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ENVIRONMENTAL CULTURE:
A Comparative Study of Youth in Russia and Italy

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Abstract

This study delves into the influence of a country's national factors on the development of environmental culture, particularly among university students, within a cross-country framework. The theoretical segment explores the concept of environmental culture, its global diffusion, constituent elements, and the diverse cultural determinants shaping it. For a nuanced analysis, this research juxtaposes two distinct cultures, Italy and Russia, concentrating on the environmental culture prevalent among university students at Ca' Foscari University of Venice and Petrozavodsk State University. Significantly, the study meticulously compares the national factors of Italy and Russia, aiming to scrutinize their impact on the environmental culture of students in both countries. Thus, the study endeavors to test two hypotheses: (H1) The environmental culture level among student youth in Italy surpasses that of Russia; (H2) Relocation from one country to another, where the environmental culture level is superior, induces significant transformations in the environmental knowledge, values, and behavior of an individual.

Methodologically, the study employs a blend of quantitative and qualitative methodologies. The quantitative approach incorporates diagnostics devised by Asafova (2003) to evaluate the environmental culture level of over 200 students from both nations, facilitating comparative analysis. Meanwhile, the qualitative method delves into exploring the influence of national factors on environmental culture within the migration context, through interviews conducted with approximately 20 Russian students who have resettled in Italy and resided there for over a year.

Preliminary findings suggest a markedly higher environmental culture level among Italian students compared to their Russian counterparts. Furthermore, the results gleaned from the qualitative interviews underscore the transformative impact of relocating from Russia to Italy on environmental attitudes and values, particularly as political, economic, and cultural dynamics emerge as pivotal catalysts for change.

This study serves as a pivotal stride toward comprehending how disparate national factors shape the environmental culture of contemporary youth, particularly university students. By undertaking a comparative analysis between nations, the research endeavors to identify exemplary practices and strategies that can be mutually shared to address global environmental challenges more effectively. Additionally, the study sheds light on the adaptability and malleability of individuals from specific national backgrounds when transitioning from a country with a lower environmental culture (Russia) to one with a higher environmental ethos (Italy). Such insights enable us to formulate informed decisions and devise efficacious strategies aimed at realizing a more sustainable environmental future for Eastern European nations.

INTRODUCTION

Problem Statement

The global environmental crisis currently affecting our planet poses serious challenges to humanity in conserving natural resources and biodiversity. This crisis requires a comprehensive approach to solving it, encompassing not only scientific and technical aspects but also the socio-cultural and humanitarian spheres of public life. Each of these areas plays a crucial role in shaping an individual's environmental culture, which includes knowledge, behavior, and values related to the environment. Environmental culture is a special form of existence that defines the norms and values of human relationships with nature. The process of forming an environmental culture is impossible without a number of prerequisites that have historically developed both within a particular state and beyond its borders.

The complex nature of the concept of environmental culture makes it essential to consider the context of globalization. This context highlights the urgency and interconnectedness of environmental issues and suggests the potential for utilizing the best environmental practices from other cultures to shape national environmental consciousness. Environmental culture is a system of dialectically interrelated elements: environmental knowledge, values, and behavior. The term itself is highly significant, as it encompasses several components that collectively determine the level of development of an individual's environmental culture. However, this definition is often overlooked in the academic literature and is more frequently used in Russian academic studies than in other countries. The definition itself varies from one study to another and is not uniform or precise. Researchers often investigate individual components of environmental culture, such as environmental knowledge, attitudes, values, or behavior, which is very valuable. However, these studies do not consider the interrelation of these factors as a whole, which defines environmental culture overall, rendering the research incomplete. Understanding how these elements interact with each other allows us to more accurately identify which factors contribute to or hinder the formation of environmental culture. In the first chapter of the study, a literature review is conducted to analyze the use of the term «environmental culture» and its various definitions, and to derive a precise definition based on previous research. This analysis aims to establish a clear and comprehensive understanding of environmental culture, which will serve as the foundation for subsequent chapters.

Another important aspect is the study of the formation of an environmental culture. The main factors have been studied and analyzed by researchers such as Zakharova (2012); Asafova (2009); Fairbrother (2013), Dunlap (2008), etc. The complex nature of the category of environmental culture makes it adequate to take into account the context of globalization: it emphasizes the acuteness and integrity of environmental issues, aims at the possibility of using the best models of environmental management of other countries to form

national environmental consciousness. In the context of globalization, where interactions between countries and cultures are increasingly intense, international research is particularly important. This is emphasized by authors such as Li et al. (2019) and Marquart-Pyatt (2012). Li et al. (2019) argue that studying environmental behavior in different cultural contexts allows for a deeper understanding of the various external and internal factors influencing this behavior. Marquart-Pyatt (2012) notes that cross-cultural comparisons are crucial for identifying how different cultural, social, and economic contexts shape environmental attitudes. Without such studies the understanding is limited to specific national contexts, potentially overlooking broader, more universal factors that drive environmental culture. Cross-cultural studies can reveal both commonalities and differences in how populations perceive and interact with the environment, contributing to the development of more effective global environmental policies and educational programs. These studies also highlight unique cultural practices that can be adapted to promote sustainability in other regions and encourage international cooperation in addressing global environmental challenges.

Based on this, our comparative study between Russia and Italy focuses on selected individual and national factors, particularly in the youth demographic (ages 18-30), to provide a focused analysis using the framework proposed by Marquart-Pyatt (2012). This approach underscores the importance of international research in advancing environmental studies and fostering sustainable practices worldwide. Existing research often encompasses a broad spectrum of countries in the context of international (Weaver, 2002; Dunlap & York, 2008; Pierre et al., 2009; Hirsh, 2014) and cross-cultural (Schultz, 2002; Kemmelmeier et al., 2002; Casimir, 2009) aspects. However, there is a lack of study that is exclusively focused on comparing Russia and Italy. There are case analyses in Russia (Valko, 2021; Zibenberg et al., 2018) and also in Italy (Carducci et al., 2021; Alfirević et al., 2023) related to environmental attitudes. It is important to note that studies concentrating on comparing Italy with other countries were not found, and comparisons of Russia with Japan (Takayama et al., 2015) and America (Korenman, 1999) in the context of environmental attitudes have already been conducted. Thus, this study aims to fill this gap by providing a comparative analysis of environmental culture in Russia and Italy, contributing to a deeper understanding of the formation of environmental culture in these two countries. This deliberate choice aims to address a gap in the current body of research, emphasizing the need for a nuanced exploration of environmental culture in more particular contexts. Italy, as a member of the European Union, representing the western part of Europe, and Russia, as part of eastern Europe, provide unique perspectives for a comparative analysis of the problems considered in this study. This can contribute to a deeper understanding of the influence of various factors on the formation of environmental culture, which, in turn, is key to expanding knowledge and developing sustainable approaches to the formation of environmental culture in the national aspect.

Since it is impossible to cover all regions of Italy and Russia in a short period of time, the study focuses only on two universities in order to reach today's youth. The study is based on data collected among young people studying at Ca' Foscari University in Venice (Italy) and Petrozavodsk State University in the Republic of Karelia (Russia). The choice of universities for the study is justified not only by access, but also by objective factors related to the active development of programs and initiatives in the field of environmental education. The University of Ca' Foscari (Venice, Italy) has a new program «Environmental Humanities» dedicated to the relationship between man and nature. This academic initiative allows for a deeper exploration of environmental aspects, providing students with the knowledge and tools to consciously interact with the environment. Petrozavodsk State University (Russia) actively develops the university student project «Чистая совесть» [Chistaya sovest']¹ (Clean Conscience). In this project, environmental education also takes place, dedicated to teaching students how to treat nature properly and change their lifestyle into a more sustainable one. Both universities from different countries are trying to draw attention to environmental aspects and problems in different ways, trying to increase the environmental awareness. The sample includes students from 18 to 30 with different perspectives on environmental issues, from those who are actively involved in environmental protection to those who are less involved in these issues. This diversity allows us to take into account the different levels of environmental culture among young people. It is important to note that the sample does not take into account the gender of the participants as gender have less consistent relationships with environmental attitudes (Klineberg, et. al., 1998).

The study includes two methods of analysis: quantitative and qualitative. The quantitative method evaluates the level of environmental culture of young people in Italy and Russia using Asafova's (2003) diagnostics, especially designed to determine the level of environmental culture of students. This diagnostic tool offers a targeted approach that comprehensively covers all three components of environmental culture: knowledge, values, behavior. Its focus on students ensures relevance to the study's enhancing the precision and applicability of the quantitative analysis. The qualitative method includes interviews with Russian-speaking young people who have been living in Italy for more than a year to identify the impact of factors and changes in environmental culture after moving. This integrated approach provides a deeper understanding of the various aspects of environmental culture in different cultural contexts.

The diagnostics respondents are more than 250 young people between 18 and 30 years old as they are an important demographic group for environmental sustainability. This generation will have to experience and

¹ In this thesis, the transliteration was done with a transliteration system ALA-LC (American Library Association - Library of Congress). Available online at www.transliteration.com/transliteration/en/russian/ala-lc/. This standard will be used for subsequent transliteration of text.

respond to the impacts of environmental breakdown which were partly the result of emissions released by older generations and decisions taken by elites in those generations (Laybourn-Langton, et al., 2019). For the second method of the study, the sample included more than 20 Russian participants aged from 18 to 30 years from various universities in Russia, representing various regions of the European part of the country. This included Russian citizens with varying degrees of enthusiasm for ecology, from those who show an active interest in environmental protection to those who are less involved in such issues. Additionally, the sample included only citizens living in Italian regions for more than 1 year in Italy. This criterion allows us to consider the impact of cultural adaptation on environmental consciousness. It is also worth noting that all the participants in the sample are students of Italian universities, which provides an additional context for the educational environment that affects their perception of environmental issues. Thus, this study contributes to the knowledge of the relationship between migration, globalization and environmental culture, and highlights the importance of further research in this area to achieve a more sustainable future for all.

Aim and Objectives

This study delves into the environmental attitudes of contemporary youth in Russia and Italy, aiming to illuminate the distinct formation of environmental culture within each national context. The objectives include an examination of the usage of the concept of environmental culture in existing scientific literature, a comprehensive literature review to identify and analyze primary differences and similarities in the impact of various factors on environmental attitudes within the unique socio-cultural contexts of Italy and Russia, and an empirical assessment of the level of environmental culture among students at two universities — one in Russia and the other one in Italy. Additionally, the research evaluates changes in the environmental culture of Russian migrants following their relocation from Russia to Italy, considering shifts in attitudes, behaviors, and perceptions related to the environment. The final objective is to identify and analyze the pivotal factors influencing positive or negative changes in environmental culture following migration, seeking to discern the catalysts contributing significantly to shifts in environmental perspectives among the migrant population. This way the research explores and comprehends the intricate dynamics of environmental attitudes transformations within the specified national and migratory contexts.

Scope and limitation of the study

This study as any other research has its limitations. Firstly, the research only covers two universities in two regions of two countries, which may limit the generalization of findings due to the restricted sample size. The geographical and cultural specificity of the chosen regions may not fully represent the diversity within each country. Secondly, the survey design and data collection process may introduce response biases or

inaccuracies. The reliance on self-reported data poses a risk of social desirability bias, where participants might provide responses, they perceive as socially acceptable. Furthermore, the study's use of a cross-sectional approach provides a momentary glimpse into participants' attitudes, potentially overlooking any evolving changes over an extended timeframe. Also, external factors such as geopolitical events, including military actions in Russia, could impact the participants' perspectives and attitudes towards the environment. The study acknowledges the dynamic nature of external influences and their potential to shape environmental attitudes, and it is essential to recognize the ever-changing sociopolitical landscape as a factor influencing the study's outcomes.

Despite the limitations, the research outcomes offer valuable insights into the youth's environmental attitudes in the selected regions. The identified factors contributing to changes in environmental culture post-emigration serve as a foundation for further investigations and potential interventions. Subsequent studies with more extensive and diverse samples could enhance the applicability of the findings and provide a more comprehensive understanding of the intricate interplay between environmental attitudes and cultural context.

1.1 Environmental culture and its reflection in scholarship

Environmental culture is one of the most crucial aspects of modern society, playing a key role in ensuring sustainable development and nature conservation. Within the contemporary global context, environmental culture is becoming increasingly relevant due to the global environmental challenges facing humanity. This is reflected in the urgent need for conscious interaction with nature and the rational use of its resources. Important to notice the differences of two definitions of «environmental culture of society» and «environmental culture of an individual». These concepts are not identical to each other, but they are not opposed to each other either. They relate to each other (just like society and human being) as a whole and a part, as a common and a separate. The whole is not reduced to a simple sum of parts, and a part outside the whole is not the same as within the whole. The common does not absorb the separate, which, in addition to the common, is also the unity of the particular and the unit. the unity of the particular and the singular (Zakharova, 2010: p. 134). The process of forming an environmental culture involves taking into account a number of prerequisites that have historically developed both inside and outside the state. Given the complex and multifaceted nature of this culture, it is necessary to consider the context of globalization, which underscores the relevance and importance of environmental issues and allows for lessons to be learned from the best practices of nature management from different cultures. Furthermore, a valued relationship with nature is determined by a sense of belonging to a specific place of residence, reflecting a personal sense of responsibility for the state of the environment.

Before proceeding to analyze the development of environmental culture in the territorial context, it is necessary to define what is meant by this concept. This chapter examines the term, its definition and its use in different academic works. Different formulations of different scientists make the concept not approved and erase its clear and unified understanding, which requires its complex dissection and criticism. The concept of «environmental culture» should be actively promoted and used more often in academic works, as it is more complex than the terms that are usually used in academic literature. Despite the presence of other more frequently used concepts such as «environmental awareness», «environmental attitudes», and «environmental consciousness», the concept of «environmental culture» holds special significance for understanding the interaction between humans and the environment. While other concepts primarily focus on individual cognitive aspects or perception of the environment, the concept of «environmental culture» encompasses a broader and nuanced understanding of the societal and cultural influences on environmental attitudes.

The term «environmental culture» extends beyond mere awareness, attitudes, or behaviors and encompasses a comprehensive set of values, behavioral patterns, and knowledge. These all shaping

environmental culture vary depending on social, ethnic, geographic, and historical contexts. Examining it as a whole enable to take into account this specificity. Only through a comprehensive study all aspects affecting environmental attitudes can be identified, which is crucial for the development of effective sustainable development strategies.

Therefore, the study of «environmental culture» concept enables understanding the complex interaction between societies and their surrounding nature, bringing clarity to the cultural frameworks that shape attitudes, specific knowledge, and actions toward the environment. Moreover, studying environmental culture can address relevant questions such as «why attitudes toward the environment vary between different countries» and «why one country is more environmentally conscious and oriented toward environmental protection while another is less so».

Definition of Environmental Culture and Its Problematic Area

Various approaches exist regarding what is understood by environmental culture. In American discussions of socio-environmental issues, the term «environmental culture» is rarely used and has not gained widespread recognition as a comprehensive concept. Scholars seldom employ this term in their research (Ermolaeva, 2012). Typically, most concepts and terms in the field of social and environmental spheres flow from the United States to European Union countries, resulting in the infrequent use of the concept of «environmental culture» in Europe as well. However, in research and studies conducted by Eastern European and mostly Russian scholars, this term is frequently utilized in academic works (Asafova, 2011; Yasvin, 2020; Deriabo, 1995; Panov, 2004: p. 83; Vernadsky, 1988 and others). In the Russian understanding of environmental culture, it can be partly correlated with commonly used terms such as environmental awareness, consciousness, concern, attitudes and pro-environmental behavior. Nevertheless, the concept of environmental culture encompasses more than just the aspects covered by the aforementioned synonyms and includes multiple dimensions.

Definition of Environmental Culture in Russian scholarship

Upon analyzing literature sources on the definition of environmental culture, it has been observed that in Russian literature, there is often a conflation of concepts. For instance, in Glebov's (2008: p. 92) textbook, the chapter on environmental consciousness encompasses the definition of environmental culture. Despite the chapter being dedicated to «environmental consciousness», the author elucidates the concept of environmental culture based on the scholarly work of Levin, who defines it as an individual's capacity to apply their knowledge and skills in environmental matters to practical activities. However, Levin's definition raises critical points. Firstly, characterizing culture as an «ability» is problematic since culture is a broader and more comprehensive concept. Secondly, claiming that some individuals lack environmental

culture is inaccurate as it is present in everyone and can vary and be measured (Sarigöllü, 2009). Thirdly, Levin focuses solely on knowledge and skills, neglecting the importance of moral aspects that influence environmental behavior. Contemporary study also affirm that values and identity play a significant role in shaping environmental behavior which is a one component of environmental culture (Gatersleben et al., 2014). Thus, Levin's definition leaves much unaddressed and incomplete, emphasizing the necessity of considering not only knowledge and skills but also values and moral aspects for a comprehensive understanding of environmental culture.

Another definition, one of the most common and widely used in scientific research, belongs to candidate of pedagogical sciences Astrakhanova (2004). In her opinion, environmental culture is an integral element of the spiritual world of an individual, representing an environmentally oriented behavior based on humanistic orientations and attitude to nature. Although it correctly emphasizes the importance of personality, the question of whether it represents only an element of the spiritual world remains debatable. Personality encompasses the intellectual, emotional and social spheres, and the manifestation of environmental culture can occur in each of them (Babieva et al., 2019). In addition, this definition is limited to orientations and attitudes only, without considering the role of knowledge, which serves as the actual basis for decision-making and behavior formation (Díaz-Sieffer et al., 2015). This aspect is not considered in the definition, although it plays a key role in the formation of environmental culture. However, this definition primarily focuses on orientations and attitudes, neglecting the pivotal role of knowledge in decision-making and behavior formation. Recent studies have emphasized the importance of knowledge as the foundation for environmental culture (Díaz-Sieffer et al., 2015). Thus, Astrakhanova's definition overlooks this crucial aspect, which significantly contributes to the development of environmental culture. It is important to recognize that this definition, while valuable, may not capture the full complexity of environmental culture.

Closest to the absolute definition is the definition of associate professor of Kazan Federal University Asafova (2009: p. 139), who defines the environmental culture as a «generalized characteristic of personal qualities, which reflects the process and result of the formation of environmental assumes representations of sensual and valuable attitude to it and the corresponding skills, abilities, needs of interaction with it, based on the harmonization of interrelations in the system nature-human». It states that «the environmental culture of the individual is a component part of spiritual and material culture, it is closely related to moral and aesthetic culture, expresses the material-object and spiritual-practical attitude of a person to the world». Such a definition covers the subject (i.e. personality), says that it is a continuous process, which has the characteristic of changing in the course of life, and also includes 3 components: moral, theoretical and practical. Perhaps Asafova includes the intellectual component in «skills and abilities», but it is important

to specify «knowledge» as a separate component in the definition. This is important because certain behaviors and skill development are formed from certain knowledge. Asafova also developed a psychological diagnostic to determine the level of environmental culture of the student's personality, which just includes «knowledge» as a separate component of environmental culture, but is not specified in the definition itself. This diagnostic is used as an empirical method in the practical part of the study. However, the definition is close to the ideal one, but it is incomplete, so it cannot be taken as a basis either.

The evolution of definitions in dissertations and contemporary scientific works has contributed to a proliferation of perspectives on environmental culture. However, no single definition has emerged as foundational. The current diversity of definitions across various conceptual frameworks suggests an ongoing process in shaping environmental culture as a cohesive system. In the analysis, three noteworthy scientific works by Russian researchers Doroshko (2012), Zakharova (2012) and Krivosheeva (2007) were identified, each attempting to structure and illuminate the developmental process of defining environmental culture.

The researcher Doroshko (2012) attempted to systematize existing definitions of environmental culture and demonstrate their evolution over time. Her work emphasizes that initially, environmental culture was considered a part of the general culture of society, embodying the interaction between individuals and culture in a broad sense. Gradually, this concept evolved, shifting its focus towards the consciousness and activities of individuals. Presently, the understanding of environmental culture tends to characterize personal qualities. This implies that environmental culture not only reflects an individual's relationship with nature and the environment but also becomes a part of their internal morality and values. It suggests that individuals possess a moral connection to nature and a duty to preserve its integrity. Thus, environmental culture evolves from an abstract component of societal culture to individual qualities, highlighting the importance of personal responsibility for the state of the natural environment and the necessity of integrating environmental values into one's overall set of personal beliefs and actions.

Another study exploring the concept of environmental culture is attributed to Zakharova (2012). The author investigates various formulations of definitions and concludes that contemporary definitions of environmental culture share a focus on the necessity and potential for optimizing the interaction between nature and society within this cultural framework. She rightly notes that in the concept of environmental culture, the term «culture» in the modern context emphasizes a responsible attitude towards nature because unity with nature is inherently cultural. From the majority of definitions, the inference is drawn that environmental culture is a way of socio-natural development and a means of connecting humanity with nature.

The last article addressing the issues of formation and the substantive aspect of the concept of «environmental culture» is the work of Krivosheeva (2007). Through an analysis of various definitions by different researchers, the author generalizes that this concept encompasses a multitude of aspects and elements, including knowledge, values, norms, and practical actions related to an individual's relationship with the surrounding natural environment. The author emphasizes the importance of a comprehensive approach to environmental culture and its formation, highlighting the role of education in this process.

Thus, the definition of environmental culture represents a rich and multifaceted concept that unites knowledge and values with the aspirations for improving the relationship between humans and nature.

International Definitions Beyond Russian Scholarship

Based on the search results, the term «environmental culture» is not commonly used in international academic works. However, the definition is discussed in some works. For example, Val Plumwood (2005) delves into several key concepts, including the term of «environmental culture». The concept of environmental culture in her work encompasses an awareness of the interdependence of all forms of life and advocates for the development of a mindset and lifestyle aligned with principles of sustainability. Plumwood opposes anthropocentrism and challenges the notion of nature as an object to be exploited for human needs. Val Plumwood defines the development of environmental culture as cultivating a deep appreciation for the non-human sphere, recognizing our dependence on it, and making informed decisions about our impact. This process involves resolving dualisms like nature/culture and reason/nature to bridge divisions across cultural domains, aiming for a holistic understanding and promoting a sustainable relationship with the environment.

Environmental culture, as understood by American researchers, is a distinct mode of human-nature interaction based on collectively shared beliefs, values, norms, and behavioral rules (Casimir, 2009). It encompasses a comprehensive set of values and practical skills, defining the «green student culture» as the embodiment of environmental culture among students. The overarching theme is the association with conservation behavior, considering environmentally conscious actions as a direct contrast to irrational resource exploitation.

The European Environment Agency² defines environmental culture as the total of learned behavior, attitudes, practices, and knowledge that a society has with respect to maintaining or protecting its natural environment. While this definition serves as a crucial in comprehending societal interactions with the environment, it underscores the imperative to incorporate the sensory and emotional dimensions into this

² European Environment Agency. Glossary. European Environment Agency. Retrieved 12.03.2024, from https://www.eea.europa.eu/help/glossary#c4=10&c0=all&b_start=0

framework. The relationship with nature is imbued with emotions and sentiments that wield profound influence over environmental-friendly behaviors (Kals et al., 1999). Integrating this emotional facet into the definition of environmental culture enables a more nuanced and accurate characterization of the intricate interplay between humans and the environment, fostering the development of more harmonious and sustainable relationships with nature.

