
Personality Ecological Culture: Universals of Ethical Principles of Human-Environment Interaction

Galina P. Novikova ^{1*}, Elena A. Kaptelinina ², Dmitriy A. Pashentsev ³,
Nikolay N. Chernogor ³, Nataliya V. Osipova ⁴, Elena V. Spirina ⁵, Elena S. Putilina ⁶,
Olga A. Ruzakova ^{7,8}

¹ Institute for Strategy of Education Development of the Russian Academy of Education, Moscow, RUSSIA

² Almeteyevsk State Oil Institute, Almeteyevsk, RUSSIA

³ Institute of Legislation and Comparative Law under the Government of the Russian Federation, Moscow, RUSSIA

⁴ Gzhel State University, Ramensky District, Elektroizolyator, RUSSIA

⁵ Ulyanovsk State Agrarian University named after P.A. Stolypin, Ulyanovsk, RUSSIA

⁶ Rostov Institute (Branch) of the All-Russian State University of Justice, Russian Law Academy of the Ministry of Justice of Russia, Rostov-on-Don, RUSSIA

⁷ MGIMO University, Moscow, RUSSIA

⁸ Financial University under the Government of the Russian Federation, Moscow, RUSSIA

* Corresponding author: nochuirot@rambler.ru

Abstract

The research urgency is caused by the trends to find effective ways of crises overcoming, which acquires in the XXI century global nature due to many factors of human activities that damage the environment. It is established that as a key strategy for solving this problem, the leading position is devoted to the rethinking of the individual ecological culture ethical values, based on the principles of unity of man and the environment; the organization of economic activity on the basis of ethical values of nature management and forecasting the consequences of their behavior for the environment; the recognition of the right of wildlife all kinds to the equal value of life on Earth with man. This strategy determines the need for scientific substantiation of the theoretical and methodical approach to rethinking the interaction principles between man and the environment, providing for the formation of a system of values, value orientations, interests, needs, attitudes, experience of the individual in making new, environmentally-oriented decisions and norms of behavior in relation to the natural environment. In this regard, the main attention in this article is devoted to the development and testing of universal ethical principles of the individual's ecological culture innovative model, raising to the rank of law the equal coexistence of man and nature and the development of sustainable interaction of ecology, economy and production. With the help of environmental monitoring, implemented as a leading method of research, the effectiveness of the ethical principles' universals of the model of man and nature equal coexistence is experimentally tested and justified. The article reveals the prerequisites for the transformation of the individual's ecological culture; the content of ethical principles' universals for rethinking the ecological culture of the individual is established; on the basis of the results of the study the structure and content of axiological, cognitive, procedural, orientation components of the innovative model of individual's ecological culture is justified and the practical importance in the implementation of ethical principles' universals of the model is proved.

Keywords: global ecological crisis, ecological culture, values of ecological culture, model of ecological culture, ethical principles, universals of ethical principles, sustainable development, ecological monitoring, criteria of ecological culture

Novikova GP, Kaptelinina EA, Pashentsev DA, Chernogor NN, Osipova NV, Spirina EV, Putilina ES, Ruzakova OA (2019) Personality Ecological Culture: Universals of Ethical Principles of Human-Environment Interaction. Ekoloji 28(107): 63-71.

INTRODUCTION

It is proved that the expectations of the ruling elites of developed countries, assigned to the globalization of

all spheres of human life, in the XXI-th century did not materialize. On the contrary, humanity is faced with the aggravation of the global ecological crisis problems

