose effective solutions. This cultivates their ability to apply language skills in practical contexts and prepares them for the challenges they may face in their professional careers.

RESULTS

While the task-based approach in English for Specific Purposes (ESP) offers many advantages, there are a few drawbacks that teachers should be aware of. Here are some common challenges and strategies to tackle them during the lesson: **Time Constraints**: Designing and implementing authentic tasks can be time-consuming, especially when considering the specific needs and goals of individual learners. Teachers may find it challenging to cover all the necessary language components within a limited timeframe. *Strategy*: Prioritize and select tasks that align closely with the learners' goals and objectives. Break down tasks into manageable segments and

provide clear instructions to optimize time usage. **Language Proficiency Levels**: In an ESP class, learners may have varying levels of language proficiency. Some students may struggle to complete tasks due to limited vocabulary or grammar knowledge, while others may find them too easy, leading to a lack of engagement. *Strategy*: Differentiate tasks by providing support and scaffolding for lower proficiency learners, such as offering vocabulary lists or sentence frames. **Assessment and Feedback**: Assessing and providing feedback on task-based activities can be more complex than traditional methods. It can be challenging to evaluate learners' performance accurately and provide meaningful feedback on their language use within the context of the task. *Strategy*: Clearly define the assessment criteria before the task and communicate them to the learners. Focus on both language accuracy and task completion. Provide constructive feedback that highlights both strengths and areas for improvement, focusing on language use, communication effectiveness, and critical thinking skills. **Learner Motivation**: While the task-based approach aims to enhance learner motivation, some learners may still struggle to engage fully, especially if they do not see the immediate relevance of the tasks to their professional goals. *Strategy*: Foster learner motivation by clearly explaining the relevance and practicality of the tasks. Connect the tasks to real-life situations and emphasize the benefits and transferable skills they provide. Incorporate learner choice and autonomy by allowing them to select tasks related to their specific interests within the professional domain.

DISCUSSION

By being aware of these potential drawbacks and employing suitable strategies, teachers can effectively tackle these challenges during ESP lessons, ensuring a more engaging and successful task-based learning experience for their learners. To ensure that tasks are relevant to learners' specific professional contexts in English for Specific Purposes (ESP), teachers can employ the following strategies: **Conduct a Needs Analysis:** Begin by conducting a thorough needs analysis to identify the specific language requirements and goals of the learners within their professional domain. This can be done through surveys, interviews, or discussions with learners, as well as by

consulting professionals in the target field. The needs analysis will help determine the language skills, genres, and tasks that are most relevant to the learners. **Incorporate Authentic Materials:** Utilize authentic materials that are commonly used in the learners' professional field. These can include industry-specific texts, reports, case studies, or examples of real-world communication. Authentic materials provide learners with exposure to the language and situations they are likely to encounter in their professional lives, making the tasks more relevant and realistic. **Collaborate with Professionals:** Engage professionals from the learners' specific field or industry to gain insights into the language, tasks, and challenges they face. Collaborating with experts can help ensure that the tasks are aligned with the current practices and expectations of the profession. Professionals can provide valuable input on the language, context, and skills required for successful communication within their field. **Customize Tasks:** Tailor tasks to match the learners' professional context. Consider the specific genres, situations, and communication skills that are essential in their field. For example, if the learners are in the business sector, tasks could involve writing business emails, conducting negotiations, or delivering presentations. By customizing tasks, teachers can make them directly applicable to the learners' future work environments. **Simulate Real-life Scenarios:** Create tasks that simulate authentic communication situations that learners are likely to encounter in their professional context. This could involve role-plays, simulations, case studies, or problem-solving activities. By replicating real-life scenarios, learners can practice and develop the language skills needed to navigate similar situations in their professional lives.

CONCLUSION

In conclusion, the task-based approach in English for Specific Purposes (ESP) offers significant advantages for language learners in professional contexts. By immersing learners in authentic and relevant tasks, this approach enhances their linguistic abilities, communication skills, and critical thinking. The focus on practical tasks fosters language acquisition within meaningful contexts, promoting effective communication and problem-solving skills. Moreover, the task-based approach

provides learners with motivation and engagement, as tasks are purposeful and connected to their professional domains. By actively engaging in tasks, learners develop the skills necessary to navigate real-world scenarios in their chosen fields. As ESP teachers continue to implement and refine the task-based approach, learners are better equipped to succeed in their professional lives, equipped with the language proficiency and communication skills needed for effective workplace interactions.

REFERENCES

1. Nunan, D. (2004). Task-Based Language Teaching. Cambridge University Press

2. Hutchinson, T., & Waters, A. (1987). English for Specific Purposes: A Learner-Centered Approach. Cambridge University Press

3. Ellis, R. (2003). Task-Based Language Learning and Teaching. Oxford University Press

4. Belcher, D., & Hirvela, A. (2009). English for Specific Purposes in Theory and Practice. University of Michigan Press

STRENGTH OF CONCRETE WITH VARIOUS COMPOSITIONS AND SUPERPLASTICIZER ADDITIVES

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ANNOTATION

The influence of LEVELCON additives on the formation of the structure and strength properties of concrete using local building materials has been determined through experimental research. It has been established that the use of such additives contributes to the formation of a dense structure at the microstructure level of cement stone and, consequently, the concrete itself. As a result of this influence, there is a consistent increase in the compressive and tensile strength of concrete with commonly used binding agent consumption.

Keywords: *structure, additive, concrete, testing, strength, superplasticizer, result, analysis.*

INTRODUCTION

Concrete is currently one of the most widely used construction materials for building structures of various purposes. Concrete is a complex artificial composite material obtained by the hardening of a mixture of binding agents, aggregates, and water. It possesses various unique properties, making it suitable for a wide range of operating conditions and applications due to its relatively low cost. In addition to these characteristics, its production technology is readily available, local raw materials can be extensively used, it has low energy consumption, and it offers operational reliability and durability for both precast and monolithic reinforced concrete structures. Concrete

remains the primary structural material in modern construction, and there is no expectation of its replacement in the near future.

Modified concrete with the use of chemical additives allows achieving significant technical and economic benefits and enhancing concrete durability by substantially influencing the chemical processes of cement and concrete hydration and hardening. This, in turn, improves its technological properties. Various complex chemical additives, imported from abroad, are currently being used in our country. Therefore, it is expedient to conduct experimental research on concretes based on local raw materials to assess their suitability for wide application.

PROPERTIES OF MATERIALS AND TESTING METHODS

In the present study, Portland cement M 400 from the "Ahangaran Cement Plant" was used, which meets the requirements of GOST 10178-85 "Portland Cement and Slag Portland Cement. Technical Specifications."

According to the manufacturer's data, the normal density of the cement paste is 27%, and the specific surface area is 3500 cm²/g. The cement's strength activity on the testing day is 39.5 MPa.

As coarse aggregate for preparing the concrete mix, granite gravel with particle sizes of 5-20 mm from the Kuylyuk quarry was used, which meets the requirements of GOST 10260 [1].

The test results for the properties of the coarse aggregates are presented in Table 1.

Table 1

Granularity Composition of Aggregates		Bulk density, kg/m³	Volume of intergranular voids, %	Water absorption (%) within	
Particle size, mm	Content in the mixture, %			1 hour	48 hours
5-10	30	1360	39	1,6	1,8
10-20	70				

River quartz sand from the Kuylyuk quarry, complying with GOST 8736 [2], was used as fine aggregate. The test results for the sand are presented in Table 2.

Table 2

Specific gravity, t/m^3	Bulk density, kg/m^3	Residue in % by weight on sieves						Coefficient of fineness
		2,5	1,25	0,63	0,315	0,14	Passed through sieve	
2,62	1470	3,15	10,5	30,4	35,8	19,12	1,1	2,39

The task of these studies was to investigate the strength of modified concrete based on local construction materials with the complex additive LEVELCON, which provides a plasticizing effect without delaying the setting time of concrete mixes. Control samples of concrete without the additive were also used. The additive was introduced into the mixing water in an amount of 1% of the cement mass, which is considered optimal for many similar additives [4,5,6].

Two types of additives imported from Turkey were used in the experiments. The additive LEVELCON FX6-SR is a highly effective additive for maintaining the plasticity and workability of ready-mixed concrete based on a polycarboxylate hyperplasticizer with a high level of water absorption capacity. This additive does not contain chlorine and has increased resistance to aggressive chemicals. According to the manufacturer, the dosage of the additive is on average 0.6-2% of the cement weight. It retains plasticity even in high outdoor temperatures during the summer.

The LEVELCON PF 300 additive is intended for concrete used in the production of prefabricated reinforced concrete structures. This additive is a superplasticizer for a new generation of concrete, consisting of modified polymers based on polycarbonate ethers. It can be used for monolithic reinforced concrete, including concrete pouring in cold weather conditions. This additive reduces the water demand of the concrete mix.

It does not contain chlorine, and concrete with its use is resistant to the effects of aggressive chemicals.

When using this additive at an average dosage of 0.6-1.2% of the cement weight, the early strength of concrete increases due to the reduction in the water-cement ratio. According to the manufacturer's recommendations, the optimal dosage of these additives should be determined through preliminary experiments using local construction materials, taking into account the specific objectives.

In the selection and study of concrete strength, two main conditions were considered. First, it was aimed at achieving maximum strength of the cement mixture with the minimum possible consumption of coarse aggregate without compromising the concrete technology.

The second condition is to ensure the highest workability of the concrete mix at various commonly used consumption rates of binder and water-cement ratio with the optimal consumption (proportion) of aggregates. This is determined by the technology of the concrete mix to achieve the desired concrete strength.

Taking into account the above, the compositions of the studied concretes are presented in Table 3.

Table 3

Composition Code	Material Consumption per 1 m^3 of Concrete Mix, kg				Bulk density, kg/m^3
	Cement	Sand	Gravel	Water (L)	
Series A	360	850	1000	200	2410
Series B	425	815	950	210	2400
Series C	530	750	900	220	2400

RESULTS AND ANALYSIS

As known, the main characteristic of concrete is the strength of concrete cubes (in MPa), accepted with a coefficient of 0.95, taking into account possible

heterogeneity of samples from one batch - the compressive strength class of concrete (B).

According to current standards, the compressive strength class of concrete is the average value obtained as a result of testing cubic samples from one batch for compression, in quantities ranging from 2 to 6 cubes, in accordance with GOST 10180 [3].

The strength of each sample during testing was calculated with an accuracy of 0.1 MPa. The actual strength of the entire batch of concrete was determined as the average strength of a series of individual samples from one batch.

The strength characteristics of concrete largely depend on the ratio of ingredients in its composition:

- Cement
- Coarse aggregates
- Fine aggregates
- Water and additives

Concrete mixes were prepared in a laboratory concrete mixer with a volume of 63 liters. Experimental concrete cubes with dimensions of 10x10x10 cm were made from each series of concrete compositions, which were stored after demolding in laboratory conditions (humidity 60±10%, temperature 20±5°C). On the day of testing, the specimens were subjected to compression on a hydraulic press MIG-1000 (manufactured in the Russian Federation) with electronic control. Tensile splitting tests were conducted on a 30-ton press of the XNC-300 type (manufactured in the People's Republic of China).

The test results are provided in Tables 4 and 5.

The Influence of the LEVELCON FX6-SR Additive on the Strength of Concrete

Table 4

Concrete Composition Code	Concrete Age on the Day of Testing, days	Concrete Strength, MPa R_b^g (R_b)		Ratio of Concrete Strengths R_b^g/R_b
Series A	7	26,1	(19,4)	1,35
	14	-	(23,1)	-
	28	36,8	(23,8)	1,55
Series B	7	37,5	(22,6)	1,66
	14	-	(26,1)	-
	28	39,7	(30,2)	1,31
Series C	7	49,2	(30,0)	1,64
	14	-	(19,4)	-
	28	52,7	(35,6)	1,48

Note: The values in parentheses represent the concrete strength without the additive.

Influence of LEVELCON PF-300 Additive on Concrete Strength

Table 5

Concrete Composition Code	Concrete Age on the Day of Testing, days	Concrete Strength, MPa R_b^g (R_b)		Ratio of Concrete Strengths R_b^g/R_b
Series A	7	27,0	(19,4)	1,39
	14	-	(23,1)	-
	28	37,2	(23,8)	1,56
Series B	7	34,6	(22,6)	1,53
	14	-	(26,1)	-
	28	40,1	(30,2)	1,33
Series C	7	35,3	(30,0)	1,18
	14	-	(19,4)	-
	28	47,1	(35,6)	1,32

Note: Values in parentheses represent concrete strength without the additive.

As a result of the use of the studied additive, it is highly likely that there is rapid formation of the concrete structure, accompanied by the generation of cementitious

mineral components. This contributes to its self-compaction and increases the density and strength of the cement stone. Experimental data on the strength of cement stone and concrete [7, 8], as well as the results presented in Tables 4 and 5, support this conclusion. Analysis of this data reveals that at 7 days, the strength of concrete with the additive is 75-90% of the strength of concrete at 28 days.

The increase in tensile strength of concrete with the additive and without the additive at 28 days for concrete with LEVELCON FX6-SR additive was approximately 45% on average for all series, and for concrete with LEVELCON PF-300 additive, it was approximately 31% on average. This is considered positive from a technical efficiency perspective for the use of these additives in concrete.

CONCLUSION

Based on the new experimental data obtained, it has been established that the introduction of LEVELCON additives of two types into the composition of concrete mixtures contributes to an increase in the ultimate compressive and tensile strength of concrete by up to 60% and 45%, respectively. This is associated with reduced water demand, resulting in the formation of a dense structure in such concrete due to self-compaction.

As a result, the introduction of these additives can lead to an increase in the concrete strength class for both compression and tensile strength by one class. This can reduce the cost of concrete through savings on Portland cement and improve the performance characteristics of various building structures, whether made of precast or cast-in-place concrete.

LIST OF REFERENCES:

1. GOST 10260-80. Gravel Crushed Stone for Construction Works. Technical Specifications.

2. GOST 8736-2014. Sand for Construction Works. Technical Specifications.

3. GOST 10180-2012. Concretes. Methods for Strength Testing of Control Samples. Moscow, 2018.

4. Zotkin A.G. Superplasticizers in Concrete. Popular Concrete Science. 2009, No. 3, pp. 65-68.

5. Khotaianovich O.E. Complex Chemical Additive for Concrete. Proceedings of BSTU, 2018, Series 2, No. 1, pp. 81-85.

6. Tarakanov O.V. et al. Complex Additives in the Production of Cement Mortars and Concretes. Concrete Technology. 2008, No. 11, pp. 8-12.

7. Kaprielov S.S. Modified Concretes of the New Generation: Reality and Perspective. Concrete and Reinforced Concrete. 1999, No. 4, pp. 6-10.

8. Kalashnikov I.V. How to Transform Old-Generation Concretes into High-Efficiency New-Generation Concretes. Concrete and Reinforced Concrete. 2012, Vol. 6, No. 1, pp. 82-89.

A STEP TOWARDS HUMAN DIGNITY

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Annotation: The article analyzes the fact that from the day when the year was named as honoring human dignity, Uzbekistan began to be mentioned in the world community as a people-loving, humanitarian country. It is intended to honor state and public figures, writers and poets, scientists, mature scholars of their field who have performed many services for the development of Uzbekistan.

Key words: Man, human value, people-oriented, humanitarian, perfection, rational knowledge, development of the spiritual sphere.

ВЗГЛЯД НА СОВРЕМЕННЫЙ СПОСОБ ПРОСЛАВЛЕНИЯ ЧЕЛОВЕЧЕСКОГО ДОСТОИНСТВА

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Аннотация: В статье анализируется тот факт, что с того дня, когда год был назван годом чествования человеческого достоинства, Узбекистан стал упоминаться в мировом сообществе как человеколюбивая, гуманитарная страна. Он предназначен для чествования государственных и общественных деятелей, писателей и поэтов, учёных, крупных учёных своего дела, внесших немалые заслуги в развитии Узбекистана.

Ключевые слова: Человек, человеческие ценности, человекоориентированность, гуманитарность, совершенство, рациональное познание, развитие духовной сферы.

ИНСОН ҚАДРИНИ УЛУҒЛАШ ЙЎЛИДА МОЗИЙГА БИР НАЗАР

Шодиев Жаҳонгир Жўрақулович

ЎзМУ докторанти.

Аннотация: Мақолада инсон қадрини улуғлаш деб йилга ном берилган кундан бошлаб дунё ҳамжамиятида Ўзбекистон халқпарвар, инсонпарвар давлат сифатида тилга туша бошлаши таҳлил этилган. Ўзбекистонимиз тараққиёти учун ўз вақтида кўплаб хизматларни бажарган давлат ва жамоат арбоблари, ёзувчи ва шоирлар, олимлар, ўз соҳасининг етук билимдонларини ҳам улуғлаш назарда тутилган.

Таянч сўзлар: Инсон, инсон қадри, халқпарвар, инсонпарвар, комиллик, рационал билиш, маънавий соҳа ривожи.