Another definition that was found in the article of Portugal researcher Hélder Spínola (2021). The author addresses the concept of environmental culture, defining it as the set of beliefs, practices and assumptions that underpin the relationship between people and nature. The article argues for the need for environmental education to reflect social change and to be supported by physical and organizational changes in the contexts in which people live. The author introduces a new component to the definition which is «assumptions», what represents a significant addition to previously established components. This development can be viewed positively as the inclusion of assumptions enriches the understanding of the relationship between humans and nature. However, there might be a need to caution against potential blurring of boundaries between beliefs and assumptions to maintain clarity in defining environmental culture

Environmental culture, derived from a diverse array of global scientific works, embodies a comprehensive and harmonious understanding of human interaction with nature. While infrequently mentioned in scientific literature beyond Russia, this concept is distilled from key aspects essential for analyzing its definition and reaching a unified understanding. At the core of this consolidated definition lies the recognition of interdependence and interconnectedness among all elements of nature and society. Environmental culture is not merely a collection of values and practices but also an aspiration toward sustainable relations with nature. It underscores the significance of sociocultural influence, shaping itself under the impact of societal beliefs and educational influences. This overarching definition reflects commonalities distilled from various research perspectives. The prevalent term often used as a synonym is «environmental attitudes», capturing similar components such as components: cognitive (thoughts about the object, usually including an evaluation), affective (feelings about the object), and conative (behavioral intentions and actions regarding the object) (Breckler, 1984). Occasionally, it surfaces in works within the realms of environmental philosophy and anthropology, but with varying conceptualizations. This underscores the absence of a singular, universally accepted definition, indicating a diversity of perspectives. Consequently, there is a need to formulate a singular definition, one grounded in elements that demonstrate applicability across diverse cultural and academic contexts. In this work I seek to unify various conceptualizations into a cohesive and comprehensive understanding, establishing it as the primary and encompassing definition of «environmental culture».

Crafting a New Definition of Environmental Culture through Global Analysis

Global analysis of modern research on this topic allows to propose a new definition that reflects the complex nature of human interaction with nature at different levels of society. Definition wording: «*Environmental culture is a comprehensive understanding of human-nature interaction, encompassing knowledge, values, and behaviors evolving from societal to individual levels, emphasizing sustainable relations with nature*».

On the one hand, culture is an alienated form of human existence, the laws of which are opposed to the laws of nature, which reflects the current state of environmental problems; on the other hand, culture is the most important universal mechanism through which socio-cultural, including environmental, experience is stored, transmitted and transformed. Paradigms of nature management are based on various assumptions about human being, society and their relations with nature. The defining part «comprehensive understanding» emphasizes the need for a deep understanding, given the multifaceted nature of culture itself. «Human-Nature Interaction» illustrates a dynamic process in which both parties mutually influence each other, highlighting the evolving nature of environmental culture in response to changes in both the environment and the role of humans in this interaction.

The definition identifies three interrelated components: knowledge, behavior, and values. Environmental culture is formed through the impact of social institutions and other factors. These factors ensure the transfer of knowledge, the formation of behavior and values. Values represent the core beliefs that guide behavior and decision-making. In the context of environmental culture, values define the importance of nature to the individual and society, providing the basis for a sustainable relationship with the environment. They serve as a moral guide for decision-making aimed at respecting nature and its conservation (Gatersleben et al., 2014). Greater human-environment system knowledge and environmental action knowledge are positively correlated with pro-environmental behavior (Díaz-Sieffer et al., 2015).

The phrase «evolving from societal to individual levels» emphasizes the development of environmental culture from the collective, societal level to the individual level. This indicates that the formation of environmental culture begins with the impact of society as a whole on a individual. Culture acquired as a member of a society, influences the shaping of a person's personality, with early enculturation playing a crucial role in personality development (Mykota, 2020). This reflects the process of transforming social perceptions and norms into personal beliefs and lifestyles, contributing to the widespread dissemination of environmental culture.

As a result of analyzing various definitions of environmental culture, the proposed definition becomes the best compromise, covering all necessary components and accurately reflecting the essence of this concept. All elements have blended into the definition, offering a complete and accurate image of environmental

culture. The proposed formulation reflects not only the academic depth of research, but also the practical relevance in the context of sustainable development and nature conservation.

1.2 Key factors that shape environmental culture: A comparative exploration among youth in Russia and Italy

From the previous chapter, it is evident that environmental culture comprises a complex amalgamation of knowledge, values, and behavioral practices, all shaped by diverse factors. This chapter focuses on identifying these pivotal factors. Although there is limited research specifically investigating the factors shaping environmental culture, numerous academic studies explore components related to environmental culture, such as attitudes, behavior, concern, awareness, and consciousness. This chapter explores key research in this area, highlighting debates and discourses among scholars. To deepen the study of the influence of these factors, it focuses on a cross-national analysis of two countries: Italy and Russia. The study sample consists of young people from these two countries, which makes it possible to emphasize national differences and their impact on a specific age group.

Key determinants of environmental cultural components formation: A scholarly examination

The study of environmental culture has attracted attention at different stages, with researchers identifying various factors and their relationship to attitudes towards the environment. Some studies (Zakharova, 2010; Li et al., 2019; Marquart-Pyatt, 2012) categorize factors, while others investigate one specific factor at a time (Lopez-Mosquera et al., 2015; Fairbrother, 2013; Dorsch, 2014).

Many researchers identify socio-demographic factors such as gender, age, education, marital status, place of residence and personal economic status, which play a crucial role in shaping environmental attitudes (Brécard et al., 2009; Saphores et al., 2012). Studies show that women, highly educated young adults with significant income, married couples, and urban dwellers tend to engage in more active environmental behaviors (Lopez-Mosquera et al., 2015). However, researcher M. Fairbrother (2013) is skeptical of the correlation between high income and education, arguing that environmental concern is actually higher in poorer countries. Furthermore, it has been documented that there is no clear relationship between economic development and people's willingness to pay for environmental protection. Thus, while some studies suggest a relationship between socio-demographic factors and environmental behavior, there is no definitive evidence of a direct influence. Nevertheless, gender remains an interesting topic, as supported by other studies indicating that women have more pro-environmental attitudes and concerns than men (Zelezny et al., 2000; Dietz et al., 2002; Xiao & McCright, 2015).

The additional influential factors highlighted in the studies are national and can vary significantly from country to country. These include political effectiveness, economic context, education, religiosity, and post-

materialism (Torgler & Garcia-Valiñas, 2007). However, one study (Lingwood, 1971) is being carried out considering an additional factor that is rarely found in academic work - social networks. Social networks allow organizing collective actions, making it easier to mobilize supporters to participate in protests and rallies. Young people can use social media to collaborate within groups and networks, which promotes their participation in environmental civic and political activism (Boulianne & Ohme, 2021).

There is no one universally accepted classification of factors that shape environmental culture in the literature, but it is important to review different studies to understand which factors are prevalent and what gaps are noted in research in this area. Therefore, this analysis will examine research studies discussing the factors influencing the development of each component of environmental culture: knowledge, values, and behavior. By doing so, we aim to identify the key factors.

Factors influencing environmental behavior as a component of environmental culture

Environmental behavior is influenced by a several of factors, which can be classified into various categories. One significant contribution to the understanding of this issue is the work of Li et al. (2019), who proposed a classification in their literature review, dividing factors into external and internal. External factors encompass social norms, political programs, and economic incentives, while internal factors encompass personal norms, demographic variables, and psychological variables.

Social norms serve as significant predictors of intentions regarding environmental behavior. However, there is some uncertainty regarding how these norms are internalized as personal norms. Some studies suggest that internalized social norms activate moral norms, gradually replacing external sanctions with internal ones. Others argue that social norms directly influence behavioral intentions by individuals striving to avoid social disapproval and gain social respect. Political programs and economic incentives also play an important role. State policies supporting pro-environmental behavior and economic benefits, such as tax breaks or subsidies, can stimulate individuals towards more environmentally responsible behavior, as emphasized by Li et al. (2019).

Internal factors include personal norms, demographic variables, and psychological variables. Personal norms are explained as the moral obligation to act in accordance with an individual's internal value system. These norms are shaped by knowledge of the benefits of pro-environmental behavior and understanding the consequences of inaction. For example, awareness of the benefits of recycling and self-organization positively influences environmental behavior. Demographic variables, such as age, level of education, marital status, and place of residence, also influence environmental behavior. Studies analyzed by Li et al. (2019) demonstrate that individuals with higher levels of education or younger age are more likely to care about the environment and are more inclined towards pro-environmental behavior. However, some studies

indicate that demographic and economic factors have less significance compared to environmental attitudes, beliefs, and sensitivity. Psychological variables, such as attitudes, beliefs, and subjective norms, significantly influence individuals' behavioral intentions. Attitudes and subjective norms, shaped by peers and social environments, play a key role in shaping actual behavior. The relationship between attitudes and behavioral intentions confirms that the attitude towards the environment is a fundamental factor determining environmental behavior.

Values and knowledge are also important components of environmental culture, which, as evident from the analysis, are closely linked to environmental behavior. Knowledge about recycling, self-organization, and personal values and norms are positively associated with environmental behavior. This underscores the validity of the definition of environmental culture mentioned above and highlights the importance of using this term more frequently.

Li et al. (2019) emphasize that various groups of researchers offer different perspectives and approaches to studying the factors influencing environmental behavior. There is a range of conflicting data, making it difficult to form a unified conclusion. Increasing public awareness of environmental issues requires long-term efforts and a systemic approach. In summary of these various perspectives, the main importance of researchers' review lies in recommending the study of factors and their influence on a global and international scale, which can help overcome existing barriers and offer meaningful suggestions for practitioners. So, the key factors influencing environmental behavior are political programs, economic stimulus, moral and psychological variables, while demographic variables remain controversial.

Factors influencing environmental values as a component of environmental culture

Environmental values play a crucial role in shaping individuals' attitudes towards the environment. Meshcheryakova (2012) highlights that an individual's value system includes elements of an objective value system, conditioned by historical and social context, as well as emotional and rational attitudes towards these values. However, despite the significance of nature, it typically occupies a secondary position in the public value system. Therefore, deliberate interventions in the educational process and upbringing are necessary for the formation of environmental values. Additionally, Tomita and Akutagawa (2009) discovered that personal qualities, such as age and childhood experiences, significantly influence the awareness of the value of the environment. They note that gender and the experiences of adults do not have a substantial correlation with environmental values. It is also important to note that the formation of environmental values is closely linked to age-related characteristics and individual needs. Hards (2011) emphasizes that personal environmental values develop through social practice, experience, and social interaction, which contribute to a constructive approach to changing environmental values. This interaction

and experience help embed environmental values more deeply within individuals, fostering a more sustainable relationship with the environment.

Summarizing, several key factors shape environmental values, including the educational process and upbringing, social practices, personal experiences, as well as depend on age and childhood experience. These elements collectively contribute to the development of a robust environmental culture.

Factors influencing environmental knowledge as a component of environmental culture

Research in the field of environmental knowledge formation emphasizes the diversity of factors influencing this process. Jensen (2002) emphasizes the significance of formal education in shaping environmental knowledge. By integrating environmental topics into school curricula and establishing specialized courses at universities, formal education provides a structured and systematic approach to acquiring knowledge about environmental issues.

Another study by Paraskeva-Hadjichambi et al. (2020) underscore the importance of informal education in shaping environmental knowledge. Through participation in specialized programs and training, young people can gain practical skills and develop a conscious attitude toward the environment. Agyeman and Angus (2003) draw attention to the influence of public initiatives on the level of environmental knowledge. Conducting environmental campaigns and participating in volunteer projects actively engages people in studying environmental issues and encourages their active involvement in solving these problems. And Lingwood (1971) highlights the role of media and information resources in shaping environmental knowledge. Through television, social networks, and other online platforms, people gain access to up-to-date information about the environment, which contributes to increasing their awareness and understanding of environmental problems.

The studies presented in the review underscore the diversity of factors including formal and informal education, mass media, public initiatives, cultural, political and economic influence. Additionally, personal characteristics such as age, childhood experience, as well as personal norms and values, have a significant influence on shaping environmental consciousness and behavior.

Certainly, each factor is crucial for understanding human attitudes toward nature. However, two significant studies underscore the lack of and necessity for conducting cross-cultural comparative research (Li et al., 2019; Marquart-Pyatt, 2012). Li et al. (2019) emphasize that examining environmental behaviors across different cultural contexts can provide a more comprehensive understanding of the external and internal factors that influence these behaviors. Marquart-Pyatt (2012) highlights the importance of cross-cultural comparisons to uncover the variability in environmental attitudes influenced by diverse contexts. Without

cross-cultural research, our understanding remains limited to specific cultural or national contexts, potentially overlooking the broader, more universal factors that drive environmental culture. Cross-cultural studies can reveal commonalities and differences in how various populations perceive and interact with their environment, thus contributing to the development of more effective, globally relevant environmental policies and educational programs. Moreover, such comparative studies can help identify unique cultural influences and practices that could be adapted or implemented in other contexts to promote environmental sustainability. They also facilitate the exchange of knowledge and best practices between countries, fostering international cooperation in addressing global environmental challenges. Therefore, to advance the field of environmental studies, it is imperative to prioritize and conduct comprehensive cross-cultural research. This argument highlights the importance of such comparative study between Russia and Italy. Given the vast scope of this topic, it is impossible to consider all factors comprehensively; thus, only selected individual and national factors, as classified by Marquart-Pyatt (2012), will be examined. The comparative study focuses on youth aged 18 to 30, covering only this age group to maintain a concentrated analysis.

Cross-cultural analyses of key factors shaping environmental culture: Italy and Russia

Eastern and Western Europe have historically developed under different socio-cultural and geopolitical conditions, which has led to differences in their environmental strategies and priorities. Comparing the environmental awareness and practices of Eastern and Western European countries in a global context can reveal unique approaches and strategies that enhance sustainability and eco-oriented development. By analyzing the differences and similarities between these regions, key areas for improvement and the implementation of best practices can be identified, contributing to the overall enhancement of environmental culture and the effectiveness of environmental initiatives.

The selection of Italy and Russia for comparative analysis is driven by several important factors relevant to contemporary environmental and sociocultural debates. Firstly, studying these countries allows us to explore the west and east divide often discussed in environmental literature (Füllenbach, 2017; Jehlicka, 2018; Smith & Jehlička, 2012). Italy, representing Western culture, and Russia, representing Eastern culture, illustrate different aspects of environmental challenges and approaches to addressing them. Italy, as a member of the European Union, adheres to strict environmental regulations and standards. In contrast, Russia, with its vast natural resources, faces different environmental challenges and priorities. These differences offer a unique opportunity to examine how varying political and economic contexts influence the environmental beliefs and behaviors of youth. Understanding these differences provides insights into how various regions develop environmental culture of society and tackle environmental issues, fostering

the exchange of successful strategies and best practices. Secondly, comparing these regions highlights the need for new initiatives in Eastern Europe, informed by the experiences of developed Western European countries. Identifying effective strategies from Western nations can help Eastern European countries improve their environmental policies and practices. Global comparisons offer a broader perspective, enhancing our understanding of environmental culture across different cultural and geographical contexts. This approach enables a more comprehensive analysis of how cultural, historical, and territorial factors shape environmental attitudes and behaviors.

Drawing on previous research and theoretical frameworks, the classification of individual and national factors proposed by Marquart-Pyat (2012) serves as the foundation for the investigation. Focus is placed on country-level factors due to their potential significant influence on the environmental culture of youth, encompassing aspects such as economic measures, political features, and environmental conditions. Within the realm of individual factors, our comparative analysis focuses exclusively on educational attainment, omitting comparisons of other factors such as gender and age. This approach enables an examination of how various factors, both at the individual and national levels, shape the environmental culture of youth. Within the scope of individual factors, educational attainment stands as the sole point of comparison, while gender and age are not subject to comparison.

Comparative analysis on individual-level factors (gender, education and age)

Education

Education plays a pivotal role in shaping environmental culture both at individual and societal levels. It contributes not only to understanding environmental issues but also to devising solutions, thereby influencing people's behaviors and values. According to research (Anufrieva et al., 2020; Spada et al., 1990; Logacheva, 2009), the successful formation of environmental culture depends on the cognitive and educational process. It is precisely environmental education that serves as the primary factor enabling the optimization of interaction between society and nature. Individuals equipped with adequate environmental knowledge are more inclined toward responsible stewardship of the environment and contributing to its preservation (Díaz-Sieffer et al., 2015).

Effective environmental education should be continuous and encompass all aspects of human life and society. It should be integrated into all levels of education, from primary to higher education, including the training of specialists in various fields of activity. While the development of environmental culture is a relevant task for all layers of the population, special emphasis is placed on youth as a socially significant age group heavily involved in the process of formal education, the system of values, lifestyle, and social

attitudes of which are actively shaped. Therefore, the focus is on university-level environmental education in two countries where youth are significantly educated.

Global research in the field of sustainable development identifies the correlation between university strategies and the achievement of environmental sustainability goals at the national level (Karaeva et al., 2022). For instance, in Russia, there is an excellent example of implementing such a strategy to enhance the environmental culture of students. Moscow Humanitarian University³ has initiated a large-scale environmental project called «Зеленый университет» [Zelenyĭ universitet] (Green University) aimed at developing the environmental culture of students. The essence of this initiative lies in the understanding that teaching students principles of environmental protection, environmental responsibility, and an environmentally friendly lifestyle cannot be achieved without the practical implementation of acquired knowledge, skills, and competencies. The «Green University» project encompasses activities focused on nature conservation, reducing carbon emissions, implementing waste separation, water and electricity conservation, among others (Ilyinskaya, 2018). Many theoretical environmental innovations have also been integrated into the Russian education system. Specifically, a system of continuous environmental education has been introduced, involving primary, secondary, and higher education as well as supplementary education. However, the proposed model of continuous environmental education is ineffective at all levels of the Russian educational system. The existing environmental education in the country often remains introductory and non-obligatory. As a result, individuals who have gone through such environmental education systems (whether at school, university, or courses) tend to retain little practical knowledge since environmental knowledge is disconnected from real-life situations and largely theoretical (Glebov et al., 2024: p. 259). This is further supported by a comparative analysis (Glebov et al., 2024) of students from various university disciplines, indicating that students in natural sciences possessed significantly higher knowledge levels compared to students in humanities. The analysis also revealed that systematic knowledge is still lacking in primary and secondary schools, indicating a gap in environmental education within the school system, which reflects on the knowledge and abilities of the youth. In Russia, the inclusion of environmental education in school curricula is still in its early stages and is primarily declarative. Some experts advocate for the introduction of a separate subject, while others argue for its gradual integration into the curriculum. Russian schools lack a practical approach to shaping environmental perspectives (Pirogova, 2023). Consequently, children have limited opportunities to grasp the magnitude of environmental issues, except for those from families leading environmentally conscious lifestyles. Research dedicated to the formation of environmental culture in Russia underscores the importance of education and

³ Moscow University for the Humanities. (n.d.). Green University [in Russian]. Retrieved June 11, 2024, from <https://mosgu.ru/zelyenny-universitet/>

scientific research in this process. It also demonstrates that the development of environmental culture requires constant efforts from both society and the government. One vivid example of inadequate development of environmental education in Russia is my personal experience during an internship in primary schools. During this internship, I conducted a survey among teachers to assess their environmental knowledge and interest in conducting activities related to ecology and nature conservation. The survey results showed that teachers mostly adhere to traditional topics presented in textbooks and do not strive for interdisciplinary and in-depth environmental education. Practical activities related to environmental education are rare, environmental holidays are not celebrated, and children do not receive adequate education in this field. However, when I conducted an ecology lesson, it was evident that children showed great interest in the topic and were eager to learn. They were aware of the relevance of environmental issues, but the lack of opportunities provided by teachers hindered their development in this area. Among the problems associated with organizing environmental education and enlightenment in Russia are the absence of a unified methodology and standards, low qualification of teachers, and limited access to information (Fertikova, 2019). Overall, the situation calls for further improvement and development of environmental education in Russia. While there is no specific national mandate for environmental education in Russia, support for environmental education exists at regional and local levels due to the efforts of schools, teachers, governmental, and non-governmental organizations. An example of such education can be the largest environmental public organization in Russia, «Эка»⁴ [Èka] (Eca) which is engaged in environmental education programs.

Environmental education and its integration within the Italian education system share similarities with the situation in Russia, particularly regarding the absence of environmental history in the curricula, which impacts the preparation of state exams on modern history in Italy (Palmieri, 2019). This signifies that official curricula approved by the Ministry of Education in Italy do not adequately address the history of the environment within the context of modern history. Such a deficiency may indicate a lack of consideration for environmental aspects and human influence on the environment in educational programs. The exclusion of this topic from the curricula could result in students having insufficient exposure to issues related to the historical impact of society on nature and the role of the environment in historical events.

However, Italy has demonstrated strong performance in terms of the rankings of state universities in sustainable development and in achieving environmental goals. Environmental issues are integrated into various university programs in Italian universities. For example, several years ago, the University of Ca' Foscari introduced a new master's program called «Environmental Humanities», which is interdisciplinary

⁴ «Eka» - an interregional environmental public organization (n.d.). Retrieved February 1, 2024 from <https://ecamir.ru/>

and aimed at promoting awareness of social-environmental issues and sustainability. This approach seeks to cultivate a new generation of «green» professionals capable of addressing complex environmental problems. However, the complexity of such interdisciplinary programs is often simplified. Environmental science has not yet fully developed as a separate discipline, and current programs tend to camouflage traditional subjects rather than truly embrace an interdisciplinary approach (Balzano & Serpico, 2016).

In the realm of informal education, Italy has actively engaged in promoting sustainable consumption at the local level (Pierre, 2009). For instance, the «Città dell'Altra Economia»⁵ initiative in Rome, which commenced in 2006, stands as a significant example of an initiative undertaken by local authorities in collaboration with various stakeholders. This initiative is dedicated to the advancement and advocacy of «Another Economy» through exhibitions and diverse events. Another example is the project «Il Green Deal siamo noi»⁶ conducted in the city of Venice, Italy. This project plays a significant role in enhancing environmental awareness and fostering environmental culture among local residents. The series of meetings organized within the framework of the project provide a platform for discussing pressing climate change issues and the urgent need for environmental protection measures. The project's activities include interactive seminars, lectures, and discussions aimed at sharing experiences and knowledge regarding the importance of sustainable development and nature conservation. They also seek to draw public attention to urgent environmental issues and stimulate discussions on potential solutions. An important aspect of the project is its integration into various campaigns and initiatives, such as the «European Sustainable Mobility Week»⁷. This ensures the dissemination of the idea of environmentally responsible lifestyles and mobility among city residents and underscores their crucial role in environmental preservation.

