

ORIGINAL PAPER

Data Analysis and Documentation on Environmental Security and Social Resilience: A Case Study on Policy Theories and Practices

Anca Parmena Olimid¹⁾, Cătălina Maria Georgescu²⁾, Cosmin Lucian Gherghe³⁾

Abstract:

Background: The current study focuses on the research topics of "environmental security" and "social resilience" upgrading recent advances in approaching the policy theories and practices.

Objectives: Thus, the research helps to understand the social and policy opportunities and innovation exploring a range of literature in selected periods.

Methods: The research provides a two-steps basis (quantitative and qualitative analysis) using the *Google Ngram Viewer* research tool aimed at focusing on the use of relevant topics in the field.

Results and findings: All in all, the research focus on the policy theories and practices represents an evolving reference related to three analytical frameworks (AF): (AF1) social resilience, social actors, organization, social practice, society, societal, social community, social environment, social engagement, social participation; (AF2) clime, environment, environmental security, environmental resilience, climate change, clime security, climatic conditions, climatic resilience; (AF3) prosperity, peace, growth, development, sustainable growth, sustainable development, developing states, emergent economies.

Keywords: *environment, security, social, resilience, development.*

¹⁾ Associate Professor, PhD, University of Craiova, Faculty of Social Sciences, Craiova, Romania, Phone: 0040351403149, Email: anca.olimid@edu.ucv.ro. https://orcid.org/0000-0002-7546-9845.

²⁾ Lecturer, PhD, University of Craiova, Faculty of Social Sciences, Criova, Romania, Phone: 0040351403149, Email: catalina.georgescu@edu.ucv.ro. https://orcid.org/0000-0002-4462-4689.

³⁾ Associate Professor, PhD, University of Craiova, Faculty of Social Sciences, Craiova, Romania, Phone: 0040351403149, Email: cosmin.gherghe@edu.ucv.ro. https://orcid.org/0000-0002-9131-0391.

Introduction

The research in the area of environmental security (ES) and social resilience (SR) has three distinct sections – firstly, on social actors and actions, secondly, on environmental security mechanisms and practice, and thirdly focusing on the growth and sustainability development goals. In this context, the recent literature considers: (a) the establishment of new directions of analysis and research, namely: text/ document analysis tools (Karch, 2021) and (b) the development of new instruments and research engagements in the field of social resilience and environmental security (Jewett, Mah, Howell, Larsen, 2021).

Therefore, the objectives of the interdisciplinary research are achieved by (i) providing concepts developing a general interface with the relational analysis of the "environmental", "climate", "resilience" and "security" related concepts during the period 1970-2019 through the analytical representation of the "environmental security" topics; (ii) approaching the particular usage of the topics of "climate security" concept during the period 2000-2019.

Moreover, the current study reviews the key topics across the recent literature with the aim to describe the state of the terminology, particularly its importance for policy practices. Understanding also the development of the policy theories is needed while providing social resilience and environmental security on various levels of community organization.

Methodology and research objectives

The research objectives of the current study are to facilitate the analysis of these major topics using the *Google Ngram Viewer* research tool that provides a linkage among selected topics or concepts (*ngrams*) providing an innovative approach to the Google books research. Moreover, the interdisciplinary research presents the frequency of use of a selected topic throughout the Google scanned books. Each figure of the current study will focus on *ngram* technique and methodology aimed to provide a contextual representation of the reference period (e.g. 1960-2019; 1990-2019 etc.).

More specifically, Figure 1 contextualizes the relational analysis representation of the use of "environmental", "climate", "resilience" and "security" related concepts by focusing on the period 1970-2019. Figure 2 points out the representation of the use of "environmental", "climate", "resilience" and "security" related concepts for the same period. Figure 3 introduces the analysis of the "environmental security" concept and related topics to climate security issues" and "climate security discourse". Figures 4 and 5 provide the link to other topics of "climate security" and "climate resilience". As Figure 6 develops an inner approach to "social/societal"-related concepts during the period 1990-2019, Figure 7 addresses the "social environment", "social engagement", "social participation" concepts.