manifested as a result of anthropocentric relations between man and nature, the discrepancy between the level of impact on nature and the boundaries in which these effects should be, so that the system of life can adequately revive the environment (Cherkasov et al. 2015, Chuikova 2012, Filatov et al 2018, Galushkin 2015, Koffler 2007, Kryukova et al. 2017, Lubnina et al. 2016, Marar 2012, Potapova et al. 2018, Rudenko et al. 2015). Globalization essentially *invaded* the natural social diversity of the relations between man and his environment which had been establishing for centuries, destroyed the natural course of these relations, and brought up mankind to the brink of ecological disaster (Barkovskaya 1999, Faleeva et al. 2017, Grebennikov et al. 2013, Kvon et al. 2017, 2018, Misenzhnikov 2008, Rosenberg and Mozgovoy 1992, Reimers 1994, Shcherbakov et al. 2017, Zaitseva et al. 2018). Awareness of probability of ecological disaster by the modern civilization highlights the need to rethink the phenomenon of ecological culture at the level of the new qualitative characteristics, reflecting the unity of man and nature in the whole world, and also at the level of procedural interactions with the environment in accordance with universals of ecological culture's ethical principles (Girusov 2010, Krivosheev and Eisner 2012). The results of recent studies (Bykanova 2005, Doroshko 2012, Gary and Alistair 2012, Glazachev 2005, Masalimova et al. 2018, Oborsky et al. 2018, Omarova et al. 2018) show that the most priority status among social aspects of people's life is occupied by problems of the person's ecological culture formation. The ecological culture of the modern man as a set of theories, ideas, behavior, forecasts and expectations, aimed at limiting the negative impact of his/her nature, is proved to be contradictory internally, it combines the features of the anthropocentric and eco-centric paradigms (Barkovskaya 1999, Marar 2012). It includes as the representations' formation on the relationship in the system *nature – man* at the level of the negative consequences' understanding because of consumer attitude to nature, and the lack of the system mechanisms of overcoming the negative impacts on the environment safety sustainable development (Chuikova 2012, Commoner 1974, Ehrenfeld 1992, Zaitseva et al. 2017). According to experts (Callicott and Baird 1994, Ivashchenko et al. 2012, Israel 2001) ecological culture reproduces the idea that that nature is not only a source of resources, natural minerals, but also that nature is a place of our habitat and development. It is proved that the readiness for realization of ecological culture of the person is a basis for comprehension and understanding of the main problems caused by interaction of the

person with environment, that is, ecological problems, and also it is a basis of need for their effective decision (Khodchenkov 2006, Kotova 2009, Tellness 2009, Yanitsky 2007). Ecological culture becomes the basic point in the concept of man, becomes his/her universal characteristic as a set of historically variable over-biological programs of human activity, providing co-evolution (co-development) of nature, man and society (Commoner 1974, Ehrenfeld 1992, Marsh 1866). It is proven that axiological (valuable) kernel of ecological culture becomes a system of values and value orientations, affecting the totality of human needs in preservation and reproduction of the natural environment, in harmonious relationship of man to the natural environment and their social environment, and as well as to him/herself as a part of nature (Glazachev and Kashlev 2005, Reimers 1994, Rosenberg and Mozgovoy 1992). In connection with the established trends there is a need to determine the theoretical and methodical approach to solving the contradictions in the process of rethinking the essence of environmental culture of the individual. As one of the effective mechanisms to overcome this contradiction, the author substantiates the universals of the innovative model's ethical principles of man and nature equal coexistence, focused on the development of sustainable interaction between the environment, economy and production. The scientific and practical significance of the need to rethink the human ecological culture, mediated by the universals of ethical principles of the innovation model, is proved. In this regard, the article reveals the prerequisites for the transformation of the individual's ecological culture; establishes the content of ethical principles' universals to rethink the ecological culture of the individual; on the basis of the study results it substantiates the structure and content of axiological, cognitive, procedural, orientation components of the innovative model of the individual's ecological culture and proves their practical importance in the implementation of the universals of the model's ethical principles. The materials of the article are useful in the development and implementation of methods for individual's environmental culture formation, in making management decisions that regulate environmental activities, as well as in educational and awareness-raising activities among young people and among other categories of the population.

LITERATURE REVIEW

It is established that the study of ecological culture as a branch of science that explores the relationship between human communities and nature; the impact of