From the day when the year was named as the honor of human dignity, Uzbekistan began to be mentioned in the world community as a people-loving and humanitarian country. For this, it would be appropriate to show, along with representatives of all sectors, the work being done in our country to support low-income, helpless families and reduce poverty.

The work in this direction is constantly getting richer in content. In particular, the declaration of 2022 by the President of the Republic of Uzbekistan Shavkat Mirziyoyev as the "Year of Honoring Human Values and Active Neighborhoods" in Uzbekistan serves as proof of our opinion. "Glorification of human dignity means ensuring the rights and freedoms and legal interests of every person living in our country," said the head of our state. Honoring human dignity means honoring not only our compatriots and contemporaries, but also state and public figures, writers and poets, scientists, mature experts in their field, who have performed many services for the development of Uzbekistan.

According to the Resolution PQ-82 of the President of the Republic of Uzbekistan dated January 13, 2022 "On additional measures to further improve the activities of Samarkand State University", scientific-technological and social development of this university, training of competitive scientific and pedagogical personnel, bringing it to the level of a flagship higher education institution issues of exit and giving this university the name of the famous state and public figure Sharof Rashidov were also shown. This is a clear proof of our above opinion and is another step on the way of this good intention. I was filled with a sense of pride while observing the meaning of this decision. The Honorable President proposed and approved the name of the state and public figure Sharof Rashidov to SamDU.

In support of these initiatives of our president, I thought that our contribution to the "Year of Honoring Human Values and Active Neighborhood" could be our proposal to give the name of the most worthy of our great scholars to the Bukhara Institute of Engineering and Technology, where we are working...

Of course, our mother Uzbekistan, including Bukhara, is famous in the world as a country rich in scientists. Great thinkers like Abu Ali ibn Sina, scholars like Imam Bukhari, philosophers like Farabi, sensitive poets like Rudaki, historians like Muhammad Narshahi, and the rich spiritual heritage of the Seven Elders, who emerged from this land, are famous throughout the Eastern and Western worlds. Bukhara Sharif is one of the cities that has been making a great contribution to world civilization for centuries. In particular, Imam al-Bukhari's book "Al-jame' as-sahih" is the holy source after the Holy Qur'an in the Islamic religion, and this book has been calling millions of people to the path of truth and piety.

The enlightener's full name is Ahmad ibn Nasir ibn Yusuf al-Hanafi al-Siddiq, and Danish is his literary pen name. Due to the sharpness of his mind, knowledge of geometry and mathematics, Ahmad Donish was also known among his contemporaries by such titles and nicknames as Ahmad Kalla, Muhandis, Makhdum, O'roq (one of the influential members of the emir's palace).

Ahmad Donish was born in 1827 in the city of Bukhara in the family of an intellectual-imam. He studied first at school and then at Mir Arab Madrasa. Ahmad Donish was not satisfied with the knowledge he received at the madrasa, but engaged in mathematics, astronomy, literature, medicine, music, architecture, calligraphy, painting, history and philosophy. He especially read a lot of works of Eastern poets and thinkers. He became closely acquainted with the works of Ibn Sina, Umar Khayyam, Nawai, Fuzuli, and Bedil, and tried to use their ideas widely in his works. At the same time, he paid great attention to studying natural sciences, especially astronomy (his teacher, Mirza Abdulfattah Khan, was an astrologer).

In the 50s of the 19th century, Ahmed Donish was employed as a calligrapher and architect in the palace of Emir Nasrullah (1826-1860), and later he was promoted to the rank of chief architect (chief architect of the emirate). In the 70s of the 19th century, he left the palace service and started teaching at a madrasa.

Amir Nasrullah and Amir Muzaffar (1860-1885) took into account Ahmed Donish's wide knowledge and punctuality and sent him to Russia 3 times (in 1887, 1869, 1874) among the Bukhara ambassadors.

A trip to Petersburg, the capital of Russia, which has entered a new stage of development, had a great impact on Ahmad Makhdum's outlook. Therefore, during 1875-1882, Donish wrote a work entitled "Risola dar nazmi tamaddun va taovun" ("A treatise on culture and mutual assistance"), in which he developed a comprehensive project of reforming the political and social system of Bukhara on the basis of legality and humanity. When the emir invites him to work in the palace, Donish presents this work to the emir and openly says that he will agree to public service only if his suggestions are applied to the life of the country. However, these ideas of the enlightener did not please the emir, and in 1882 he was removed from the capital by appointing him as a judge in Guzor.

Akhmed Donish visited Petersburg three times in 1857, 1869 and 1874 as part of the Bukhara ambassadors. He had the opportunity to get acquainted with European culture and achievements in the field of science. This caused the displeasure of Amir

Muzaffar (1860-1885) and he sent Amir Ahmad Donish to Guzor as a judge. After the death of Donish Amir, he returned to Bukhara and died in 1897. His body was buried in Khoja Ishaq cemetery in Bukhara.

Ahmed Donish wrote works on philosophy, history, catastrophe, mathematics, literature, and calligraphy. In the manuscript fund of the Institute of Oriental Studies named after FA Beruni of the Republic of Uzbekistan, 16 pamphlets of Ahmad Donish and several other poems of Tazkiras, copies of manuscripts copied from the works of Ghazzoli and Jami are kept, most of them are original copies and were written by the author himself. For example: in the manuscript known as "Majmuai kharyati Ahmadi Kalla" written in 1877, the author reflects on various historical, literary, and philosophical issues. He also wrote a treatise on the Ulughbek period, Abdurrahman Jami's teachings, and reconciliation between Shiites and Sunnis. The treatise discusses the history of Islam, the reasons for its various directions, and the attitudes of sages such as Rumi, Ghazali, Jami, and Bedil to these issues. In the field of social sciences, Ahmad Donish, along with creating poetic works with a unique content, related to the past history, science, literature, statehood, and religion of Central Asia, also conducted continuous research on the problems of natural sciences, especially astronomy, cosmology, and published a number of works in this field. wrote it down. Ahmed Donish solved an important issue related to the science of catastrophe in his book "Munozir al-Kawakib" "Watching the Stars".

Donish also wrote "Risolat dar ilmi kurra" "Treatise about the Globe", which talks about the function of the globe and its importance for science, and its practical use. In the 12-chapter "Iztighroji bul va arzi balat" "Measuring the length and width of places", Ahmed Donish reflects on the issues of measuring the position of places and determining the celestial meridian in hours.

His socio-political views are reflected in works such as "Navodir ul-vaqae", "Risolai mukhtasare az harishti sultanati khanadoni mangitiya", "Istoriya mangitskoy dynastii". The last work is briefly called "The Treatise" and is dedicated to the history

of the Mangit dynasties in the Bukhara Khanate and includes the history from the reign of Amir Daniyol (1758-1785) to the reign of Amir Abdullakhan (1885-1910).

The most important work of Ahmed Donish is "Nawadir ul-Waqoe". This work reflects on many social and moral issues. This book is considered the masterpiece of Ahmad Donish, in which the scientist expressed his attitude to various issues. In both of the works mentioned above, Ahmed Donish criticizes the feudal social-political system, order and relations that have become an obstacle to social development. Criticizing the theory of tawakkul, widespread in medieval philosophy, he writes: "If a person believes in tawakkul, does not act, does not work, and says that he is destined to live in hardship, poverty or live in abundance, then he is wrong. So he's not smart." Comparing the Bukhara khanate with European countries, especially Russia, Donish shows that his homeland is economically and culturally backward and emphasizes the need for reforms in the socio-political system in order to get out of this backwardness.

According to Donish, "the state should serve not to satisfy the needs of a group of people, but for the interests of the people, for the prosperity of the country. "We were born to prosper in the world, to explore the seas, to find underground treasures, to know all its continents and inhabitants," Donish wrote. For this, the ruler must be knowledgeable, enlightened, just and serve the interests of his citizens. No matter what issue he decides, first of all he should imagine himself in the place of citizens, and them in their place. This makes it possible to ensure justice. "When running the country," says Donish, the ruler must solve important state problems in cooperation with his advisers. Counselors should also be wise and fair people, and it is necessary to count on their opinion, because the mind of many is more than the mind of one person.

Ahmed Donish constantly searched for ways to bring his country out of backwardness. "A person is always alive as long as he protects his homeland and is with his people," says Donish. He is interested in studying the teachings of Eastern thinkers as well as socio-political teachings spread in the West. Although these teachings were not accepted by Donish, his attitude towards them allows us to see the thinker as a broad researcher and his socio-political dreams were broader. Ahmad

Donish's social ideas were important for his time. Wisdom shows that the existing economic-political system is obsessed with progress and looks for ways to remove this idea.

Thus, he was engaged in catastrophes, literature, medicine, music, architecture, calligraphy, painting, history and philosophy; He was famous among the people with the title of Engineer because he was a scholar of geometry and mathematics; In 1857, 1869 and 1874, he was in Petersburg three times as part of the Bukhara ambassadors, and got to know European culture and achievements in the field of science; Manuscripts of 16 pamphlets and several other poems are stored in the manuscript fund of the Institute of Oriental Studies named after FA Beruniy of the Republic of Uzbekistan.

List of references.

1.Кахарова М. Инсон манфаатлари-олий ыадрият//Миллий –ғоя-бизнинг ғоя: Илмий-амалий конференция материаллари.–Тошкент: "Турон замин зиё", 2016.–Б.118–121

2.Юсупов Э., Исмоилов Ф. Инсон баркамоллиги. –Тошкент: Ўзбекистон, 1989.–240 б.

3.Мурадов, С. А., & кизи Касимова, Ф. Ф. (2022, December). ФИЛОСОФИЯ ДИЗАЙНА: ОСОБЕННОСТИ И СУЩНОСТЬ. In *INTERNATIONAL CONFERENCE: PROBLEMS AND SCIENTIFIC SOLUTIONS.* (Vol. 1, No. 7, pp. 51-59).

4.Мурадов, С. А. Современные методы философии и их значение в развитии мышления человека. *Актуальные исследования*, *51*.

5. Мурадов, С.А. (2023). ОСНОВНЫЕ ИДЕИ ОСНОВАТЕЛЯ НЕМЕЦКОЙ ФИЛОСОФСКОЙ ШКОЛЫ. *Инновационное развитие в образовательной деятельности* , *2* (7), 588-594.

6.Shodiyev, J. J. (2020). U THE QUESTION OF HUMAN DESTINY AND FREE IN THE PHILOSOPHICAL VIEWS OF OMAR KHAYYAM. *Scientific and Technical Journal of Namangan Institute of Engineering and Technology*, 2(2), 197-202.

7.Shodiev Jahongir Jurakulovich. Interpretation of moral facts in the opinions of Umar Khayyam. International Engineering Journal For Research & Development 2020/4/16.

8.Jurakulovich, S. J. (2023). The role of the national idea in increase of human values. *Web of Scientist: International Scientific Research Journal*, *3*(10), 1160-1164.

9.Shodiyev Jahongir Jo'raqulovich. Inson qadri va uning huquqlari eng oliy qadriyat: tarixiy-huquqiy meros. Ilm sarchashmalari/ Urganch – 3.2023. 19-21.

10.Shodiyev, J. J. (2023). THE ROLE OF SCIENTIFIC THINKING AND MENTAL DEVELOPMENT IN IMPROVING HUMAN DEVELOPMENT AND VALUE. *Innovative Development in Educational Activities*, *2*(9), 251-261.

11.Shodiyev, J. J. (2023). THE ROLE OF THE NATIONAL IDEA IN INCREASE OF HUMAN VALUES. *Innovative Development in Educational Activities*, *2*(7), 616-625.

12.Jurakulovich, S. J. (2023). PHILOSOPHICAL VIEWS OF SAGES ON HUMAN VALUES AND GLORIFYING HIM. *THEORY AND ANALYTICAL ASPECTS OF RECENT RESEARCH*, *2*(16), 229-238.

13.Шодиев, Ж. Ж. (2023, June). ЗНАЧЕНИЕ ИСТОРИЧЕСКОГО МЫШЛЕНИЯ В СОЗДАНИИ ФУНДАМЕНТА ТРЕТЬЕГО ВОЗРОЖДЕНИЯ И ЕГО ЗНАЧЕНИЕ В УКРЕПЛЕНИИ ЧЕЛОВЕЧЕСКИХ ЦЕННОСТЕЙ. In *INTERNATIONAL SCIENTIFIC RESEARCH CONFERENCE* (Vol. 2, No. 15, pp. 124-130).

14.Jahongir, S. (2020). Philosophical views of Umar life. *Academicia. An International Multidisciplinary Research Journal.–India*, *10*(4), 360-364.

15.Shodiev, J. J. (2020). Interpretation of moral facts in the opinions of Umar Khayyam. *International engineering journal for research & development.-India*, *5*(3), 143-148.

16.Шодиев, Ж. Ж. Interpretation of the image of may in the ruba of Umar Khayyam. *Monografia pokonferencyjna science, research, development*, *33*, 2020-30.

17.Шодиев, Ж. Ж. (2020). Умар Хайём фалсафий қарашларида инсон тақдири ва эркин ирода масаласи. *Наманган давлат университети Илмий ахборотномаси*, *2*, 197-204.

18.Шодиев, Ж. Ж. (2020). Умар Хайёмнинг асосий асарлари ва рубоийларининг тузилиши, мазмуни ва таҳлили. *Илм Сарчашмалари.-Урганч*, *10*, 44-47.

19.Шодиев, Ж. Ж. (2020). Умар Хайём рубоийларининг талқин ва тавсифи. *Наманган давлат университети Илмий ахборотномаси*, *9*, 206-210.

20.Шодиев, Ж. Ж. (2020). Умар Хайёмнинг ижтимоий-ахлоқий қарашлари. *Фалсафа ва ҳуқуқ.–Тошкент*, *3*, 107-110.

21.Shodiev, J. (2021). The problem of knowledge in the philosophical views of Umar Khayyam. *Imam al-Bukhari IBS Journal*, *2*.

22.Шодиев, Ж. (2022). Илк уйғониш даврида–комил инсонни шакллантириш ватарбиялашда тасаввуф таълимотининг ўрни. *Scientific Bullettin of NamSU-Научный вестник НамГУ-NamDU ilmiy axborotnomasi–2022-yil_4-сон*, *229*.

23. Шодиев, Ж. Ж. Мамлакатимизда инсон қадрини юксалтиришнинг ижтимоий-фалсафий масалалари. *Қарду хабарлари. Илмий-назарий, услубий журнал. Махсус сон (Ижтимоий фанлар)*.

24. Shodiev, J. J. (2020). INTERPRETATION AND DESCRIPTION OF UMAR KHAYYAM RUBAYA. *Scientific Bulletin of Namangan State University*, 2(9), 206-211.

25. Shodiyev, J. (2021). JAMIYATDAGI MEHNAT MUNOSABATLARI SHAROITIDA MA'NAVIY SALOHIYAT. *Журнал истории и общества*, (2)

26. SHODIEV, J. (2021). SOCIO-POLITICAL LIFE AND THE DEVELOPMENT OF SCIENCE IN THE PERIOD OF UMAR KHAYAM. *ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz)*, 1(1).

27. Shodiyev, J. (2021). O'ZBEKISTONDA IJTIMOIY-SIYOSIY KOMMUNIKATSIYA RIVOJLANISHIDA RAQAMLI TPANSFORMATSIYA SIYOSATI. *Academic research in educational sciences*, 2(2), 409-416.

28. Jurakulovich, S. J. (2022). AGAINST IGNORANCE-FIGHTING WITH ENLIGHTENMENT THE MAIN CRITERIA IN IMPROVING HUMAN VALUE. *Web of Scientist: International Scientific Research Journal*, 3(10), 1160-1164.

29. Jurakulovich, S. J. (2022). ATTITUDE TO HUMAN DIGNITY IN THE PERIOD OF AMIR TEMUR AND TEMURIDS DYNASTY. *Web of Scientist: International Scientific Research Journal*, 3(5), 43-47.

THE PLACE OF THE NAQSHBANDIYA SECRET IN THE TEACHINGS OF TASSUVUF AND ITS ATTITUDE TO FAMILY AND MARRIAGE ISSUES

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Annotatsiya: *In this article, it is stated that marriage and family relations, which are the leading link of the society during the years of independence, is the duty of every citizen to further strengthen family peace and harmony.*

Key words: *Family, marriage, upbringing, morals, order, spirituality, spiritual maturity.*

МЕСТО НАКШБАНДИЙСКОЙ СТРУКТУРЫ В УЧЕНИИ МИСТИЦИЗМА И ЕЕ ОТНОШЕНИЕ К ПРОБЛЕМАМ СЕМЬИ И БРАКА

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Аннотация: *В данной статье утверждается, что брак и семейные отношения, являющиеся ведущим звеном общества в годы независимости, являются долгом каждого гражданина по дальнейшему укреплению семейного мира и согласия.*

Ключевые слова: *Семья, брак, воспитание, этика, порядок, духовность, духовная зрелость.*

NAQSHBANDIYA TARIQATINING TASSAVVUF TALIMOTIDAGI O`RNI VA UNING OILA, NIKOH MASALASIGA MUNOSABATI.-FALSAFIY MUAMMO SIFATIDA

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Annotatsiya: Ushbu maqolada Sharq mutaffakirlari shaxs tarbiyasi va kamolotida oilaning, oilaviy tarbiyaning rolini yuqori qo'yishgan. Ular faqat oiladagina rivojlanishi mumkin bo'lgan sifatlar - halollik, poklik, mardliq, so'zomollik, mehribonlik, xaqgo'ylik kabi qator fazilatlarga oid qimmatli fikrlarni o'z falsafiy-etik, sotsiologik va psixologik qarashlarida ifodalab berganligi bayon qilingan.