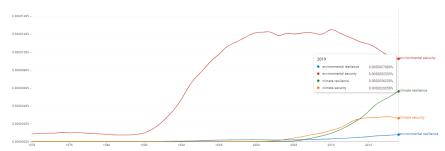
The main objective of the Figures 8, 9, 10 is to address is to quantify the representation of UN SDG goals-related and the "environment" (concept and adjective) and related concepts (nouns) (1990-2019). It is also important to focus on the configuration of Figure 11 considering how the reference interval for the period 1960-2019 synthesizes the conceptual inputs in the area of the use of "environmental"-related concepts. Figures 12 and 13 explore the priorities of "climate"-related concepts and "sustainable" (adjective) and related nouns during the last three decades.

Literature review

The conceptual overview of the social resilience-related phrases comprises a set of major related topics that involve various input and output levels, namely: the social behavior during COVID-19 pandemic (Burlea-Schiopoiu, Ogarca, Barbu, Craciun, Baloi, Mihai, 2021; Burlea-Schiopoiu, Puiu, Dinu, 2022; Bărbuceanu, 2022: 181–188), sustainability, communication and social media linkage (Lăpădat, Lăpădat, 2021: 22-30; Bularca, Nechita, Sargu, Motoi, Otovescu, Coman, 2022); social participation, mobility and resilience in multilevel governance (Levasseur, Roy, Michallet, St-Hilaire, Maltais, Généreux, 2017: 2422-2432; Olimid, Georgescu, 2017: 42-56; Pîrvu, Bădîrcea, Doran, Jianu, Țenea, Murtaza, 2022); community resilience and COVID-19 crisis (Olimid, Georgescu, Gherghe, 2022: 38-51; Wei, Han, Han, Gong, 2022: 706-714; Trivedi, Afjal, Spulbar, Birau, Murthy Inumula, Mitu, 2022: 365-376; Birau, R., Spulbar, Trivedi, Florescu, 2021: 13-21; Olimid, Olimid, 2022: 182-190) and cultural, communication and language social encounters (Mitu, 2021: 201-211; Vlădutescu, 2021: 89-92; Păunescu, Chiritescu, 2022). However, Popay et al. argue that there are also other social determinants for this approach reflecting health inequalities and system resilience (Popay, Kaloudis, Heaton, Barr, Halliday, Holt, Khan, Porroche-Escudero, Ring, Sadler, Simpson, Ward, Wheeler, 2022). Moreover, a part of literature recently assumed that social resilience is affected by local strategies and environmental security (Wamsler, Lawson, 2012: 28-53; Kaplan, Rashid, Gasparovic, Pietrelli, Ferrara, 2022: 1513-1526; Georgescu, 2014: 135-146). Based on these correlations, Jewett et al., Sorea et al. and also Otovescu et al. identify a direct link between social cohesion and community resilience (Jewett, Mah, Howell, Larsen, 2021: 325-336; Otovescu, Otovescu, Motoi, Otovescu, 2015; 32-49; Sorea, Csesznek, Rătulea, 2022), as Ellis et al. develop an active model for the community resilience within the public sector (Ellis, Dietz, Chen, 2022). Therefore, a range of discussions are developed here based on: (i) social considerations assessments (Crowley, Jackson, Connell, Karunarthna, Anantasari, Retnowati, Niemand, 2022; Moya, Goenechea, 2022); (ii) security determinants (Georgescu, Olimid, Gherghe, 2022: 82-96); (iii) climate resilience (Pope, Gitay, 2022).

Other two potential reflections are relevant. The first one refers to the revision of the concept of resilience suggesting the need for community focus and support (Manyena, 2006: 434-450). The second one provides the right to recovery at community level (Ahmad, Chowdhury, Siedler, Odek, 2022: 327-338). While acknowledging the various discussions in the environmental security and social resilience approach, there is also a more appropriate evaluation of the climate change perspectives, scenarios and effects, carrying out a strict focus on three broad indicators including the decisionmaking process, the linkage amongst environment and economic factors and the sustainable productivity (Apitz, 2021: 495-497). Using these three determinants, Apitz states the systematic challenges that the society faced here including social engagement and security. Whereas, the research methodology provides alternative techniques for three categories of analytical frameworks (AF), namely: (AF1) social resilience, social actors, organization, social practice, society, societal, social community, social environment, social engagement, social participation; (AF2) clime, environment, environmental security, environmental resilience, climate change, clime security, climatic conditions, climatic resilience; (AF3) prosperity, peace, growth, development, sustainable growth, sustainable development, developing states, emergent economies.