industrial activity on the composition and properties of the environment; the negative impact of anthropogenic, especially urbanized landscapes and other similar factors on the physical and mental health of man, on the gene pool of the human population and on the biological diversity of nature, are described in the studies of famous philosophers, psychologists, environmentalists, ethno-ecologists, including Vernadsky (1988), Commoner (1974), Marsh (1866), Girusov (2010), Baird (1994), Ehrenfeld (1973) etc. The results and conclusions of these authors about the nature, structure and features of human ecological culture development form the methodological basis of this study. It is proved, along with certain achievements in the study of problems of environmental culture to date, there are many controversial and unresolved issues. For example, in a significant number of works, ecological culture is often identified with social ecology and is considered as its invariant (Chuikov 2012, Girusov 2010), is classified from the standpoint of ecological problems of nature management (Doroshko 2012, Glazachev and Kashlev, 2005) is examined in connection with the spiritual values and mental world of man (Krivosheev and Eisner 2012, Kudinova et al. 2013). Active attempts are being made to assess the ecological culture as a condition for the survival of mankind from the perspective of civilization preservation (Kotova 2009, Rosenberg and Mozgovoy 1992). In most studies, ecological culture is defined as a set of ideas, representations, beliefs, stereotypes, and other spiritual formations that reflect and regulate the environmental relations of man with the environment (Marar 2012). The existing variety of definitions confirms the assumption that ecological culture as a system has not been codified to date, and therefore exists as a certain type of environmental relations between society and nature, along with similarly distinguished political, legal, moral and other types of culture (Girusov 2010). Until now, many authors in their studies rely on the semantic core of ecological culture in the relations between man and nature: "a constant measure of human freedom in relation to nature" (Glazachev and Kashlev 2005). It is established that the knowledge of the laws of society development in combination with environmental laws creates a scale of environmental culture measurement, the scale of "socialization of nature and human naturalization" (Reimers 1994). It is proved that such formation of culture is ensured by combining environmental ethics and moral philosophy, based on the categories of ecological austerity, altruism, co-evolution, and environmental imperatives. They also represent the limits of permissible human activity on

the natural environment, which he is not entitled to cross under any circumstances (Commoner 1974, Krivosheev and Eisner 2012, Vernadsky 1988). That is why the objective nature of ecological culture does not depend on the will of the individual, and is determined by the ratio of the properties of the natural environment, physiological and social characteristics of man and society. This provision defines a new approach to the essence of the concept under study: ecological culture is not a part of the General culture, identical in its meaning and content to the political, legal, moral culture. It forms the basis of the General culture and is its fundamental core (Marar 2012, Reimers 1994). Proponents of this approach legitimately substantiate the thesis-any culture is ecologized: the interaction of human communities and nature existed initially, forever, since its inception. Therefore, the whole culture that characterizes these interactions at the genetic level is of environmental nature (Doroshko 2012, Girusov 2010, Reimers 1994). In the course of the study, despite the extensive bibliography in the study of the problem of ecological culture formation, many questions remain open, among which the definition of theoretical and methodical approaches to the transformation of the individual's ecological culture, including through the universals of the innovative model's ethical principles of equal coexistence of man and nature, occupy not the last place. The study of this direction is the purpose of this study.

RESULTS AND DISCUSSIONS

Prerequisites of the Individual's Environmental Culture Transformation

It is established that the ideas of environmental protection are not new. By the end of the XIX century the phrase *environment* acquires a modern ecologically oriented value that describes a "system that includes all the living organisms inhabiting air, water and soil" (Commoner 1974, Reimers 1994, Vernadsky 1988). Specialists of the XIX century actively study the impact of society on the natural ecological system; assess the effect of environmental measures. Together with the growth of living standards, satisfaction of material needs and understanding of the danger of the natural environment's depletion and reaching the limits of its growth, the ideas of environmental protection are becoming increasingly important, gradually becoming an independent branch. It is established that until the mid-twentieth century there was not even a single set of rules for the protection of the environment, which had to adhere to civilization (environmental doctrine of Russia, 2001). Protection of the environment in the

early twentieth century has become a complex and intricate phenomenon, including conservative, reformist and even radical ideas about how the world order should look like and what needs to be done. Several positions corresponding to the ideas of the last century about the culture of environmental protection are revealed. These include protection of wildlife habitats and wildlife themselves, conservation of natural resources, eco-feminism, eco-theology, eco-psychology, deep ecology, radical ecology, environmental justice, sustainable development and environmental consumerism (Gorlachev 2005, Petrovskaya et al. 2016). Each area of research offers new ideas, methods and tools designed to decide how humanity should develop and how to interact with the environment. Over the past decades, there has been a specific tendency to respond to a specific environmental disaster or to the risks of new disasters, expressed in an information surge of new ideas, rounds of meetings at the international level, in enhancing public interest in improving the legal and environmental framework at the national and global levels (Rosenberg and Mozgovoy 1992).