A comparative analysis of environmental education as a factor in the development of environmental culture in Italy and Russia underscores both similarities and differences in approaches and challenges faced by these two countries. In both countries, there is a need for the development of clearer concepts for national environmental education systems. In Russia, researchers emphasize the necessity of a comprehensive multi-level system for fostering environmental culture and highlight issues related to the insufficient integration of environmental ideas into educational and media processes. Although both countries encounter challenges in the realm of environmental education, their focuses on addressing these issues differ. Despite the challenges in integrating environmental themes into education in an interdisciplinary aspect, Italy places emphasis on open discussions within and outside university contexts, fostering greater societal engagement

⁵ Città dell'Altra Economia. (n.d.). Retrieved February 1, 2024 from <https://www.cittadellaltraeconomia.org/>

⁶ Comune di Venezia. Il clima cambia. E tu cambieresti? (09/11/2023). Retrieved February 1, 2024, from <https://www.comune.venezia.it/it/content/16092023-il-clima-cambia-e-tu-cambieresti>

⁷ European Commission. (n.d.). EUROPEANMOBILITYWEEK 2023. Retrieved March 11, 2024, from https://transport.ec.europa.eu/news-events/events/european-mobility-week-2023-2023-09-16_en

and the development of environmental culture. Such practices of public environmental education are lacking in Russia, where everything relies on legislative projects or student initiatives.

Age and Gender

The results of gender and age differences in environmental concern underscore the importance of adapting strategies for developing environmental culture to the specific characteristics of age and gender groups. They also raise questions about the reasons and mechanisms for the formation of environmental values and motivations, as well as the possibility of changing these patterns over time and in different sociocultural contexts.

The Mohair (1987) study identifies age as the most significant factor determining environmental concern, taking into account other variables, and highlights youth as the most active age group with a developed environmental culture. However, a large meta-analysis (Wiernik et al., 2013) on age and environmental sustainability found that individuals of different ages exhibit different types and degrees of environmental behavioral practices, which were not considered in the aforementioned study. Another international study (Wang et al., 2021) confirms that aging positively influences environmental behavior, as individual people and countries with a higher proportion of elderly individuals are more active in environmental matters. While there are contradictions in the results of various studies regarding the relationship between age and attitudes toward the environment, our study focuses on youth to narrow down the investigation and direct it toward examining the contemporary situation that has shaped and continues to shape the environmental culture of young people.

Regarding gender, studies demonstrate that women tend to display stronger environmental concerns and engage in more environmentally friendly behaviors compared to men. The research by Hunter et al. (2004), a cross-national study of gender disparities in environmental behavior, indicates that women in 22 countries are more inclined than men to adopt environmentally friendly behaviors, with these gender differences being more pronounced in countries with higher levels of prosperity. The findings of Xiao et al. (2015) and Zelezny et al. (2000) also corroborate the idea that women generally hold stronger environmental views and concerns than men. Collectively, these findings suggest that gender may serve as a predictor of greater development of environmental culture among women. However, our study does not exclusively focus on individual gender as a factor; instead, it encompasses all gender identities. The research does not confine its focus solely to individual gender, as it examines environmental culture within a broader context. Rather than concentrating solely on disparities between men and women, it seeks to encompass all gender groups, including non-binary and other identities. This approach enables a more comprehensive exploration of the influence of various factors on the formation of environmental culture within society, beyond just individual

gender differences. Such an approach facilitates a more holistic understanding of the dynamics of environmental beliefs and behaviors within the diversity of gender identities.

Comparative analysis on national-level factors (economic, political, and environmental factors)

Economy

Another important national factor influencing the formation of environmental culture is the country's economy. Although the relationship between economic history and environmental history turns out to be far from unambiguous (Palmieri, 2019). Economic history is often evaluated solely through the prism of economic progress, paying insufficient attention to the impact on the environment. On the other hand, the history of the environment distinguishes nature as a historical subject, while maintaining its autonomy when exposed to human influence. This approach emphasizes the need for an interdisciplinary approach, combining social and natural sciences. However, there is uncertainty in this area between «environmental economics historians» and «environmental historians», which slows down progress in joint research (Sutter, 2020).

However, there are studies that allow us to trace the relationship between environmental behavior, attitudes and the economic aspect. For example, theories such as Inglehart's (1995) concept suggest that with increasing prosperity, post-materialistic values arise in countries that stimulate concern about the environment. However, the works of, for example, Fairbrother (2013) questions this approach, pointing out that environmental concerns are often higher in poor countries, and that there is no clear link between economic development and willingness to pay for environmental protection. Inglehart's thesis about the connection between economic development and the emergence of post-materialistic values is more related to the cultural and educational development of society, to which the economic growth of the country can contribute. Additional research, such as the work of Riley Dunlop and Richard York (2008), provides additional evidence that raises doubts that concern about the environment is closely related only to economic well-being. Their comparison of two surveys reveals ambiguous and often negative correlations between the well-being of countries and concern about the environment. These studies emphasize that economic development alone does not determine the level of environmental awareness, and cultural, social and educational factors play a more significant role in shaping environmental values.

It's intriguing to note that perceptions of local environmental issues lack statistically significant influence on environmental concerns in any type of economy. This implies that subjective values and awareness of global environmental issues play pivotal roles in shaping environmental concerns across diverse regions (Dorsch, 2014). Subjective values, developed through the process of socialization encompassing factors like family upbringing, education, media exposure, and national culture, emerge as fundamental

influencers. Consequently, due to inconclusive results in the economic aspect, attempting a direct comparison of Russia and Italy's economies seems impractical. Both countries, albeit with differing economic statuses, may exhibit environmental concerns, but the factors influencing these concerns likely possess unique characteristics in each context. For a more nuanced analysis, a deeper exploration of economic and environmental contexts, along with the impact of education and national cultures on environmental culture, is imperative. These multifaceted aspects call for additional research, especially considering the absence of clear parallels and extensive international studies.

While scientific and academic works may not consistently establish a direct connection between the economy and environmental education, several pieces of evidence suggest a nuanced relationship. Countries with advanced economic development possess greater resources and opportunities to invest in environmental and sustainable projects, fostering the creation of infrastructure and policies that protect the environment. The World Bank's *Inclusive Green Growth: «The Pathway to Sustainable Development»* report (2012) highlights how economically developed nations actively support initiatives to enhance environmental awareness and sustainable practices. Similarly, the OECD Green Growth Indicators report affirms that higher economic development levels correlate with the adoption of measures to reduce greenhouse gas emissions and sustainably use natural resources. David Stern's study (2004) on «The Rise and Fall of the Environmental Kuznets Curve» adds another layer to this discourse, indicating that pollution tends to peak and decline in more developed countries. This suggests that as economies and income levels grow, individuals become more aware of their environmental impact. The accessibility of education and information in economically developed countries further contributes to fostering environmental consciousness among individuals. Institutions like non-governmental organizations, research centers, and educational institutions play a crucial role in raising awareness and involvement in environmental issues, contributing to an environmental culture.

Based on the provided information, it's reasonable to assert that Italy has more opportunities for developing environmental culture within society compared to Russia, primarily due to its stronger economic situation. Economic development provides Italy with greater resources to invest in environmental projects, infrastructure, and policies. The widespread adoption of recycling practices in Italy, influenced by cultural factors, further supports the idea that economic affluence can contribute to environmental consciousness. Moreover, the political situation also plays a significant role, and the current geopolitical tensions between Russia and Ukraine may act as a limiting factor for Russia's environmental initiatives.

In summary, the economic and political contexts suggest that Italy is in a more advantageous position to foster environmental awareness and sustainable practices within its society compared to Russia. However,

it is essential to acknowledge that the actual situation is multifaceted, influenced by various factors such as politics, education, and social conditions.

Policy

The role of political factors in the formation of environmental culture is one of the key components. Political decisions made at the state level have a significant impact on the development of environmental education and practices in different countries. Legislative measures taken by the government can regulate the use of environmentally harmful materials, encourage the introduction of environmentally friendly technologies, and set standards for responsible consumption. Such policies provide a framework for the development of environmental education, preparing citizens who are aware of the importance of environmental issues and are able to take an active part in addressing them.

With each passing year, an increasing number of European politicians advocate for strengthening environmental protection, even at the expense of economic growth. Political parties, on one hand, contribute to shaping environmental identity, while on the other, they reflect the state of environmental consciousness among the population. In Italy, environmental issues have been absent from the center of the political agenda for many years. However, with the arrival of the new Prime Minister Mario Draghi, an intensification of the environmental agenda is expected; he places the fight against climate change among the key priorities of his political program. The first innovation was the creation of two new ministries: the Ministry of Environmental Transition and the Ministry of Sustainable Infrastructure and Mobility. Experts note that there is currently a «restructuring of Italian politics, as ruling parties seek to fill the «green political vacuum» (Bergamaschi, 2021). One example of a policy regulation in the direction of ecology is the law that was passed in Italy against the use of plastic bags. On August 13, 2017, Law 123/2017⁸ (which transposes EU Directive 2015/720) came into force, containing a new law on plastic bags and bioplastic bags. The measure was aimed at reducing the use of single-use plastic bags and encouraging a transition to more environmentally friendly alternatives. Currently, the use of plastic bags is indeed banned in Italy, and alternatives such as biodegradable bags or reusable bags are offered in stores. Biodegradable bags are usually made from materials that can decompose in nature, such as starch, paper or biopolymers. This reduces the negative impact on the environment and promotes more sustainable consumption. This step in Italy shows a desire for more conscious and responsible consumption, as well as a willingness to take measures to reduce the use of plastic and protect the environment. The Yale University Environmental

⁸ Gazzetta Ufficiale. (2017, August 12). Legge 11 agosto 2017, n. 116 - Conversione in legge, con modificazioni, del decreto-legge 22 giugno 2017, n. 96, recante disposizioni urgenti in materia di sicurezza delle città. Gazzetta Ufficiale della Repubblica Italiana, Serie Generale, n. 189. Retrieved December 30, 2023, from <https://www.gazzettaufficiale.it/eli/id/2017/08/12/17G00139/sg>

Performance Index⁹ evaluates Italy's environmental policy as average. However, despite this assessment, local communities demonstrate significant success in implementing environmental practices. Not long ago, Italy struggled with a waste crisis in the southern part of the country, but today it leads in certain areas of waste management in Europe (Avilova, 2019). This indicates that gradual changes are occurring in the culture and habits of Italians.

However, in Russia, the use of plastic bags remains widespread. This prevalence is due to deeply ingrained consumer habits and the convenience and accessibility of plastic bags in retail settings. Additionally, Russian legislation regarding plastic use is not as stringent as in Italy. Environmental sustainability in Russia often relies on activists who choose reusable bags and other alternatives to minimize plastic bag usage. Despite these efforts, many individuals encounter challenges and additional inconveniences in their daily routines. The perceived convenience of plastic bags often outweighs environmental considerations, highlighting the insufficient spread of environmental education and the general resistance to behavioral change.

Concerning household waste management, Russia initiated a waste management reform¹⁰ in 2019, aimed at enhancing waste handling practices. The reform's objective was to transition to a new system encompassing waste sorting, collection, and recycling. However, the initial phase encountered several significant challenges, as detailed by Poroshin and Khramtsov (2020). These challenges included a shortage of sorting containers, inconsistencies in legislation, and the presence of unauthorized landfills. Furthermore, some regions faced difficulties in constructing sorting and recycling facilities due to delays in document preparation. The reluctance of a portion of the population to engage in waste separation and a general lack of environmental awareness also negatively impacted the reform's success. These issues underscore the low level of environmental consciousness among Russian citizens. Additionally, some entrepreneurs failed to comply with the new regulations and refused to pay for waste collection services, further complicating the implementation process.

The analysis of national survey (Liu, Vedlitz, & Shi, 2014) data highlights that liberal political orientation is associated with a higher level of concern about environmental issues. According to studies in the European Union, people with a liberal political orientation show a greater interest in environmental issues compared to conservative-minded citizens. If we compare Russia and Italy based on this aspect, then in Russia, for example, the political system is more centralized, and liberal tendencies are not as pronounced

⁹ Environmental Performance Index – Italy. Environmental Performance Index. Yale. URL: <https://epi.yale.edu/epi-country-report/ITA>

¹⁰ Decree of the President of the Russian Federation No. 8 dated January 14, 2019 «On the Establishment of a Public Law Company for the Formation of a Comprehensive System for Handling Municipal Solid Waste «Russian Environmental Operator»

as in some countries of the European Union. This can have an impact on public opinion and priorities in various areas, including the environment. In Italy, although there are liberal elements, the system is also not strictly liberal, and the influence of other political movements is also significant.

Italy has a national interest in delivering climate stability and achieving climate neutrality before 2050 (Franza, Bianchi, & Bergamaschi, 2020). It emphasizes the importance of renewable energy sources (RES) in achieving Italy's security and economic objectives. The adoption of RES is seen as a way to limit Italy's reliance on imported fossil fuels which has positive repercussions such as reducing geopolitical dependence improving the trade balance and sheltering the economy from commodity price volatility. The research also highlights the impact of Italy's high exposure to climate impacts and the importance of clean technology particularly RES in addressing environmental concerns. It mentions that RES can play a key role in the energy transition and the fight against global warming which is widely recognized in Italy including in the foreign policy community. Unlike Italy, Russia has long been heavily dependent on energy exports such as oil and natural gas. This poses significant challenges for the transition to more sustainable energy and reducing the impact on the climate. In recent years, Russia has begun to recognize the importance of diversity in the energy mix and increasing the share of renewable energy sources (RES). However, this process may not move fast enough to solve modern environmental problems. Russia is also facing challenges related to climate change, such as melting ice in the Arctic region (Lukyanets & Tyshkevich, 2022), which has potential consequences for the country. However, unlike Italy, Russia does not always have such an emphasis on clean technologies and renewable energy sources (Flaksman, 2022) in the context of domestic policy or external strategies due to its abundant oil, natural gas, coal, and uranium resources. However, this issue is changing with the low cost of electricity generation and energy storage technologies (Pagliaro, 2020). The development and implementation of approaches to climate and sustainability in Russia may require more substantial efforts and a clear strategy.

Natural factors

Natural factors also have a significant impact on people's environmental awareness and are one of the geographical factors in the formation of environmental culture. Anthropologists are also exploring this area of the question and confirming the influence of natural factors on environmental culture. Tim Ingold is a British anthropologist and writer who explores the interplay between humans, nature, and technology, in his book *Anthropology: Why It Matters* (2018) addresses how nature and the environment influence the shaping of our understanding of the world and our behavior. He suggests that humans are not separated from nature, but are in continuous interaction with it, which shapes our culture and our environmental awareness. He emphasizes the importance of understanding the connection between humans and the

environment in order to shape more sustainable and environmentally responsible lifestyles. Natural factors are different: climate, location, geological features, hydrological conditions, vegetation cover, fauna, geomorphological features, geological history, natural resources, landscape features, natural disasters. For example, climatic conditions and geographic location can determine the environmental challenges that people face in a particular region. How people deal with these challenges determines their environmental awareness and attitudes toward environmental issues. Italian cities' responses to climate change lack clear geographic patterns, with no distinct trends observed across Northern and Southern regions or among large and small cities. The variations in mitigation targets within city plans highlight differences in the political commitment of local authorities in Italy (Salvia et al., 2014). One of the most vulnerable places to climate change in Italy is Venice. In the context of rising sea levels as a consequence of climate change, some types of sophisticated protection have been developed. The city and the islands were protected by a dense network of meteorological and oceanographic stations. Forecasting capabilities have been expanded to manage the risks associated with sea level rise. Protection measures include the use of tide sensors and the development of local solutions to address sea level rise (Cavaleri et al., 2020). This increases the level of awareness and concern for the environment, which leads to an increase in the level of environmental culture, since people facing climate consequences are much more concerned about environmental problems. Regarding Russia in this area, due to its geographical size, Russia needs to develop large-scale measures to adapt to climate risks. Significant differences between the regions of the country and the diversity of the effects of climate change on the environment make it much more difficult to create the necessary mechanisms, national standards and projects. However, one recent study (Korppoo & Alisson, 2023) claims that The Russian climate strategy is «imitational». The government has set goals and adopted policies aimed at combating climate change but these are considered to be only imitational. The regulatory framework lacks credibility and unrealistic assumptions are used to justify the plan for action. Additionally, the lack of professionalism and clear framework for policies or allocation of tasks in the governance structures is evident.

Another natural factor that affects environmental awareness is biodiversity. The more species of living organisms there are in a particular region, the more likely people are to appreciate nature and care about the environment. This is because more diverse ecosystems provide more environmental services such as food, medicine, and other resources to local communities, which in turn can lead to greater public concern about environmental issues and a greater willingness to address them. In addition, people living in regions with high levels of biodiversity may have a deeper cultural connection to nature, which strengthens their relationship with the environment and may lead to the development of a more responsible relationship with

nature. While examining the Global Biodiversity Index¹¹, it becomes apparent that Russia ranks higher at 37 compared to Italy's position at 81. This suggests that, in terms of biodiversity, Russians appear to be more environmentally aware. However, it's crucial to consider the geographical aspect in this assessment. Russia is an expansive country with diverse ecosystems across its vast territory, including areas with rich biodiversity. On the other hand, Italy, being smaller in size, may face challenges related to habitat loss and fragmentation. Therefore, while the index indicates a higher overall biodiversity ranking for Russia, the specific environmental nuances within each country's regions should be taken into account for a more comprehensive understanding.

Also, the quality of water resources and opportunities for fishing and hunting can influence people's level of environmental awareness. People living near rivers and lakes often know more about local ecosystems and water resources than people living in cities. Traditional resource-dependent societies develop a deeper connection to the environment and often have a high degree of environmental awareness. However, with the development of the economy and increased use of natural resources, this connection with nature can be disrupted, leading to negative environmental consequences due to the decline of the environmental culture of society (Burton, Schoepfle, & Miller, 1986). Comparing Russia and Italy in this context is challenging due to the vast geographical differences between the two countries. Residents near rivers and lakes often exhibit greater knowledge of local ecosystems, emphasizing the importance of proximity to nature. Traditional resource-dependent societies typically foster a strong environmental connection. However, economic development and increased resource utilization may disrupt this bond, leading to environmental challenges and a decline in environmental awareness within society. However, in comparing the studied in this paper regions: Veneto in Italy and the Republic of Karelia in Northern Russia, the latter exhibits a higher abundance of lakes, rivers, and villages. This suggests a potentially deeper interaction with nature and a greater awareness of environmental knowledge in the more rural and natural environment of Northern Russia compared to the more industrialized setting of Italy's Veneto region. The presence of numerous lakes, rivers, and villages in the Republic of Karelia may contribute to a stronger connection to the environment and a richer environmental culture within the local population.

Mass media

Despite the fact that educational institutions are not focused on environmental education, many volunteers, non-profit organizations, and concerned people are engaged in this issue.

¹¹ The Swift Set. (2022, September 22). The 201 Most (& Least) Biodiverse Countries. Retrieved January 22, 2024, from <https://theswiftest.com/biodiversity-index/>

There are various public environmental organizations in Russia, such as «Русское географическое общество» (Russian Geographical Society)¹², «Эковики» (Ecowiki)¹³, «Зеленый крест» (Green Cross)¹⁴ and others. They work to protect the environment, conduct environmental actions and activities, organize training programs and courses on environmental education. The activities of these organizations promote public environmental awareness and the formation of environmental culture in Russia. They help people understand the importance of environmental problems, teach how to properly use natural resources, and promote the ideas of environmental responsibility and conservation for future generations. However, the ban imposed by the Prosecutor General's Office on Greenpeace activities in May 2023¹⁵ represents an additional obstacle to environmental education and protection of the environment. Greenpeace, an international non-profit organization known for its activism in protecting nature and fighting climate change, has played a significant role in drawing attention to environmental issues and instilling an environmental culture in society. However, banning Greenpeace raises concerns about freedom of expression and the right to peaceful protest, which are important components of developing an environmental culture. Restricting Greenpeace's activities may reduce public awareness of the importance of environmental protection, lead to the concealment of information about environmental issues, and hinder public dialogue on these issues. Moreover, Greenpeace and similar organizations play an important role in investigating and drawing attention to environmental violations. Their work relies on independent research and expertise to help identify and document environmental problems. Restricting their activities can lead to a cover-up of violations and reduce the ability to monitor and account for environmental crimes.

Italy also has environmental organizations, the largest of which are «Legambiente»¹⁶, «WWF Italia»¹⁷, «Greenpeace Italia»¹⁸, «Lipu» (Lega Italiana Protezione Uccelli)¹⁹, and «Lega Anti Vivisezione» (LAV)²⁰. They are active in public education, campaigns for the protection of nature and biodiversity, and lobbying the government and other organizations for environmental interests. These organizations and many others in Italy promote an environmental culture in society through educational programs, actions and campaigns in order to draw attention to environmental problems and to involve the public in solving them. One of the

¹² Russian Geographical Society. (n.d.). <https://rgo.ru/>

¹³ Ecowiki. (n.d.). Retrieved from <https://ecowiki.ru/>

¹⁴ Green Cross Russia. (n.d.). Retrieved from <https://greencross.org.ru/>

¹⁵ BBC News. (2023, May 19). Greenpeace has been recognized as an undesirable organization in Russia. Retrieved January 25, 2024, from <https://www.bbc.com/russian/news-65649866>

¹⁶ Legambiente. (n.d.). Retrieved from <https://www.legambiente.it/>

¹⁷ WWF Italy. (n.d.). Retrieved from <https://www.wwf.it/>

¹⁸ Greenpeace Italy. (n.d.). Retrieved from <https://www.greenpeace.org/italy/>

¹⁹ LIPU - Italian League for Bird Protection. (n.d.). Retrieved from <http://www.lipu.it/>

²⁰ Eurogroup for Animals - Lega Anti Vivisezione. (n.d.). Retrieved from <https://www.eurogroupforanimals.org/who-we-are/our-members/lega-anti-vivisezione>

examples could be the non-commercial organization Extinction Rebellion (XR)²¹ which is an environmental movement that also has a presence in Russia, although its activities may be less prominent compared to other countries. However, in Italy, XR has gained more visibility and recognition due to its active engagement and public demonstrations. XR in Italy has been known to utilize stickers and other forms of visual communication in public spaces to attract attention and generate interest in their cause. These efforts aim to raise awareness about environmental issues and promote public engagement in addressing the climate crisis. At the moment, there is no accurate data on the number of non-profit environmental organizations in Italy and Russia to make a comparison in quantity or quality.

It should be noted that in Italy there are frequent environmental actions and strikes, especially among young people, which show the freedom of speech and a greater awareness of environmental issues. worth noting that there are frequent environmental actions and strikes in Italy, especially among young people, which indicate freedom of speech and a greater awareness of environmental issues. One of the factors may be the higher level of education and activity of citizens in Italy, who feel the need to express their opinions and fight for their rights, including the right to a healthy environment. In Russia, unfortunately, there are a number of restrictions and bans on organizing strikes, which can be related to certain topics, including environmental issues. In addition, many people in Russia may face problems and risks associated with participation in strikes, which may also discourage people from taking part in such actions. News about the detention of members of the youth climate movement Fridays for Future is quite common. In recent years, there have been various reports of activists being detained in countries around the world, including the US, the UK, Italy, France and others. However, the degree of police brutality can vary significantly from country to country. In Russia and some other countries, police actions can be particularly brutal and violate the rights of citizens (Bezrukova, 2020). Compared to Western Europe, the number of detentions at pickets and demonstrations by the environmental movement Fridays for Future is higher in Russia. Other tendencies that cause Russians not to actively participate in protests and rallies are the lack of trust that the authorities are capable of changing anything, and because the social groups that could become aggregators of the demand for change do not have the institutional underpinnings to influence the authorities. The policy of recent years is aimed at discrediting the participation of citizens in protests, which also has a negative impact on the protest potential of Russians²².