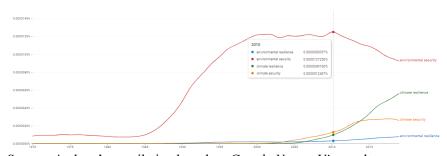
Figure 1. Relational analysis representation of the use of "environmental", "climate", "resilience" and "security" related concepts (1970-2019)



Source: Authors' compilation based on Google Ngram Viewer data

The relational analysis representation of the use of "environmental" and "climate" related to the concepts of "resilience" and "security" for the period of 1970-2019 shows the highest frequency values in 2019 for "climate resilience" (0.0000056259%), "climate security" (0.0000026056%) and "environmental resilience" (0.0000007889%), while "environmental security" scored highest between 2000 and 2010 (0.000012725%).

Figure 2. Relational analysis representation of the use of "environmental" and "climate"-related concepts (2010)



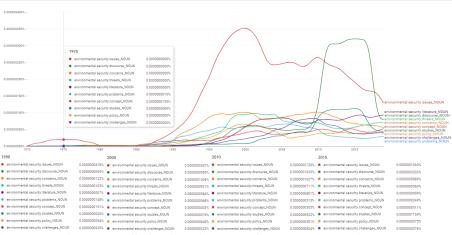
Source: Authors' compilation based on Google Ngram Viewer data

The analysis for the identification of "environmental security"-related concepts shows that "environmental security issues" has started being mentioned in 1975 (0.0000000008%) and rose to rich its highest frequency in 2000 (0.0000003547%). The other concepts discovered in the analysis wither rather minor occurrence were "environmental security literature" (0.0000000901%), "environmental security threats" (0.0000000921% in 2000), "environmental security concerns" (0.0000001027%), "environmental security concept" (0.0000000511%), "environmental security policy" (0.0000000640% in 2000), "environmental security challenges" (0.0000000834% in 2010) and "environmental security problems" (0.0000000568% in 2000).

Two notable exceptions were "environmental security discourse" and "environmental security studies", both registering a similar frequency pattern, displaying

an ascending line in 2010 (0.0000001020% and 0.0000000922% respectively) and reaching the top in 2015 (0.0000003203% and 0.0000001134% respectively), gradually descending towards 2019.

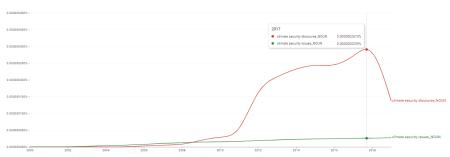
Figure 3. Relational analysis representation of the use of "environmental security" concept (1970-2019)



Source: Authors' compilation based on Google Ngram Viewer data

When performing the relational analysis representation of the use of "climate security" concept for the period 2000-2019 we identified only two related concepts: "climate security issues" and "climate security discourse" (registering the highest frequency in 2017 - 0.0000000259% and 0.0000002673%, respectively).

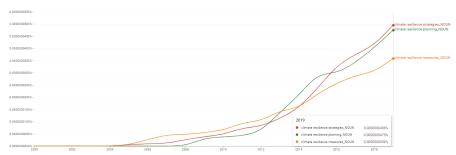
Figure 4. Relational analysis representation of the use of "climate security" concept (2000-2019)



Source: Authors' compilation based on Google Ngram Viewer data

The analysis has identified three concepts related to "climate resilience", all three of them peaking in 2019: "climate resilience strategies" (0.0000000496% in 2019), "climate resilience planning" (0.0000000475% in 2019), and "climate resilience measures" (0.0000000359%).