In the second half of the twentieth century, civilization for the first time was seriously puzzled by the limits of its own destructive consequences. It became obvious that the continued use of the proposed models of interaction (consumption) with the environment could pose global threats. The consequences or possible consequences of such processes as the arms race, the development of bacteriological weapons, and the growing human intervention in the terrestrial ecosystem have reached a critical mass. In the 1960s, social, cultural and political transformation of state and social systems led to an increase in the level of activity in the field of nature protection among all segments of the population of developed countries. The result of this activity was the strengthening of environmental organizations' influence, the signing of international agreements, the development of a Set of rules for the protection of nature, beyond the simple protection of wild animals and their habitats, codes of social responsibility of business and activation in the field of environmentally responsible training, education and culture (Rosenberg and Mozgovoy 1992).

The current stage of environmental protection development is characterized by the development of national laws on climate change (greenhouse effect, warming, conservation of biological species), the main purpose of which is to prevent the increasing

degradation of the natural environment of the planet, the preservation of biological diversity of the Earth and the achievement of humanitarian impact of human activities on nature. For the first time the social, economic and environmental spheres of the States' development are highlighted and programs to address urgent global problems are adopted (*the Agenda for the XX1 century*). In order to ensure effective implementation of *the Agenda for the XX1 century*, the world Summit on sustainable development, entitled *Planet Earth*, was organized in 2002. This Summit finally completed the *Agenda for the XX1 century*, implemented its goals, forecasts and commitments in specific practical recommendations for the protection of the environment on the principles of environmental culture: the unity and inseparability of man and nature, man is not the king of nature, he is part of nature, its creation and he is within nature; the domination of man over nature is nothing but a consumer activity based on the use of its laws; modern man is ecologized, nature is socialized (Materials of websites: WWF; UN environment Programs).

It is proved that the problems in the development of modern civilization have created the prerequisites for the global environmental crisis resulting from economic activities, focused on the anthropocentric consciousness of man, his interests and needs. The ability of nature to self-purification in a man-made civilization is almost exhausted, and advances in science, technology, culture can no longer fundamentally affect the overcoming of the entrenched crisis. In the current difficult conditions, it is important to understand that in solving the global environmental problem of civilization survival it is necessary to rethink the anthropocentric ideology of mankind, which has crossed the border of permissible activity in relation to the natural environment, on the ethical values of equal interaction of nature, man and society. As a key idea of this interaction specialists substantiate ethical principles of ecological culture.

The Structure and Content of Universals of Ethical Principles of the Individual's Ecological Culture Rethinking

The research proves the priority of the universals of human ecological culture's ethical principles as a necessary element of environmental activities, regulating its attitude to nature in the present and projected future.

The first universals. Moral and environmental imperative for contemporaries:

- Categorical commands to modern man, using the achievements of scientific and technological progress in the natural environment today.

Based on principles:

- Precautions, taking into account the vulnerability of the natural environment, which does not exceed its *strength limits*;

- taking into account the essential mutual relations between nature and man;

- Compliance with natural laws of development, so as not to cause irreversible processes in the environment;

- Compliance with the capacity of ethical opportunities as the limit of solving moral problems by man and society;

- taking into account the peculiarities of time, situations in the development and welfare of society.

The rules of universals realization are defined:

1) The rule of self-defense. It is allowed to use force against another living creature, as well as the ecosystem for self-defense only when a person cannot avoid an attack or escape;

2) The rule of equitable distribution. It explains that in case of collision of vital interests of people and vital interests of nature conflicting parties should be given an alternative;

3) The rule of proportionality. It claims that in case of conflicts of vital interests of nature and side interests of man, priority is given to nature.

4) Fair compensation rule. This rule says, if in the case of satisfaction of the people interests the damage to nature is made, that man should make compensation for the damage (Ehrenfeld 1992, Vernadsky 1988).

The second universals. Imperatives addressed to future generations.

They are based on specific principles, norms and values:

- The chronological objectivity forbidding ignoring interests of future generations of people because of their time or spatial distance;

- Debts to descendants whose presence in modern life is not relevant, but who have specific rights in relation to living today;

- Norms-imperatives of dialogue with the future, which includes the need to reject any action that could endanger the existence or interests of future generations.