Tayanch so'zlar: Oila, ta'lim, fan, tarbiya, barqaror taraqqiyot, ma'naviy yetuklik.

Since ancient times, our people have considered the family as sacred and have taken great responsibility to respect its honor and value. Because a person grows, matures, matures in the family. It is not for nothing that they say that our people do what they see in the bird's nest. Because all the good qualities, ideas and goodness in a child's heart are formed in the family environment.

During the years of independence, special attention was paid to the fact that marriage and family relations, which are the leading link of society, and the fact that it is the duty of every citizen to further strengthen family peace and harmony.

In order to raise spirituality, it is necessary to educate a person's psyche, heart, inner world, will, faith, and conscience. These issues have been specially studied and paid attention to in Sufism, especially in Naqshbandi. In order to know, understand, get to the essence of the main concepts that reveal the essence of the Naqshbandiya

way, and use them in practice, it is necessary to analyze their genesis, i.e., their origin, and to study them holistically and systematically.

The teachings of Sufism, which illuminated the thinking of the peoples of the Muslim East for centuries and deeply influenced our spirituality and enlightenment, appeared in the middle of the 8th century. Initially, it took the form of asceticism (renunciation of worldly pleasures) and spread widely in the cities of Baghdad, Basra, Kufa, and Damascus. Sufism has served to enrich the spirituality of our people for a long time. Spiritual and moral purification of a person, rising with divine love are the main ideas of this teaching. That's why Sufism was mixed with deep humanistic ideas, found its way into the hearts of people who were in search of truth, expressed people's dreams of purity, eternal life, and freedom of the soul.

The sheikhs of Sufism appeared as the spiritual leaders of the people, spiritual trainers, and promised to continue the activities and conditions of the Prophet. In the early days, people who followed the path of Sufism used to wear woolen cloaks or furs to distinguish themselves from other ordinary people. That is why they were called Sufis. A Sufi is distinguished from other people by the fact that he lives a pure and modest life, is constantly obedient and aims only to join the divine soul. For a Sufi, there should be no taste of this world or the hereafter. The only desire is to reach God. Renunciation of everything, in the end, relinquishment of self. The great Sufi Bayazid Bistami says: You have gone beyond yourself, you have reached God. Hazrat Bahauddin Naqshband says: We have nothing, but we have nothing less. We are not worried about that "nothing". A corpse is in our arms, a grave is behind us, and if we die, there is no need for mourning.

While Sufism - Sufism studies a person, it first of all relies on the heart of a person, strives to educate the heart, to bring the heart to maturity, because God works only in the pure heart of a person.

In Sufism, it is taught that the total selfishness, vices, and lust for the world of pleasure in a person come from the needs of the body and the taste of the soul. In order

to become a perfect person, one must first overcome the needs and desires of the body and soul. Loving the world and wealth makes a person a slave to his desires.

In order to understand the true essence of Sufism, it is necessary to analyze it in the whole system of sects and to reveal its uniqueness and commonality with all sects. For this purpose, a comparative analysis of classical sects is useful. Another major mystical order that appeared in Central Asia in the 14th century is the "Naqshbandiya" order. This order is related to the name of Khwaja Muhammad Bahauddin Naqshband.

According to the famous scholar of Sufism, famous orientalist E.E. Bertels, voluntary poverty is the basis of Naqshband's teachings. According to this, Bahauddin Naqshband, who lived by farming all his life, moved to a small plot of land in his village. while planting wheat and mash. He did not keep any possessions and wealth in his house, he lived on reeds in winter and on mats in summer. There was never a servant in his house. Hazrat Naqshband spent his whole life in poverty and poverty. After all, the original creed of this sect is "Dil ba yor-u, dast-ba kor" - that is, it puts forward the idea that "your heart should always be in God, and your hand should be in work". He liked to make a living with his own hands, he gave what he earned to orphans and widows, he always kept himself away from the rulers, he never lived in front of them. The teaching of "Naqshbandiyya", which appeared in Central Asia in the 14th century, began to spread rapidly through Afghanistan to India and other Islamic countries.

The largest line of Sufism philosophy formed in Central Asia is the teaching of Naqshbandiyya, associated with the name of the great thinker, scientist and philosopher Bahauddin Naqshband who lived in the 14th century. The Naqshbandi sect is superior to other forms of Sufism philosophy in terms of its essence, the depth of its religious and philosophical ideas, and its influence on the social thought of Muslim countries.

The main sources about the way of life and teachings of Bahauddin Naqshband: Manoqib "Anis ut-taliban wa uddat us-salikin" by Salahiddin ibn Mubarak, "Maqamat Hazrat Khwaja Naqshband" by Muhammad Baqir, "Risolai Qudsiya" by Muhammad Porso, "Risalai Qudsiya" by Ya`qubi Charkhi "Risolai unsia" works. Based on these

sources, later Abdurrahman Jami, Alisher Navoi and others gave information about Bahauddin Naqshband in their tazkira, treatise, maqamat and manoqib.

Bahauddin Naqshband, the founder of the Naqshbandi sect, was born in Qasri Hindivan (now Qasri Orifon) near the city of Bukhara in the month of Muharram 718 AH. This date corresponds to the period from March 5 to April 3, 1318 AD.

Hazrat Bahauddin Baboyi Samosi, Said Mir Kulol, Khalil ata, Arif Deggarani, Qusam Sheikh, Bahauddin Qishlaqi took lessons from them. By God's grace, Bahauddin Naqshband took lessons from Abdukhaliq Gijduvani and reached the status of Uwais. Alisher Navoi wrote about this in his book "Nasayimul Muhabbat": "The first acceptance is from Khoja Babayi Somosiydin, and the education of the tariqat is from the apparent Yuzidin Amir Sayyid Kuloldin." But in the face of truth, they are parents and they found education in the soul of Khoja Abduhaliq Gijduvani.

After 1370, Bahauddin Naqshband created a new independent way of perfection. They started calling it Naqshbandiya after Bahauddin Naqshband. This path is based on 11 principles. Bahauddin Naqshband discovered a new way of awakening people from the sleep of heedlessness and introducing them to the path of truth based on adding three more principles to the eight principles of the Khojagan sect.

The main rashha (rules) of the Naqshbandiya tariqa are as follows:

1. Rest in peace. During the dhikr performed for the remembrance of Allah, every breath that comes out from the inside should be done with vigilance and awareness, so that heedlessness does not occur.

2. Look at every step. When a member of the sect walks anywhere, he should pay attention to each step and walk carefully, so that his eyes do not become cluttered.

3. Travel to home. Let him strive from human qualities to angelic qualities, and from negative (unacceptable) qualities to all (acceptable) qualities.

4. Khilvat dar anjuman. In the work "Rashahot" Bahauddin Naqshband himself quotes the following valuable sentences: Farmuda said: "Khilwat dar anjuman, ba zahir bo people and ba batin bo Haqi Subhana."

5. Memorial. As described in the work "Rashahot", the meaning of this rule is verbal or mental zikr. It is intended to honor the memory of the deceased, to do things that please the pure spirit of ancestors, to keep their memory high, to show honor and respect to them.

6. Bozgasht. Every time Zakir finished saying the kalimai tayyiba, he followed it with the language of the heart: "God, you are my goal, I pray for your approval!" he says.

7. Look at each other. It is necessary to be careful that the memory of Tayyiba is spoken in the zakir language, so that the memory is diverted to another direction, that is, the zakir should repeat the blessed kalima several times in one moment and concentrate the memory.

8. Memo. Not giving free rein to lust, spiritual purity, self-restraint, not wishing for anything for oneself, avoiding malice and greed.

By classifying the memory in a person, purifying it from the devilish and sensual base, inventing ways to raise it to the level of angelic and finally merciful, he saw that this can be achieved as a result of the rashha (rules) of "yodkard", "bozgasht", "nigohdosht", "yoddosht". showed

9. Vuqufi is numerical. Adad, to be aware of the number, that is, to be able to see the ahad in the kasrat.

10. Wukufi is modern. Be aware of time.

11. Wuqufi is a hearty person. Zakir's language consists of always being aware and aware of the truth Subhonahu.

Bahauddin Naqshband enriched the tariqat with mystical teachings about time, number, soul, discovered their new aspects and was the first to introduce them as the main principle for the perfection of humanity.

The Naqshbandi sect gained wide fame during the lifetime of Bahauddin Naqshband. Promotion of universal ideas, spiritual perfection, and inner purity of the Naqshbandi order led to its wide spread in the world. His fans number several million people.

A number of proposals of the first leader of our country, Islam Karimov, on the development and improvement of the family institution in our country, are currently being implemented in the regulation of marriage and family relations.

In particular, to reflect today's and tomorrow's requirements in newly adopted laws, rules and norms in the field of marriage and family relations and the development of the family institution, to introduce necessary changes and additions to the current legal documents, to further strengthen the attention of our society to this issue. Also, to provide material and spiritual support to young families who have just appeared, who are entering life with great hope, to provide them with assistance, privileges and opportunities, first of all, to provide them with housing, not only parents, but primarily the state and our society are responsible for all this.

In solving material, spiritual and educational problems in the family and facilitating all their worries, as well as in marriage and family relations, first of all, the family guardian, who carries the burden of every family on his shoulders without complaining, thanks to life. it is important to lighten the burden of the female race, our sisters, who are both beautiful and bright. It is necessary to increase the role and importance of the family in resisting any harmful influences and destructive ideas that are completely contrary to our national nature and traditions, and in preserving our ancient values.

In this regard, it is the responsibility of the family to bring up a well-rounded generation that is physically and spiritually mature, has its own independent opinion, is capable of distinguishing white from black, and is able to compete with its peers in developed countries, to protect their health, and to lead them to life. cannot be replaced by anything.

The attention paid to the development of enlightened Islam in our country and the construction of mausoleums of great scholars is recognized at the international level. In particular, ISESCO, the Organization of Islamic Cooperation Organization for Education, Science and Culture, announced that "the city of Bukhara is the capital of Islamic culture in 2020". The President of the Republic of Uzbekistan Shavkat

Mirziyoyev decided to celebrate the 915th anniversary of Abdukholiq Gijduvani and the 700th anniversary of the birth of Bahauddin Naqshband. This, in turn, serves to glorify the world fame of the Naqshbandi sect.

List of references.

1. Nigmatovna N. G., Erkinovna U. V. Pharaoh of the weavers of bahauddin naqshband //Academicia: An International Multidisciplinary Research Journal. – 2020. – Т. 10. – №. 5. – С. 922-926.

2. Наврўзова, Г. (2005). Нақшбандия тасаввуфий таълимоти ва баркамол инсон тарбияси. *Тошкент:"Фан*, *233*.

3. Nematovna, N. G. (2021, February). The essence of Abu Ali Ali Sina's treatise on birds and the influence of mystical ideas on its development. In *Archive of Conferences* (Vol. 16, No. 1, pp. 19-23).

4. Наврўзова, Г. Н. (2021). Махдуми Аъзам Нақшбандия асоси бўлган тўрт калима хусусида. *Academic research in educational sciences*, *2*(3), 188-199.

5. Наврўзова, Г. Н. (2007). Нақшбандия-камолот йўли. *Тошкент:"Фан*, *189*.

6.Наврўзова Г.Н. Нақшбандия тасаввуфий таълимоти ва баркамол инсон тарбияси. Фалсафа фанлари доктори илмий даражасини олиши учун тайёрланган дисертация авторефepати. -Т., 2002. – Б.50

7.Gafurov, D. O. (2020). PHILOSOPHICAL AND SOCIAL ANALYSIS OF FAMILY RELATIONS IN MAXDUMI AZAM'S VIEWS "ASROR-UN-NIKOH". Scientific Bulletin of Namangan State University, 2(11), 178-183.

8.Gafurov, D. O. (2020). ANALYSIS OF THE TEACHINGS OF MAHDUMI AZAM AND CLASSIFICATION OF PAMPHLETS. International Engineering Journal For Research & Development, 5(4), 4-4.

9.Shodiyev, J. J. (2020). U THE QUESTION OF HUMAN DESTINY AND FREE IN THE PHILOSOPHICAL VIEWS OF OMAR KHAYYAM. *Scientific and Technical Journal of Namangan Institute of Engineering and Technology*, *2*(2), 197-202.

10.Салохов, А. К. К АНАЛИЗУ ИДЕЙ ТОЛЕРАНТНОСТИ ТУРКЕСТАНСКОГО ДЖАДИДИЗМА В КОНТЕКСТЕ ЕЕ СОВРЕМЕННОЙ ГЛОБАЛИЗАЦИИ. ЎЗБЕКИСТОН РЕСПУБЛИКАСИ ОЛИЙ ВА ЎРТА МАХСУС ТАЪЛИМ ВАЗИРЛИГИ МИРЗО УЛУҒБЕК НОМИДАГИ ЎЗБЕКИСТОН МИЛЛИЙ УНИВЕРСИТЕТИ ФУҚАРОЛИК ЖАМИЯТИ ШАКЛЛАНИШИНИ МОНИТОРИНГ, 464.

11. Салохов, А. Қ. БУХОРО МАЪРИФАТПАРВАРЧИЛИГИНИНГ ТАРИХИЙ-ФАЛСАФИЙ ТАҲЛИЛИ.

12. Atoyev, J. H., & Saloxov, A. Q. (2022). KONSTITUTSIYADA OILA HUQUQI. Academic research in educational sciences, 3(TSTU Conference 2), 637-640.

13. Shodiev Jahongir Jurakulovich. Interpretation of moral facts in the opinions of Umar Khayyam. International Engineering Journal For Research & Development 2020/4/16.

14. Jurakulovich, S. J. (2023). The role of the national idea in increase of human values. *Web of Scientist: International Scientific Research Journal*, *3*(10), 1160-1164.

15. Shodiyev Jahongir Jo'raqulovich. Inson qadri va uning huquqlari eng oliy qadriyat: tarixiy-huquqiy meros. Ilm sarchashmalari/ Urganch – 3.2023. 19-21.

16. Shodiyev, J. J. (2023). THE ROLE OF SCIENTIFIC THINKING AND MENTAL DEVELOPMENT IN IMPROVING HUMAN DEVELOPMENT AND VALUE. *Innovative Development in Educational Activities*, *2*(9), 251-261.

17. Shodiyev, J. J. (2023). THE ROLE OF THE NATIONAL IDEA IN INCREASE OF HUMAN VALUES. *Innovative Development in Educational Activities*, *2*(7), 616-625.

18. Jurakulovich, S. J. (2023). PHILOSOPHICAL VIEWS OF SAGES ON HUMAN VALUES AND GLORIFYING HIM. *THEORY AND ANALYTICAL ASPECTS OF RECENT RESEARCH*, *2*(16), 229-238.

19. Шодиев, Ж. Ж. (2023, June). ЗНАЧЕНИЕ ИСТОРИЧЕСКОГО МЫШЛЕНИЯ В СОЗДАНИИ ФУНДАМЕНТА ТРЕТЬЕГО ВОЗРОЖДЕНИЯ И ЕГО ЗНАЧЕНИЕ В УКРЕПЛЕНИИ ЧЕЛОВЕЧЕСКИХ ЦЕННОСТЕЙ. In *INTERNATIONAL SCIENTIFIC RESEARCH CONFERENCE* (Vol. 2, No. 15, pp. 124-130).

20. Jahongir, S. (2020). Philosophical views of Umar life. *Academicia. An International Multidisciplinary Research Journal.–India*, *10*(4), 360-364.

21. Shodiev, J. J. (2020). Interpretation of moral facts in the opinions of Umar Khayyam. *International engineering journal for research & development.-India*, *5*(3), 143-148.

22. Шодиев, Ж. Ж. Interpretation of the image of may in the ruba of Umar Khayyam. *Monografia pokonferencyjna science, research, development*, *33*, 2020-30.

23. Шодиев, Ж. Ж. (2020). Умар Хайём фалсафий қарашларида инсон тақдири ва эркин ирода масаласи. *Наманган давлат университети Илмий ахборотномаси*, *2*, 197-204.

24. Шодиев, Ж. Ж. (2020). Умар Хайёмнинг асосий асарлари ва рубоийларининг тузилиши, мазмуни ва таҳлили. *Илм Сарчашмалари.-Урганч*, *10*, 44-47.

25. Шодиев, Ж. Ж. (2020). Умар Хайём рубоийларининг талқин ва тавсифи. *Наманган давлат университети Илмий ахборотномаси*, 9, 206-210.

26. Шодиев, Ж. Ж. (2020). Умар Хайёмнинг ижтимоий-ахлоқий қарашлари. *Фалсафа ва ҳуқуқ.–Тошкент*, *3*, 107-110.