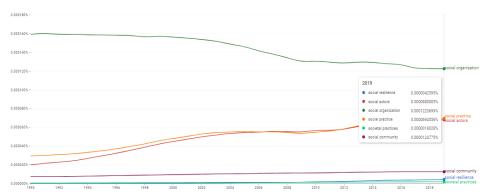
Figure 5. Relational analysis representation of the use of "climate resilience" concept (2000-2019)



Source: Authors' compilation based on Google Ngram Viewer data

The research methodological framework has targeted the scoring of concepts associated to environmental security and social resilience. The research units were designed to show the results of the extraction process of the evaluated phrases. *Google Ngram Viewer* features provide the possibility to identify the frequencies of some core topics in Google corpus. Thus, the analysis goes further to account the frequencies of the following associated concepts in 2019: "social resilience" (0.0000042595%), "social actors" (0.0000680005%), "social organization" (0.0001223699%), "social practice" (0.0000694556%), "social practices" (0.0000018028%), "social community" (0.0000124775%).

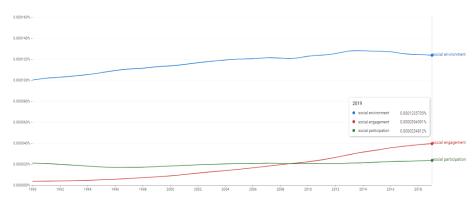
Figure 6. Analysing the use of "social/societal"-related concepts (1990-2019)



Source: Authors' compilation based on Google Ngram Viewer data

The analysis further provides meaningful information as regards the use of certain phrases for the period 1990-2019, showing the following values for 2019: "social environment" (0.0001235705%), "social engagement" (0.0000394591%), "social participation" (0.0000234812%).

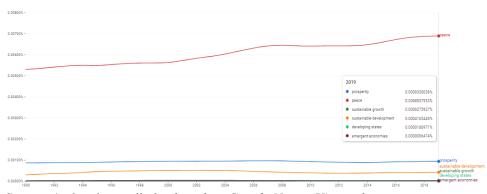
Figure 7. Analyzing the use of "social environment", "social engagement", "social participation" concepts (1990-2019)



Source: Authors' compilation based on Google Ngram Viewer data

The retrospective analysis performed for the period 1990-2019 for the representation of UN SDG goals-related concepts provides evidence for the constancy associating frequencies to major concepts, while the concept of "peace" has shown a gradual increase reaching 0.0068837933% in 2019. Meanwhile, the subsequent graphic points out the constant use of the conceptual cluster and provides the values recorded for 2019 in the case of all other concepts: "prosperity" (0.0009330038%), "sustainable growth" (0.0000275927%), "sustainable development" (0.0004165449%), "developing states" (0.0000180971%) and "emergent economies" (0.0000006474%).

Figure 8. Representation of UN SDG goals-related concepts (1990-2019)



Source: Authors' compilation based on Google Ngram Viewer data

The analysis shows the following frequencies for the environment-related concepts for the period between 1990-2019. Throughout this period we observe that the use of phrases such as "environment variables" with its singular form "environment variable" have increased until reaching a peak between 2000-2006; after that period we observe a constant decrease till 2019 (reaching the values 0.0000136612% and 0.0000052852% respectively). The same could be observe for the phrase "environment claim" which

reached its most frequent in 2001, then gradually decreased until 2019 (0.0000017744%). There is the case of phrases whose frequency increased gradually until 2019 such as "environment interaction" (0.0000130840%) and the plural form "environment interactions" (0.0000168961%), and "environment changes" (0.0000095038%). There is also the case of phrases whose frequency has constantly decreased until 2019. We observed this situation for the case of "environment protection" (0.0000081134%), "environment issues" (0.000024979%), "environment policy" (0.0000018755%) and "environment management" (0.0000027922%).

Figure 9. Analyzing the use of "environment" and related concepts (nouns) (1990-2019)

Source: Authors' compilation based on Google Ngram Viewer data

The analysis was directed to identify the changes in frequencies as regards the associations between the term "environmental" (adjective) and related nouns, highlighting the following: "environmental impact" and its plural "environmental impacts", "environmental protection", "environmental conditions", "environmental factors", "environmental issues", "environmental problems", "environmental effects", "environmental management" and "environmental policy" which peaked around 1995.