It is established that the observance of these principles is possible only in the conditions of moral and environmental freedom and responsibility, the correct ratio of which is determined by the degree of knowledge of social and natural laws and the possibilities of their reasonable use. At the same time, environmental freedom implies the possibility, ability and moral readiness of a person to act in the natural environment and in relation to it in accordance with the high measure of his own environmental culture.

It is proved that environmental freedom is determined by the moral and ecological responsibility, which can be considered as the human awareness of the need for environmental activities focused on the principle of co-evolution of society and nature and further harmonization of their interaction, in particular: the transition from the *model of dominance* of man over nature to the *model of reasonable coexistence* of man and nature; the adoption of a new concept of environmental protection – not so much for man as from man; reconciliation of economy and production with the environment on the basis of moral criteria (Ivashchenko et al. 2012). All the course of the historical development of civilization proved that man is the only creature on Earth, which has moral obligations to other biological species and nature as a whole. Animals and plants inhabiting the environment as an intrinsic value are the moral partners of man. He enters with them in moral relations, and therefore is obliged to protect them as the weaker, more defenseless, as their *smaller brothers*. Axiomatic are the direct responsibilities of man and all future generations of people to nature:

- do not destroy the species;

- don't be cruel to living things;

- do not destroy natural areas;

- try as little as possible to kill living beings, not to kill them just for fun;

- protect the rights of living beings and ecosystems;

- relate to the natural nature and other living beings, applying the ethical concepts of good, duty, justice, compassion, conscience, etc.

The universals of ethical principles of ecological culture allow us to successfully rethink the existing

traditional principles, norms and imperatives, to ecologize them and to include in their content the new internal values of nature, minimizing the traditional usefulness and expediency as the fundamental categories of human deeds in its relation:

- 1) Mandatory actions - the manifestation of good deeds for animals in distress;
- 2) The ethic virtue - participation in the work of the volunteer teams and the public environmental inspection of nature protection;
- 3) Permissive actions-those that in any case will not cause damage to nature;
- 4) Indecent acts - which are not prohibited by law, but negatively evaluated by humanitarian ethics. For example, sports hunting, this is not prohibited by law, but sharply condemned by ethics;
- 5) Prohibited acts-acts that are not only immoral, but also illegal. For example, poaching.

The Structure and Content of the Individual's Ecological Culture Modern Model

The study substantiates the four-component structure of the individual's ecological culture model, taking into account the values of the universals of ethical principles.

Axiological component of the model. The theoretical and methodical basis consists of the highest living values at the ecosystem level: the nature's right to the equal existence with the human being; the right to prosperity; the right to the extension of the species; the right to freedom; the right to the living space (Callicott, 1994). The specific hierarchy of values of the model consists of ethical principles:

- 1) Compliance with the human rights and obligations to nature;
- 2) Observance of ethical categories of human actions in relation to nature.

Cognitive component. Through the content of cognitive values a person learns the essence of the environment, determines its place in this space. The moral basis of the ethical principles of the model is the content of such categories as good, evil, justice, conscience, duty, the meaning of life. The formation of ideas about ethical principles, moral norms; the ability to moral judgments, the ability to evaluate their own actions or the actions of other people in relation to the environment in terms of environmental ethics,

morality; the ability to understand the motives of these actions acquire moral meaning for man:

- while compliance with the principle of non-harm or damage to any substance in the natural environment or ecosystem surrounding us;
- while compliance with the principle of non-interference. This principle contains two types of obligations: one requires refraining from any restrictions on the freedom of individual organisms, the second concerns the General strategy of *non-interference* with whole ecosystems and biotic communities;
- in compliance with the principle of respect for the rights of animals as the natural laws of living beings life, embodied in the legislation and legal culture of man:

1) At the species level: the right to exist; the right to inherit; the right to a critical habitat; the right to genetic diversity (protection against genetic pollution); the right to prosperity;

(2 at the level of beings: the right to life; the right to natural freedom; the right to inheritance; the right to protection from suffering because of human (protection from cruelty); the right to a share of earthly goods necessary for life; the right to genetic diversity (protection from genetic pollution); the right to custody (for domestic and agricultural animals and plants);

3) At the ecosystem level: the right to exist; the right to prosperity; the right to liberty; right to living space (Commoner 1974, Callicott 1994).