27. Shodiev, J. (2021). The problem of knowledge in the philosophical views of Umar Khayyam. *Imam al-Bukhari IBS Journal*, 2.

28. Шодиев, Ж. (2022). Илк уйғониш даврида–комил инсонни шакллантириш ватарбиялашда тасаввуф таълимотининг ўрни. *Scientific Bullettin of NamSU-Научный вестник НамГУ-NamDU ilmiy axborotnomasi–2022-yil_4-сон*, 229.

29. Шодиев, Ж. Ж. Мамлакатимизда инсон қадрини юксалтиришнинг ижтимоий-фалсафий масалалари. *Қарду хабарлари. Илмий-назарий, услубий журнал. Махсус сон (Ижтимоий фанлар)*.

30. Shodiev, J. J. (2020). INTERPRETATION AND DESCRIPTION OF UMAR KHAYYAM RUBAYA. *Scientific Bulletin of Namangan State University*, 2(9), 206-211.

31. Jurakulovich, S. J. (2022). AGAINST IGNORANCE-FIGHTING WITH ENLIGHTENMENT THE MAIN CRITERIA IN IMPROVING HUMAN VALUE. *Web of Scientist: International Scientific Research Journal*, 3(10), 1160-1164.

32. Jurakulovich, S. J. (2022). ATTITUDE TO HUMAN DIGNITY IN THE PERIOD OF AMIR TEMUR AND TEMURIDS DYNASTY. *Web of Scientist: International Scientific Research Journal*, 3(5), 43-47.

33. Shodiyev, J. (2021). JAMIYATDAGI MEHNAT MUNOSABATLARI SHAROITIDA MA'NAVIY SALOHIYAT. *Журнал истории и общества*, (2)

34. SHODIEV, J. (2021). SOCIO-POLITICAL LIFE AND THE DEVELOPMENT OF SCIENCE IN THE PERIOD OF UMAR KHAYAM. *ЦЕНТР НАУЧНЫХ ПУБЛИКАЦИЙ (buxdu. uz)*, 1(1).

35. Shodiyev, J. (2021). O'ZBEKISTONDA IJTIMOIY-SIYOSIY KOMMUNIKATSIYA RIVOJLANISHIDA RAQAMLI TPANSFORMATSIYA SIYOSATI. *Academic research in educational sciences*, 2(2), 409-416.

YASHIRIN TARMOQ DARKNET ORQALI SODIR ETILGAN IQTISODIY JINOYATLARGA QARSHI KURASHISH SAMARADORLIGINI OSHIRISHDA XORIJIY TAJRIBANING O'RNI VA AHAMIYATI

Muxsimov Ulug'bek Timurbek o'g'li

Sergeli tuman prokuraturasi katta tergovchisi

ANNOTATSIYA

Darknetda jinoiy faoliyatning kuchayishi global kiberxavfsizlikka jiddiy tahdid solmoqda va butun dunyo bo'ylab huquq-tartibot idoralari unga qarshi kurashish uchun choralar ko'rmoqda. Ushbu chora-tadbirlar huquqiy himoyani kuchaytirish, aholining xabardorligini oshirish, axborot almashishni yaxshilash va yangi dasturiy vositalarni ishlab chiqishni o'z ichiga oladi. Yevropa Ittifoqi a'zo davlatlarga kiberjinoyat va iqtisodiy jinoyatlarni tergov qilish va ta'qib qilishda operativ yordam va ekspertiza bilan ta'minlash uchun Yevropa kiberjinoyatchilik markazini (EC3) tashkil etdi. Bundan tashqari, Evropa Ittifoqining huquqni muhofaza qilish organlarining favqulodda vaziyatlarda harakat qilish protokoli favqulodda vaziyatlarda huquqni muhofaza qilish idoralari o'rtasidagi hamkorlikni osonlashtirishga qaratilgan. Maqolada, shuningdek, huquqni muhofaza qilish organlari xodimlarini darknet faoliyatini aniqlash va kuzatish, agentliklar o'rtasida ma'lumot almashishni yaxshilash va darknetdagi noqonuniy harakatlarga qarshi kurashish uchun yangi tashkiliy tuzilmalar va huquqiy standartlarni yaratishga o'rgatish muhimligi ta'kidlangan.

Kalit so'zlar: Darknet, kiberjinoyat, pul tashish (money muling), EC3, Tor, RAND loyihasi, Xavfsiz internet ligasi.

THE ROLE AND SIGNIFICANCE OF FOREIGN EXPERIENCE IN INCREASING THE EFFICIENCY OF THE FIGHT AGAINST ECONOMIC CRIMES COMMITTED THROUGH THE HIDDEN NETWORK DARKNET

ABSTRACT

The rise of criminal activities on the darknet poses a significant threat to global cybersecurity, and law enforcement agencies worldwide are taking steps to combat it. Measures include strengthening legal protection, increasing public awareness, improving information sharing, and developing new software tools. The European Union has established the European Cybercrime Centre (EC3) to provide operational support and expertise to member states in investigating and prosecuting cybercrime and economic crime. Additionally, the EU Law Enforcement Emergency Response Protocol aims to facilitate cooperation between law enforcement agencies in emergency situations. The article also highlights the importance of training officers to identify and track darknet activities, improving information sharing between agencies, and creating new organizational structures and legal standards to combat illegal activities on the darknet.

Keywords: Darknet, cybercrime, money muling, EC3, Tor, RAND project, Safe internet league.

Qorong'u tarmoqdagi jinoyatlarni o'rganish internet xavfsizligini ta'minlash va kiberjinoyatlarga qarshi kurashda muhim qadamdir. "Darknet" global hodisaga aylandi va u orqali sodir etilayotgan iqtisodiy jinoyatlar butun dunyo mamlakatlariga ta'sir ko'rsatmoqda. Darknetdagi jinoyatlarga qarshi kurashish uchun maxsus usullar kerak, chunki ular maxsus shaklda sodir etiladi va deyarli hech qanday iz qoldirmaydi. Jahon mamlakatlari "Darknet" orqali sodir etilgan iqtisodiy jinoyatlarga qarshi kurashni takomillashtirishga oid bir necha vazifalarni o'z oldiga qo'yishgan:

Huquqni muhofaza qilishni kuchaytirish: AQSh Federal Qidiruv Byurosi (FQB) darknet bilan bog'liq jinoiy faoliyatlarni tergov qilish bilan shug'ullanuvchi

maxsus guruhiga (*Joint Criminal Opioid Darknet Enforcement*) ega, Buyuk Britaniyaning Milliy Jinoyat Agentligida (NCA) kiberjinoyat va iqtisodiy jinoyatlarga e'tibor qaratadigan maxsus guruh (*Jinoiy daromadlarni legallashtirish bo'yicha qo'shma razvedka guruhi, JMLIT*) mavjud.

Jinoiy daromadlarni legallashtirish bo'yicha qo'shma razvedka guruhi – bu pul yuvish va kengroq iqtisodiy tahdidlarga oid ma'lumotlarni almashish va tahlil qilish uchun huquqni muhofaza qilish organlari va moliya sektori o'rtasidagi hamkorlikdir. JMLIT davlat-xususiy axborot almashishning innovatsion modeli bo'lib, 2015-yilda tashkil etilgan va xalqaro miqyosda ilg'or tajriba namunasi hisoblanadi.

Aholining xabardorligini oshirish: Rossiya Federatsiyasi hukumati fuqarolarni "Darknet", shuningdek internetdagi xavf-xatarlari haqida xabardor qilish va har qanday shubhali faoliyat haqida xabar berishga undash uchun "Xavfsiz Internet Ligasi" veb-sayti ishlab chiqilgan. Agar fuqarolar internatda noqonuniy faoliyatni aniqlasalar, ular "**http://www.ligainternet.ru/hotline/**" havolasi orqali xabar berishlari mumkin. Birgina AQShning o'zida 60 milliondan ortiq odam elektron identifikator o'g'irlanishidan zarar ko'rgan.[1]

Xavfsiz Internet ligasi – bu "World Wide Web"da xavfli kontent tarqalishiga qarshi kurashish uchun yaratilgan tashkilot. Liga a'zolari tijorat, jamoat tashkilotlari, ommaviy axborot vositalari vakillari va internetdagi xavfli kontentga qarshi kurashga real hissa qo'shish imkoniyati va istagiga ega bo'lgan shaxslar bo'lishi mumkin.[2]

Ma'lumotlar almashishni yaxshilash: Yevropa Ittifoqi butun qit'adagi huquqni muhofaza qilish idoralari o'rtasida ma'lumotlar almashish va hamkorlikni osonlashtirish uchun Yevropa Kiberjinoyat markazini (EC3) tashkil etdi. EC3 "Darknet" orqali sodir etilgan kiberjinoyat va iqtisodiy jinoyatlarni tergov qilish va ta'qib qilishda a'zo davlatlarga operativ yordam va ekspertiza o'tkazishda yordam beradi.

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[1] United States; Congress; House; Committee on Ways and Means (2018). Protecting Children from Identity Theft Act: report (to accompany H.R. 5192) (including cost estimate of the Congressional Budget Office).

[2] Лига Безопасного интернета. URL: https://www.tadviser.ru/index.phpКомпания:Лига_безопасного _интернета

Yevropa Ittifoqi Kengashi tomonidan "Yevropa Ittifoqi Huquqni muhofaza qilish organlarining favqulodda vaziyatlarda harakat qilish protokoli" (*EU Law Enforcement Emergency Response Protocol*) qabul qilindi. Protokol Yevropolning Yevropa kiberjinoyatchilik markaziga (EC3) markaziy rol o'ynaydi va Yevropa Ittifoqining keng ko'lamli transchegaraviy kiberxavfsizligini muvofiqlashtirish rejasining bir qismidir.[1]

Mazkur protokol 7 bosqichni o'z ichiga oladi:

– Muhim ahamiyatga ega bo'lgan kibertahdidni erta fosh etish va aniqlash;

– Xavfni tasniflash;

– Favqulodda vaziyatlarda harakatni muvofiqlashtirish;

– Vaqtli ogohlantirish xabari;

– Huquqni muhhofaza qilish organlarining tezkor tadbir rejasi;

– Tergov va bir necha bosqichli tahlil;

– Favqulodda vaziyatlarga javob berish protokoli yakuni.

Yevropolning tezkor tadbirlar bo'yicha ijrochi direktori o'rinbosari Uil van Gemert: "Yevropa Ittifoqi va uning fuqarolarini keng ko'lamli kiberhujumlardan himoya qilish uchun kibertayyorligimizni oshirish juda muhimdir", deb aytib o'tgan.[2] Bundan ko'rinib turibdiki, kiberxavfsizlik masalasi global ahamiyat kasb etmoqda. Bundan tashqari, dasturiy ta'minotlarni zamonaviylashtirmasdan turib xavfsiz kibermakon yaratib bo'lmaydi.

Dasturiy ta'minot: FQB "Tor"ning ma'lum foydalanuvchilarini aniqlashga urinib, 2002-yildan beri FQB "Tor" kabi proksi-serverlar yoki anonimlik xizmatlaridan foydalangan holda o'z manzilini yashirayotgan gumonlanuvchilarni aniqlash uchun "kompyuter va internet protokoli manzilini tekshirish" (CIPAV) dasturidan foydalangan.[3] Ushbu dasturiy ta'minot orqali qorong'u tarmoqda noqonuniy faoliyat bilan shug'ullangan shaxslarni deanonimlashtirish amalga oshiriladi.

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[1] Commission Recommendation (EU) 2017/1584 of 13 September 2017 on coordinated response to large-scale cybersecurity incidents and crises C/2017/6100

[2] New EU Protocol Preps for X border Cyber-attacks. URL: https://www.cybercureme.com/new-eu-protocol-preps-for-x-border-cyber-attacks/

[3] Kevin Poulsen, "FBI Admits It Controlled Tor Servers Behind Mass Malware Attack," Wired.com, September 13, 2013.

Darknetdagi jinoiy faoliyatga qarshi kurashish maqsadida Adliya tizimi nomidan RAND va Politsiya Ijroiya Tadqiqot Forumi tomonidan tashkil etilgan ekspertlar seminarida quyidagilarga qaratilgan yuqori darajadagi tavsiyalar taqdim etilgan:

– Trening – ofitserlar va tergovchilarni darknet tarmog'ining tegishli dalillarini aniqlashga o'rgatish;

– Axborot almashish – agentliklar o'rtasida ham ichki, ham xalqaro miqyosda axborot almashishni yaxshilash;

– Hamkorlik uchun yangi tuzilmalar – hamkorlik uchun tashkilotlararo tuzilmalarni qurishning afzalliklarini o'rganish;

– Yangi sud standartlari – kompyuterlarda darknet veb-dalillarni to'plash va sudga taqdim etish uchun yangi standartlarni ishlab chiqish;

– Jinoyatlarmi aloqadorlik bo'yicha o'rganish – huquqni muhofaza qilish organlariga darknetda an'anaviy jinoyatlar va kamroq sodir etiladigan jinoyatlarni o'rganish va jinoyani ochishda yordam berish uchun o'zaro bog'liqligini o'rganish.[1]

RAND loyihasi – Ikkinchi Jahon urushidan keyin 1948-yil 14-mayda tashkil etilgan tashkilot – Kaliforniyaning Santa Monika shahridagi Duglas aviatsiya kompaniyasidan ajralib chiqdi va mustaqil, jamoat farovonligi va xavfsizligi maqsadidagi notijorat tashkilotga aylangan. RAND butun dunyo bo'ylab jamiyatlarni xavfsizroq, sog'lomroq va farovonroq qilishga yordam berish uchun davlat siyosati muammolariga yechimlar ishlab chiqadigan tadqiqot tashkilotidir.[2]

Aleksandr va Safranovlar o'zlarining tadqiqit ishlarida darknet bilan bog'liq jinoyatlarni oldini olish va u bilan bog'liq muammoni hal qilish uchun quyidagi vazifalarni amalga oshirishni ta'minlash kerakligini ta'kidlab o'tishgan:

1. Darknet tarmog'ida jinoyatchilar tomonidan qo'llaniladigan vositalar va resurslarni chuqurroq o'rganish. Shuni ta'kidlash kerakki, "TOR" brauzeri hozirda yangilik emas, ammo boshqa yopiq veb-brauzerlarda qo'shimcha bilimlarni kengaytirish;

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[1] National Instiute of Justice. Taking on the Dark Web: Law Enforcement Experts ID Investigative Needs. URL: https://nij.ojp.gov/topics/articles/taking-dark-web-law-enforcement-experts-id-investigative-needs
[2] About the RAND Corporation. URL: https://www.rand.org/about.html

2. Ushbu sohadagi jinoyatlarni tergov qilish metodologiyasi va taktikasini takomillashtirish. Shuningdek, soyali internetdan olingan ma'lumotlarning huquqiy holatini aniqlashtirish;

3. jinoyatlarni ochish uchun tezkor xodimlarni ommaviy tarmoqlarga yo'naltirish kerak, chunki ko'p hollarda jinoyatchilar yopiq tarmoqdan faqat jinoyat sodir etish platformasi sifatida foydalanadilar va mijozlar bazasi asosan ochiq tarmoqda to'planadi.[1]

Sudakova T. va Nomokonov V. lar ham o'z tadqiqot ishlarida mazkur turdagi jinoyatlarga qarshi kurashishda zaruriy tavsiyalarni berib o'tishgan. Ular quyidagilar:

– Darknet tarmog'ining jinoiy tarkibiy qismlarining tizimli tavsiflash;

– Darknetdagi jinoiy faoliyatlar to'g'risida aholining turli yosh guruhlari xabardorligini o'rganish, undan foydalanishning afzal shakllari va maqsadlarini aniqlash, so'rovnoma qatnashchilarining ushbu hodisaga shaxsiy munosabatini aniqlash;

– Darknetda kiberjinoyatchilikka qarshi kurashish sohasidagi qonunchilik va huquqni qo'llash amaliyotining qiyosiy huquqiy tahlili (AQSh, Yevropa Ittifoqining alohida davlatlari, Xitoy tajribasi);

– Darknetda va undan foydalanish orqali sodir etilgan jinoiy harakatlarni tergov qilish usullarini ishlab chiqish;

– Raqamli kriminologiyaning ajralmas qismi sifatida Darknetda mavjud bo'lgan anonim jinoyatlarning oldini olish bo'yicha kompleks dastur asoslarini ishlab chiqish.[2]

Yuqorida aytib o'tilganidek, darknetdagi kiberjinoyatlarning oldini olish uchun xavfsizlik organlari internet tarmog'ida o'tkaziladigan harakatlarni kuzatishga harakat qilmoqda, ammo darknetdagi anonimlik tufayli faoliyatni kuzatish xavfsizlik organlari

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[1] Александров А. Г., Сафронов А. А.,. Криминалистика; судебно-экспертная деятельность; оперативно-розыскная деятельность. Использование сети Даркнет при подготовке и совершении преступлений. – 2021.