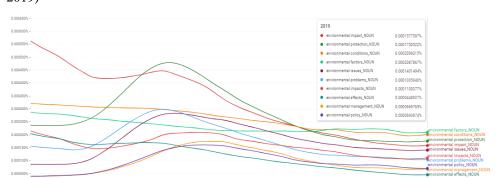


Figure 10. Analyzing the use of "environmental" (adjective) and related nouns (1980-2019)

Source: Authors' compilation based on Google Ngram Viewer data

The results change when selecting the reference interval as the period 1960-2019, thus "environmental impact" and its plural form "environmental impacts" with its

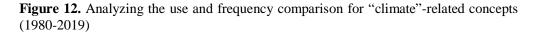
highest frequency in 1975 (0.0007446930%), "environmental protection", "environmental conditions", "environmental factors", "environmental issues", "environmental problems", "environmental effects", "environmental management" and "environmental policy".

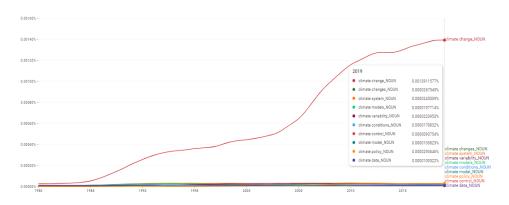
0.000400%
0.000400%
0.000400%
0.000400%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007100%
0.0007

Figure 11. Analyzing the use of "environmental"-related concepts (1960-2019)

Source: Authors' compilation based on Google Ngram Viewer data

The analysis of climate-related concepts representative for the period 1980-2019 has identified the following highest frequencies for "climate changes" (0.0000338196% in 2010) replaced by "climate change" (0.0013925697% in 2018). With the exception of "climate change", all other concepts identified by the *Ngram* scientific literature scanning soft would be varying slightly for the selected period. Thus, the program identified the following highest frequencies: "climate system" (0.0000331865% in 2010), "climate models" (0.0000270026% in 2010) and "climate model" (0.0000146303% in 2010), "climate variability" (0.0000278702% in 2010), "climate conditions" (0.0000178832% in 2019), "climate control" (0.0000160646% in 2000), "climate policy" (0.0000301456% in 2018), and "climate data" (0.0000116859% in 1990).





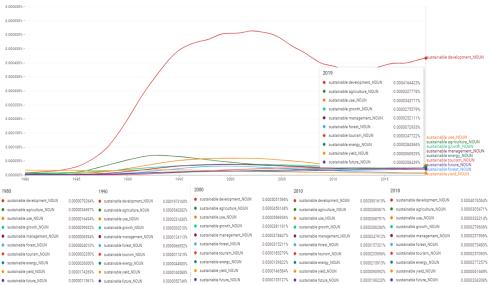
42

1980	1990	2000	2010	2018	
 climate change_NOUN 0.0000268 	30% climate change_NOUN 0.0002575983%	• climate change_NOUN 0.0004436641%	 climate change_NOUN 0.0011651797% 	 climate change_NOUN 0.0013925697% 	i
 climate changes_NOUN 0.0000124 	93% climate changes_NOUN 0.0000279984%	• climate changes_NOUN 0.0000279888%	• climate changes_NOUN 0.0000338196%	• climate changes_NOUN 0.0000263963%	i
 climate system_NOUN 0.0000079 	08% climate system_NOUN 0.0000239475%	 climate system_NOUN 0.0000293650% 	 climate system_NOUN 0.0000331865% 	 climate system_NOUN 0.0000249658% 	i
 climate models_NOUN 0.0000083 	62% climate models_NOUN 0.0000208699%	 climate models_NOUN 0.0000195697% 	climate models_NOUN 0.0000270026%	climate models_NOUN 0.0000200873%	i
 climate variability_NOUN 0.0000031 	77% • climate variability_NOUN 0.0000092758%	• climate variability_NOUN 0.0000267154%	• climate variability_NOUN 0.0000278702%	 climate variability_NOUN 0.0000218496% 	i
 climate conditions_NOUN 0.0000119 	66% climate conditions_NOUN 0.0000107159%	climate conditions_NOUN 0.0000136285%	climate conditions_NOUN 0.0000172262%	climate conditions_NOUN 0.0000176388%	
climate control_NOUN 0.0000113	91% climate control_NOUN 0.0000136354%	 climate control_NOUN 0.0000160646% 	climate control_NOUN 0.0000109741%	climate control_NOUN 0.0000091998%	i
• climate model_NOUN 0.0000063	25% climate model_NOUN 0.0000124128%	 climate model_NOUN 0.0000120611% 	 climate model_NOUN 0.0000146303% 	 climate model_NOUN 0.0000105391% 	
climate policy_NOUN	42% climate policy_NOUN 0.0000009269%	 climate policy_NOUN 0.0000072839% 	 climate policy_NOUN 0.0000242989% 	 climate policy_NOUN 0.0000301456% 	i
climate data_NOUN 0.0000082	58% climate data_NOUN 0.0000116859%	 climate data_NOUN 0.0000099144% 	 climate data_NOUN 0.0000102530% 	 climate data_NOUN 0.0000095544% 	