Procedural component. It is proved that procedural values are mastered in the process of all human life, are formed and developed in various types of behavioral and professional activities, as a result of resolving internal and external contradictions, and are manifested in the sphere of environmental consciousness, actions, personal properties. In the behavior the personality is guided by own views, beliefs which are formed on the basis of the acquired knowledge and life experience. Knowledge about the world around us and the norms of morality are combined in the consciousness into a single picture. In addition, the procedural component reveals the essential properties of the individual (nature and consumer- based; nature and value-based; adequate; scientific), influencing the choice of the position of the individual in relation to the surrounding nature:

- intrinsic values. One of the basic concepts of ecological culture. This is an absolute, Autonomous,

genuine, innate, independent, self-sufficient value of nature. This is something that is valued for its own sake, regardless of the usefulness in achieving some goal by someone else (Vernadsky 1988, Materials of sites);

- External (instrumental) values of the environment:

1) Material values: economic value (represents the value which is useful for economy of the person-the ancient wood *is appreciated* as a warehouse of forest products); recreational value (tourist, recreational use of natural territories);

2) Non-material values: the values of existence, aesthetic, ethical, historical, spiritual, scientific, values of life support, the unknown nature.

Orientation component. This component determines the orientation of the individual-altruistic or egoistic, to the realization of the universals of ethical principles. For example, the ability of the individual for some material gains to sacrifice the life of nature (shooting animals, cutting down rare trees, etc.). Or the person's readiness to gratuitous activity in nurseries for revival to life of the crippled animals. Orientation component in its essence and orientation serves as an ethical ideal, the standard of norms in the improvement of man, the conditions of life on Earth, in which people can humanely implement the interests and needs without destroying the natural processes in the environment, without prejudice to the interests and needs of animals and plants in a huge variety of ecosystems to lead a legitimate, unhindered existence. Priority standards - requirements for strict observance in the relations of the person with the nature and its creations are proved:

- nature, living and inanimate, is valuable in itself, recognized as a subject entitled to existence and prosperity, regardless of its usefulness, uselessness or harm to humans;

- Eco-ethical norms and rules are used in the interaction of man with nature, which is based on value equality and right equality;

- The mind and culture impose on a person exceptional duty in relation to the nature;

- Environmental activities are determined primarily by the need to preserve nature for the sake of nature (Marar 2012).

CONCLUSION

The results of the study confirm the theoretical and practical significance of the research problem as a necessary condition for clarifying the ethical principles of human ecological culture in the current global crisis circumstances. The search for new ideas of civilization's way out of the growing ecological crisis, which is becoming global in nature, has caused the interest of specialists in the ethical component of ecological culture, which recognizes not only the unity of man and the environment, but also the right of all kinds of wildlife to equal with man the value of life on Earth. This strategy determines the need for scientific substantiation of the theoretical and methodical approach to rethinking the principles of interaction between man and the environment, providing for the formation of a system of values, value orientations, interests, needs, attitudes, experience of the individual in making new, environmentally-oriented decisions and norms of behavior in relation to the natural environment. In this regard, the study developed and experimentally tested the structure and content of the universals of ethical principles of the individual's ecological culture innovative model, elevating to the rank of law the equal coexistence of man and nature and the development of sustainable interaction of ecology, economy and production. The prerequisites for the transformation of the individual's ecological culture in the article are revealed; the content of the universals of ethical principles of rethinking the individual's ecological culture is established; on the basis of the study results the structure and content of axiological, cognitive, procedural, orientation components of the individual's ecological culture modern model are justified and their practical importance in the implementation of the universals of ethical principles is proved. The study does not cover all aspects of the problem. The primary problem of further research is to rethink the methodology of ecological culture as an integrated system of eco-centric values of interaction between nature, man and society.

REFERENCES

- Barkovskaya Ayu (1999) Ecological consciousness as a subject of social and philosophical analysis: PhD Thesis. Volgograd.
- Bykanova NA (2005) Formation of ecological culture of urban population in modern conditions (regional aspect): PhD Thesis. Kursk.