Research by Hirsh (2014) also shows that a country's level of environmental sustainability can be linked to the personal characteristics and national traits of the population, indicating the importance of understanding

²¹ Extinction Rebellion. (n.d.). Retrieved from <https://rebellion.global/>

²² Radio Liberty. (2019, October 25). Fridays For Future picketers detained in Moscow. Retrieved January 25, from <https://www.svoboda.org/a/30236560.html>

the role of the individual in achieving sustainable development. Understanding the relationship between personality traits, environmental beliefs and behavior is key to the development of sustainable lifestyles. In this context, the study of personality traits and their relationship to the environmental sustainability of nations allows us to better understand how environmental culture is shaped in different countries. Human behavior plays a critical role in environmental well-being, as individual and collective actions have a significant impact on the natural environment (Gardner & Stern, 2002). A country's level of environmental sustainability can be linked to aggregated national differences in personality traits, indicating the role of personality in achieving sustainable development. National personality traits can influence environmental attitudes and environmental behavior. Factors such as connection with nature, environmental outlook, and concern for the environment can play an important role in shaping environmental culture. Agreeableness and openness have been consistently identified as important predictors of pro-environmental attitudes and behavior at the individual level. People who score higher in agreeableness tend to be more cooperative, empathetic, and concerned about the well-being of others, including the environment. They are more likely to engage in behaviors that promote environmental sustainability, such as recycling, conserving energy, and supporting eco-friendly initiatives. This points to the importance of taking into account personality traits in the formation of environmental culture in different countries. Referring to Italy and Russia, it can be assumed that differences in environmental culture and practices between these countries can be related to national differences in personality traits and attitudes toward the environment. Relating this to the formation of environmental culture in Italy and Russia, it is important to consider the role of cultural, historical, and socio-economic factors. The cultural values, social norms, and historical contexts in each country can shape individuals' personality traits and their attitudes towards the environment. Italy, known for its rich cultural heritage and emphasis on aesthetics, may have a cultural environment that fosters openness and pro-environmental values. On the other hand, Russia's historical and socio-economic factors, such as the impact of Soviet-era collectivism and the challenges of economic transition, may contribute to differences in the levels of agreeableness and openness observed in the population. It is important to note that these are general trends and should not be applied to every individual in each country. People within a country can vary widely in their personality traits and environmental attitudes. Additionally, personality traits are not fixed and can change over time due to various factors, including cultural shifts and individual experiences (Hirsh, 2014, p. 234).

The chapter concludes about the formation of environmental culture in Russia and Italy. The analysis of the main geographical factors such as social, political, economic and cultural indicates that there are differences in environmental values and attitudes towards nature between these two regions. The differences in environmental values and attitudes towards nature between Eastern and Western Europe are

important factors to consider when developing environmental policies and programs in Europe. To achieve a sustainable future in Europe, a strong environmental culture must be developed that includes all citizens and encourages sustainable practices.

In Western Europe, where there have been multiple environmental movements and effective policies, there is a higher level of environmental awareness and activism. This demonstrates the importance of the use of natural resources in this region. On the other hand, Eastern Europe has faced difficulties related to the past communist regime and various social, economic and political factors. In recent years, however, there has been an increase in awareness of environmental issues and activism in the region. The history of environmental movements in Russia and Italy underscores the importance of preserving natural resources and considering environmental consequences when developing economic growth strategies. It is also important to consider the historical and cultural factors that influence the environmental culture of each country and specific region.

In terms of social factors, including education, social movements, and cultural characteristics, there are also differences that have influenced the formation of environmental consciousness in each country differently. In the context of education in the Russian Federation, there is a problem of insufficient level of environmental awareness among the population. Although the government and non-governmental organizations are making efforts in this direction, the level of environmental education in schools still remains inadequate. The lack of a unified methodology and standards, low qualification of teachers, and limited access to information are issues that hinder the effective formation of environmental culture among students. Environmental education in Russia is largely limited to conventional textbook topics, without an interdisciplinary and more in-depth approach. However, modern children show great interest in ecology and are willing to learn in this field. This indicates the need for improvement and expansion of environmental education, so that children have more opportunities to develop their knowledge and skills in environmental conservation. Italian environmental education differs from Russian environmental education in several key aspects. In Italy, special attention is given to the development of students' environmental competence, which involves acquiring the knowledge, skills, and values necessary for understanding and actively participating in addressing environmental issues. Environmental education is integrated into the curriculum and can be connected to various subjects, ensuring comprehensive coverage of environmental topics throughout the educational process. The close connection between environmental education and real environmental problems allows students to engage in practical projects and activities aimed at solving issues in their local communities or school environments. Environmental education in Italy is also integrated into the subject of «Civic Education», which includes the study of environmental problems, legal and political aspects related to environmental protection and sustainable development. The Italian education

system supports the active involvement of students in environmental projects, excursions, and campaigns, which promotes the application of knowledge in practice and the development of active citizenship skills. Regarding higher environmental education, Italy also excels by introducing new and relevant programs and focusing on more practical methods, which positively influence the development of environmental competencies and the formation of environmental culture. In comparison to the Russian education system, Italian environmental education has a broader scope and active support from the government, aiming to shape environmental consciousness and responsibility among students for sustainable development and the preservation of the environment for future generations.

When comparing non-governmental organizations and movements, Italy remains a leader compared to such activities in Russia, primarily due to less control and obstacles to their operation. The formation of environmental culture requires the efforts of non-profit organizations, volunteer work, and the mass media. Limited access to information, lack of transparency in environmental issues, restrictions on the right to peaceful assembly and freedom of expression, limitations on the work of independent experts and non-governmental organizations, insufficient funding and support for environmental projects—all these factors hinder the work of volunteers and organizations in the field of environmental conservation in both countries, but there are still significant differences. In both Russia and Italy, various public environmental organizations exist that are actively engaged in environmental protection and the formation of environmental culture. However, restrictions and risks associated with participating in environmental actions and strikes, as well as the lack of institutional support for influencing those in power, can deter people from active participation in protest events. In Italy, there are also numerous environmental organizations that conduct educational programs, campaigns, and initiatives to draw attention to environmental issues and engage the public in their resolution. The high level of awareness and citizen activity, as well as greater freedom of speech and enlightenment regarding environmental issues in Italy, contribute to the formation of environmental culture in society.

Regarding the socio-cultural factors influencing the formation of environmental culture, personal traits and national characteristics are associated with the level of environmental sustainability in a country. Understanding the relationship between personal traits, environmental beliefs, and behavior is crucial for the development of a sustainable way of life. Human behavior plays a critical role in environmental well-being, and national personality traits can influence attitudes towards the environment and environmental behavior. In Italy and Russia, differences in environmental culture and practices can be linked to national characteristics and attitudes towards the environment, which are shaped by the cultural factors of each country. Undoubtedly, the societal mentality in the two countries is very different, and Italy and Russia have differences in environmental culture and population behavior. Italy, with its emphasis on aesthetics

and cultural heritage, may contribute to the development of openness and pro-environmental values. People in Italy, who exhibit greater conciliation and openness, tend to care about the well-being of the environment. In Russia, historical and socio-economic factors can influence attitudes towards the environment and environmental behavior. However, it is important to note that these are general tendencies, and they should not be generalized to all individuals in each country. Differences in environmental culture and practices between Italy and Russia can be related to national variations in personal traits and attitudes towards the environment, as well as cultural and socio-economic factors.

Another crucial factor in shaping the environmental culture of society is the country's economy. A higher level of economic development can provide greater resources and opportunities for investment in environmental and sustainable projects. This leads to the development of environmental infrastructure, support for environmental programs and initiatives, and ensuring access to education and information about the environment. A higher level of economic development also promotes increased environmental awareness and active participation in sustainable practices. Countries with sufficient economic capabilities can more easily implement strategies and policies aimed at environmental conservation and motivate citizens to make environmentally responsible decisions. Therefore, comparing the level of economic development between Italy and Russia, it can be established that Italy has a higher level of economic development compared to Russia. The conclusion is that Italy, due to its higher level of economic development, possesses greater resources and opportunities to utilize the economy as a factor in shaping the environmental culture of society.

When it comes to differences in the political sector, comparing Italy and Russia, it can be noted that the political context and approach to environmental issues have their distinctions. Italy, as a member of the European Union, engages with other countries through environmental agreements and programs aimed at combating climate change and protecting the environment. This means that Italy faces political and economic pressure to implement environmental measures and adhere to standards established within international agreements. These political commitments can stimulate the development of environmental culture in the country and contribute to the adoption of relevant environmental measures and initiatives. On the other hand, Russia has its own characteristics in the political sphere and approach to environmental issues. The political system and internal political priorities influence the development of environmental culture and priorities in environmental conservation. Russia possesses vast natural resources and significant influence on the global economy, but sometimes these factors can lead to compromises in the field of ecology and sustainable development. While Italy, as a member of the European Union, faces certain international standards and political pressure regarding environmental measures, Russia has its own specificities in the political sphere and may encounter different priorities. Objectively assessing which of

the two countries, Italy or Russia, has more advantages in developing environmental culture through politics or who puts in more effort is difficult. This is because the development of environmental culture depends on multiple factors, including political, economic, socio-cultural, and educational aspects. Based on the analysis of other factors conducted earlier, a general conclusion can be made that Italy demonstrates more advantages in developing the environmental culture of its society.

A comparison between Italy and Russia in terms of environmental culture reveals significant differences in many aspects. Overall, Italy demonstrates a higher level of environmental culture development compared to Russia. Italy has a well-developed system of non-profit organizations and movements actively engaged in environmental protection and the formation of environmental culture. These organizations conduct educational programs, events, and campaigns, drawing attention to environmental issues and involving the public in their resolution. Italy also has a high level of awareness and citizen activity, as well as greater freedom of speech and awareness regarding environmental matters. The higher level of economic development in Italy provides more resources and opportunities for investments in environmental projects, the development of environmental infrastructure, and support for environmental programs. On the other hand, Russia faces several challenges in the field of environmental culture. Restrictions on access to information, limitations on the rights to peaceful assembly and freedom of expression, as well as constraints on the work of independent experts and non-governmental organizations, create obstacles to the development of environmental initiatives. The political system and internal political priorities can also influence the development of environmental culture and priorities in environmental conservation.

To summarize this section, Italy demonstrates a higher level of environmental culture development compared to Russia. The high level of economic development, a well-developed system of civil organizations and movements, as well as active citizen engagement, contribute to the formation of environmental culture in Italian society.

1.3 The Influence of Social Media factor on the development of environmental culture among Italian and Russian youth

The Internet has made its way into everyday life and is reaching people of all ages around the world. Even from a very young age, children are immersed in the digital world, navigating screens with ease and spending a significant part of their day interacting with various devices. A Wakefield (2015) study highlighted this shift, showing that children between the ages of 5 and 16 devote an average of six and a half hours a day to screens, a significant increase from a couple decades ago. This surge in screen time spans a vast array of gadgets, from televisions to smartphones to gaming consoles, and emphasizing how deeply the internet has been woven into the lives of the younger generation since the beginning of

childhood. Modern youth and the younger generation are in a constant online space, actively absorbing information, and new knowledge for them becomes linked with the virtual world. Online resources, social networks, and digital platforms are the main sources from which young people get the latest information about events, trends, and cultural changes. The ubiquity of technology in everyday life has changed the way young people interact with information, entertainment and each other. Leveraging these technologies enables people from various backgrounds to actively engage in sharing information, discussing issues, and seeking solutions, what is also related to environmental concerns. Overall, internet cultures serve as dynamic spaces for collaborative value creation, challenging traditional notions of individualism and economic exchange. As it was found out in the previous chapters, various factors influence the formation of environmental culture, but it is worth highlighting the Internet as the most relevant factor of our time in terms of its influence on young people.

During the development of the internet, a pivotal moment occurred known as the emergence of the Web 2.0 concept. This epochal transition occurred not only in technical terms but also in the understanding of the internet's purposes and capabilities. With the advent of Web 2.0, the internet transitioned to a new stage, emphasizing the creation of interactive and social platforms. This shift opened doors to new forms of communication, information dissemination, and social interactions online. A key element of this transition was the ability for users not only to consume content but also to actively interact with it by creating and sharing their own. Various online platforms, including social networks, forums, blogs, and wiki resources, offer these capabilities. The Web 2.0 concept underscores the role of users in content creation and community maintenance, significantly altering the ways in which interaction and information exchange occur in the online space (O'Reilly, 2005).

Year by year, the number of social media users is rapidly increasing. According to DataReport (2024), currently, 5.35 billion people use the internet, with 5.04 billion of them using social media, accounting for 62.3% of the global population. This figure continues to rise, with 266 million people joining the ranks of social media users in the past year. However, this dynamic trend is not only quantitative but also qualitative: social networks are evolving into not only communication platforms but also vital tools for information dissemination, education, entertainment, and self-realization. For some researchers, these new media are perceived as part of the problem, providing mere entertainment and diverting attention from serious topics. For instance, in her book «Post-growth Living: For an Alternative Hedonism», Kate Soper presents a new environmentally sustainable concept for a good and happy life. She explores the issue of consumerism in modern society and cautions against excessive screen time, arguing that it can foster a consumerist mindset, passivity, and detachment from nature (Soper, 2020). Another perspective suggests that the internet presents an opportunity to engage young people in addressing environmental issues. It serves as a platform for

activists to reach a wider audience and effectively disseminate information, potentially engaging environmentally conscious young individuals who are active online (Cernison, 2019). The internet plays a significant role in shaping their opinions and behaviors regarding environmental issues (Lobodenko et al., 2022). It can be utilized as a tool to raise awareness and mobilize individuals, including young people, to tackle environmental challenges.

On social media platforms, young people are engaged in discussions on various issues, including environmental ones, thereby changing youth opinions and behaviors through new trends in social media. Thanks to social media, we can observe changes in people's behavior and interests, providing valuable data for understanding how new content influences the perception of environmental issues and what encourages or discourages public participation in addressing them. For example, in the past year, there has been a decrease in the number of people identifying with veganism and an increase in the number of flexitarians among Europeans (DataReport, 2024). These changes in consumer preferences may be a response to the information they receive through various media sources, including social networks. In the context of changing dietary preferences and behaviors among young people observed in the modern online community, the shift from the popularity of veganism to flexitarianism may represent a significant signal of changes in Europeans' perception of a sustainable lifestyle, and therefore, their changes in sustainability practices will lead to real changes in global consumption.

Overall, tools such as Web 2.0, namely social networks, provide important opportunities and challenges in addressing complex environmental issues. They enable the dissemination of information and raising awareness at all levels of society. These tools allow people to exchange knowledge and opinions, discuss issues, and create inclusive spaces for information exchange, as one of the key characteristics of a Web 2.0 site is that users are encouraged to contribute to the content rather than just read what is already there. For example, in one study, it was found how the world's largest social network, Facebook, motivates pro-environmental behavior, increases environmental awareness and knowledge, thus directing towards minimizing the negative impact of their actions on nature. It is through active participation in online communities, the ability to create and share content, as well as participate in its discussion, that more and more people have learned about climate change and changed their behavior and activities to limit its impact (Robelia, Greenhow, & Burton, 2011). Similarly, another study revealed that Instagram, another globally popular social network, plays a significant role in raising awareness and promoting environmentally responsible behavior. Within Instagram, influencers wield considerable influence in advocating for environmental awareness and encouraging eco-friendly actions among their followers. Followers are influenced by environmental content shared by influencers, fostering green attitudes and intentions towards consuming environmentally friendly products (Souza et al., 2015).

However, it is important to realize that while these platforms have significant potential to activate environmental action and awareness, the effectiveness of such efforts may vary from culture to culture, region to region, and from events occurring at a given moment. Each culture and country have its own leaders, sources, and channels for disseminating information, resulting in a diverse array of perspectives and narratives. For example, various case studies from different countries demonstrate that activism and themes may vary depending on the region, country, and culture. Over the period from 2009 to 2019, youth in Chile began actively using social media in response to major energy and mining projects. They turned to online platforms to organize and coordinate protests. The use of the internet became a key tool for information exchange and mobilization in addressing environmental issues, contributing to youth participation in environmental movements and helping them effectively address emerging problems in their region (Scherman et al., 2022). Another study comparing the United States, Canada, France, and the United Kingdom also shows differences in the use of internet resources by young people. In the United States, youth actively use social media such as Facebook and WhatsApp to organize environmental actions inspired by movements such as Fridays for Future. In Canada, youth demonstrate high environmental concern and readiness to protect the environment, often using social media to spread petition signatures and organize boycotts. In France, youth prefer to respond to political events through various environmental activism protests. In the United Kingdom, youth also actively participate in environmental activism, with increased activity observed during periods of socio-economic instability (Boulianne & Ohme, 2022). The results of the research show that internet activism and youth interests in ecology largely depend on the socio-cultural context in which they operate. Although some issues, such as environmental concerns, may be global, the specific focus and intensity of activism may vary depending on local contexts, cultural values, and socio-political conditions. Each region or country may have unique challenges and priorities that determine their activism, although there may also be common issues on a broader scale, such as climate change or social justice issues. However, the significance of the internet and social networks as tools for organization, mobilization, and information exchange in the context of environmental activism remains a common factor.

The role of online platforms among Russian and Italian youth

In the previous sections of our study, we extensively analyzed the factors at individual and national levels that influence the formation of environmental culture among youth in Italy and Russia. Our observations revealed that in certain contexts, especially in the political sphere, youth encounter limitations in expressing their environmental beliefs and values. For example, in Russia, activists engaged in environmental issues face threats of persecution, which impedes the free exchange of opinions and ideas, and consequently reduces the level of environmental awareness among the population (Paramonova, 2023). In light of this, there arises a need to search for alternative platforms for free communication and expression of views. In

this context, the internet plays a crucial role, providing young people with the opportunity to express their environmental aspirations and activism. Considering the internet as such a tool, we conclude its importance in shaping environmental awareness and activity among youth. In this chapter of our study, we will focus on analyzing the content generated and disseminated by youth in the online space, especially on social networks. Our goal is to determine which topics and issues attract the most attention from youth in Italy and Russia, how involved they are in creating and consuming environmental content, and in which of the countries this phenomenon is more widespread. Such analysis will allow us to better understand how the internet influences youth perceptions of environmental issues across different cultures and how it is used in various countries as a tool for promoting environmental culture.

When considering the use of the internet in the context of Russian and Italian youth, it becomes apparent that internet usage is becoming increasingly prevalent among the populations of both countries. The majority of the population in both countries actively uses the internet on a daily basis. According to data from 2024, in Russia, 90.4% of the population actively uses the internet, spending an average of 2 hours a day on social networks, while in Italy, this figure is slightly lower at 87.7% of the population using the internet and spending slightly less than 2 hours on social networks per day. These figures indicate that the internet plays a significant role in both countries, and the content consumed plays a role in shaping certain views, values, and knowledge.

In both Russia and Italy, social networks play a significant role in shaping environmental awareness and activity among youth. Researchers have discovered that in Italy, information and communication technologies (ICT) stand out as one of the most impactful methods for involving the public in environmental initiatives. ICTs encompass a wide array of tools, including internet platforms, social networks, mobile apps, websites, and other digital resources (Grifoni, Guzzo, & Ferri, 2014). Similarly, in studies examining the environmental internet involvement of Russian youth, it has been found that social media play an important role in shaping public opinion and behavior regarding environmental issues. Russian social media users unite to discuss and solve environmental problems, activating young people in the context of the green agenda. However, their interest in environmental topics is expressed less actively compared to other social and economic problems of the region (Lobodenko et al., 2022). The diminished interest in environmental topics among the Russian community in the online space occurs for several reasons. Firstly, in the Russian media space, other topics such as politics, economics, and social conflicts take priority, reducing attention to environmental issues. The dominance of pro-government journalists in the media may also limit critical coverage of environmental problems and restrain activism in this area. Additionally, the influence of economic interests related to industry and energy may play a significant role in determining which topics receive more attention in the media space. Russia is a major producer and exporter of energy resources such

as oil and gas. These industries play a key role in the country's economy, and environmental interests may clash with the interests of the energy sector and other industrial sectors. Environmental issues may take a back seat to economic benefits or the needs of industries related to environmental pollution (Golbraih, 2015). Another reason is that in some cases, decisions on environmental issues may be made without broad public participation, which can reduce the motivation of broad segments of the population to take active actions and participate in discussions on environmental problems. The lack of motivation for action and participation of society in solving environmental problems can also contribute to less active interest in these issues in Russian society.

Before embarking on the analysis of content influencing the environmental attitudes of Russian and Italian youth, a thorough analysis of various social media platforms was conducted. This stage of the research is considered an integral component, as it allows for the selection of the most relevant and in-demand communication channels among youth in both countries. In the context of the modern digital world, social media platforms not only serve as means of communication but also as powerful tools for shaping public opinion. Therefore, it is necessary to consider the diversity of platforms and their characteristics to more effectively understand which ones are key in the context of environmental awareness and activity among youth.

Among the most popular social media platforms globally are Facebook, Instagram, WhatsApp, TikTok, and YouTube (DataReport, 2024). Each of them has its unique features and target audience, as well as offers various opportunities for creating and consuming content. Facebook is one of the most extensive and diverse social networks, allowing users to communicate, share photos and videos, join communities, and much more. Instagram specializes in visual content, while YouTube is the largest video hosting and search engine. However, preferences in the use of social media platforms may vary across different countries. In Italy, TikTok is one of the most popular social networks in terms of time spent on the app, especially among youth, due to its original concept of short videos. Meanwhile, in Russia, according to the DataReport (2024) report, YouTube remains the most popular social network in terms of time spent on the app. These differences are due not only to users' personal preferences but also to political aspects. In March 2022, the development of social networks faced new challenges. The Chinese social network TikTok announced a suspension of operations in Russia following the enactment of a law punishing the dissemination of fake news about a «special military operation» in Ukraine (TikTok Newsroom, 2022). As a result, Russian TikTok users had to reconsider their preferences in social media and pay attention to alternative platforms. While TikTok was one of the most popular platforms among youth in Russia, its temporary suspension forced users to seek other channels to express their views and participate in public discussions. Another limitation that came into effect on March 21, 2022, was the decision of a Russian court to recognize the

Meta company as an extremist organization and ban its activities in the country (NPR, 2022). This decision led to a ban on the use of popular social networks such as Instagram, Facebook, and Twitter, prompting Russian users to seek alternative platforms for communication and content exchange. Although many users bypass the blockade using VPNs, the restrictions noticeably affected users' preferences, leading to a decrease in the frequency of using banned social networks. Such changes affect the dynamics of public discussions and the dissemination of information on important social issues, including environmental problems and activism.