[2] Sudakova T. M., Nomokonov V. A. Understanding the future of criminolo-gy: an overview of current trends. Vserossiiskii kriminologicheskii zhurnal / Russian Journal of Criminology, 2018, vol. 12, no. 4, pp. 531–540. DOI: 10.17150/2500-4255.2018.12(4).531-540.

uchun muammo keltirib chiqarmoqda. Muammolarni hal qilish uchun quyidagi yo'nalishlarga e'tibor qaratish mumkin:

– Mijoz ma'lumotlarini monitoring qilish;

– Ijtimoiy sayt monitoringi;

– Yashirin xizmat monitoringi;

– Semantik tahlil.

Mijoz ma'lumotlarini monitoring qilish: huquqni muhofaza qilish organlari nostandart domen bilan o'zaro aloqani aniqlash uchun mijozlar veb-ma'lumotlarini kuzatishi va tahlil qilishi mumkin. Shunday qilib, ushbu monitoring darknetdagi havolalarni aniqlamasligi mumkin, ammo bu ularning faoliyati haqida ma'lumot beradi. Monitoring davomida foydalanuvchi maxfiyligi buzilmaydi, chunki huquqni muhofaza qilish organlar veb-saytga kiradigan shaxsni emas, balki veb-so'rovning manzilini tekshiradi.

Yashirin monitoring: ko'pgina darknet veb-xizmatlar tez-tez yopiladi va ma'lum vaqtdan keyin yangi domen ostida qayta ishga tushiriladi. Yashirin tekshiruv faoliyati yangi saytlar ishga tushirilishi bilanoq aniqlash va tahlil qilish orqali sayt maqsadini aniqlashdan iborat.

Semantik tahlil: darknetdagi maxfiy xizmatlar ma'lumotlarni olgandan so'ng, maxfiy xizmat haqida muhim ma'lumotlarni o'z ichiga olgan semantik ma'lumotlar bazasi yaratilishi mumkin. Ushbu ma'lumotlar bazasi bilan kelajakda saytdagi noqonuniy harakatlarni oldini olish mumkin.

Darknet tarmog'idagi iqtisodiy jinoyatlarni qarshi kurashish samaradorligini oshirishda jinoyatni isbotlash protsedurasi, ya'ni internet provayderlaridan dalillar olish va sudga dalillarni taqdim etish ham muhim ahamiyat kasb etadi. Darknet tarmog'ida jinoyat sodir etgan shaxslarni javobgarlikka tortishda muhim jihatlardan biri ularning aybini isbotlab beruvchi dalillar hisoblanadi. Ushbu dalillarni internet provayderlaridan olish va sudga taqdim etish muhim protsessual harakat hisoblanadi. Ushbu jarayonni tezlashtirish va osonlashtirish uchun Yevropa Ittifoqiga a'zo davlatlar elektron dalillar bo'yicha kelishuvni tasdiqladi. Unga ko'ra, a'zo davlatdagi xizmat

ko'rsatuvchi provayderlarga elektron dalillarni olish uchun sud qarorlarini yuborish imkonini beradi.

Shvetsiya Adliya vaziri Gunnar Strommer: "ushbu kelishuv bilan biz adliya organlarimizning asosiy so'roviga javob beramiz. Borgan sari ko'proq jinoyatlar onlayn tarzda rejalashtirilgan yoki sodir etilmoqda va bizning rasmiylar oflayn rejimda sodir etilgan jinoyatlar uchun bo'lgani kabi ularni jinoiy javobgarlikka tortish vositalariga muhtoj. Dalillarni taqdim etish bo'yicha yangi qoidalar orqali sudyalar va prokurorlarga, ular qayerda saqlanishidan qat'i nazar, ular yo'qolishidan oldin kerakli dalillarni tezda olish imkonini beradi", deb ta'kidlagan.[1]

Bugunki kunda jinoyatchilar darknet tarmog'idagi jinoyatni rejalashtirish va sodir etish uchun texnologiyadan foydalanmoqda. Natijada, huquqni muhofa qilish organlari ularni kuzatib borish va hukm qilish uchun elektron dalillarga tobora ko'proq tayanishi kerak. Biroq, elektron dalillarga kirish, ayniqsa, ma'lumotlar chet elda saqlangan bo'lsa, uzoq va murakkab jarayon bo'lishi mumkin. Shu sababli, Yevropa Kengashining chaqiriqlaridan so'ng, Komissiya 2018-yil aprel oyida elektron dalillardan foydalanishni yaxshilash uchun yangi qoidalarni taklif qildi.

***Elektron dalillar** – jinoiy huquqbuzarliklarni tergov qilish va ta'qib qilish uchun foydalaniladigan raqamli ma'lumotlarni anglatadi. U o'z ichiga elektron pochta xabarlari, matnli xabarlar yoki xabar almashish ilovalaridagi kontent, audiovizual kontent foydalanuvchining onlayn hisobi haqida ma'lumotlarni o'z ichiga oladi.[2]*

Yevropolning Yevropa kiberjinoyatchilik markazi (EC3) har yili Yevropa Ittifoqidagi hukumatlar, biznes va fuqarolarga ta'sir ko'rsatadigan kiberjinoyatchilikdagi asosiy topilmalar va paydo bo'layotgan tahdidlar va o'zgarishlar to'g'risidagi asosiy strategik hisobotni (Internet Organized Crime Threat Assessment - IOCTA) nashr etadi.

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[1] Electronic evidence: Council confirms agreement with the European Parlament on new rules to improve cross-border to e-evidence. URL: https://www.consilium.europa.eu/en/press/press-releases/2023/01/25/electronic-evidence-council-confirms-agreement-with-the-european-parliament-on-new-rules-to-improve-cross-border-access-to-e-evidence/

[2] Better access e-evidence to fight crime. URL: https://www.consilium.europa.eu/en/policies/e-evidence/

Internetda uyushgan jinoyatchilik tahdidini baholash (IOCTA) – *huquq-tartibot idoralari, siyosatchilar va huquqni muhofaza qiluvchi organlarga kiberjinoyatlarga samarali va kelishilgan tarzda javob berish uchun asosiy tavsiyalar ishlab chiqadi.[1]*

Eng so'nggi Internetda uyushgan jinoyatchilik tahdidini baholash *(Internet Organized Crime Threat Assessment, IOCTA)* shuningdek, qo'shimcha jinoyat sohasini, onlayn jinoiy bozorlarni, ham ochiq internet manbasida, ham Darknetda ko'rib chiqadi. Shuningdek, IOCTAning yana bir tipik yo'nalishi – bu bir nechta jinoyat sohasini qamrab oluvchi, lekin o'z-o'zidan jinoiyatni yashiradigan yoki uning sodir etilishiga omil boladigan qo'zg'atuvchilarni qamrab oladi. Ushbu faollashtiruvchilarga quyidagilar kiradi:

– Biznes elektron pochta kelishuvi;

– Qattiq himoyalangan xosting;

– Anonimlashtirish vositalari;

– Kriptovalyutalarni jinoiy egallab olish;

– Pul tashish (*money muling*).

Pul tashish – *jinoiy daromadlarni legallashtirishning bir turi. Pulni tashuvchi – bu uchinchi shaxsdan o'z bank hisobvarag'iga pul olib, boshqasiga o'tkazadigan yoki naqd pulda olib, boshqa birovga beradigan, buning uchun komissiya oladigan shaxs.[2]*

Ular jinoiy daromadlarni legallashtirish bilan bog'liq jinoyatlarda (kiber jinoyatlar, onlayn firibgarlik va boshqalar) bevosita ishtirok etmasalar ham, sheriklar hisoblanishadi, chunki ular bunday jinoyatlardan olingan daromadlarni legallashtirishga yordam beradi va jinoyatchilarga anonim qolishga yordam beradi.

Shunday qilib, biz ishonch bilan aytishimiz mumkinki, taraqqiyot bir joyda to'xtab qolmaydi, jinoyatchilikning yangi elementlari paydo bo'ladi, jinoyatchilar vaqt o'tishi bilan yangi innovatsion usullarda jinoyat sodir etadilar, shuning uchun huquqni

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[1] Internet Organized Crime Threat Assessment (IOCTA). URL: https://www.europol.europa.eu/publications-events/main-reports/internet-organised-crime-threat-assessment

[2] Money Muling. URL: https://www.europol.europa.eu/operations-services-and-innovation/public-awareness-and-prevention-guides/money-muling

muhofaza qilish organlarining asosiy vazifasi tez rivojlanayotgan jinoyatchilikdan ortda qolmaslikdan iborat. unga qarshi kurashning eski usullari haqida. Bunda ichki ishlar organlari xodimlarining amaliy faoliyati tajribasini hisobga olish, jinoyatchilikka qarshi ilg'or, zamonaviy vosita va usullar bilan kurashish zarur.

Umuman olganda, "Darknet" orqali sodir etilayotgan iqtisodiy jinoyatlarga qarshi kurash huquq-tartibot tizimini kuchaytirish, aholining xabardorligini oshirish, ma'lumotlar almashishni yaxshilash, xalqaro hamkorlikni mustahkamlash, ilg'or texnologiyalarni rivojlantirish, yanada mustahkam me'yoriy-huquqiy hujjatlarni o'rnatish va xususiy sektor bilan ishlashni o'z ichiga olgan global sa'y-harakatlarni talab qiladi. Dunyo mamlakatlari ushbu jinoyatlarga qarshi kurashish bo'yicha turli strategiyalarni amalga oshirmoqda va davlatlar o'rtasida tajribalar almashish va hamkorlik qilish orqali "Darknet" tarmog'ida sodir etilayotgan iqtisodiy jinoyatlarning oldini olish va ularga barham berishda muvaffaqiyatga erishish mumkin.

Yuqoridagilardan kelib chiqib quyidagi xulosalarga kelindi:

Darknet asosida sodir etiladigan jinoyatlar – bu transchegaraviy hisoblanadi. Shu sababli, davlatlar o'rtasida o'zaro ma'lumot almashish, jinoyat sodir etgan shaxslarni qidirib topish va ularni ekstraditsiya qilish kabi masalalarda o'z ichiga olgan xalqaro hamkorlik shartnomasi tuzishlari maqsadga muvofiqdir;

Huquqni muhofaza qilish organlari hodimlarining zarur malakasi va tayyorgarligiga yetarlicha e'tibor berib,   ularning qorong'u tarmoq haqida xabardorligini oshirish, ya'ni huquqni muhofaza qilish organlarining tergov qilish vakolatiga ega bo'lgan xodimlarning darknet tarmog'ida tegishli dalillarni aniqlashga o'rgatish va tergov usullarini takomillashtirish zarur;

Milliy jinoyat-protsessual qonunchiligimizga kiberjinoyatlarni tergov qilish va sudda javobgarlik masalasini aniq belgilab berishga xizmat qiladigan ishlar yuzasidan elektron dalillarni to'plash, olib qo'yish, tintuv qilish, ularning butunligi va yaxlitligini ta'minlash, sudda ko'rib chiqish uchun taqdim etish tartibini aniq ko'rsatuvchi qo'shimchalar kirtish lozim deb hisoblaymiz.

FOYDALANILGAN ADABIYOTLAR:

1. Александров А. Г., Сафронов А. А.,. Криминалистика; судебно-экспертная деятельность; оперативно-розыскная деятельность. Использование сети Даркнет при подготовке и совершении преступлений. – 2021;

2. Sudakova T. M., Nomokonov V. A. Understanding the future of criminolo-gy: an overview of current trends. Vserossiiskii kriminologicheskii zhurnal / Russian Journal of Criminology, 2018, vol. 12, no. 4, pp. 531–540. DOI: 10.17150/2500-4255.2018.12(4).531-540;

3. Commission Recommendation (EU) 2017/1584 of 13 September 2017 on coordinated response to large-scale cybersecurity incidents and crises C/2017/6100;

4. Kevin Poulsen, "FBI Admits It Controlled Tor Servers Behind Mass Malware Attack," Wired.com, September 13, 2013.

REFERENCES

1. Александров А. Г., Сафронов А. А.,. Криминалистика; судебно-экспертная деятельность; оперативно-розыскная деятельность. Использование сети Даркнет при подготовке и совершении преступлений. – 2021;

2. Sudakova T. M., Nomokonov V. A. Understanding the future of criminolo-gy: an overview of current trends. Vserossiiskii kriminologicheskii zhurnal / Russian Journal of Criminology, 2018, vol. 12, no. 4, pp. 531–540. DOI: 10.17150/2500-4255.2018.12(4).531-540;

3. Commission Recommendation (EU) 2017/1584 of 13 September 2017 on coordinated response to large-scale cybersecurity incidents and crises C/2017/6100;

4. Kevin Poulsen, "FBI Admits It Controlled Tor Servers Behind Mass Malware Attack," Wired.com, September 13, 2013.

YASHIRIN TARMOQ "DARKNET" ORQALI SODIR ETILADIGAN KIBER VA IQTISODIY JINOYATLAR VA ULARGA QARSHI KURASHISH MASALALARI

Muxsimov Ulug'bek Timurbek o'g'li

Sergeli tuman prokuraturasi katta tergovchisi

ANNOTATSIYA

Kiber jinoyatchilikda "Darknet" bozorlarini monitoring qilish hamda duch keladigan muammolar va huquqni muhofaza qilish organlarining ushbu saytlarda jinoiy faoliyatga qarshi kurashish harakatlari muhokama qilindi. Unda anonimlik uchun ilg'or texnologiyalardan foydalanish va bu muammoni hal qilishda huquqni muhofaza qiluvchi idoralar o'rtasida hamkorlikda harakat qilish zarurligi ta'kidlangan. Maqolada, shuningdek, "Hyperion" operatsiyasi kabi darknetdagi noqonuniy faoliyatga qarshi muvaffaqiyatli operatsiyalar haqida so'z yuritiladi, ammo bu platformalarda jinoiy faoliyatga qarshi kurashni davom ettirish zarurligi ta'kidlanadi. Platformalarni yopib qo'yishdan ko'ra, undagi sotuvchilarga e'tibor qaratish muhim va kiberjinoyatlarga qarshi samarali kurashish uchun huquqni muhofaza qilish idoralari o'rtasidagi hamkorlikni kuchaytirish zarurdir.

Kalit so'zlar: *Darknet, "Hyperion" operatsiyasi, kiberjinoyat, RAND korporatsiyasi, Dark Web Monitor, IP-manzil, VPN, FATF, Tor brauzer, anonim tarmoq.*

ANNOTATION

The problems faced in monitoring the "Darknet" markets and the efforts of law enforcement agencies to combat criminal activities on these sites were discussed. It emphasizes the need for the use of advanced technologies for anonymity and the need for cooperation between law enforcement agencies in solving this problem. The article

also mentions successful operations against illegal activity on the darknet, such as Operation Hyperion, but stresses the need to continue fighting criminal activity on these platforms. Rather than shutting down platforms, it is important to focus on the vendors on them and to strengthen cooperation between law enforcement agencies to effectively combat cybercrime.

__Key words:__ Darknet, "Hyperion" operation, cybercrime, RAND corporation, Dark Web Monitor, IP-address, VPN, FATF, Tor brauzer, anonymous network.

Zamonaviy dunyoda axborotni yaratish va integratsiyalashuv jarayonlari (umumiy va shaxsiy foydalanishda) doimiy ravishda sodir bo'lib, texnologik taraqqiyotning ta'sirchan natijalaridan foydalangan holda jinoyatchilik ham sifat jihatidan o'zgarib bormoqda. Kapitalni masofaviy tasarruf etishning texnik va texnologik mavjudligi ma'lum ma'lumotlarga ega bo'lgan jinoyatchilarga firibgarlik yo'li bilan boshqa shahar, viloyat yoki mamlakatda yashovchi fuqarolardan pul o'g'irlash imkoniyatini beradi. Shu bilan birga, zamonaviy kompyuter texnologiyalari va aloqa vositalaridan foydalangan holda sodir etilgan jinoyatlar jiddiy o'ziga xos xususiyatga ega bo'lib, bu tajovuzkorning haqiqiy harakatlarini aniqlashda ham, jinoiy qilmish sodir etishning potentsial imkoniyatlarini aniqlashda ham qiyinchiliklar tug'diradi.

Ayni paytda, huquqni muhofaza qilish organlari amaliyoti ko'rsatganidek, ushbu chora-tadbirlar zarur bo'lgani holda, umuman axborot-telekommunikatsiya makonida sodir etilgan jinoyatlarning, xususan, telekommunikatsiya va kompyuter tarmoqlaridan foydalangan holda sodir etilgan firibgarliklarning oldini olish masalalarida to'liq emas.

"Darknet" bozorlarini tekshirishda bir qator tergov qiyinchiliklari mavjud. Doimiy takomillashib borayotgan anonimlashtirish usullari va o'zgaruvchan tahdidlar manzarasi tufayli ma'lumotlarni topish va himoya qilish huquqni muhofaza qilish organlari uchun ko'plab muammolarni keltirib chiqaradi. Bundan tashqari, ushbu holat Yevropa Ittifoqidagi turli xil huquqiy tashkilotlarning ushbu darknet bozorlariga qarshi birgalikdagi sa'y-harakatlarini murakkablashtirmoqda. Biroq, huquqni muhofaza

qilish organlarida onlayn jinoiy bozorlarga qarshi kurashish uchun samarali vositalar mavjud: nafaqat an'anaviy tergov usullari, balki elektron pochtani aniqlash va ushlash, shuningdek, darknet bozorlarini kuzatish imkonini beruvchi dasturiy ta'minotlar va ishchi guruhlar mavjud. Bu yerda asosiy misollar sifatida "Yevropolning Darknet Tergov guruhi va kiberpatrullari"ni keltirish mumkin.