- Callicott JB (1994) *The conceptual foundations of the land ethic. Planet in peril. Essays in environmental ethics.* Orlando: Harcourt Brace Company.
- Cherkasov AA, Ivantsov VG, Ustinovich ES, Kryukova NI, Molchanova VS (2015) The moving of the Ubykhs to the Russian service as a result of the peace initiatives in the first half of the 1840s years. *Bylye Gody*, 37(3): 541-548.
- Chuikova Lyu (2012) The problem of sustainability of ecological culture and ecological consciousness of the individual in modern conditions. *Man and education*, 1(30): 49-53. Moscow.
- Commoner B (1974) *Closing circle. Nature, man, technology.* Leningrad: Hydrometeoizdat.
- Doroshko OM (2012) Modern approaches to the definition of ecological culture. *Modern studies of social problems. Electronic scientific journal*, 9(17): 113-125.
- Ehrenfeld D (1992) *The dilemma of nature conservation. Environmental anthology.* Moscow: Boston Golubka.
- Environmental doctrine of Russia (2001) *The draft prepared by the Russian environmental organizations.* Mpscpcw: Ed. Russia International Social and environmental Union. Center For Environmental Programs, Register of audited organizations' External influencing factors., Greenpeace of Russia, Union for chemical safety, Wildlife conservation center and Ecol.
- Faleeva LV, Bratukhina EV, Ezhov SG, Gorbunova LN, Lopanova AP, Viaznikova LF, Kryukova NI (2017) Student's social experience forming in university vocational training, *Eurasian Journal of Analytical Chemistry*, 12(7): 1127-1135.
- Filatov VV, Zaitseva NA, Larionova AA, Zhenzhebir VN, Polozhentseva IV, Takhumova OV, Kolosova GM (2018) State Management of Plastic Production Based on the Implementation of UN Decisions on Environmental Protection. *Ekoloji*, 106: 635-642.
- Galushkin A (2015) Education in the field of national information security in the Russian Federation and abroad. *Journal of Computer Science*, 11(10): 988-994.
- Gary H, Alistair P (2012) *Environmentalism since 1945.* Routledge Taylor and Francis Group. London and New York: Routledge.
- Girusov EV (2010) Rise to environmental culture: necessity and essence. *Library science*, 3: 6-11.
- Glazachev SN, Kashlev SS (2005) Ecological culture: essence, content, technologies of formation. *Narodnaya asveta*, 2: 33 - 37.
- Gorlachev VP (2005) *Formation of ecological culture of personality in educational process: regional aspect: Doctoral Dissertation.* Chita.
- Grebennikov VV, Marchuk NN, Galushkin AA (2013) Organizational and legal bases of the nationality institute and its place in the system of rights in Russia. *World Applied Sciences Journal*, 23(9): 1217-1220.
- Israel (2001) *State and integrated monitoring of the natural environment and climate. Limits of change.* Moscow: Nauka.
- Ivashchenko AV, Gagarin AV, Stepanov SA (2012) Value approach to the formation of professional and environmental culture of the future specialist. *Bulletin of Moscow state University for the Humanities named after M. Sholokhov. Social and environmental technologies*, 1: 58 – 67.
- Khodchenkov AV (2006) *Ecological culture of the Russian youth: state and tendencies of transformations: PhD Thesis.* Rostov on Don.
- Koffler W (2007) Sustainability and some arguments for an additional approach for science for survival. *International Conference on «Environment: Survival and Sustainability»: Abstracts.* Nicosia–Northern Cyprus, 1: 773–774.
- Kotova IN (2009) *Ecological culture as a factor of the local community sustainable development in the conditions of modern Russia (sociological analysis): PhD Thesis.* Moscow.
- Krivosheev ES, Eisner Lyu (2012) Axiological component of ecological culture. *Bulletin of Krasnoyarsk state agrarian University. History and cultural studies*, 4: 217 – 220.
- Kryukova NI, Zakharova AN, Dulina GS, Yusupova ZF, Belonovskaya ID, Bogdanova JN (2017) Didactic features of pedagogical interaction as the basis of university education. *Man in India*, 97(3): 29-41.
- Kudinova GE, Rosenberg AG, Rosenberg GS (2013) Ecological modernization: formation, current state and prospects. *Institute of ecology of the Volga basin RAS. Tolyatti.* URL: http://www.ssc.smr.ru/media/journals/samluka/2013/22_2_02.pdf