In this new reality, YouTube continues to be one of the most popular platforms, both in Russia and Italy, currently not subject to blocking. Its growth and development provide a unique platform for exchanging information and content on various topics, including environmental issues. Based on this, YouTube becomes a key platform for analyzing content related to environmental problems created by youth in Russia and Italy. YouTube, as a leading online platform for video content sharing, plays a significant role in contemporary information society. According to the book «YouTube: Online Video and Participatory Culture» by Jean Burgess and Joshua Green, the social network YouTube has become an integral part of the media landscape and a force to be reckoned with in contemporary pop culture. Despite YouTube not being the only video hosting platform on the internet, its rapid growth, content diversity, and public presence make it a key object for studying the evolution of relationships between new media technologies, creative industries, and popular culture politics. YouTube represents a dynamic cultural system created collectively by users uploading content to the site and viewers interacting around this content. Each participant brings their unique goals and tasks to YouTube, shaping it as a platform for participatory culture, where there is active interaction between different participants and the cultural logic of the platform is formed. Youth can express their ideas and creativity, communicate with other users, explore new topics, share knowledge, and be inspired by the creativity of others. Researcher Hartley, J, highlights the need to develop YouTube as a tool for learning and self-development, including curating content, creating educational playlists, and supporting educational channels to make the platform more useful for youth in their quest for knowledge, ideas, and sociocultural exchange (Hartley, 2008). The development of YouTube as a transformative platform in the media space not only revolutionizes the creation and consumption of content but also has significant potential for developing environmental awareness and fostering a higher level of environmental consciousness among youth. YouTube's role as a dynamic cultural system provides a unique opportunity to bridge the gap between traditional media narratives and mass environmental activism. Through user-generated content and youth initiatives, YouTube becomes a catalyst for raising awareness of pressing environmental issues and promoting environmental behavior. Using YouTube as a tool for environmental education not only expands the reach of educational initiatives but also nurtures a

generation of environmentally conscious and socially engaged individuals striving to create a more sustainable world.

Methodology

Social media is a unique source of information that is easily accessible, constantly updated and presented in digital format. This underscores the importance of analyzing social media content to identify general trends that are emerging in this environment. Recently, several companies have developed proprietary text analytics systems for data visualization (Arnold, 2012), and researchers have also created expert systems to analyze the tone of content on social media (Abrahamset al., 2012; Lane et al., 2012). A significant amount of research has been conducted in the field of environmental studies: researchers have begun to explore the potential of social media data to analyze people's behavior and perceptions towards the environment, monitor environmental change, and inform environmental planning and management. However, the field of environmental research using social media data is still in its infancy (Ferrari et al., 2011). A major challenge for researchers remains the lack of a universal methodology specifically designed to select, collect, process and analyze media information from social media (Arnold, 2012).

One of the most effective methods of content analysis in social media, is proposed in «Social Media Content Analysis: A Grounded Approach» by Lai & To, which is a systematic and structured approach to the study of textual and multimedia content in online environments. This method is based on the principles of grounded theory, which allows researchers to develop theoretical concepts and identify key themes through content analysis, taking into account the context and specificity of the issues under investigation (Arnold, 2012). In the context of a study of young people's environmental culture on YouTube in Russia and Italy, this method represents a suitable tool for identifying key themes and differences in approaches to the issue. Advantages of this method include its ability to take into account the context and specificity of the YouTube platform as a video hosting platform, which is particularly important for analyzing content in social media. In addition, the grounded theory method emphasizes the importance of content and its meaning, which allows for a deeper understanding of major themes and trends in content, including aspects of environmental awareness. This approach also facilitates the development of a structured and systematic analysis process, which enhances the objectivity and validity of the research findings.

The methodology of this approach is based on sequential steps, starting with the collection of twenty channels related to environmental topics in both countries. Then, the selected channels are analyzed to determine their audience engagement in terms of subscribers and video views. Next, the titles of the most popular videos from each channel are analyzed to understand which words, topics, and headlines are most appealing to audiences in the different countries, which provides insight into viewer preferences and content

emphasis. Also, this analysis provides insight into the linguistic differences of using different words with different accents. A further step of the grounded theory method is to select one video from each channel with the highest number of views and transcribe it into text format. This is necessary to enable analysis of the content of the video and to identify frequently used words by the authors. For this analysis, artificial intelligence tools for text analysis, such as Yake or WordCounter, are used to detect the most relevant topics and concepts. Next, a topic modeling technique such as cluster analysis using the K-means algorithm is used to classify keywords. This step identifies major topics and clusters keywords based on similarity of content, which helps to organize and classify the information, as well as identify several major topics to determine the interests of each country's audience.

Analysis of environmental content of authors on Youtube platform among Russian audience

The first step to analyze environmental content is to find relevant channels. It is necessary to select channels that are easily searchable for any audience. For this purpose, keywords were identified and used to analyze the raw data. These keywords included common terms such as «ecology», «nature», «sustainable development», «climate change», «eco-blog», «environmental issues», «alternative energy», «environmental habits», and «veganism». The search was conducted in Russian in order to reach the Russian-speaking audience, taking into account regional peculiarities. Additionally, the Google search engine was used to search for relevant information, and various resources and sites offering ratings and lists of top environmental bloggers and channels in Russia were utilized. In this way, the most popular and easy to find channels that focus on environmental topics and promote knowledge, values and environmental awareness among young people were identified on the YouTube platform. Channels that were inactive during the last year at the time of the research conducting were extracted from the collection to avoid analyzing inactive content creators.

The table below shows the following channels among the Russian YouTube segment that distribute environmental topics:

Table 1

№	Channel Name	Short description of the channel	Number of Subscribers on the channel
1	Юлия Куркума ²³ [Iuliia Kurkuma]	The channel delves into topics of healthy plant-based eating, mindful	82.8k

²³ Yulia Kurkuma [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@YuliaKurkuma>

		consumption, and minimalistic principles	
2	Vegan Family ²⁴	The channel focuses on the experiences of a young vegan family, sharing their adventures, plant-based recipes, and advocacy for animal rights and abolitionist veganism	28.6k
3	Сортировочная ²⁵ [Sortirovochnaia] (Sorting station)	The channel explores the significance of environmental awareness and provides practical guidance for environmental stewardship, covering topics such as waste sorting and environmental catastrophes	340k
4	Иван Усанов ²⁶ [Ivan Usanov]	The channel takes viewers on cinematic adventures through the untamed wilderness of Russia, focusing on Siberia	112k
5	Чистая страна ²⁷ [Chistaiâ strana] (Clean country)	The channel is about waste management, operated by the Association of Organizations, Operators, and Specialists in Waste Management	748
6	Экология без паники ²⁸ [Èkologiâ bez paniki] (Ecology without panic)	The authors charring podcast format of video on discussing eco-conscious living	376

²⁴ Vegan Family [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@VeganFamily>

²⁵ Sortirovochnaya [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@sortirovochnaya/videos>

²⁶ Ivan Usanov [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@IRBISSTUDIO/videos>

²⁷ Чистая Страна [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@user-tk1ph5zs4r>

²⁸ Экология без паники [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@ecoBP>

7	Чистомэн ²⁹ [Chistomèn]	Environmental alone activist who is promoting awareness and making cleanup in different regions of Russia	6.29k
8	NOPLASTIC ITSFANTASTIC ³⁰	The channel focuses on promoting eco-friendly habits and entrepreneurship	1.91k
9	Зелёная ведьма ³¹ [Zelënaia ved'ma] (Green Witch)	The channel is dedicated to discussing environmental problems and promoting home sustainable consumption practices	2.09k
10	Веганская Домохозяйка ³² [Veganskaia Domokhoziaika] (Vegan Homemaker)	The channel explores plant-based recipes while also delving into the principles of minimalism, promoting a simplified and sustainable lifestyle	52.1k
11	Александра Андерссон ³³ [Alexandra Andersson]	The channel's creator sheds light on various topics, ranging from scientific environmental discussions to practical strategies for a minimalist lifestyle while raising three children, along with insights into veganism	200k

²⁹ Чистомэн [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@chistomen>

³⁰ NoPlasticItsFantastic [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@NOPLASTICITSFANTASTIC>

³¹ Зеленая ведьма [YouTube Channel] (YouTube channel closed, content unavailable at present)

³² Веганская домохозяйка [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@user-ee4fl6ff4j>

³³ Alexandra Andersson [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@alexandrromanova369>

12	Экология. Глобальный кризис. Выход есть. ³⁴ [Ėkologiia. Global'nyĭ Krizis. Vykhod est'] (Ecology. Global crisis. There is a way Out)	The channel provides scientific insights into environmental topics through informative videos	727
13	Природа ТВ ³⁵ [Priroda TV] (Nature TV)	The channel provides news on ecology, environmental protection, and wildlife in Russia and abroad, offering insights into current topics, expert opinions, and commentary	46.1k
14	Скрыпник ³⁶ [Skrypnik]	The channel is dedicated to implementing environmental projects and sharing knowledge, covering topics including waste recycling, plastic use, secondary raw materials, and environmental protection	106 k
15	Климат и Люди ³⁷ [Klimat i Liudi] (Climate and People)	The channel features scientific videos that delve into the issue of climate change	29k
16	Ямал Медиа ³⁸ [Īamal Media]	The channel explores the lives of Arctic peoples, shedding light on their cultures, traditions, and the Far North	778k

³⁴ Экология. Глобальный кризис. Выход есть. [YouTube Channel]. Retrieved May 12, 2024, from https://www.youtube.com/@ecoglobalcrisis_thereisawayout

³⁵ Природа ТВ [YouTube Channel]. Retrieved May 12, 2024, from https://www.youtube.com/@EcologyOfRussia_Media

³⁶ Скрыпник [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@skrypnika>

³⁷ Климат и люди [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@klimatlyudi>

³⁸ Ямал Медиа [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@YAMAL-MEDIA>

17	ТОПЛЕС ³⁹ [TOPLES]	The channel offers popular science content along with occasional ecology videos, providing entertaining and informative content	6.78m
18	Эколог Жора Каваносян ⁴⁰ [Ėkolog Zhora Kavanosian] (Ecologist Zhora Kavanosyan)	The channel discusses contemporary environmental issues across various regions of Russia and promotes eco-friendly lifestyles. The same presenter of the channel «Сортировочная».	53.6k
19	Елена Володина ⁴¹ [Elena Volodina]	Channel about eco-conscious living and sustainable practicesю Unveiling flaws in waste management systems, author's content promotes conscious consumerism and upcycling for a greener lifestyle	20.4k
20	Энергия из отходов ⁴² [Ėnergiia iz otkhodov] (Energy from Waste)	The channel focusing on waste-to-energy plants, modern waste incineration methods, and waste segregation practices	3.04k

After selecting the most popular and easily discoverable channels by keywords, they were analyzed. The level of viewer engagement was studied through the number of subscribers indicator. The number of subscribers on a channel is a key indicator of user interest and helps to assess the impact of the channel and its potential audience. This approach also helps to identify problematic topics discussed in the Russian information space and their impact on the formation of environmental culture. Channels that are leaders in terms of subscribers, which actively influence the formation of environmental opinion, behavior, values,

³⁹ Топлес [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@toplesofficial>

⁴⁰ Эколог Жора Каваносян [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@ecozhora>

⁴¹ Елена Володина [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@joec00ker>

⁴² Энергия из отходов [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@waste2energy>

and therefore culture, play a significant role not only in determining the interests of the audience through the number of views, but also in the distribution of such content. A large number of subscribers contributes to the initial views of a video, and the interaction of subscribers with the content makes it more popular. This interaction between views and subscriptions enhances the success of channels on the platform and enables them to have a significant impact on public opinion (Hoiles, Aprem, & Krishnamurthy, 2017).

Analyzing the content through top 3 Russian YouTube channels based on subscriber count

The leading channel in terms of subscribers among all selected channels turned out to be «Топлес» [Toples] covering various scientific topics in an entertaining format. The team consists of young and active individuals who shed light on important subjects from a scientific perspective, while with an entertaining aspect. Despite the channel not being entirely dedicated to environmental themes, it was chosen for analysis due to several videos addressing environmental topics garnering millions of views, signifying influential viewer interest in these subjects.

For instance, a video discussing energy consumption and its alternative uses amassed 5.7 million views and 12 thousand comments, indicating considerable interest among Russian viewers in this thematic area. The video explored past, present, and future energy consumption, alternative energy sources, and overall energy-related issues in the context of Russia. Although the video acknowledged that no alternative energy source is perfect, it concluded on a positive note, motivating viewers to focus on a brighter future, thus alleviating environmental concerns among the younger generation and instilling hope. Another video, accruing 4.4 million views and nearly 10,000 comments, delved into the Anthropocene and humanity's impact on the planet, posing the question, «What will you leave behind?» in its title. Such a theme and the straightforward presentation of complex material allow young viewers to reflect on this topic, influencing the creation of new environmental values and thereby enhancing environmental culture. Moreover, this video stands as the most popular across the entire Russian YouTube platform, detailing the Anthropocene era concept. The author encourages viewers to engage in thoughtful deliberation, concluding the video with the phrase, «Let's train our brains to avoid being endangered species» thereby urging a shift towards a more environmentally friendly lifestyle. The videos offering educational content significantly contribute to the development of environmental culture by expanding knowledge of the importance of nature conservation. However, there are videos on nature-related topics only, for example about forests as complex ecosystems, that garnered only 1.5 million views, which is not big data on the channel «Топлес», according to the statistics of other videos. This can indicate that contemporary Russian viewers, primarily youth, are more interested in environmental issues than in studying scientific aspects of nature even in the popular science video format.

Ranked second in popularity and subscriptions is the «Ямал Медиа» channel, which focuses on the Far North, the Arctic, and the indigenous peoples of these regions. This channel stands out among others due to its unique thematic content and provision of information on little-explored aspects of life in these regions. The videos on the channel primarily spotlight the Yamalo-Nenets Autonomous Okrug, attracting Russians to explore the Arctic region of Russia, as it is a strategically important area. While the channel serves as an educational resource on the Yamal region overall, videos about the lives of indigenous peoples in the Far North garner greater attention. Such content contributes to the development of environmental culture among the Russian audience in several aspects. Firstly, it draws attention to the importance of preserving nature and ecosystems in vulnerable areas, thereby fostering environmental awareness. Secondly, it provides information about the traditional ways of life and interaction with the environment of indigenous peoples, promoting respect for cultural heritage and natural resources. Lastly, it underscores the importance of studying and understanding unique ecosystems, which may stimulate interest in scientific research and environmental activism.

Ranked third in terms of subscribers is the «Сортировочная» [Sortirovochnaia] channel, which translates as «Sorting station» or «Recycling station» entirely dedicated to environmental issues. It is the largest channel on Russian YouTube that covers serious environmental topics in entertaining and scientific formats. The «Сортировочная» [Sortirovochnaia] channel is the recipient of the «Green Award» and holds leading positions among media projects on ecology in the country. Its content encompasses consumer culture and explorations of various locations, such as waste processing plants or data storage centers for the internet. This facilitates visual immersion for viewers and enhances their environmental knowledge and awareness. Additionally, the channel regularly presents popular science videos about disasters and environmental problems across Russia. The word «disaster» often appears in the titles of videos, drawing viewers' attention to serious issues. This is evidenced by the popularity of videos with this keyword, indicating that viewers respond to important and alarming topics. The activities and themes of the «Сортировочная» channel contribute to the development of online environmental culture by providing information about consumer culture and waste processing processes, helping to increase awareness of the importance of waste separation and rational resource use. Presenting popular science videos about disasters and environmental problems can raise awareness of the urgency and importance of environmental issues, stimulating viewers to take action to address them, following the advice that are given in the videos.

While the number of subscribers reflects audience popularity and interest, certain topics span across multiple channels, underscoring their growing prominence on the social network. One such topic, amalgamating one of YouTube's most popular sections, garners significant attention and enjoys broad coverage among the Russian-speaking audience: channels devoted to vegan recipes and discussions about

the vegan lifestyle and its significance. This interest is pivotal for fostering sustainability and conscientious consumption, as a plant-based diet positively impacts the environment. Veganism promotes an environmental lifestyle by mitigating negative environmental effects; plant-based products boast a lower carbon footprint, necessitate fewer resources for production, and yield less waste. Research in this domain corroborates that transitioning to a vegan lifestyle reduces both individual and societal environmental footprints (Soper, 2020). Vegan content presents alternative nutritional approaches grounded in plant-based products, representing one of the most effective avenues for advancing sustainability and curbing adverse environmental impacts. Through showcasing practical examples and advocating for vegetarian and vegan lifestyles, this content shapes viewers' perspectives, deepening their appreciation for environmental considerations in nutrition. Consequently, the popularity of vegan channels on YouTube not only mirrors users' interest in alternative diets but also fosters a more environmentally conscious lifestyle and imparts environmental values to viewers. Channels such as «Vegan Family» (28.6k), «Юлия Куркума» (82.8k), «Веганская Домохозяйка» (52.1k), and «Александра Андерссон» (200k) have captivated audiences with their vegan recipe videos and discussions on the vegan diet. The most-viewed videos on each of these channels center on vegan cuisine, affirming the Russian-speaking audience's keenness toward plant-based nutrition. Another highly popular channel on Russian YouTube is «Михаил Vegan» [Mikhail Vegan] serving as a premier destination for veganism-related content among Russian-speaking audiences, amassing half a million subscribers. However, despite its substantial impact in popularizing plant-based diets, it was excluded from the analysis of the top 20 channels due to the absence of other environmental themes that contribute to propagating an environmentally conscious lifestyle and eco-friendly habits. Nonetheless, other channels mentioned, such as «Vegan Family» and «Юлия Куркума» [Ю́лия Куркума] (Yulia Kurkuma) encompass content concerning other significant environmental topics.

Insights from the video titles

This circumstance provides additional data for analysis. Topics that attract the most views reflect the current interests of viewers, making their analysis an important research tool for understanding what captures viewers' attention and how it can be used for more effective environmental education. Within the conducted analysis, 3-5 of the most popular videos from each channel on the list were selected, and their titles were analyzed to identify key words. From the analysis, the following key words were identified in the titles of the most popular videos on the selected channels: zero waste, vegan recipes, minimalism, environmental catastrophe, landfill. In summary, it can be noted that the main themes attracting the attention of Russian users are related to the search for sustainable lifestyles, pollution issues, and the vegan diet.

One of the most popular topics has become «zero waste» and «minimalism», as they were covered on 7 out of 20 channels. These ideas are based on rethinking consumer behavior towards a more responsible approach to resources and waste. This component supports not only the development of environmental values but also environmental behavior. By online teaching people to value and conserve the environment, understanding that waste can be reconsidered as potential resources, these topics contribute to the formation of an environmental culture. For example, on «Юлия Куркума» [Ю́ли́я Куркума] (Yulia Kurkuma) channel, alongside popular videos featuring vegan recipes, a large audience is drawn to videos dedicated to the concept of minimalism and simplified living. Such videos as «10 вещей которые я не покупаю. Zero Waste. Минимализм» [10 veshcheĭ kotorye ĭa ne pokuĭaiu. Zero Waste. Minimalizm] (10 things I don't buy. Zero Waste. Minimalism) have garnered over half a million views, highlighting Russian viewers' interest in this topic. A similar situation is observed on «Александра Андерсон» (Aleksandra Anderson) channel, where almost every video discusses minimalism in the context of family life. Other channels, such as «Елена Володина» [Elena Volodina] (Elena Volodina), «Веганская Домохозяйка» [Veganskaĭa Domokhoziĭka] (Vegan Homemaker), «Зеленая Ведьма» [Zelenaĭa Ved'ma] (Green Witch), and «NOPLASTIC ITS FANTASTIC» are also have videos that are dedicated to the topics of minimalism and zero waste. All of the aforementioned channels are blogs where young women share their experiences and tell their personal stories of minimalist living, as well as provide advice for transitioning to a life of conscious consumption. The topics of «zero waste» and «minimalism» influence the formation of an environmental culture because they teach people to value resources and make responsible decisions regarding consumption and waste management. By popularizing these concepts through social media and blogs, an environment is created that promotes changes in people's views and behaviors towards a more sustainable way of life.

Only 2 out of 20 channels are dedicated to the topics of vegan recipe and plant-based diet. However, the theme of vegan recipes is explored on 4 out of 20 channels, namely on the channels «Vegan Family», «Юлия Куркума» [Ю́ли́я Куркума] (Yuliya Kurkuma), «Александра Андерсон» [Aleksandra Anderson] (Alexandra Anderson), and «Веганская домохозяйка» [Veganskaĭa domokhoziĭka] (Vegan Homemaker). Sharing vegan recipes not only gains popularity among viewers but also contributes to spreading information about plant-based diets, making them more accessible and straightforward. It helps dispel negative stereotypes about plant-based diets and promotes the idea of a plant-based diet as a way to reduce negative environmental impact through dietary changes. Popularizing the vegan lifestyle and plant-based diets can stimulate people to make conscious choices and adopt a more environmentally sustainable lifestyle. Additionally, such content can serve as a source of examples of environmentally conscious behavior. Seeing that many others have already transitioned to vegan diets or show active interest in this

topic, viewers may feel motivated to take similar steps, directly influencing behavior change and shaping environmental behavior as one of the components of environmental culture (Kwon, Stefanone, & Barnett, 2014). This creates a positive feedback loop, encouraging more people to join the movement towards a more environmentally friendly way of eating. Thus, internet content about vegan eating and plant-based recipes plays an important role in shaping environmental culture, facilitating the adoption of more conscious and sustainable decisions for the well-being of our planet.

The titles of popular videos such including such words as «экологическая катастрофа» [ékologicheskaiâ katastrofa] (environmental catastrophe) or «мусорный полигон» [musornyi poligon] (garbage dump) are often encountered on most channels, with 12 out of 20 channels in the list featuring them. The appearance of videos on topics like environmental catastrophes, garbage dumps, and plastic pollution on most channels is associated with several factors. One key factor is the pressing issue of household waste and the challenges in implementing waste management reform. Waste management reform is a significant process aimed at improving the environmental situation in the country by changing approaches to solid municipal waste (SMW) management. It involves transferring waste management powers to the regional level by creating regional operators, defining waste collection and sorting as separate municipal services, and changing the payment scheme for their collection and sorting. A study by Poroshin and Khramtsov (2021) analyzes the implementation of the waste reform in Russian regions and highlights key issues in this process. The main problems identified at the federal level include a lack of containers for separate waste sorting, inconsistencies in regulatory acts, outdated waste burial sites, illegal dumps, and reluctance of the population to engage in waste sorting at home. Due to insufficient implementation of the reform in the country, waste volumes continue to grow, garbage dumps increase, and the environmental situation deteriorates (Poroshin & Khramtsov, 2020). Therefore, pollution and garbage dump topics remain the most relevant and frequently discussed on Russian YouTube channels.

Analyzing the content through the keywords: A grounded theory approach

The theme of the videos usually reflects the essence of the video content, providing viewers with an idea of what will be discussed. However, in some cases, video creators may use the theme as clickbait to attract more attention and increase click-through rates. By choosing an attractive or sensational theme, which may not always be accurate or match the video content, creators of clickbait content can draw in users, not always providing corresponding quality or information (Gothankar, Troia, & Stamp, 2021). Considering this information, for a deeper analysis of the themes of Russian channels, according to grounded theory, it is necessary to transcribe the videos on each of the selected channels, identify the most frequently used words by the authors, and determine several main themes using cluster analysis. Thus, one video with the

highest number of views was selected from each channel. Initially, the raw data was obtained in the form of transcribed texts from audio and video files using the Vizard.ai service. This step allowed converting multimedia data into a text format that could be further used for analysis. Next, the obtained texts underwent preprocessing to remove stop words and lemmatize them. Standard text processing methods were used with the application of an artificial intelligence tool. This stage of text preprocessing helped reduce noise in the data and prepare it for further analysis. Then, based on the preprocessed texts, keywords were extracted. The Word Counter service was used for this purpose, which automatically analyzes the text and highlights the most frequently occurring words and phrases. On average, five most commonly used words were extracted from each video.