Yevropa Ittifoqining jinoyatchilikka qarshi kurash agentligi Yevropol darknetda jinoyatni tekshirishning yangi yondashuvini e'lon qildi – bu a'zo davlatlar huquqni muhofaza qilish organlari o'rtasida muvofiqlashtirish kuchayishini ko'rsatadi. Yevropolning ta'kidlashicha, maxsus darknetdagi jinoyatlarga qarshi kurashish guruhi internetda giyohvand moddalar savdosi, o'qotar qurollar va xakerlik xizmatlari va yashirin iqtisodiyot kabi noqonuniy faoliyatlar hajmini kamaytirish bo'yicha sa'y-harakatlarni amalga oshiradi. Lekin Yevropol ilgari ham Yevropa kiberjinoyatchilik markazi orqali muvaffaqiyatli operatsiyalarni amalga oshirib kelgan.

Biroq, Groshkovaning ta'kidlashicha, huquqni muhofaza qilish operatsiyalari orqali darknet bozorlariga qarshi kurash platformalardan birining, yoki bir nechtasining yopilishiga olib keladi, lekin bu foydalanuvchilar – sotuvchilar, xaridorlar va yetkazib beruvchilarning bir bozordan ikkinchisiga o'tishiga to'sqinlik qilmaydi. Jinoiy faoliyatni butunlay tugatish uchun sotuvchi va xaridorning xatti-harakatlarini ham to'xtatish kerak.[1]

Dark internetda uyushgan jinoyatchilikka qarshi yangi kurashdagi birinchi operatsiyalardan biri 2016-yil oktabr oyida bo'lib o'tdi. AQSh huquqni muhofaza qilish idoralari tashabbusi bilan "Besh ko'z" (Five Eyes Law Enforcement Group) huquqni muhofaza qilish guruhi (Avstraliya, Kanada, Yangi Zelandiya, Buyuk Britaniya va Qo'shma Shtatlar) va Yevropol a'zolari, "Hyperion" operatsiyasi maqsadi darknetdagi noqonuniy xizmatlar sotuvchilari va xaridorlariga qaratilgan.[2]

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[1] E.W. Kruisbergen, "Criminal markets: the dark web, money laundering and counterstrategies - an overview of the 10th research conference on organized crime". – URL: https://www.researchgate.net/publication/332685663

[2] Department of Homeland Security, ICE, "Law Enforcement Agencies around the World Collaborate on International Darknet Marketplace Enforcement Operation," press release, October 31, 2016.

Bu operatsiya shunchaki boshlanishi edi va qaysidir ma'noda uyushgan jinoyatchilikni tergov qilishning birinchi bosqichini aks ettirdi. Lekin bu kelgusida ushbu sohada jamoaviy ishlash va hamkorlikni kengaytirishni talab qiladi.

Kiberjinoyat olamida anonimlik texnologiyalari huquqni muhofaza qilish organlarining shaxslarni jinoiy xatti-harakatlar bilan bog'lashiga yo'l qo'ymaydi va u kiberjinoiy guruhlarga qo'lga olish yoki ta'qib qilinishdan qo'rqmasdan ochiq faoliyat yuritish imkonini beradi.[1] Biroq, anonimlik o'z-o'zidan jinoiy xususiyatga ega emas va anonimlik texnologiyalari qonuniy funksiyalarga ega.

Darknetdagi jinoyatlar bo'yicha tadqiqot ishi olib borgan Kristin darknet bozor tarmoqlariga qarshi kurashish uchun huquqni muhofaza qilish idoralari tomonidan qo'llaniladigan strategiyalar ichida asosiy e'tiborni darknet veb-sahifalaridagi sotuvchilarga qaratish ko'proq ta'sir ko'rsatishi mumkinligini ta'kidlaydi.[2] Bu fikr olimlar Daksber va Hayne tomonidan ham mustahkamlangan, ular ham darknet tarmog'idagi sotuvchilarga qarshi chora-tadbirlar ishlab chiqishni taklif qilishadi.[3]

Shunga qaramay, darknet bozorlardagi faollik so'nggi yillarda doimiy sur'atda o'sib bordi. Huquqni muhofaza qilish organlari uchun mutanosib holda platformalarning moslashib borayotganligi va tez rivojlanayotganligi, kelgusida ularning tekshiruvlarini yanada qiyinlashtirishi mumkin.[4]

Huquqni muhofaza qilish idoralari doimiy ravishda darknet bozorlariga faol aralashish uchun yangi yondashuvlar va strategiyalarni izlaydilar. Hozirda darknet platformalari o'rniga darknetdagi sotuvchilarga qaratilgan strategiyalar muhokama mavzusidir.

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[1] EC3 (2014, February 9). European Cybercrime Center (EC3) - First year report. Retrieved March 3, 2015, from URL: https://www.europol.europa.eu/content/european-cybercrime-center-ec3-first-year-report

[2] Christin, N. (2012). Traveling the Silk Road: A measurement analysis of a large anonymous online marketplace. archive:1207.7139 [cs]. arXiv: 1207.7139. Retrieved February 28, 2019, from URL: http://arxiv.org/abs/1207.7139

[3] Duxbury, S. W. & Haynie, D. L. (2018). The Network Structure of Opioid Distribution on a Darknet Cryptomarket. Journal of Quantitative Criminology, 34(4), 921{941.doi:10.1007/s10940-017-9359-4

[4] Paquet-Clouston, M., Decary-Hetu, D. & Morselli, C. (2018). Assessing market competition and vendors' size and scope on AlphaBay. International Journal of Drug Policy, 54, 87{98.doi:10.1016/j.drugpo.2018.01.003

Tadqiqot ishlarining natijalaridan shuni ko'rish mumkinki, bir darknet bozorida faol bo'lgan sotuvchilarning qariyb 80 foizi boshqa darknet bozorlarida ham faol yoki ular ham bor. Demak, faqat asosiy nishonni darknet bozorlariga qaratish jinoyatni to'liq oldini olmaydi. Huquq-tartibot idoralari o'z faoliyat doirasini kengaytirishi va bir vaqtning o'zida faqat darknet bozorlari bilan cheklanmasligi kerak.

Hozirki kunda o'g'irlangan yoki buzilgan hisob ma'lumotlari uchun proaktiv monitoring xizmatini taqdim etuvchi kompaniyalar mavjud. Xizmat "Dark Web"da o'g'irlangan ma'lumotlarni aniqlaganida mijozlarni ogohlantiradi. 2020-yil may oyi o'rtalarida "ImmuniWeb" veb-xavfsizlik kompaniyasi bepul "ImmuniWeb Domain Security Test" xizmatini taqdim etdi, bu esa korxonalar va tashkilotlarga qorong'u internetdagi zaifliklarini baholash imkonini beradi. Onlayn test kompaniya ma'lumotlari va hujjatlarini "Darknet"da mavjudligini aniqlash imkonini beradi. Yangi bepul xizmat "ImmuniWeb" domen xavfsizligi testiga integratsiya qilingan bo'lib, u shuningdek, barcha turdagi tashkilotlar uchun domen nomini sotish, o'g'irlangan ma'lumot, karta raqamlari, savdo belgisi buzilishi va soxta ijtimoiy media akkauntlarini aniqlay oladi. Darknetda tashkilot o'zining buzilgan hisob ma'lumotlari va o'g'irlangan hujjatlari haqida ma'lumot olish uchun URL veb-sayt manzilini kiritishi. "ImmuniWeb" ma'lumotlariga ko'ra, sun'iy intellekt algoritmi xizmatga doimiy ravishda xakerlik forumlari, ajratilgan IRC kanallari, darknet bozorlari, "TelegramChat" kanallari va o'g'irlangan ma'lumotlar sotiladigan qorong'u internet va oddiy internetdan qidirish imkonini beradi.[1]

Yana bir muhim holat shundaki, darknetdagi sotuvchilar ochiq forumlardan darknet bozorlarida o'z ish faoliyatlarini oshirish uchun reklama sifatida foydalanishlari mumkin. Bu huquq-tartibot idoralari potentsial maqsadlar haqida ko'proq ma'lumot to'plash uchun ochiq forumlardagi ma'lumotlardan samarali foydalanishi mumkinligini ko'rsatadi.

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[1] Запущен бесплатный сервис для мониторинга наличия данных компании в даркнете. URL: https://www. tadviser.ru/index.php/ Статья:Даркнет_(теневой_интернет,_DarkNet)

Birlashgan Millatlar Tashkilotining 2014 yilgi hisobotiga ko'ra, FQB tomonidan 2013-yil 1-oktyabrda o'chirilishidan oldin, "Silk Road" darknet bozori noqonuniy faoliyati natijasida ikki yarim yil ichida taxminan 1,2 milliard dollar to'plagan.[1] Federal qidiruv byurosining muvaffaqiyatiga qaramay, "Silk Road 2.0" birinchi platforma yopilishidan atigi ikki hafta o'tib internetga paydo bo'ladi va 2014-yil noyabr oyida YEVROPOL va FQB qo'shma operatsiyasi chog'ida o'chirilgunga qadar bir yildan ko'proq vaqt davomida faoliyat ko'rsatgan.[2]

FBI tomonidan "Freedom Hosting" ishida qo'llanilgan texnikalar "Silk Road"ni olib tashlash uchun qo'llanilgan taktikalardan sezilarli darajada farq qilgani aytilgan.[3] Keyinchalik FQB xalqaro hamkorlik orqali "Freedom Hosting" serverlarini tortib olganini va Tor brauzerining ayrim versiyalarida nol kunlik zaiflikdan foydalanish uchun ularni qayta konfiguratsiya qilganini tan olgan. Ushbu zaiflik FQBga dasturni yashirin ravishda masofaviy mashinalarga o'rnatishga imkon berdi, bu esa tizimlarning IP manzilini Vashington okrugidagi ma'lumotlar markaziga yuboradi.[4] Ushbu uslub mijoz darajasidagi faol kuzatuv choralarining eng intruzivini va hozirgi kunga qadar FBI tomonidan qo'llanilgan aylanib o'tish texnologiyalarini yengishning eng murakkab, eng tajovuzkor vositalarini ifodalaydi.

2014-yilda RAND korporatsiyasining "Kiberjinoyat vositalari va o'g'irlangan ma'lumotlar xakerlari bozori" nomli tadqiqotida aytilishicha, huquqni muhofaza qiluvchi tashkilotlar kiberjinoyatchilik bilan hamqadam bo'lish uchun kurashayotgan bo'lsa-da, huquqni muhofaza qilish organlari jinoiy ta'qiblar sonini ko'paytirmoqda va

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[1] United Nations Office on Drugs and Crime (UNODC). (2014, June 1). World drug report 2014. Retrieved September 9, 2014, from URL: http://www.unodc.org/wdr2014/

[2] Greenberg, A. (2014, November 5). Global web crackdown arrests 17, seizes hundreds of DarkNet domains. Retrieved November 8, 2014, from URL: http://www.wired.com/2014/11/operation-onymous-dark-web-arrests/

[3] Poulsen, K. (2013, September 13). FBI admits it controlled Tor servers behind mass malware attack. Retrieved September 9, 2014, from URL: http://www.wired.com/2013/09/freedomhosting-fbi/

[4] Poulsen, K. (2014, August 14). Visit the wrong website, and the FBI could end up in your computer. Retrieved August 22, 2014, from URL: http://www.wired.com/2014/08/operation_torpedo/

aybdorlarni qidirish usullarini takomillashtirmoqda.[1] O'zgarishlarning asosiy kuchi sifatida hisobotda yangi texnologiyalar va xalqaro hamkorlikning kuchayishi haqidagi iqtibos keltiriladi, bu esa ekstraditsiya jarayonlari va kiberjinoyatchilarni ta'qib qilishni osonlashtiradi. Hisobotga ko'ra, butun dunyo hukumatlari tomonidan kiberjinoyatlarga yangi e'tibor qaratilishi bilan yaqin va yaqin kelajakda kiberjinoyatlarga qarshi kurashda sezilarli yaxshilanishlar bo'ladi. 2014-yil 7-noyabrda RAND korporatsiyasi hisobotiga ko'ra, 16 ta Yevropa davlati va Qo'shma Shtatlar 414 ta noqonuniy "Tor" darknet domenlarini o'chirib tashlagan keng qamrovli operatsiyani amalga oshirgan.[2] Lekin FQB va YEVROPOL vakillari serverlarni qanday topishga muvaffaq bo'lganliklarini tushuntirishga kelganda, bu usullarni oshkor eta olmasliklarini aytishgan. Ammo, "Tor" himoyalangan brauzeri yaratuvchilardan biri, Endryu Lyuman, keyinchalik huquqni muhofaza qilish organlari shunchaki Bitkoin kriptavalyuta tranzaksiya izini topishga erishganliklarini va ular "Tor"ning shifrlash tizimini buzishga erisha olmaganliklarni aytib o'tgan. Lyumanning qo'shimcha qilishicha, 414 domen o'chirilgan bo'lsa-da, bu 27 tadan kamroq individual veb-saytlarni anglatadi va bu miqdor kam, shuning uchun 414 domenning olib tashlanishi rasmiylar tomonidan bor yo'g'i 17 nafar shaxsning hibsga olinganini bildirgan.[3]

Biz ko'rib chiqayotgan virtual makonda hatto "aqlli texnologiyalar"dan foydalangan holda ham jinoiy guruhlar faoliyatini to'xtatish mushkul. Buning sababi, shifrlangan "VPN" ulanish xizmatlari yordamida anonim "TOR" tarmog'i ichki qonunchilikni buzuvchi internet resurslarini chetlab o'tishadi. Ya'ni bu orqali foydalanuvchining IP-manzilini Rossiya qonunchiligi qo'llanilmaydigan har qanday joyga almashtirish tufayli bajaradi. Binobarin, saytga so'rov sud qaroriga binoan internet-provayderlar veb-saytga kirishni bloklagan Rossiya Federatsiyasi hududidan

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[1] Ablon, L., & Libicki, M. (2014). Markets for cybercrime tools and stolen data: Hackers' bazaar. Washington DC: RAND Corporation.

[2] Greenberg, A. (2014, November 5). Global web crackdown arrests 17, seizes hundreds of Dark Net domains. Retrieved November 8, 2014, from URL: http://www.wired.com/2014/11/operation-onymous-dark-web-arrests/

[3] Lee, D. (2014, November 10). Dark Net raids 'overblown' – Tor. Retrieved December 10, 2014, from URL: http://www.bbc.com/news/technology-29987379

emas, balki xorijiy davlat hududidan, ya'ni soxta IP-manzil tegishli bo'lgan serverdan kirayoganini ko'rsatadi.

G'arblik hamkasblar tajribasidan kelib chiqib shuni aytish mumkinki, onlayn jinoyatchilarni qo'lga olishning asosiy usuli bu tezkor-qidiruv harakatlari bo'lib, ular bilan bevosita aloqada bo'lish va jinoyatchilar orasiga kirishdir.

Ba'zilar huquqni muhofaza qilish organlari jinoyatchilarning xatolari yoki texnologiyadagi kamchiliklarga tayanishi mumkin, deb taxmin qilishadi. Masalan, 2013-yilda "Silk Road" sayt operatorining noto'g'ri qadamlari FQB toonidan uning qo'lga olishiga olib kelgan.[1]

"RAND Europe" tadqiqot instituti darknet tarmog'i jinoyatlariga qarshi kurashning quyidagi asosiy usullarini ta'kidlaydi:

– Ochiq veb-saytlardan ma'lumotlar olish. Kiberjinoyatchilar darknetdan faqat jinoyat sodir etish uchun platforma sifatida foydalanadilar, lekin ko'pincha ular jamoat tarmoqlarida e'lon berib mijozlar qidiradi. Qonunga ko'ra, ommaviy saytlar egalari huquqni muhofaza qiluvchi organlarga har qanday noodatiy qiziqish uyg'otadigan ma'lumotlarni taqdim etishlari kerak. Misol uchun, "Silk Road" darknet bozori veb-sahifasi egasi Ross Ulbricht aloqa qilish uchun ochiq internet tarmog'ida o'z elektron pochta manzilini qoldirgani kabi;

– Pochtani ushlash. Huquq-tartibot idoralari yetkazib beruvchi kompaniyalar va pochta bo'limlari bilan hamkorlikda shubhali jo'natmalarni tekshirishlari kerak. Huquq tartibot idoralari, shuningdek, oluvchini kuzatish uchun shubhali buyumning raqam belgisini ham olishi mumkin;

– Dasturiy ta'minot yaratish. Huquqni muhofaza qiluvchi oganlar katta hajmdagi ma'lumotlardan foydalanishga majbur, aks holda darknet jinoyatlarini ochish imkonsiz. Dasturiy ta'minot IP-manzillar va internetda joylashtirilgan ma'lumotlarni to'playdi, xulosa chiqaradi va asta-sekin ular bo'yicha tekshiruv olib borish mumkin bo'ladi. Bu qimmat va murakkab tizim, lekin u o'zini oqlaydi;

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[1] Donna Leinwand Leger, "How FBI Brought Down Cyber-Underworld Site Silk Road," USA Today, May 15, 2014.