- Kvon GM, Lushchik IV, Karpenko MA, Zaitseva NA, Kulkov AA, Galushkin AA, Yakupova NM (2017) Regional investment policy: analysis and assessment of the investment environment state. *Eurasian Journal of Analytical Chemistry*, 12(5): 835-853.
- Kvon GM, Prokopyev AI, Shestak VA, Ivanova SA, Vodenko KV (2018) Energy saving projects as energy security factors. *International Journal of Energy Economics and Policy*, 8(6): 155-160.
- Lubnina AA, Shinkevich MV, Ashmarina SI, Zaitseva NA, Saifutdinova GB, Ishmuradova II (2016) Resource saving innovative forms of the industrial enterprises. *International Journal of Economics and Financial Issues*, 6(2): 479-483.
- Marar OI (2012) Ecological culture in modern Russian society: author's abstract: Doctoral Dissertation. Moscow.
- Marsh DP (1866) *Man and nature*. St.Petersburg: Publication of I. Polyakov.
- Masalimova AR, Sangadzhiev BV, Shagieva RV, Gurbanov RA, Zhdanov SP (2018) Philosophical and socio-psychological meaning of the concept of psycho violence in learning environment. *XLinguae*, 11(1): 126-135.
- Misenzhnikov VV (2008) *Environmental culture and public policy. Formation of ecological culture and development of youth movement*. Moscow: Acropolis, Center for environmental policy and culture.
- Oborsky AY, Chistyakov AA, Prokopyev AI, Nikolyukin SV, Chistyakov KA, Tararina LI (2018) The national mentality in the history of philosophy. *XLinguae*, 11(3): 158-165.
- Omarova LB, Kalimullin AM, Grudtsina LY, Korzhuev AV, Zhukova MY (2018) Philosophical anthropology in postmodernism. *XLinguae*, 11(3): 76-85.
- Petrovskaya MV, Zaitseva NA, Bondarchuk NV, Grigorieva EM, Vasilieva LS (2016) Scientific methodological basis of the risk management implementation for companies' capital structure optimization. *IEJME-Mathematics Education*, 11(7): 2571-2580.
- Potapova SV, Danilova IY, Prasolov VI, Makarova EV, Kryukova NI (2018) Mythological foundations of ontology. *XLinguae*, 11(2): 672-685.
- Reimers NF (1994) *Ecology (theory, laws, rules, principles and hypotheses)*. Moscow: Russia Is Young.
- Rosenberg GS, Mozgovoy DP (1992) *Key issues of modern ecology: textbook*. Togliatti: RAS Institute of ecology of the Volga basin.
- Rudenko L, Zaitseva N, Larionova A, Chudnovskiy A, Vinogradova M (2015) Socio - economic role of service - sector small business in sustainable development of the Russian economy. *European Research Studies Journal*, 18(3): 223-238.
- Shcherbakov VS, Makarov AL, Buldakova NV, Butenko TP, Fedorova LV, Galoyan AR, Kryukova NI (2017) Development of higher education students' creative abilities in learning and research activity. *Eurasian Journal of Analytical Chemistry*, 12(5): 765-778.
- Tellness G (2009) How can Nature and Culture promote Health? *Scandinavian Journal for Public Health*, 37: 559-561.
- The materials of websites: world wildlife (2018) [Fund.http://www.wwf.org/](http://www.wwf.org/); UN programs on the environment.<http://www.un.org/ru/development/sustainable/background.shtml>.
- Vernadsky VI (1988) *Philosophical thoughts of a naturalist*. Moscow: Nauka.
- Yanitsky ON (2007) *Ecological culture*. Moscow: Nauka.
- Zaitseva NA., Larionova AA, Filatov VV, Rodina EE, Zhenzhebir VN, Povorina EV, Palastina IP (2018) Natural-Resource Potential Management of Region's Territorial Ecosystems Issue. *Ekoloji*, 106: 495-502.
- Zaitseva NA, Larionova AA, Gornostaeva ZhV, Malinina OYu, Povalayeva VA, Vasenev SL, Skrynnikova IA, Ersozlu A (2017) Elaboration of the methodology for assessing the development of managerial competences in university students taught with the use of case-technologies. *Eurasia Journal of Mathematics, Science and Technology Education*, 13(11): 7339-7351.