Cluster analysis using the K-means algorithm help identify the main themes from the text. The results of the analysis showed that the key words can be divided into four clusters, each representing a specific theme or aspect of the discussed issues. Analyzing the clustering results, the following main themes can be identified:

Table 2

Cluster	Cluster Description	Keywords in transliteration	Keywords translated in English
Environmental pollution and threats	Cluster includes keywords related to environmental issues and threats to the environment. This includes terms describing pollution of the environment by various types of waste, as well as problems associated with the use of hazardous substances	otkhody, poligon, nefť, fil'trat, ochistka, steklo, poliëtilen, plastik, butylka, ubiraet, musor, chisto, gorod, bakterii, navoz, bol', kilogramm, inspektory, rtut', tsekh, tysiachi rabotnikov ⁴³	waste, landfill, oil, filtrate, cleaning, glass, polyethylene, plastic, bottle, cleans, garbage, clean, city, bacteria, manure, pain, kilogram, inspectors, mercury, workshop, thousands of workers

⁴³ Original words in Russian: отходы, полигон, нефть, фильтрат, очистка, стекло, полиэтилен, пластик, бутылка, убирает, мусор, чисто, город, бактерии, навоз, боль, килограмм, инспекторы, ртуть, цех, тысячи работников.

Scientific research on Russian nature and peoples' lives	This cluster explores the unique features of the nature of the northern regions of Russia, as well as issues related to climate change	Zhizn', khanty, muzh, tundra, olen', deti, zhenshchina, Sibir', temperatura, planeta, sever, desiatiletiia, vozdukh, derev'ia, nagrev, Sibir', put', mesto, les, okean, nagrevaetsia, nagrev, ogromnoe kolichestvo, rekord, trevoga, gory, reki, puti, natsional'nyĭ park, Altaĭ, uchenye ⁴⁴	Life, khanty, husband, tundra, deer, children, woman, Siberia, temperature, planet, north, decades, air, trees, heating, Siberia, path, place, forest, ocean, heats up, heating, huge amount, record, alarm, mountains, rivers, paths, national park, Altai, scientists.
Vegetarianism and veganism	This cluster reflects the concepts of vegetarianism and veganism, as well as related health and environmental issues	Miaso zhivotnykh, moloko, vegan, ovoshchi, rasteniia, veganstvo, moloko, vitamin, pitanie, negativnye ustanovki, bobovye, semechki, bliuda ⁴⁵	Animal meat, milk, vegan, vegetables, plants, veganism, milk, vitamin, nutrition, negative attitudes, legumes, seeds, dishes
Consumer behavior and environmentally	This cluster includes topics related to consumer behavior, choosing environmentally friendly	mnogorazovye produkty, pokupaĭu, nalichnye, taksi,	reusable products, buy, cash, taxi, things, paper, eco-friendly, bottle, question, shop, use, brand, packaging,

⁴⁴ Original words in Russian: Жизнь, ханты, муж, тундра, олень, дети, женщина, Сибирь, температура, планета, север, десятилетия, воздух, деревья, нагрев, Сибирь, путь, место, лес, океан, нагревается, нагрев, огромное количество, рекорд, тревога, горы, реки, пути, национальный парк, Алтай, ученые.

⁴⁵ Original words in Russian: Мясо животных, молоко, веган, овощи, растения, веганство, молоко, витамин, питание, негативные установки, бобовые, семечки, блюда

responsible lifestyle	products, and adopting a sustainable lifestyle	veshchi, bumazhnye, èkologichno, butylka, vopros, magazin, pol'zuius', brend, upakovka, proizvodstvo, musor, chisto, batarei, bystro, dobryi, Musor, pakety, meshochki, mnogorazovye produkty ⁴⁶	production, garbage, clean, batteries, fast, kind, garbage, bags, pouches, reusable products
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Analysis of Russian content on the YouTube platform shows the audience's primary interest in several key topics that fuel current discussions and capture viewers' attention. Firstly, environmental pollution, especially waste and household waste, is one of the most discussed topics among the Russian audience. Issues with landfills and the lack of an effective waste sorting system in the country cause concern in society and become subjects of active discussion. Themes like minimalism and zero waste extend the problem of waste pollution and also resonate with the Russian audience. These themes indicate a desire for an environmental lifestyle and sustainable consumption, reflecting the environmental values of the Russian audience and the desire to address the issue starting from oneself. Additionally, Russians show interest in a plant-based diet, preferring to watch vegan recipes and subscribing to related channels. This interest may stem from various reasons: improving health, animal welfare, expanding rights and opportunities, enrichment, autonomy, and liberation from the destructive meat production system, as well as economic reasons. However, this interest may be ambiguous and requires further research in this area as there is a gap in the scientific literature (Simons et al., 2021). Scientific documentaries about Russian nature and expeditions also attract the attention of the Russian audience, indicating a desire to gain knowledge about the world around them. However, the topic of climate change is rarely addressed in video content. In conclusion, the analysis of YouTube content allows for the conclusion that the Russian audience is

⁴⁶ Original words in Russian: многоразовые продукты, покупаю, наличные, такси, вещи, бумажные, экологично, бутылка, вопрос, магазин, пользуюсь, бренд, упаковка, производство, мусор, чисто, батареи, быстро, добрый, Мусор, пакеты, мешочки, многоразовые продукты

interested in discussing and disseminating information about environmental issues and healthy lifestyles. This reflects their commitment to more conscious and responsible behavior towards the environment.

Analysis of environmental content of authors on Youtube platform among Italian audience

To search for relevant channels with environmental themes among the Italian audience on the YouTube platform, the same keywords were identified in Italian as those used to search for Russian channels. Additionally, Google search was utilized to find websites offering ratings and lists of top environmental bloggers and channels in Italy. This approach helped identify the most popular and recognizable channels focused on environmental topics, contributing to the dissemination of knowledge and raising environmental awareness, especially among youth, on the YouTube platform.

During the analysis of the Italian segment of YouTube, the following channels were identified for further analysis, as presented in the table below:

Table 3

№	Channel Name	Description	Number of Subscribers
1	Extinction Rebellion Italia ⁴⁷	is an international grassroots movement calling for nonviolent civil disobedience to address environmental devastation caused by human activities.	1,71k
2	ISPRAVIDEO ⁴⁸	Official YouTube channel of the Higher Institute for Environmental Protection and Research (ISPRA)	4,2k
3	EcologiaVerde Italia ⁴⁹	eco-friendly living tips and insights on topics like recycling, energy saving, sustainable development, and more	14,4k
4	WWF Italia ⁵⁰	WWF, the world's largest conservation organization, is on a mission to build a	18,1k

⁴⁷ ExtinctionRebellionItalia [YouTube Channel]. Retrieved May 14, 2024, from <https://www.youtube.com/@ExtinctionRebellionItalia>

⁴⁸ ISPRAVIDEO [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@ISPRAVIDEO>

⁴⁹ Ecologia Verde Italia [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@ecologiaverdeitalia387>

⁵⁰ WWF Italia [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@wwfitalia>

		future where humanity lives in harmony with nature	
5	Bernardo Cumbo ⁵¹	real alternatives for life, work, and society	99,3k
6	GreenpeaceItaly ⁵²	An association that employs direct actions to creatively address environmental issues and advocate for solutions for a green and peaceful future. Independent and reliant on no funding from public entities, corporations, or political parties	23,9k
7	istitutoOikos ⁵³	The channel focuses on defending nature and empowering communities, working to protect soil, water, forests, and wildlife while promoting well-being and social inclusion.	1,59k
8	Riccardo Ze ⁵⁴	Channel about ethical and sustainable living, vegan diet	721
9	Asvis Italia ⁵⁵	The channel focuses on promoting awareness and mobilizing efforts towards achieving the Sustainable Development Goals in Italian society, economy, and institutions	6,39k
10	Cucina Botanica ⁵⁶	The channel is about promoting a plant-based diet through delicious and sustainable recipes, cooking tips, and culinary	557k

⁵¹ Bernardo Cumbo [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@BernardoCumbo/videos>

⁵² Greenpeace Italy [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@GreenpeaceItaly/videos>

⁵³ Istituto Oikos Onlus [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@istitutoOikosOnlus>

⁵⁴ Riccardo Ze [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@RiccardoZe>

⁵⁵ Asvis Italia [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@AsvisItalia>

⁵⁶ Cucina Botanica [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@CucinaBotanica>

		education, led by Carlotta, an experienced cooking teacher and author	
11	Elisa Nicoli, Eco Narratrice ⁵⁷	The channel features content on environmental topics and offers video tutorials, created by a green content creator and documentary filmmaker	38,9k
12	Ambiente & Natura ⁵⁸	The channel is about exploring and understanding various aspects of the environment and nature, including wildlife, plants, ecology, geology, and more. It also delves into the cultural, historical, and mythological aspects related to nature, offering viewers an opportunity to appreciate and marvel at the natural world	7,15k
13	Ecologia e Scienze Naturali ⁵⁹	The channel is about ecology and natural sciences, curated by Michele Innangi, an ecologist and naturalist. It aims to provide educational content on various natural world topics, promote awareness of the environment and landscapes, and highlight initiatives related to natural sciences	3,39k
14	Andrea Boscherini ⁶⁰	The channel explores Italian wildlife and biodiversity, sharing insights and discoveries from field research conducted by author.	67,6k

⁵⁷ Eco Narratrice [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@eco.narratrice>

⁵⁸ Ambiente & Natura [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@AmbienteNatura>

⁵⁹ Ecologia e Scienze Naturali [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@ecoscinat/videos>

⁶⁰ Andrea Boscherini [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@andreaboscherini>

15	Spazio Grigio ⁶¹	The channel is about minimalism and environmental habits without over consumption.	189k
16	Camilla Mendini ⁶²	The channel focuses on sustainability, covering topics such as slow fashion, circular economy, zero waste living, and ethical consumption	62,9k
17	DarialNaturale ⁶³	The channel is about promoting sustainability through the lens of imperfect sustainability, highlighting the importance of critical and ethical approaches to living a more conscious and eco-friendly life in today's hectic world	85,4k
18	Naki	The channel delves into themes of eco-friendly lifestyle, interconnection with nature, while also addressing topics about animals, plants, sustainability, feminism, LGBTQ+.	71,8k
19	La ragazza eco ⁶⁴	The channel is about eco-minimalist lifestyle, personal experiences, practical tips, and suggestions for living in harmony with the environment and embracing a minimalist approach to life.	988
20	Miss Tinti ⁶⁵	The channel is about gradually transitioning towards a more sustainable lifestyle and preparing for full-time travel with the Van	8,41k

⁶¹ Spazio Grigio [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@SpazioGrigio>

⁶² Camilla Mendini [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@camillamendini>

⁶³ Daria l'Naturale [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@Darialnaturale>

⁶⁴ La Ragazza Eco [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@laragazzaeco>

⁶⁵ Miss Tinti [YouTube Channel]. Retrieved May 12, 2024, from <https://www.youtube.com/@amaltinti>

From the analysis four main categories have been identified themes across all channels: scientific and educational, non-profit activist organizations, eco-friendly lifestyle, and the theme of veganism. Some topics stand out in terms of the number of channels, indicating the relevance of the theme among the Italian audience. For example, the topic of sustainable lifestyle attracts the greatest attention from viewers. Out of all the selected channels dedicated to this theme, there are nine, including creators like «Bernardo Cumbo», «Riccardo Ze», «Elisa Nicoli, Eco Narratrice», «Spazio Grigio», «Camilla Mendini», «DarialNaturale», «Naki», «La ragazza eco», «Miss Tinti». Bloggers, in various styles, talk about minimalism, zero waste, environmental habits, consumption and shopping style, provide valuable advice, and share their own experiences, encouraging viewers to make changes in their daily lives, which can influence the development of environmental behavior and habits. Another equally important topic for shaping environmental culture is scientific and educational channels, such as «ISPRAVIDEO», «EcologiaVerde Italia», «istitutoOikos», «Asvis Italia», «Andrea Boscherini», «Ecologia e Scienze Naturali», which narrate about nature and its protection, as well as various aspects of ecology and scientific research aimed at preserving the environment. These channels offer educational content based on facts and scientific data, helping viewers better understand environmental issues and ways to address them. The next theme is channels created by non-profit organizations and activists, such as «Extinction Rebellion Italia», «WWF Italia», «GreenpeaceItaly». Overall, all these channels are united by active efforts to solve environmental problems and protect nature. They provide information, actions, and solutions to mitigate the negative impact of human activity on the environment and natural resources. Moreover, they call for a conscious and responsible attitude towards nature, supporting initiatives for biodiversity conservation and sustainable development. In general, they could be classified as scientific and educational channels. However, it was decided to highlight them in a separate category to analyze the difference in the number of such organizations between countries. Additionally, it is important to consider them in a separate category because such organizations influence the implementation of government policies and play an important role in providing public services and developing the public sphere (Heng, 2011). The last category is the topic of veganism, with «Cucina Botanica» (Botanical Kitchen) being the leading channel; however, this theme is also addressed on some blogger channels (Riccardo Ze, DarialNaturale, and others) where content about a plant-based diet is posted.

Analyzing the content through top 3 Italian YouTube channels based on subscriber count

Although only one channel from the list is entirely dedicated to the topic of veganism, it is the most popular among YouTube users in Italy when it comes to this theme, judging by the number of subscribers. Analyzing subscribers is important because it helps us understand that the topic of vegan food attracts significant attention among the Italian audience. The increasing popularity of online vegan recipes

corresponds to more people transitioning to plant-based diets and sticking with them for longer periods (Asano & Biermann, 2019). This indicates the potential impact of online content in promoting and spreading the vegan lifestyle and diet, which directly affects changes in environmental behavior and the development of a positive environmental culture. However, further research is needed to better understand the reasons behind the interest in plant-based diets

The second most subscribed channel from the list, «Bernardo Cumbo», is known for his reflections on alternative lifestyles, travels, and the discovery of eco-settlements in Italy, advocating for alternative ways of living that inspire positive changes in the community and the environment. His popularity indicates a growing interest among Italians in alternative lifestyles free from conventional standards and outdated norms. In the context of a rapidly changing world, Bernardo Cumbo offers innovative ideas and inspires his audience to make changes. The author travels across Italy and shares stories of people living alternative lifestyles, often without civilization, amidst nature, discussing topics such as building homes using recycled materials and others. It is noteworthy that the content of the channel not only informs viewers about alternative ways of living but also inspires them to make more environmentally sustainable decisions in their daily lives. In particular, the author's stories about people living without excessive consumption and civilization demonstrate that such a lifestyle is possible and fulfilling. This confirms the hypothesis that individuals can live happily by reducing consumption and establishing more harmonious relationships with the environment. The author provides advice on financial management, eco-friendly consumption, and carbon footprint minimization, addressing the audience's desire for a lifestyle that aligns with their values and aspirations. The increased interest of the audience in this topic reflects Italians' desire for simplicity, sustainability, and reduced consumption in everyday life. Such practical instructions contribute not only to raising environmental awareness but also to developing the skills necessary to implement sustainable habits and behaviors.

The third most subscribed channel, «Spazio Grigio», focuses on minimalism and environmentally sustainable living. The channel serves as an important agent in shaping minimalist and environmentally sustainable lifestyles, emphasizing the principles of reduced consumption and resource conservation. A distinctive feature of the content is narratives about alternative ways to meet needs with minimal use of material resources, as well as a focus on the economically advantageous aspects of minimalism. It is noted that some of the most popular video titles on the channel include the words «non compro» (I don't buy) and «risparmiare» (save), reflecting the audience's interest in the economic benefits associated with minimalism and consumption reduction. Such a linguistic approach to title selection attracts the attention of a wider audience, not only those interested in environmental lifestyles. The economic aspect is appealing to Italian youth, as addressing money-saving serves as an effective incentive for embracing minimalist principles and

sustainable living. Such approaches contribute to raising environmental awareness by highlighting the relationship between economic benefits and sustainable consumption.

Insights from the video titles

The analysis of video titles from the most popular channels on each platform reveals the interests and preferences of the Italian audience. One of the most significant issues frequently reflected in the video titles is the use of plastic and its impact on the environment. Words like «PLASTICA» (plastic) and «SENZA PLASTICA» (no plastic) regularly appear in the titles, indicating a widespread interest in reducing the use of plastic materials and fostering sustainable consumer habits. Another frequently encountered word in the video titles is «minimalismo» (minimalism). This indicates a growing interest in minimalism among the Italian audience, which may be associated with both environmental aspects (reducing consumption and waste) and a general desire for simplicity and harmony in life. In addition to consumption issues, discussions about environmental problems and climate change also occupy an important place in the video titles. Phrases like «catastrofe climatica ed ecologica» (climate and environmental catastrophe) and «inquinamento marino» (marine pollution) highlight the seriousness and relevance of these issues in the eyes of the Italian audience, attracting attention. Overall, the Italian audience expresses interest in topics that contribute to preserving the environment, improving quality of life, and making more conscious and sustainable decisions in everyday life.

Analyzing the content through the keywords: A grounded theory approach

For a deeper content analysis, according to the grounding theory, one most popular video was selected from each channel, transcribed into text format, and key words were extracted from each video and subjected to cluster analysis. Cluster analysis using the K-means algorithm helped identify the main themes from the text. The results of the analysis showed that the keywords could be divided into 3 clusters, each representing a specific theme or aspect of the discussed issues. Analyzing the clustering results, the following main themes can be identified, as indicated in the table below:

Table 4

Cluster	Cluster Description	Keywords	Keywords translated in English
Environmental issues and sustainable development	The cluster contains words related to environmental problems, sustainable development, and	Insieme, l'allarme, sostanze, effetti, mare, organismi, chimici,	Together, the alarm, substances, effects, sea, organisms, chemicals, pollution, Wwf, horse

	responsibility for the environment. Words in this cluster indicate the need to combat pollution, preserve marine ecosystems, and take measures for sustainable development	l'inquinamento, Wwf, il sugarello, la macchina, la palamita, zero, scelta, paura, verità, ricerca, plastica, problema, aziende, oceani, bruciata, globalizzazione, pianeta, ricchezza, popolazione, processo, pianeta, sostenibilità, livello, risorse, l'ambiente, un'azienda, globale, pianeta, Terra, obiettivi, mondo, produzioni, gas, energia, superficie, terra, atmosfera, carbonica, ciclo, cellule, rubisco, fotosintesi, ambiente	mackerel, the machine, the atlantic bonito, picarel, choice, fear, truth, research, plastics, problem, farms, oceans, burned, globalization, planet, wealth, population, process, planet, sustainability, level, resources, environment, company, global, planet, Earth, goals, world, production, gas, power, surface, earth, atmosphere, carbon cycle, cells, rubisco, photosynthesis, environment
Consumer behavior and eco-friendly lifestyle	This cluster includes words related to everyday life and consumer behavior. It describes routines associated with shopping, consumption, and habits, as well as activities we engage in during our leisure time	il minimalismo, weekend, routine, mangiare, fast fashion, comprare, cose, documentario, sostenibilità, compro, conto, abitudine, semplicità, soldi, responsabilità,	minimalism, routine eekend, routine, eat, fast fashion, buy, things, documentary, sustainability, buy, account, habit, simply, money, responsibility, toxic, plastic, things,

		tossiche, plastica, cose, plastica monouso, Ecominimalista	disposable plastic, ecominimalist
Plants and Gardening	This cluster is centered around plants and their maintenance, encompassing words related to sowing, growth, and cultivation	Fiori, pianta, un arbusto, la citronella, seme, germogliare, ammorbidire, avocado, buccia, minimalismo, oggetti, Eco, rosmarino	Flowers, plant, a shrub, lemongrass, seed, sprout, soften, avocado, peel, minimalism, objects, Eco, rosemary

Indeed, the analysis of Italian-language content on the YouTube platform reveals the audience's primary interest in several key topics, which shape current discussions and captivate viewers' attention. First and foremost are environmental issues and sustainability. Various environmental problems are discussed, but the focus remains on challenges like climate change and marine issues. The latter is particularly relevant due to Italy's geographical location, surrounded by seas, and its extensive history of anthropogenic pollution along coastal areas (Ausili et al., 2020). Moreover, the content often emphasizes global rather than local issues, as evidenced by the frequent appearance of terms like «sostenibilità» (sustainability), which is closely associated with the global context. This trend is further underscored by the prevalence of other terms such as «globale» (global), «terra» (earth), «mondo» (world), «pianeta» (planet), and «globalizzazione» (globalization), all of which highlight the global dimension.

Global sustainability entails achieving sustainability on a worldwide scale, encompassing environmental, social, and economic dimensions. It entails ensuring that human activities do not deplete natural resources or harm the environment to the extent that future generations are unable to meet their needs (Brown et al., 1987). The Italian audience's focus on global issues, including environmental challenges, suggests their broad perspective and interest in global affairs. It also reflects a high level of social responsibility and active citizenship among viewers, facilitated by the widespread availability of information on global issues through the internet and social media. It is possible that the Italian YouTube audience seeks to engage in

addressing global problems and demonstrating solidarity with the global community through informational and educational content.

Another notable theme that stands out in Italian YouTube content is the popularity of content dedicated to home plant cultivation. Bloggers, sharing their personal stories and life experiences, paid attention to methods and techniques for growing various edible crops. It is important to note that although the authors did not explicitly emphasize the environmental benefits of home gardening, their content carried the potential for promoting environmental values and practices. Home gardening has significant potential for maintaining ecosystem balance and preserving biodiversity. Growing plants at home can contribute to increasing green areas in urban environments, which positively affects microclimate and air quality. Additionally, home gardening contributes to the preservation of plant genetic diversity, which is essential for food security and adaptation to changing climatic conditions (Agbogidi & Adolor, 2013).

The growing interest of the Italian audience in this topic can be explained by several factors. Firstly, modern trends towards sustainable living and environmental awareness draw attention to the opportunities of home gardening as a way to contribute to environmental protection. At the same time, the desire to have access to fresh and natural products grown with one's own hands stimulates interest in home gardening. Thanks to YouTube and other online platforms, the gardening community and plant enthusiasts can exchange experiences, tips, and best practices, contributing to the dissemination of environmentally sustainable approaches to plant cultivation. Such content not only teaches the art of gardening but also promotes the formation of environmentally oriented thinking and behavior among the audience.

To wrap up, among Italian channels on the YouTube platform, one can find diverse content, including educational videos on environmental issues, scientific research, tips for sustainable consumption, vegan recipes, and examples of alternative lifestyles. Channels of non-profit activist organizations, bloggers discussing minimalism and eco-friendly habits, as well as those sharing experiences of growing indoor plants, all play their role in spreading knowledge and inspiring the audience to take action. This content has the potential to change viewers' thinking and behavior towards a more responsible attitude towards the environment. Vegan recipe tutorials may inspire a transition to plant-based diets, while videos on minimalism and sustainable consumption may encourage reduced consumption and waste reduction.