– Pul oqimlarini kuzatish. Kriptovalyuta yuqori darajadagi himoyaga ega bo'lsa-da, zaif nuqta uni sotib olish yoki sotishdir. Huquq tartibot idoralari birjalardan kriptovalyuta bilan kim va qachon operatsiyalarni amalga oshirganligi haqidagi ma'lumotlarni so'rashi mumkin.[1]

Shunday qilib, ushbu hodisaning ijtimoiy xavfliligi aniq va profilaktika ishlari samaradorligini oshirishni talab qiladi. Darknet ijtimoiy tarmog'ida jinoyatchilikka qarshi xalqaro kurash tahlili bizga darknet jinoyatchiligiga qarshi kurashning asosiy usullarini ishlab chiqish va ularni hayotga muvaffaqiyatli joriy etish imkonini beradi.

Davlatlarga virtual aktivlarga asoslangan noqonuniy moliyaviy oqimlar va jinoiy daromadlarni legallashtirish xavfiga qarshi kurashish uchun BMTning "Narkotiklar va jinoyatchilikka qarshi kurash boshqarmasi", "Moliyaviy harakatlar bo'yicha ishchi guruhi" (FATF) va shu kabi tashkilotlar bilan hamkorlik qilish tavsiya etiladi.

Kiberjinoyatchilar, an'anaviy jinoyatchilar kabi, asosan foyda uchun harakat qilishadi. Kiberjinoyatchilar Darkweb forumlari va bozorlarida jismoniy shaxslar va korxonalardan o'g'irlangan shaxsiy va moliyaviy ma'lumotlar bilan savdo qiladilar. Jinoyatchilar onlayn xizmatlarga kirish uchun o'g'irlangan hisob ma'lumotlaridan (foydalanuvchi nomlari va parollar kabi) foydalanadilar –darknetda ko'pincha "PayPal" elektron hamyoni ma'lumotlari sotiladi.[2]

Rossiya fuqarosi 2018-yilda Tailandda Darknet "Infraud Organization" bozorini boshqargan va o'g'irlangan kredit karta ma'lumotlari va apparat vositalarini sotgani uchun hibsga olingan. Ushbu darknet bozorida butun dunyo bo'ylab 4,3 milliondan ortiq kredit kartalari, debet kartalari va bank hisoblari bilan savdo qilgan 11 000 a'zo bor edi. Bu 530 million AQSh dollaridan ortiq yo'qotishga olib kelgan.[3]

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[1] Taking Stock of the Online Drugs Trade / S. Hoorens, K. Kruithof [et al.] // URL: https://www.rand.org/randeurope/research/projects/online-drugs-trade-trafficking.html (дата обращения: 23.04.2021).

[2] Here's how much your credit card is now worth on the Dark Web. URL: https://www.komando.com/security-privacy/criminals-targeting-paypal/806650/

[3] "US indicts Russian cybercrime Dark Web market "Infraud Organization" suspect Sergey Medvedev, arrested in Thailand - CBS News." [Online]. Available: URL: https://www.cbsnews.com/news/usrussia-cybercrime-dark-web-market-suspect-sergeymedvedev-thailand/. [Accessed: 10-Mar-2020].

Moliyaviy jinoyatlarga qarshi kurash tarmog'ining vazifasi moliyaviy tizimni noqonuniy foydalanishdan himoya qilish, jinoiy daromadlarni legallashtirish va u bilan bog'liq jinoyatlarga, shu jumladan terrorizmga qarshi kurashish va moliya organlaridan strategik foydalanish hamda moliyaviy ma'lumotlarni to'plash, tahlil qilish va tarqatish orqali milliy xavfsizlikni ta'minlashdan iborat.

Darknet tarmog'i sayt operatorlari va foydalanuvchilari, ayniqsa, agar ularning harakatlari noqonuniy bo'lsa, o'z shaxsini yashirish yoki noto'g'ri yo'naltirish uchun barcha imkoniyatlarni ishga soladi. Darknet tarmog'idagi eng yuqori darajadagi jinoyatchilar shaxsini aniqlash ko'pincha bir nechta davlatlar ishtirokidagi xalqaro operatsiyalarni talab qiladi.

 2019-yil mart oyi oxirida yashirin internet tarmog'ida o'z noqonuniy faoliyatini amalga oshirgan jinoyatchilar ommaviy hibsga olingani ma'lum bo'ldi. "Computer Weekly" portalining Yevropol bayonotiga tayanib xabar berishicha, "SaboTor" deb nomlangan qo'shma operatsiya doirasida turli mamlakatlar, jumladan, AQSh, Kanada va Yevropa huquq-tartibot idoralari 61 nafar shaxsni hibsga olgan va noqonuniy biznes yuritish uchun foydalanilgan 50 ta veb-servisni yopgan. Bundan tashqari, "SaboTor" operatsiyasi davomida 122 kishi so'roq qilingan. Yevropol ijrochi direktori Ketrin De Bollening aytishicha, darknet tarmog'i ko'pchilik o'ylaganchalik yashirin emas.[1]

Moliyaviy harakatlar bo'yicha ishchi guruhi (FATF) moliyaviy jinoyatlarga qarshi global va asosiy qoidalarni haqida tavsiya berib keladi. Kriptovalyutalarni tartibga solish asosiy muammoga aylandi. Bu esa darknet olamida iqtiodiy jinoyatlarning o'sishiga olib kelmoqda. Ishchi guruh moliyaviy jinoyatlarga qarshi kurash bo'yicha xalqaro sa'y-harakatlarni rag'batlantirish va muvofiqlashtirish uchun 39 a'zo davlatdan iborat. 2019-yilda FATF "Virtual aktivlar va virtual aktivlarga xizmat ko'rsatuvchi provayderlar uchun xavfga asoslangan yondashuv bo'yicha qo'llanma" e'lon qildi.

Global yondashuv asosiy va muhim hisoblanadi, chunki moliyaviy kiberjinoyatlarning tarkibiy qismlarining aksariyati kibermakonning chegarasiz

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[1] Массовые задержания пользователей теневого интернета. URL: https://www.tadviser.ru/index.php

xususiyatlaridan kelib chiqqan holda bir nechta yurisdiktsiyalarni o'z ichiga oladi. Ushbu jinoyatlarga qarshi kurashish uchun qoidalar va xavfsizlik choralari imkon qadar ko'proq mamlakatlar, shu jumladan, ushbu mamlakatlarda faoliyat yuritayotgan moliyaviy institutlar va virtual aktivlarga xizmat ko'rsatish provayderlari tomonidan implemintatsiya qilinishi kerak.

Yuqaoridagi tavsiyalarni amalga oshirishda turli mamlakatlarning suvereniteti, ularning qonunchiligi, mahalliy sharoit va yurisdiktsiyalarga moslashuvchan munosabat o'rtasida muvozanatni saqlash kabi jihatlarni ham e'tiborga olish kerak.

FATFning turli tavsiyalari, huquqni qo'llash yondashuvlari asosida quyidagi chora-tadbirlar belgilandi. Ushbu chora-tadbirlar Milliy Standartlar va Texnologiyalar Instituti (NIST) kiberxavfsizlik tizimi tomonidan tizimlashtirilgan. [1] Bu choralar quyidagilardir:

– Mijozlarni tekshirish (CDD);

– Operatsion kiber xavfsizlik (OPSEC);

– Ma'lumotlarni uzatish va ochiq manbali razvedka (OSINT) qobiliyati;

– Shubhali tranzaksiya monitoringi;

– Jinoiy infratuzilmalarga aralashuv;

– Asossiz orttirilgan boylik tartibga solish (Unexplained Wealth Order) va virtual aktivlarni musodara qilish.

Ushbu profilaktika chorasi soxta anonimlik, pul o'tkazmalari va tranzaksiyaga asoslangan pul yuvishga qarshi kurashish uchun amaliy identifikatorlarini joriy qiladi. Bu, shuningdek, potentsial qonun va tartibga solishni osonlashtiradi. Ushbu tekshiruvlar noqonuniy moliyaviy oqimlarga qarshi kurashish bo'yicha moliya sanoatining asosiy faoliyatini tashkil qiladi. Virtual aktivlarga xizmat ko'rsatish provayderlarini mijozlarning tekshirishi muhim profilaktika chorasidir, chunki jinoyatchilar operatsiyalar va to'lovlarda anonim bo'lib qolibga harakat qilishadi.

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[1] Project Participate, December 2019, URL: https://www.thecryptoupdates.com/coalition-of-major-stakeholders-incryptocurrency-industry-issues-report-on-indicators-of-suspicious-activity/

"Dark Web Monitor" – bu CFLWning (Cyber Field and Law Enforcement) tekshiruv xizmati. CFLW kiberxavfsizlik va huquqni muhofaza qilish sohalarida 10 yildan ortiq tajribaga ega doktor Mark van Staalduinen tomonidan asos solingan. Doktor Mark van Staalduinen xavfsizlik ehtiyojlari va texnik tadqiqot asoslari o'rtasidagi bo'shliqni to'ldirish maqsadida CFLWga asos solgan. CFLW tekshiruv xizmatlari "Dark Web Monitor va Virtual Assets" (Cryptocurrencies) tahlillarini uzoq muddat davomida to'plangan ma'lumotlar asosida tavsiyalar ishlab chiqadi. "Dark Web Monitor" (DWM) ochiq manbali razvedka (OSINT) platformasi bo'lib, u Dark Web va virtual aktivlardan foydalanish natijasida kelib chiqadigan jinoiy va firibgarlik faoliyati haqida strategik tushuncha va operatsion istiqbollarni taqdim etadi. Strategik tushunchalar va operativ istiqbollar tergovchilar uchun yangi tergov usullarini taqdim etadi va xavfsiz kibermakonga yo'l ochadi. 2019-yil noyabr oyida Niderlandiya Amaliy Ilmiy Tadqiqotlar Tashkiloti (TNO) va Niderlandiya va Singapurda joylashgan "CyberDevOps" (CDO) kompaniyasi "Dark Web Monitor"ni xizmat sifatida litsenziyalashga kelishib oldilar. Litsenziya shartnomasi shartlariga ko'ra, Kiber maydon va huquqni muhofaza qilish tashkiloti (CDO) "Dark Web Monitor" xizmatini huquqni muhofaza qilish idoralari, xavfsizlik tashkilotlari va kompaniyalari doirasiga yetkazib beradi.

Tahdidlarga qarshi kurashish TNO tashkilotining Milliy xavfsizlik bo'yicha direktori Krishna Taneja shunday dedi: "Texnologiya bizning dunyomizni tez o'zgartirmoqda va jinoyatchilar Dark Web kabi yangi imkoniyatlarni tez o'zlashtirishdi. Bu yangi tahdidlarni keltirib chiqaradi. Ushbu tahdidlarga qarshi turish uchun innovatsiyalar talab qilinadi. "Dark Web Monitor" – Adliya va xavfsizlik vazirligining innovatsion dasturida o'z kelib chiqishini topadigan bunday innovatsiyaning yorqin namunasidir. Ushbu yechim manfaatdor tomonlarimiz, jumladan, huquqni muhofaza qilish organlari, bir nechta banklar va xavfsizlik tashkilotlarining keng ko'lamli talablari bilan belgilanadi. Kiber maydon va huquqni muhofaza qilish tashkiloti bilan ushbu hamkorlik "Dark Web Monitor"ni bizning

manfaatdor tomonlarimizga arzon xizmat sifatida taqdim etiladigan operativ va yaxshi ta'minlangan yechimga aylantirish imkonini beradi".[1]

Kelajakda tashkilot direktori va hammuassisi janob Erre Roelevink shunday dedi: "Ushbu tashkilot huquqni muhofaza qilish va xavfsizlik dasturlari va vositalariga qaratilgan kiberxavfsizlik yechimi provayderidir. "Dark Web Monitor" Dark Web jinoyatlarini tadqiq qilish va tergov qilish kerak bo'lgan huquqni muhofaza qilish organlari va xavfsizlik mutaxassislari uchun ajralmas vosita bo'ladi."[2]

Xulosa qilib aytganda, anonimlik uchun ilg'or texnologiyalar tufayli kuzatilishi qiyin bo'lgan noqonuniy faoliyat platformasi bo'lgan darknetda jinoiy faoliyatni kuzatish va unga qarshi kurashish muammolari yetarli. "Silk Road" darknet bozori FQB tomonidan muvaffaqiyatli amalga oshirilgan operatsiyaning namunasi sifatida ta'kidlash mumkin, ammo keyingi saytlar huquqni muhofaza qilish organlarining sa'y-harakatlariga qaramay paydo bo'lishda davom etmoqda va faol bo'lib qolmoqda. Yangi texnologiyalardan foydalanish va xalqaro hamkorlikning kuchayishi kiberjinoyatlarga qarshi kurashni yaxshilashning kaliti sifatida qaralmoqda, biroq onlayn jinoyatchilarni ushlash hali ham qiyin. Tezkor qidiruv faoliyati va jinoyatchilar bilan to'g'ridan-to'g'ri aloqa qilish darknet jinoyatiga qarshi kurashning samarali usullari bolishi mumkin. Shuningdek, kiberjinoyatchilarni kuzatish uchun ochiq veb-saytlar va ijtimoiy tarmoqlardan ma'lumot olish muhimligini ham qayd etib o'tish joizdir.

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[1] TNO licenses Dark Web Monitor to CyberDevOps. URL: https://cflw.com/2019/11/13/tno-licenses-dark-web-monitor-to-cyberdevops/
[2] TNO licenses Dark Web Monitor to CyberDevOps. URL: https://cflw.com/2019/11/13/tno-licenses-dark-web-monitor-to-cyberdevops/

References:

1. E.W. Kruisbergen, "Criminal markets: the dark web, money laundering and counterstrategies - an overview of the 10th research conference on organized crime". – URL: https://www.researchgate.net/publication/332685663

2. Department of Homeland Security, ICE, "Law Enforcement Agencies around the World Collaborate on International Darknet Marketplace Enforcement Operation," press release, October 31, 2016.

3. EC3 (2014, February 9). European Cybercrime Center (EC3) - First year report. Retrieved March 3, 2015, from URL: https://www.europol.europa.eu/content/european-cybercrime-center-ec3-first-year-report

4. Christin, N. (2012). Traveling the Silk Road: A measurement analysis of a large anonymous online marketplace. archive:1207.7139 [cs]. archive: 1207.7139. Retrieved February 28, 2019, from URL: http://arxiv.org/abs/1207.7139

5. Duxbury, S. W. & Haynie, D. L. (2018). The Network Structure of Opioid Distribution on a Darknet Cryptomarket. Journal of Quantitative Criminology, 34(4), 921{941.doi:10.1007/s10940-017-9359-4

6. Paquet-Clouston, M., Decary-Hetu, D. & Morselli, C. (2018). Assessing market competition and vendors' size and scope on AlphaBay. International Journal of Drug Policy, 54, 87{98.doi:10.1016/j.drugpo.2018.01.003

7. Запущен бесплатный сервис для мониторинга наличия данных компании в даркнете. URL: https://www.tadviser.ru/index.php/Статья:Даркнет_(теневой_ интернет,_DarkNet)

8. United Nations Office on Drugs and Crime (UNODC). (2014, June 1). World drug report 2014. Retrieved September 9, 2014, from URL: http://www.unodc.org/wdr2014/

9. Greenberg, A. (2014, November 5). Global web crackdown arrests 17, seizes hundreds of DarkNet domains. Retrieved November 8, 2014, from URL: http://www.wired.com/2014/11/operation-onymous-dark-web-arrests/

10. Poulsen, K. (2013, September 13). FBI admits it controlled Tor servers behind mass malware attack. Retrieved September 9, 2014, from URL: http://www.wired.com/2013/09/freedomhosting-fbi/

11. Ablon, L., & Libicki, M. (2014). Markets for cybercrime tools and stolen data: Hackers' bazaar. Washington DC: RAND Corporation.

12. Greenberg, A. (2014, November 5). Global web crackdown arrests 17, seizes hundreds of Dark Net domains. Retrieved November 8, 2014, from URL: http://www.wired.com/2014/11/operation-onymous-dark-web-arrests/

13. Lee, D. (2014, November 10). Dark Net raids 'overblown' – Tor. Retrieved December 10, 2014, from URL: http://www.bbc.com/news/technology-29987379

14. Donna Leinwand Leger, "How FBI Brought Down Cyber-Underworld Site Silk Road," USA Today, May 15, 2014.

15. Taking Stock of the Online Drugs Trade / S. Hoorens, K. Kruithof [et al.] // URL: https://www.rand.org/ randeurope/research/projects/online-drugs-tradetrafficking .html (дата обращения: 23.04.2021).