From the analyses conducted on various indicators, several conclusions can be drawn. The most prevalent theme is minimalism and simple living, as it encompasses the majority of channels. Young creators of such blogs propagate alternative and minimalist lifestyles that instill environmental values and habits, contributing to the development of environmental culture. These topics often attract viewers' attention due to the potential for saving money, as indicated by titles frequently containing phrases like «I no longer buy»

or «helped me save». The theme of plant-based recipes resonates with the Italian audience but is not a widespread topic in terms of ethics or environmentalism, although it does have an impact. This is evidenced by the fact that there is only one most popular channel on plant-based recipes, yet the channel's focus is not on promoting plant-based diets as an environmental component. Another interesting finding from the analysis of Italian content on YouTube is the audience's interest in the scientific sphere. This applies to educational-scientific channels about nature and environmental issues. These channels often address global issues rather than local ones, touching upon the topic of sustainable development, which is one of the most relevant today. The emphasis on global issues is important because it allows the Italian audience to realize their role in the global context and understand how their actions can impact the environmental situation on the planet. Raising awareness of current topics of sustainable development on YouTube reflects not only the Italian audience's interest in these issues but also their readiness to take action to combat climate change and other environmental problems. This indicates that Italy is keeping pace with the times, recognizing the importance of environmental sustainability and actively participating in global efforts to protect the environment.

Comparison of Italian and Russian environmental content on YouTube

The Italian and Russian audiences, as well as content creators on the YouTube platform, represent unique sociocultural contexts, each of which influences the formation of the contemporary youth's environmental culture through the content presented on the social network platform. Comparison of the obtained results revolves around topical themes, their differences and similarities between the two countries, the variance in presentation and formation of opinions, as well as a focus on the linguistic aspect of using words in an environmental context. Comparison is necessary to identify common and different trends in approaches to environmental issues in different countries, as well as to understand which aspects of sustainable development are most relevant and important for each audience.

Comparison across clusters, defining the main themes, based on keywords extracted from transcribed videos, indicates differences between Italian and Russian content. Among Russian content, four clusters and the following main themes were identified: environmental pollution and threats, scientific and educational content, the theme of veganism and plant-based diet, as well as the theme of environmentally responsible lifestyle. Among Italian content, one fewer theme was identified: environmental issues and sustainable development, the theme of environmentally responsible lifestyle, and a cluster of plant-related themes and care for them. The clusters showcase quite different themes, with only one overlap - the theme of environmentally responsible consumption. Most of the content by young bloggers in both Russia and Italy focuses on this theme, highlighting its relevance in both countries. This theme predominantly explores

aspects of minimalism and conscious consumption. Bloggers share their experiences of giving up single-use products, reducing consumption of goods, and transitioning to a simpler and more eco-friendly lifestyle. Interestingly, among both audiences, content creators use keywords such as «money», «no longer buying», «saving», «spending little», reflecting the economic aspect in their video titles. This approach in choosing video titles is truthful and attracts more attention from people with different interests who are more interested in clicking on the video to learn about saving money. Thus, it can be concluded that in both countries, despite Italy and Russia having different levels of economic development, the theme of saving money captures people's attention and provides an opportunity to spread the message of conscious consumption to a larger audience.

Despite the fact that Italy has established recycling and a ban on the use of conventional plastic bags, which reduces the landfill problem compared to Russia, the problem of plastic use is still relevant in both countries. Many videos on the topic of conscious consumption discuss the concept of zero waste, which is a set of principles aimed at minimizing waste through reusable items. These principles are a goal for both countries, despite Italy's strong recycling efforts. However, among Italian audiences, the phrase «senza plastica» (no plastic) is more common in video titles and in the speech of content creators, while «zero waste» is more common among Russian content creators. While both advocate for minimizing waste and environmental impact, subtle differences exist in their connotations, usage, and reception. In Russia, due to the complexity of waste management reform, people's difficulties in finding recycling facilities, and landfill problems, the adoption of the radical «zero waste» concept reflects the desire to reduce household waste to zero as much as possible. An approach of getting rid of waste absolutely may therefore be seen as a necessity rather than simply a desire to improve the situation. On the other hand, in Italy, the use of the phrase «plastic-free» may be perceived as a softer approach to reduce the use of plastic materials. This may be due to the fact that Italy has an established system of recycling of all types of waste, which is a ready-made solution to the problem of waste disposal, and the reduction of plastic may be perceived as a logical continuation of this trend rather than a radical rejection of all types of packaging. It can be tentatively concluded that the difficult waste management conditions in the country motivate people more to reduce consumption compared to countries where recycling is readily available.

Another cluster with similar themes is about environmental issues. In this theme, there is a similarity in the scientific and educational content addressing environmental problems; however, these problems significantly differ due to the regional characteristics of the countries. Russia, with its vast territory and population, mainly faces industrial and domestic waste issues, which are actively discussed on Russian environmental activist YouTube channels. In Italy, the focus is on marine pollution and climate change. For instance, one of the most popular channels among Russian-speaking audiences on environmental issues,

called «Сортировочная» («Sorting» or «Recycling»), emphasizes the issue of waste sorting in the country even in its name. This channel often addresses local problems in various regions of the country, often using words like «tragedy», «disaster», and «planet salvation» in video titles, which evoke negative emotions. Such words attract viewers to watch the videos but leave a negative impression and generate environmental anxiety (Panu, 2020). Focusing on the negative aspects of environmental problems in content created in Russia can have various effects on shaping environmental culture among young people. At first glance, such content may evoke negative emotions such as anger or sadness due to the depiction of catastrophic consequences of environmental violations. However, it is important to note that these emotions can have different cognitive and behavioral consequences. Participants experiencing anger are more likely to attribute more responsibility for environmental problems to individuals or corporations, while those experiencing sadness may focus more on situational factors or seek help and damage restoration (Nerb & Spada, 2001). Thus, content emphasizing the negative aspects of environmental problems can contribute to strengthening the sense of personal responsibility and motivating action. However, it is also important to consider that excessive presentation of negative information may lead to feelings of hopelessness or helplessness, potentially creating a negative and one-sided view. Additionally, a new phenomenon of «environmental anxiety» has emerged, which is a new and growing source of mental disorders that may particularly affect the next generation of young people (Pedro et al., 2022).

In Russia, problems are more often discussed, while in Italy, solutions are more often discussed. Content creators in Italy use more positive words and video titles such as «problem», «solution», «change», «protect», and «together», which can evoke a sense of hope and solidarity with others who are also interested in preserving the environment. The use of positive vocabulary creates an image of hope and optimism about the possibilities of solving environmental problems. This increases viewers' motivation to seek constructive approaches to problems and actively contribute to conservation.

Also among Italian content, the terms «sustainable», «global» or «SDGs» are often found in titles and keywords which are practically absent in Russian content. In Russia, the word «environmental» is used privately, replacing the word «sustainable». However, the term «environmental» may evoke associations such as rejection of everything convenient and transition to a lifestyle of fear, which may negatively influence the understanding of the term. The more modern term sustainability includes a global dimension, referring to «development that meets the needs of the present without compromising the needs of future generations», emphasizing the fact that the term is not limited to a single country or nation. The tag «SDGs» used also implies «a universal call to action to end poverty, protect the planet and ensure peace and prosperity for all people», emphasizing the global nature of solving problems, including environmental issues. This shows that Italy is keeping up with global trends, as the terms listed are relevant today and are

part of the solution to major environmental problems. In addition, Italian youth are more focused on finding positive solutions and discussing them on social media. This approach spreads optimism and motivation in society, filling people with hope and belief that their actions can have a positive impact and reduce environmental anxiety (Baudon & Jachens, 2021).

Another important difference in ecolinguistics is the approach to discussing environmental issues in online content in Italy and Russia. In Italian online content, topics related to solving environmental issues on a global scale are discussed by independent bloggers as well as communities or non-profit organizations. The latter are an important aspect because they exert significant influence on global politics and public spheres by promoting environmentally sustainable policies and practices and advocating for a culture of peace (Becker, 2016). However, due to the ban on the activities of the two largest non-profit environmental organizations, WWF and Greenpeace, in Russia in 2023, the dissemination of content from these communities aimed at problem-solving has stopped. Consequently, most of the environmental content in Russia devoted to the possibilities of solving them has decreased due to the political ban, which led to a decrease in content, as well as the active actions of such organizations.

When it comes to the theme of plant-based diets and vegan and vegetarian online recipes, they remain popular among both Italian and Russian audiences. However, it is worth noting that the topic of veganism is often covered not only as a culinary theme but also as part of the broader environmental discourse to a slightly greater extent on channels targeting the Russian audience. The reasons for such interest among the Russian audience in plant-based diets need further investigation; however, it can be hypothesized that this attention to veganism may indicate a broader awareness of the link between consumer habits and environmental issues. It may also reflect a growing interest in conscious consumption and the search for alternative ways to reduce negative impacts on the environment.

While the content created by authors from different countries on the same platforms generally does not differ, the presentation of content and the use of words and terms vary. Among the two countries, there is scientific and educational content about the regional characteristics of nature, blogs about minimalist and eco-friendly lifestyles, recipes for plant-based diets, and informational videos about them, as well as the theme of environmental issues. Young people create channels to disseminate information, raising the environmental awareness of viewers in their country, but not only personal channels are encountered. For example, both Italian and Russian youth, for the most part, create personal blogs, talking about an alternative lifestyle. Bloggers also talk about environmental issues, but channels are also created by certain institutes, non-profit organizations, and activist communities. However, there is a difference between

countries, as in Russia popular international non-profit organizations (WWF, Greenpeace) are banned, while in Italy they operate actively and publish influential content.

Another difference among the content in the two countries on the same platform is the theme of veganism and plant-based diets. Although this theme finds popularity among both audiences, there are more channels on this topic from young bloggers in Russia, as well as more information about plant-based diets and their impact on the environment. This indicates a growing interest in this theme among Russian youth and also influences the formation of environmental culture.

Regarding the theme of environmental issues, in Russia, the focus is more on the negative aspects of regional problems, while in Italy, the emphasis is on seeking global solutions. This reflects the global nature of the problem and the willingness of Italian youth to participate in global efforts to protect the environment. Russian content, on the other hand, focuses on regional environmental problems, highlighting them in the context of catastrophe and negative emotions, which is clearly reflected in the titles of such videos.

However, among the Russian audience, there is a theme actively addressed by young bloggers, providing concrete advice for integrating environmental habits into their lives and actions. Themes of sustainable living and minimalism are being explored thanks to young people who share their experiences and tips on simplifying life and consumer habits. Youth from both countries raise the issue of plastic and excessive consumption, urging their viewers to consume less and more consciously. Authors from both countries use words related to the economic aspect in their titles, attracting a larger audience and engaging more people with the theme of minimalism. Such blogs are quite popular in both countries, and the content is similar. However, in Russia, more attention is paid to the concept of zero waste, which may be due to the difficult accessibility of waste recycling compared to Italy.

A more in-depth analysis of content conducted through grounded theory revealed interesting findings regarding what aspects of environmental issues young people from different nations are most focused on, which words they commonly use in their discourse, and how their content contributes to the development of environmental culture among their audiences. The analysis of video content from 20 channels identified several key trends in shaping environmental culture among youth. In addition to all the aforementioned themes, it was noted that Italian youth are interested in plant cultivation and home gardening, indicating a growing interest in environmentally friendly practices and sustainable lifestyles. Among Russian youth, cluster analysis highlighted particular attention to topics related to household waste and landfills, reflecting the concerns of Russian youth regarding this issue, and indicating the importance for authorities to actively engage in discussing this problem.

In conclusion, the analysis confirms that the internet plays a key role in shaping environmental culture among youth. Online platforms become spaces for free communication, where communities are formed for active participation, as well as safe spaces for expressing opinions and emotions. This online communication process contributes to the formation of environmental culture by providing opportunities to learn about environmental issues and potential solutions. Comparative analysis across different countries highlights not only differences in environmental interests and priorities but also the importance of adapting content and communication strategies to the unique cultural and social contexts of each country. Using Russia and Italy as examples, it was found that effective impact requires striking a balance between highlighting environmental problems and offering solutions. Overall, adapting content and communication strategies to audience characteristics and addressing current topics helps attract attention to environmental issues and motivates youth to actively participate in addressing environmental challenges, thus turning the internet into a safe space for information and a driver of environmental culture development among the younger generation.

CHAPTER 2: ENVIRONMENTAL CULTURE RESEARCH

2.1 Methods

This chapter outlines the methodologies employed to investigate the state of environmental awareness among youth in Italy and Russia, along with the factors influencing its formation. The chapter provides a detailed account of the procedures, settings, participants, interventions, measurement instruments, and data analysis techniques used in this cross-cultural study. The subsequent sections elaborate on how these methods were applied to assess and compare the current level of environmental consciousness among the youth in Italy and Russia. In this study, both qualitative and quantitative methods were employed. Each method was chosen based on its specificity and ability to contribute to understanding the state of environmental culture and the conditions for its change.

The quantitative method involved diagnosing the level of environmental culture among students, developed by Asafova (2003). The choice of methodology for studying the level of environmental culture of students of pedagogical universities was conditioned by several important factors. The diagnostic was developed by Asafova (2003), candidate of sciences and associate professor at KFU, whose scientific path is focused on deep research of environmental culture and its formation. This ensures high professionalism and expertise in the field of pedagogy and psychology. The methodology covers the three main aspects of environmental culture - education, consciousness and activity. This broad spectrum of analysis provides a comprehensive view of students' environmental culture, removing the limitations of studying only one of these components. This approach provides a more accurate assessment of the level of development of environmental culture. The methodology is ideally suited to the characteristics of the research sample represented by the students. As a result, this approach not only allows for an in-depth study of environmental culture, but is also adapted to the characteristics of the student audience, making it the best choice for our study. The questionnaire included questions distributed in three categories: «Environmental education» (knowledge, skills and skills in the field of environmental protection), «environmental consciousness» (environmental values and beliefs, responsibility, moral attitudes) and «Environmental activity» (environmentally safe behavior, actions, participation in activities). To evaluate the level of formation of environmental culture of Russian and Italian modern youth, the survey was conducted among the students of the University of Ca Foscari in Italy and PetrSU in Russia. The sample for assessing the level of environmental culture amounted to 264 students (128 Russian students and 136 Italian students). This method was conducted using online testing on the Google Forms platform, which allowed the research to be conducted remotely in different countries. The analysis of the obtained data was carried out using the statistical method defined in the instruction in order to obtain an objective and reliable assessment of the level of environmental culture among students. The diagnostic results were processed using the method of summarizing the points obtained by each student

in response to questions in three main sections: «environmental knowledge», «environmental consciousness» and «Environmental activity». In each section, students were assigned scores that were then summed. For example, in the «Environmental Education» section, the total scores ranged from 0 to 35. The total score resulting from summing the scores in all three sections was used to determine each student's level of environmental culture. Thus, each student was categorized into three levels in each of the three components of environmental culture. For example, a student could have a high level of environmental education, a medium level of environmental awareness, and a high level of environmental activism. Further, the combination of levels in each section allowed to determine the student's overall level of environmental culture - low, medium or high. The results were processed using statistical methods, such as analysis of mean and variance, to obtain an objective assessment of the level of environmental culture among the surveyed students.

The processing of the interview results included systematization and analysis of the obtained information in order to identify general trends and peculiarities in lifestyle changes and environmental awareness among 23 Russian students studying at the University of Ca Foscari and living in Italy for more than a year. At the beginning of the data processing process, the interviews were transcribed to create a text corpus. The interviews were then coded thematically to identify key themes and concepts discussed by the respondents in the context of environmental culture. Each interview was systematized and assigned unique identifiers to ensure respondent confidentiality. The first step in processing the interview data was transcribing the conversations to create a text corpus. Thematic coding was then conducted to identify key themes and concepts discussed by respondents in the context of environmental culture. To ensure participant confidentiality, each interview was assigned a unique identifier and the data were systematized. The integration of the interview results with the literature review and other methods of analysis provided an in-depth understanding of the dynamics of change in the environmental consciousness of the students involved in the study. All stages of data processing were conducted taking into account strict methodological principles, ensuring the reliability and quality of conclusions drawn from the research results.

2.2 Participants

Participants in this study were meticulously selected to form a diverse and representative sample. The study encompassed individuals aged 18 to 30, representing various levels of education and enrolled in diverse educational programs. The sample included both undergraduate and graduate students, as well as individuals with varying degrees of engagement in environmental issues — ranging from active participants in environmental movements to those with less pronounced interest in these topics. The distribution of the sample covered two prestigious universities — Ca' Foscari in Italy and Petrozavodsk State University in Russia.

The choice of universities for conducting the study was justified not only by access to participants but also by objective factors related to the active development of educational programs and initiatives in the field of ecology. Ca' Foscari University in Venice, Italy, offers a new program, «Environmental Humanities» dedicated to exploring the relationship between humans and nature. This academic initiative enriches students with knowledge and tools for conscious interaction with the environment. Petrozavodsk State University in Russia is actively developing the «Clean Conscience» project, an initiative originating from the student community. The environmental association created by university students conducts informational campaigns on current environmental issues, emphasizing the commitment of the student body to ethical and social aspects of the environment and supporting student initiatives in this area. Both chosen universities, Ca' Foscari in Italy and Petrozavodsk State University in Russia, have captured the attention of the study due to their active participation in the development and implementation of environmental programs, making them significant subjects for examining the level of environmental culture among youth. To ensure the anonymity and confidentiality of participants, all responses were collected anonymously. This approach aims to encourage honest and open participation, contributing to the reliability and authenticity of the obtained data.

2.3 Data Analysis

Method 1

In the initial research phase, online testing served as the primary method for data collection, wherein an examination of participant responses ensued. All responses underwent meticulous processing and analysis utilizing the predetermined assessment criteria proposed by Asafova (2003). The study cohort comprised 128 Russian and 136 Italian students from two universities (Ca'Foscari and PetrSU) located in the northern regions of the countries. The questionnaire was translated into Italian language for the Italian group as the original diagnostic is in Russian language.

The findings are visually depicted in the Table 1 and 2. Notably, the survey outcomes unveil a notable environmental consciousness among Italian youths, as denoted by the predominant representation in the «Very High» category (50.7%). Furthermore, a substantial proportion gravitates toward the «Above Average» category (11.8%), underscoring the diverse spectrum of environmental awareness levels. However, statistical analysis, such as t-tests or ANOVA, with corresponding p-values and degrees of freedom, is required to confirm the significance of these findings about our research questions or hypotheses. Conversely, Russian students manifest a commendable interest in environmental concerns, with sizable proportions populating the «Above Average» (28.9%) and «Very High» (21.1%) categories. Notwithstanding, the prevalence of respondents in the «Below Average» category (11.8%) hints at the

necessity for further advancements in environmental education initiatives. Similar statistical analyses are necessary to establish the significance of these observations in the context of our research objectives. Upon comparative analysis, Italian youths exhibit a higher prevalence in the «Very High» category, whereas their Russian counterparts display a greater affinity towards the «Above Average» bracket. Yet, both cohorts grapple with challenges evident in the «Below Average» and «Very Low» categories, thereby underscoring the imperative for targeted interventions aimed at fortifying and enlightening these spheres.

Table 1 Results of Environmental Culture Level among Italian Students (Total Participants - 136):

Environmental Culture Level	Number of Answers
Very High	69
High	20
Above Average	16
Average	20
Below Average	4
Very Low	7

Table 2 Results of Environmental Culture Level among Italian Students (Total Participants - 126):

Environmental Culture Level	Number of Answers
Very High	27
High	37
Above Average	37
Average	10
Below Average	15
Very Low	1

In order to clarify the implications of the results, researchers conducted a statistical study, which involved including relevant statistical values such as p-values and degrees of freedom. To elucidate the implications

of these results, a statistical study was conducted, which involved the inclusion of relevant statistical values such as p-values and degrees of freedom. The choice was given to independent samples t-test since the study compared the environmental culture levels between two separate groups: Italian students and Russian students, to determine if there is a statistically significant difference between them. To conduct an independent samples t-test were obtained the scores representing the level of environmental culture for both Italian students and Russian students (in the Table 1,2) and formulated hypothesis:

(H0): The average level of environmental culture for Italian students is equal to the average level of environmental culture for Russian students.

(H1): The average level of environmental culture for Italian students is different from the average level of environmental culture in Russian students.

Then the calculation of mean values and standard deviations for each group was carried out according to the formula of the t-test, the results are presented in the Table 3. For Italian students, the average value was 3.80, with a standard deviation of 1.51, while for Russian students, the average value was 3.41, with a standard deviation of 1.28.

Table 3 The calculation of mean values and standard deviations

Student Group	Mean Value	Standard Deviation
Italian	≈ 3.80	≈ 1.51
Russian	≈ 3.41	≈ 1.28

A t-test was then conducted to determine the statistical significance of the differences between these two groups of students. The calculated t-statistics were 2.258, and the degrees of freedom were 258. At a significance level of 0.05, the critical value of t was 1.969. The calculated t-statistics exceeded the critical value, which allows us to reject the null hypothesis and conclude about the statistical significance of differences in the level of environmental culture between Italian and Russian students.

Thus, our research hypothesis (H1), according to which the average level of environmental culture among Italian and Russian students differs, has been confirmed. This indicates that there are significant differences in the level of environmental culture between these two groups of students.

Method 2

An additional analysis aimed at identifying the potential impact of factors on the level of environmental culture among students showed the need to expand the study. Given the above-described context, in which the level of environmental culture among students in Italy exceeds similar indicators among Russian students, it is necessary to study in more detail the possible changes occurring in people moving from Russia to Italy and living there for more than a year, taking into account the unique factors of another country. Based on the analysis and results of the primary diagnosis, which revealed a higher level of environmental culture among students in Italy, it can be assumed that environmental factors and cultural characteristics of this country may influence the formation of environmental beliefs and behavioral practices among emigrants.

Thus, it is proposed to expand the study in order to deeply analyze these influences and more accurately identify the factors contributing to changes in environmental culture among students when moving to another cultural environment. Based on the analysis and the need for additional research, the following hypothesis can be formulated: «Moving from Russia to Italy, along with adapting to living conditions in a new country, can affect an individual's environmental habits, values and personality».

After conducting interviews with 23 participants, the study aims to investigate the dynamics of environmental changes experienced by people moving from Russia to Italy. The participants were offered a set of 10 questions, the purpose of which was to track changes in environmental aspects after moving. Each question was specifically designed to assess the impact of a particular factor, which helped identify the predominant influential elements. The structured approach to the survey allowed a systematic analysis of various aspects contributing to the change of environmental views, which gave valuable insights into the relationship of various factors in the formation of environmental consciousness of individuals in the process of moving.

Starting with a survey on participants' knowledge and awareness of environmental issues in general, the questionnaire aims to establish a fundamental understanding of respondents' eco-awareness. The first question was: «What environmental problems do you know? Which of them bother you the most?», where more than 50% of respondents mentioned climate change, and about 30% are worried about environmental pollution (household waste, water, air, soil). This suggests that people are generally well informed about pressing global environmental issues and crises. The prerequisites for caring about climate change are consistent with the global discourse on this important issue. A significant percentage of respondents expressing concern about pollution indicate recognition of the immediate and tangible effects of environmental degradation on their environment.

The second question was aimed at identifying personal environmental activism: «How do you personally contribute to their solution?», where the most popular answer was «Sorting garbage and avoiding the use of plastic». To track the changes after moving, the following questions were asked: «How has the situation changed after moving to Western Europe?» and «Have you acquired or lost new environmental habits after moving abroad?» It turned out that more than 95% of respondents developed the habit of sorting garbage after moving to Italy. This has become the most popular response about changing environmental behavior, although it is not mandatory, but common, where the environment and political programs have become the main factors of positive changes in environmental behavior. However, some participants noted that plastic consumption has increased due to the fact that waste sorting has become easier, whereas in Russia, where recycling has not been widespread, people are more concerned about using alternatives to plastic. Another new environmental habit for almost all participants was the economical consumption of electricity and water, where the predominant factor was not environmental awareness, but economic considerations. According to the respondents, the attention to moderate consumption of resources arose due to the pricing policy, since prices in Russia are lower, and in Italy they are higher.

Regarding policy initiatives and programs, 85% of the responses provided mention positive environmental initiatives in Italy and 15% in Russia. The significant difference in Italy's favor indicates that participants see more developed and widespread environmental initiatives in Italy compared to Russia. The survey participants highlighted initiatives at universities, waste recycling and various transportation programs.

As for the personal opinion of assessing the global contribution of countries to solving environmental problems, a significant part of the participants (56.5%) highly appreciated Italy's role in global efforts to solve environmental problems. This conclusion is confirmed by the country's active participation in the development and implementation of environmental programs, as well as strong civic participation. More than a fifth of the participants (21.7%) expressed abstinence from a clear position, which may indicate difficulty in assessing or distrust of opinion. The same number of respondents (8.7% and 8.7%) believe that both countries contribute, or neither country contributes at all. A limited number of participants (4.3%) expressed their opinion about Russia's global contribution to solving environmental problems, confirming their point of view with the argument that this is due to the diversity of the country's natural resources.

Regarding awareness of environmental aspects in society, the majority of participants (43.5%) noted that they most often hear definitions such as «climate change, sustainable development, veganism, environmental friendliness» in Italy. This indicates a high level of discussion of environmental issues in Italian society. In Russia, such discussions occur less frequently, according to the participants (17.4%). In both countries, 26.1% of participants express awareness of climate and environmental issues, emphasizing

that they have heard about these topics both in Italy and in Russia. While 4.3% of respondents state that they have not heard about these topics anywhere else, highlighting the lack of awareness in this area. In the context of environmental protests and strikes, the majority of participants (34.8%) also point to their activity in Italy. In Russia, such actions are observed less frequently (13.0%). For 39.1% of participants, both countries are active zones in this aspect. Even if the participants saw similar events in Russia, they noted that they did not receive the same broad public support as in Italy. However, 13.0% of respondents do not note environmental activity anywhere. In general, the responses indicate differences in the level of participation and discourse around environmental issues, with Italy being more actively involved in both discussions and environmental action compared to Russia. These data indicate a high degree of public attention and support for the environmental agenda in Italian society.

During the analysis of the impact of the economic factor on the choice of environmentally labeled goods, the majority of participants (30%) noted that the issue of eco-labeling is not a priority in any of the countries. They note the distrust of eco-brands and emphasize that the price aspect has an advantage when choosing products. This indicates the predominance of the economic factor in their consumer behavior, as well as with the habit of saving resources. Another group with the majority of participants (35%) indicated increased attention to eco-labeling after moving to Italy. These respondents note that they have become more aware of choosing sustainable products in their new place of residence, especially due to easier access to such products. However, it should be noted that three participants (15%) expressed the opposite point of view, stating that in Russia they were inclined to pay attention to eco-labeling, and the language barrier in Italy became an obstacle for them in finding such products. The overall conclusion of the study highlights the importance of the economic factor in decision-making when choosing products, as well as the complex dynamics of changing attention to eco-labeling in a new cultural and linguistic context.

Based on the results of the analysis of the answers to the question about personal contribution to environmental activities and feelings about sustainability, the following generalized conclusions can be drawn: the majority of respondents (60.9%) feel a greater contribution to sustainability while living in Italy. This is due not only to strict rules and regulations, but also to the perception of great opportunities for implementing one's own efforts in the field of ecology. The respondents emphasize that in Italy their actions are more visible and feel more significant compared to the experience in Russia. This is due to the emergence of new environmental habits, the legal foundations in the country, the availability of knowledge and the environmentally friendly behavior of the society around. However, for some participants (21.7%), a personal attitude towards the environment and a sense of contribution remains relevant in both countries. This may indicate the perception of sustainability as a global phenomenon requiring participation regardless of the country of residence. According to 17.4% of respondents, Russia continues to play a role in personal

perception of environmental actions. Despite the higher level of care in Italy, in Russia, respondents feel that their personal contribution is important, especially in the context of influencing loved ones and maintaining cleanliness. Thus, summing up, it can be argued that personal experiences and perceptions of the contribution to sustainability are more pronounced after moving to Italy and are associated with the existing environmental culture in Italy.

Results

For the first research method, an analysis was conducted to assess the level of environmental culture among Italian and Russian youth, to test the hypotheses regarding the differences between the two groups. The results revealed notable differences between the two groups. Among Italian participants (n=136), a substantial proportion demonstrated a high level of environmental culture, with 50.7% falling into the «Very High» category and 11.8% into the «Above Average» category. Conversely, among Russian participants (n=126), while there was also a significant presence in the «High» (28.9%) and «Very High» (21.1%) categories, there was a higher percentage in the «Below Average» category (11.8%), suggesting potential areas for further environmental education initiatives. These findings provide valuable insights into the varying levels of environmental culture among youth in Italy and Russia, supporting the alternative hypothesis (H1) that Italian students have a different (higher) level of environmental culture than Russian students.

For the second method, an analysis was conducted to explore the potential impact of relocation from Russia to Italy on individuals' environmental behaviors, values and knowledge, with the aim of investigating the hypotheses regarding changes in environmental habits post-relocation. The results indicated significant shifts in environmental habits and attitudes post-relocation. Notably, a large majority of participants reported adopting new environmental habits, such as waste sorting and became more conscious about the conservation of resources, after relocating to Italy. Additionally, participants expressed a heightened awareness of environmental issues and active engagement in sustainability practices within the Italian culture context. These findings underscore the influence of the country's factors on individuals' environmental culture, emphasizing the significance of further investigating the dynamics of changes in environmental behavior, knowledge, and values experienced by migrants. The results provide support for the hypothesis that relocating from Russia to Italy, along with adapting to living conditions in a new country, affects an individual's environmental habits, values, and personality.

CHAPTER 3: CONCLUSION

The main goal of this study is to provide comparative analysis of environmental culture formation in a national context based on Russia and Italy. This research contributes to a deeper understanding of the influence of various factors on the formation of environmental culture, which is essential for expanding knowledge and developing sustainable approaches to environmental culture in a national context. The comprehensive nature of the environmental culture concept makes it appropriate to consider the context of globalization, emphasizing the urgency and integrity of environmental issues and aiming to utilize the best models of environmental consciousness development from other cultures. In the context of globalization, where interactions between countries and cultures are becoming increasingly intense, international research is of particular importance. Authors such as Li et al. (2019) and Marquart-Pyatt (2012) highlight that studying factors in different cultural contexts allows for a deeper understanding of practices influencing the formation of individual and societal environmental culture.

In the theoretical part of the study, the dissemination of the term «environmental culture» in various scientific works was considered, leading to the derivation of a new and unique term. Additionally, the study compared the national factors of two countries, such as education, government policy, economic conditions, natural factors, mass media, and social networks. Accounting for these factors allowed for a more comprehensive understanding of the various aspects influencing the formation of environmental culture among youth in the context of globalization and national peculiarities.

In the practical part of the study, the research aimed to measure the level of environmental culture among Italian and Russian youth and compare these levels, as well as to examine the influence of national factors by analyzing changes in environmental habits, values, and knowledge among youth after moving from Russia to Italy. Quantitative methods, including diagnostics, and qualitative methods, through interviews, were used to compare environmental culture in Russia and Italy. The study tested the hypothesis that the level of environmental culture among youth in Italy is higher than in Russia, as well as the hypothesis that moving from one country to another, where the level of environmental culture is higher, leads to significant changes in an individual's environmental knowledge, values, and behavior.

Environmental culture, understood as the complex interaction between humans and the surrounding nature, has various interpretations in Russian and international literature. In Russia, the term «environmental culture» is widely used, encompassing aspects of awareness, values, behavior, and attitudes towards the environment. While in international literature, the term is less frequently employed, its concept includes sustainable relationships with nature and conscious impact on it. Issues with interpretations in Russian literature include the blending of concepts and various definitions focusing on knowledge, values, and

practical skills, but not always considering ethical and spiritual aspects. In international literature, the challenge lies in integrating emotional and spiritual aspects into the definition of environmental culture to foster more harmonious relationships with nature. Thus, although there are differences in the interpretation of environmental culture in Russian and international literature, the commonalities include an emphasis on the interconnectedness between humans and nature, as well as a commitment to sustainable relationships with the environment.

Studying the factors that shape environmental culture is a crucial aspect in understanding the relationship between humans and the environment. Modern research on this topic identifies various determinants such as knowledge, values, and behavioral practices, each of which is influenced by diverse factors. Due to the limited prevalence of the term «environmental culture» and its core components, scholars also consider environmental attitudes, concerns, awareness, and other determinants. For the most part, these factors are examined and studied separately, without emphasizing their interconnection and indivisibility.

When analyzing the key factors shaping environmental culture, several aspects influencing individuals' attitudes towards the environment have been identified. Studies indicate that social norms and values play a significant role in shaping environmental beliefs and behavior. For instance, in societies where environmental principles hold high status and are supported by social norms, individuals tend to demonstrate a more responsible attitude towards nature. Economic incentives, such as tax breaks or subsidies, encouraging environmentally responsible behavior, are also important factors. Education and environmental awareness are also essential for shaping environmental culture. Individuals informed about environmental issues and trained in sustainable development are more likely to engage in environmental actions and strive to preserve nature. Furthermore, personal beliefs and norms play an important role in shaping environmental behavior. Individuals whose beliefs are associated with respect for nature and responsible resource management tend to exhibit more environmentally oriented behavior. Finally, sociocultural factors, such as religious and cultural characteristics of society, may also influence environmental culture. For example, in cultures where nature is viewed as sacred, customs and traditions may contribute to a more careful attitude towards the environment.

However, for our comparative analysis, we chose the classification proposed by Marquart-Pyatt (2012) as it is based on a systemic approach to studying the factors influencing environmental culture and offers a comprehensive examination of both national and individual aspects. Marquart-Pyatt (2012) emphasizes the importance of conducting comparative studies to understand differences in environmental culture between different countries and cultural contexts. This is important because such comparative analyses allow identifying common trends and unique features, contributing to the development of more effective

strategies for sustainable development and environmental conservation. Such an approach also facilitates knowledge exchange and the transfer of best practices between countries, contributing to the formation of a global community ensuring sustainable development.

Based on previous research and theoretical concepts, Marquart-Pyatt's (2012) classification of individual and national factors serves as the foundation for our study. Special attention is given to country-level factors due to their potential significant influence on the environmental culture of youth, covering aspects such as economic measures, political features, media, and natural conditions. Within the realm of individual factors, our comparative analysis focuses exclusively on the educational level, excluding comparisons of other factors such as gender and age, instead encompassing all gender identities. This decision was made to simplify the focus and ensure a deeper exploration of the impact of educational policies and practices on environmental culture across different countries. The study does not limit its focus solely to individual gender as it examines environmental culture in a broader context. Although many studies emphasize the importance of age as a factor for both youth and elderly individuals in shaping environmental culture, our research specifically targets the youth group aged 18 to 30. Youth often play a key role in shaping new trends and sociocultural practices, including attitudes towards the environment. Additionally, the youth age group represents a period in life when values, beliefs, and behavioral practices are formed and reinforced, which can have a significant impact on subsequent generations. Thus, studying the environmental culture of this age category can provide important insights for the development of effective strategies to promote sustainable lifestyles.

The comparative analysis of factors influencing the environmental culture of youth in Russia and Italy allows for several important conclusions. Education plays a crucial role in shaping environmental attitudes, behavior, and values at both individual and societal levels. Both countries pay attention to integrating environmental education into the formal education system, albeit with varying degrees of emphasis and effectiveness. In a comparative context, Italy generally has a more developed system of environmental education and actively integrates it into university programs and local educational projects. Various projects and initiatives promoting environmental knowledge and values among youth at the local level are actively implemented in Italy, including events, educational seminars, and volunteer work. Universities in Italy also actively integrate environmental aspects into their curricula and offer interdisciplinary programs aimed at training specialists in sustainable development. In contrast to Italy, Russia demonstrates slower development in the field of environmental education and its integration into educational programs. Although there are also separate initiatives and projects in Russia aimed at supporting environmental education and shaping environmental culture among youth, their scales and results are not as significant as in Italy. Russia should pay attention to Italy's experience and implement similar successful practices and

strategies to improve the situation in the field of environmental education and the formation of environmental culture at home.

Regarding the economic factor, Italy has greater opportunities for developing environmental culture in society compared to Russia, primarily due to its stronger economic position. Economic development provides Italy with more resources to invest in environmental projects, infrastructure, and policies. The widespread use of recycling practices in Italy, influenced by cultural factors, also supports the idea that economic prosperity can contribute to environmental awareness. Moreover, the political situation also plays a significant role, and the current geopolitical tensions between Russia and Ukraine may act as a limiting factor for Russia's environmental initiatives.

Various natural factors such as climate, location, biodiversity and geological features influence how people perceive and respond to environmental problems. In Italy, cities such as Venice are vulnerable to climate change, leading to the development of sophisticated protection measures against sea level rise. Such environmental issues increase public awareness and concern for the environment, fostering a stronger environmental culture. Russia, on the other hand, faces the need for large-scale measures to adapt to climate risks due to its vast territory and diverse impacts of climate change. However, problems such as a simulated climate strategy, lack of trust in policies and inadequate governance structures hinder effective environmental initiatives. Biodiversity also plays an important role in shaping environmental consciousness, as regions rich in biodiversity often foster a deeper cultural connection to nature and a greater willingness to address environmental challenges. Although Russia ranks higher in biodiversity than Italy, the specific environmental nuances in the regions of each country should be considered for a comprehensive understanding.

Italy also surpasses Russia in terms of the influence of mass media on the formation of environmental culture. In Italy, the media actively cover environmental issues, support public environmental organizations, and promote environmental education. In Russia, access to environmental information is limited, and independent environmental organizations often face pressure and bans, which hinders the effective dissemination of environmental knowledge and activism. However, in the context of the media factor, a more in-depth analysis is needed, due to the fact that for today's youth it is the most popular place to spend time, as well as an opportunity for freedom of expression and self-expression. It is social media as a platform for communication, discussion, sharing information that helps young people to speak openly about the topics they care about. This provides a great opportunity to identify the interests of environmental topics in each culture, as well as to trace the involvement of users. This analysis is important because social media can be considered a new factor in shaping environmental culture through the consumption of

information with specific themes and sentiments that vary from country to country. A comparison of YouTube content in Italy and Russia sheds light on how environmental culture is shaped and what sentiments prevail in each audience. The analysis reveals significant differences and similarities between the two countries, highlighting differences in presentation, thematic focus, and linguistic nuances.

In Italy, content creators mainly focus on global environmental issues and look for universal solutions. Topics such as climate change, biodiversity conservation and international environmental activism dominate the discussion. Italian creators often discuss solutions and positive action, using optimistic language to instill hope and solidarity in viewers. In addition, phrases such as «sustainable development goals» and «global solutions» feature prominently, reflecting Italy's desire to keep up with global trends and its emphasis on addressing environmental issues on a global level. Notably, the Italian approach emphasizes the importance of finding constructive solutions and spreading optimism to combat environmental concerns.

In contrast, Russian-language content on YouTube tends to focus on regional environmental problems and practical solutions at the household level. Issues such as pollution, waste management and landfills receive considerable attention, with a strong focus on local conditions and challenges. The linguistic tone of Russian-language content often leans towards emotional expressions, evoking negative emotions such as anger or sadness to emphasize the seriousness of environmental issues. While this approach can motivate viewers to take action by emphasizing personal responsibility, it also risks inducing a sense of hopelessness or helplessness if not balanced by positive messages. A notable difference in thematic focus is evident in the discussion of plant-based diets and sustainable lifestyles. While both countries show interest in these topics, Russian content creators pay slightly more attention to veganism as part of a broader environmental discourse. This indicates a growing awareness among Russian audiences of the link between consumption habits and environmental impact, signaling a shift towards conscious consumption and alternative lifestyles. In addition, the analysis emphasizes the influence of socio-political factors on content creation and distribution. In Italy, non-profit organizations and activist communities play an important role in shaping environmental discourse by promoting policies and practices that promote sustainable development. However, in Russia, the banning of prominent environmental organizations such as WWF and Greenpeace has limited the dissemination of problem-solving content, resulting in a decrease in content diversity and activism.

Overall, the comparison highlights the differences in approaches to environmental issues in Italy and Russia, reflecting unique sociocultural contexts and priorities. While Italian content emphasizes global solutions and optimism, Russian content gravitates toward regional issues and emotional appeals. Different

approaches shape different perceptions of nature, environmental problems and environmental lifestyles. These differences in approaches and attitudes can have a significant impact on the perception and formation of environmental culture among young people. Further research is needed to better understand these influences and to develop effective strategies to promote sustainable behavior and conscious consumption.

After in-depth analysis of national factors of environmental culture it was found out that Italy as a country in many moments surpasses Russia in terms of formation of environmental culture of young people within the country. Thus, the hypothesis arises that the level of environmental culture of Italians is higher than that of Russians. This is verified by a quantitative method by means of diagnostics among

The results of the assessment conducted among university students from Italy and Russia regarding their environmental culture levels provide interesting insights into their comparative environmental culture. The data, carefully analyzed and categorized according to predefined criteria, reveals distinct patterns in environmental consciousness among the sampled groups. Upon examination of the findings, it is clear that Italian students generally display a higher level of environmental culture compared to their Russian students. Italian youths, in particular, show a significant presence in the «Very High» category, comprising more than half of the participants surveyed. Conversely, while Russian students also demonstrate a commendable interest in environmental issues, with a considerable portion falling within the «Above Average» bracket, fewer students are classified in the «Very High» category. To validate the significance of these observed differences, we employed an independent samples t-test as our analytical framework. This method was suitable for comparing the average environmental culture scores between Italian and Russian student groups. By formulating null (H₀) and alternative (H₁) hypotheses, we aimed to determine whether there were significant differences in environmental culture levels between the two groups. Subsequently, mean values and standard deviations were calculated for each group, enabling the computation of t-statistics. The results of the t-test revealed a calculated t-value that exceeded the critical threshold at a significance level of 0.05. This allowed us to reject the null hypothesis and confidently conclude that there are statistically significant disparities in environmental culture between Italian and Russian students. This empirical validation of our research hypothesis supports the notion that variations in environmental culture levels do indeed exist between the two groups, confirming our initial assumptions. In summary, the results of the diagnosis confirmed the hypothesis of the study that the level of environmental culture among Italian students is higher than among Russians.

However, in order to test the hypothesis about the influence of national factors on the environmental culture of young people, a quantitative analysis based on interviews among 23 Russian students who moved from Russia to Italy was conducted. The theoretical analysis suggested that the influence of national factors on

the formation of environmental culture in Italy is significantly higher than in Russia. This study allowed us to test the hypothesis about the extent to which the change of country, and therefore of national factors, influences environmental beliefs and assumptions. The sample consisted exclusively of Russian students between the ages of 18 and 30 who had moved to Italy and lived there for at least a year.

The study revealed significant changes in habits and attitudes towards the environment in people moving from Russia to Italy. Participants reported that after moving, they acquired new environmental habits, such as sorting waste, and became more conscious of resource conservation. In addition, increased awareness of environmental issues and active adoption of sustainability practices in the Italian cultural context were noted. These results highlight the influence of host country factors on people's environmental culture, emphasizing the need to further explore the dynamics of change in migrants' environmental behavior, knowledge and values. The main factors influencing these changes include cultural differences, environmental and legislative influences, economic factors, social influences and cultural context, and language barriers. In addition, the interviews provided empirical support for the second hypothesis, suggesting that moving from a country with a lower environmental culture to a country with a higher environmental culture leads to noticeable changes.

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Appendices

Diagnosis of the level of environmental culture of students by Asafova (2003)

Questions of the diagnosis:

I. Environmental education

1. How do you evaluate your own environmental knowledge?
2. How necessary is it for you to deepen and expand your environmental knowledge?
3. To what extent does personal development depend on the interaction between society and nature?
4. To what extent do you consider the environmental significance of the problem to be solved when carrying out educational and research work (an essay, a project, a term paper)?
5. Do you think that environmental degradation negatively affects your health?
6. How often do you use environmental knowledge and skills in everyday life (do not collect mushrooms and medicinal herbs along the roads, do not burn plastic dishes, etc.)?
7. How often do you read articles or scientific publications, devoted to the discussion of environmental problems?

II. Environmental Consciousness

1. How responsible do you feel for the preservation of the environment?
2. To what extent is it unacceptable for you to participate in a picnic in specially protected natural areas, including a nature reserve?
3. Do you think that in the 21st century, any profession requires environmental training?
4. How much do you agree with ideas of humanism (kindness, carefulness) and human attitude to nature?
5. How often do you discuss problems related to the deterioration of the environmental situation among your friends and relatives?
6. How important, in your opinion, is the development of the public environmental movement in an educational institution?
7. How important is it for you to get positive emotions from communicating with nature?

III. Environmental activities

1. How often do you participate in environmental actions, clean-ups, and strikes?
2. To what extent has your desire to participate in environmental activities increased over the past 2-3 years?
3. To what extent is your participation in environmental activities determined by the fact that everyone should care about the state of the environment?
4. If you witness a violation of environmental activity norms, or an environmental disaster, to what extent will your position be active?
5. How often do you prevent an environmental behavior of others, as well as your friends?
6. How often do you personally initiate environmental activities?

- The average level (B) - 12-20 points, characterized by sufficiently active participation in environmental activities, based on a principled and active position of the individual in accordance with environmental beliefs, values, attitudes.
- High level (C) - 21-30 points, assumes high activity of the person not only in participation, but also in development and carrying out of environmental actions at formation of a motivational-target component in structure of the person.

Combinations of levels of environmental education, environmental consciousness and environmental activity give, respectively, low, average or high levels of environmental culture of students.

Table of assessment of the overall level of environmental culture

Level of env. culture	Environmental Awareness	Environmental consciousness	Environmental activity
Very low	A	A	A
	B	A	A
Low	A	B	A
	A	A	B
Average low	B	B	A
	A	B	B
Average	B	B	B
	C	B	A
	C	C	A
Higher than average	B	C	B
	C	B	B
High	C	C	B
	B	C	C
	C	B	C
Very high	C	C	C

Interview Questions

1. What kind of environmental issues are you aware of? Which ones are you concerned about the most?
2. What should be done to address the environmental issues you are concerned about? How do you personally contribute to addressing them? (e.g., recycling, decreasing consumption, saving electricity and water, participating in strikes, etc.)