16. Here's how much your credit card is now worth on the Dark Web. URL: https://www.komando.com/security-privacy/criminals-targeting-paypal/806650/

17. "US indicts Russian cybercrime Dark Web market "Infraud Organization" suspect Sergey Medvedev, arrested in Thailand - CBS News." [Online]. Available: URL: https://www.cbsnews.com/news/usrussia-cybercrime-dark-web-market suspect-sergeymedvedev-thailand/. [Accessed: 10-Mar-2020].

18. Массовые задержания пользователей теневого интернета. URL: https://www.tadviser.ru/index.php

19. Project Participate, December 2019, URL: https://www. thecryptoupdates.com/coalition-of-major-stakeholders-incryptocurrency-industry-issues-report-on-indicators-of-suspicious-activity/

20. TNO licenses Dark Web Monitor to CyberDevOps. URL: https://cflw.com/2019/11/13/tno-licenses-dark-web-monitor-to-cyberdevops/

KIBER-JINOYATCHILIK VA UNGA QARSHI KURASHISH

Muxsimov Ulug'bek Timurbek o'g'li

Sergeli tuman prokuraturasi katta tergovchisi

Annotatsiya: Mazkur maqolada internet tarmog'i va axborot texnologiyalari sohasida yuz berayotgan kiberjinoyatlar haqida qisqacha yoritilgan. Shuningdek, ushbu jinoyatlarning turlari, bu turdagi jinoiy vaziyatlarga qarshi kurash tizimini takomillashtirish, xavfsizlik choralarini ko'rish bo'yicha qonunchiligimizda samarali olib borilfyotgan islohotlar yoritilgan.

Kalit so'zlar: globallashuv, kiberxavfsizlik, kiberjinoyat, kiberterrorizm, axborot xuruji, informatsion tahdid, kompyuter jinoyatchiligi, elektron jinoyat.

So'nggi paytlarda ijtimoiy tarmoqlarda saytlarni buzib kirish, virusli dasturlar tarqatish kabi holatlar juda kòp uchramoqda. Kiber jinoyatlar hozirgi globallashuv davrida jiddiy muammolardan biriga aylandi. Kiber-jinoyatchilik atamasi kompyuterlar, tarmoqlar yoki internetni qamrab oluvchi jinoiy faoliyatni nazarda tutadi.

Kiber jinoyatlarga qarshi kurashish uchun IT-kompaniyalar har doim inson omilini hisobga olishlari kerak, chunki hozirgi vaqtda tajovuzkorlar ijtimoiy muhandislik usullaridan faol foydalanadi. Kiberjinoyatlar asosan moliyaviy daromad olish maqsadida amalga oshiriladi. Yangi texnologiyalar zamonida yangicha atamalar bilan ham tanish bo'lishimiz zarur. Ulardan biri "Kiberhujum". Kiberhujum ko'pincha siyosiy sabablarga ko'ra bo'ladi.

Kiberterrorizm esa, vahima yoki qo'rquvni keltirib chiqarish uchun elektron tizimlarni buzishga qaratilgan. Hozirgi kunda eng keng tarqalgan kibertahdidlardan biri zararli dastur - bu kiberjinoyatchi yoki xakerlarning qonuniy foydalanuvchilar kompyuterini buzish yoki shikastlash uchun yaratgan

dasturiy ta'minotdir. Ko'pincha nomaqbul elektron pochta ilovasi yoki qonuniy ko'rinishdagi yuklab olish orqali tarqaladigan zararli dasturlar kiberjinoyatchilar tomonidan pul ishlash yoki siyosiy sabablarga ko'ra kiberhujumlarda foydalanilishi mumkin. Hozirgi vaqtda insonlarni kiberhujumlardan himoya qilish maqsadida boshqa davlatlar qatorida O'zbekiston Respublikasida ham yangi va birqancha samarali qonun hujjatlari ishlab chiqilmoqda. Bulardan Yangi O'zbekistonning 2022–2026 yillarga mo'ljallangan Taraqqiyot strategiyasida O'zbekistonda 2023-2026 yillarga mo'ljallangan O'zbekiston Respublikasining kiberxavfsizlik strategiyasi ishlab chiqilishi nazarda tutilgan. Strategiyaga ko'ra, axborot maydonidagi kiberhujum va tahdidlarni monitoring qilish tizimi yanada takomillashtiriladi.

▪ Bunda, "UZ" domen zonasi Internet-makonining kiberxavfsizligini ta'minlashning asosiy yo'nalishlarini hamda elektron hukumat, energetika, raqamli iqtisodiyot tizimlarini va muhim axborot infratuzilmasiga taaluqli boshqa yo'nalishlarni himoya qilish bo'yicha kompleks vazifalar belgilanadi. Shuningdek, kiberjinoyatchilik uchun jinoiy javobgarlik qayta ko'rib chiqilishi ham ko'zda tutilmoqda. Strategiyaga ko'ra, axborot maydonidagi kiberhujum va tahdidlarni monitoring qilish tizimi yanada takomillashtiriladi.

Bunda: kiberxavfsizlikning yagona tarmog'ining texnik infratuzilmasini kengaytirish, "Kibernetikada innovatsiyalar IT-parki" faoliyatini yanada jadallashtirish, IT-parkning hududlardagi raqamli texnologiyalar o'quv markazlari negizida yoshlarni kiberxavfsizlik asoslari bo'yicha o'qitilishini ta'minlash, hamda har yili talaba va o'quvchilar orasida kiberhujumlarni aniqlash bo'yicha respublika miqyosida konkurslar o'tkazish nazarda tutiladi. Statistik ma'lumotlarga nazar soladigan bo'lsak, 2024 yilga kelib, kiber jinoyatlardan moliyaviy yo'qotishlar deyarli 70% ga yetadi.

Juniper Research tadqiqotchilarining fikriga ko'ra, zarar har yili o'rtacha 11 foizga oshadi va 2024 yilga kelib 5 trillion dollardan oshadi. O'tgan yili mutaxassislar kiber jinoyatlardan etkazilgan zararni 3 trillion dollarga baholashgan. Har yili

kompaniyalar tobora ko'proq raqamli muhitga bog'liq bo'lib, zarar etkazilishi ma'lumotlarning tarqalishi uchun qonun bo`yicha olinadigan jarimalar tufayli ortadi.

Jinoyat kodeksining bir qator moddalarida kompyuter texnikasi vositalaridan foydalanib sodir etiladigan jinoyatlar va ularga nisbatan javobgarlik ko'zda tutilgan. O`zbekiston Respublikasi Jinoyat kodeksi, 130-modda. Pornografik mahsulotni tayyorlash, olib kirish, tarqatish, reklama qilish, namoyish etish. Pornografik mahsulotni tarqatish, reklama qilish, namoyish etish maqsadida tayyorlash yoki O'zbekiston Respublikasi hududiga olib kirish, xuddi shuningdek pornografik mahsulotni reklama qilish, namoyish etish, tarqatish, shu jumladan ommaviy axborot vositalarida, telekommunikatsiya tarmoqlarida yoki Internet jahon axborot tarmog'ida reklama qilish, namoyish etish, tarqatish, shunday harakatlar uchun ma'muriy jazo qo'llanilganidan keyin sodir etilgan bo'lsa bazaviy hisoblash miqdorining to'rt yuz baravaridan olti yuz baravarigacha miqdorda jarima yoki uch yuz oltmish soatgacha majburiy jamoat ishlari yoxud uch yilgacha axloq tuzatish ishlari bilan jazolanadi. 139-modda. Internet jahon axborot tarmog'ida joylashtirish orqali tuhmat qilish bazaviy hisoblash miqdorining ikki yuz baravaridan to'rt yuz baravarigacha miqdorda jarima yoki uch yuz soatdan uch yuz oltmish soatgacha majburiy jamoat ishlari yoxud ikki yildan uch yilgacha axloq tuzatish ishlari yoki bir yilgacha ozodlikni cheklash bilan jazolanadi.

Shu bilan birga biz kiberxavfsizlik haqida ham ma'lumotga ega bo'lishimiz kerak.

Kiberxavfsizlik - bu kompyuterlar, serverlar, mobil qurilmalar, elektron tizimlar, tarmoqlar va ma'lumotlarni zararli hujumlardan himoya qilish amaliyotidir. U axborot texnologiyalari xavfsizligi yoki elektron axborot xavfsizligi sifatida ham tanilgan. Bu atama biznesdan tortib mobil hisoblashgacha bo'lgan turli kontekstlarda qo'llaniladi va bir necha umumiy toifalarga bo'linishi mumkin. Odatda, kiberxavfsizlik quyidagilarni anglatadi: shaxslar, *kiberxavfsizlik* ularning shaxsiy ma'lumotlari o'zi va o'zlari shunday vakolatga ega bo'lganlardan boshqa hech kim uchun mavjud emasligini va ularning kompyuterlari to'g'ri ishlashini va zararli

dasturlardan xoli ekanligi, kichik biznes egalari ,kiberxavfsizlik kredit karta ma'lumotlari to'g'ri himoyalanganligini va ma'lumotlar xavfsizligi standartlari savdo nuqtalari registrlarida to'g'ri bajarilishini ta'minlashni o'z ichiga olishi mumkin. Shuningdek, onlayn biznes olib boradigan firmalar, *kiberxavfsizlik* o'z ichiga ishonchli serverlar bilan doimiy ishlaydigan serverlarni himoya qilish kiradi. Yani, kiberxavfsizlik bu o'z navbatida ko'plab turli tashkilotlarga tegishli bo'lgan ko'plab virtual serverlarga ega bo'lgan ko'p sonli serverlarni o'z ichiga olgan ko'plab ma'lumot markazlarini himoya qilishni talab qilishi mumkin.

Axborot xavfsizligi saqlashda ham, tranzitda ham ma'lumotlarning yaxlitligi va maxfiyligini himoya qiladi. Operatsion xavfsizlik ma'lumotlar aktivlari bilan ishlash va himoya qilish jarayonlari va qarorlarini o'z ichiga oladi. Foydalanuvchilarning tarmoqqa kirishda ega bo'lgan ruxsatlari va ma'lumotlarning qanday va qayerda saqlanishi yoki baham ko'rilishini belgilovchi protseduralar shu soyabon ostidadir.

Tarmoq xavfsizligi - bu maqsadli hujumchilar yoki opportunistik zararli dasturlardan qat'iy nazar, kompyuter tarmog'ini buzg'unchilardan himoya qilish amaliyotidir.

Favqulodda vaziyatlarni tiklash va biznesning uzluksizligi tashkilotning kiberxavfsizlik hodisasiga yoki operatsiyalar yoki ma'lumotlarning yo'qolishiga olib keladigan boshqa hodisaga qanday munosabatda bo'lishini belgilaydi. Favqulodda vaziyatlarni tiklash siyosati tashkilotning o'z operatsiyalari va ma'lumotlarini voqeadan oldingi kabi ishlash qobiliyatiga qaytishi uchun qanday tiklashini belgilaydi. Biznesning uzluksizligi - bu ma'lum manbalarsiz ishlashga urinayotganda tashkilot orqaga tushadigan rejadir.

Ilova xavfsizligi dasturiy ta'minot va qurilmalarni tahdidlardan xoli saqlashga qaratilgan. Buzilgan dastur himoya qilish uchun mo'ljallangan ma'lumotlarga kirishni ta'minlashi mumkin. Muvaffaqiyatli xavfsizlik dizayn bosqichida, dastur yoki qurilma ishga tushirilishidan ancha oldin boshlanadi. Shuni takidlab ótish kerak-

ki, insoniyatga yangi imkoniyotlar yaratilishi bilan birga kiber xurujlar tobora ortib, og'irlashib, xavfli tus olib, xususiy va davlat sektorini bir xilda nishonga olmoqda.

Bizneslar va kompaniyalarga tegishli tijoriy sirlar va maxfiy axborotlar o'g'irlanmoqda. Universitet va laboratoriyalarga tegishli ixtirolar o'zlashtirib olinmoqda. Fuqarolar shaxsiy ma'lumotlarini boy berib, firibgarlik qurboniga aylanmoqda. Vaqt o'tishi bilan himoya usullari yaxshilanmoqda. Tahlilchilar kiber jinoyatchilar kelajakda xavfsizlik tizimlarini mustaqil o'rganishga qodir bo'lgan sun'iy intellektdan foydalanishni boshlashlari haqida ogohlantirmoqda. So'nggi yillarda AI texnologiyasi kiber tahdidlardan himoya qilish uchun faol foydalanilmoqda.

Kiberxavfsizlik korporativ madaniyatning tobora muhim qismiga aylanib bormoqda, ammo bu tendentsiya kompyuter tizimlari foydalanuvchilari orasida keng tarqalmadi. Internet tarmog'idagi ayrim ma'lumot va xabarlar buzg'unchilik, jinoyatchilik harakatlariga undabgina qolmay, balki bunday axborot tarqatish usullaridan turli ekstremistik guruhlar, buzg'unchi tashkilotlar, kiberterrorizm vakillarihamda ko'plab firibgarlar foydalanishga harakat qilmoqdalar. Bunday urinishlar o'z navbatida jinoyatchilikning yangi turlarini "kashf" etishda va jinoyatning globallashuvida katta rol o'ynab kelmoqda. Ana shunday "kashfiyot"lardan biri — kompyuter jinoyatchiligi qisqa vaqt ichida o'zining "yuqori cho'qqisi" ga ko'tarildi.

Yuqorilardagidan xulosa qilib shuni aytish mumkinki, axborot texnologiyalarisohasi jadal rivojlanib borayotgan zamonda u bilan bog'liq turli tuman muammolar yuzaga kelmoqda. Shunday ekan, internet xavfsizligini ta'minlash va bu kabi jinoyatlarning oldini olish faqatgina davlatning emas, balki internet xizmatidan foydalanayotgan har bir mustaqil shaxsning ham burchi hisoblanmog'i darkor. Xodimlarni kiberxavfsizlik asoslariga o'rgatish ushbu sohada xarajatlarni yanada samarali rejalashtirishga yordam beradi.

ADABIYOTLAR

1. Sh.M.Mirziyoyev Xalqimizning roziligi faoliyatimizga berilgan eng oliy bahodir. 2-jild. –T. : "O'zbekiston" 2018.

2. A.U.Anorboyev Kiberjinoyatchilik, unga qarshi kurashish muammolari va kiberxavfsizlikni ta'minlash istiqbollari. Monografiya. –T. : Milliy gvardiya instituti. 2020.

3. S.K.Ganiyev, A. A. Ganiyev, Z. T. Xudoyqulov Kiberxavfsizlik asoslari. O'quv qo'llanma. –T. : "Toshkent" 2020.

4. Salayev N.S., Ro`ziyev R.N Kiberjinoyatchilikka qarshi kurashishga oid milliy va xalqaro standartlar. Monografiya ., – T.: TDYU, 2018

5. Нестерович С.А. Проблемы расследования преступлений, которые стоят пред сотрудниками следственных органов.//Вестник науки и образования. №8. 2018

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Shakhnoza Mamatova Hoshim qizi. (2023). THE SIGNIFICANCE OF A TASK-BASED APPROACH IN ENGLISH FOR SPECIFIC PURPOSES (ESP). GOLDEN BRAIN, 1(24), 45–50. https://doi.org/10.5281/zenodo.8327132
9
Akramov X.A, Yusupov R.R, & Ergashov J.D. (2023). STRENGTH OF CONCRETE WITH VARIOUS COMPOSITIONS AND SUPERPLASTICIZER ADDITIVES. GOLDEN BRAIN, 1(24), 51–58. https://doi.org/10.5281/zenodo.8327149
10
Shodiev Jahongir Jurakulovich. (2023). A STEP TOWARDS HUMAN DIGNITY. GOLDEN BRAIN, 1(24), 59–67. https://doi.org/10.5281/zenodo.8327159
11
Gafurov Doniyor Oripovich. (2023). THE PLACE OF THE NAQSHBANDIYA SECRET IN THE TEACHINGS OF TASSUVUF AND ITS ATTITUDE TO FAMILY AND MARRIAGE ISSUES. GOLDEN BRAIN, 1(24), 68–77. https://doi.org/10.5281/zenodo.8327166
12
Muxsimov Ulug'bek Timurbek o'g'li. (2023). YASHIRIN TARMOQ DARKNET ORQALI SODIR ETILGAN IQTISODIY JINOYATLARGA QARSHI KURASHISH SAMARADORLIGINI OSHIRISHDA XORIJIY TAJRIBANING O'RNI VA AHAMIYATI. GOLDEN BRAIN, 1(24), 78–88. https://doi.org/10.5281/zenodo.8327168
13
Muxsimov Ulug'bek Timurbek o'g'li. (2023). YASHIRIN TARMOQ "DARKNET" ORQALI SODIR ETILADIGAN KIBER VA IQTISODIY JINOYATLAR VA ULARGA QARSHI KURASHISH MASALALARI. GOLDEN BRAIN, 1(24), 89–103. https://doi.org/10.5281/zenodo.8327172
14
Muxsimov Ulug'bek Timurbek o'g'li. (2023). KIBER-JINOYATCHILIK VA UNGA QARSHI KURASHISH. GOLDEN BRAIN, 1(24), 104–109. https://doi.org/10.5281/zenodo.8327178