Source: Authors' compilation based on Google Ngram Viewer data

Throughout the period 1980-2019, the concept of "sustainable development" has acquired the highest frequency (0.0005051596% in 2000), "sustainable agriculture" (0.000540282% in 1990), "sustainable use" (0.0000596936% in 2000), "sustainable growth" (0.0000381191% in 2000), "sustainable management" (0.0000378847% in 2000), "sustainable forest" (0.0000315211% in 2000), "sustainable tourism" (0.0000257093% in 2018), "sustainable energy" (0.0000284366% in 2019), "sustainable yield" (0.0000174269% in 1980), and "sustainable future" (0.0000208439% in 2019).

Figure 13. Analyzing the use and frequency comparison for "sustainable" (adjective) and related nouns (1980-2019)



Source: Authors' compilation based on Google Ngram Viewer data

Conclusions

In conclusion, the current research connects the processes of social resilience to the ones related to environmental security. Consequently, the analytical research of the topics developed in Figures 1-13 explores the frequencies of use for selected topics while focusing on the evolving conceptual context of the policy theories and practice. The analysis has shown the evolution of the appropriation and use of specific concepts and phrases associated to "environmental security" and "social resilience", as well as their dissemination throughout the online literature corpus within a wide span of time.

Thus, the analysis has provided evidence for the constancy, rise or decline in the use of some specific concepts, opening the arena to scientific displays of relating the above-mentioned occurrences to policy theories and practice.

Authors' Contributions:

The authors contributed equally to this work.

References:

- Ahmad, F., Chowdhury, R., Siedler, B., Odek, W. (2022). Building community resilience during COVID-19: Learning from rural Bangladesh. Journal of Contingencies and Crisis Management, 30, 327-338. https://doi.org/10.1111/1468-5973.12405
- Apitz, S.E. (2021). Science in Service of Society: COVID-19, Climate Change, and the Future. *Integr Environ Assess Manag*, 17, 495-497. https://doi.org/10.1002/jeam.4398.
- Bărbuceanu, C.D. (2022). Improving Academic Outcomes and Behaviours through SEL (Social and Emotional Learning). *Revista de Științe Politice. Revue des Sciences Politiques*, no. 75, pp. 181-188.
- Birau, R., Spulbar, C., Trivedi, J., Florescu, I. (2021). Modeling volatility in the stock markets of Spain and Hong Kong using GARCH family models in the context of COVID 19 pandemic. *Revista de Științe Politice. Revue des Sciences Politiques*, 72, 13-21.
- Bularca, M. C., Nechita, F., Sargu, L., Motoi, G., Otovescu, A., & Coman, C. (2022). Looking for the Sustainability Messages of European Universities' Social Media Communication during the COVID-19 Pandemic. *Sustainability*, *14*(*3*), 1554. MDPI AG. Retrieved from http://dx.doi.org/10.3390/su14031554.
- Burlea-Schiopoiu A, Ogarca RF, Barbu CM, Craciun L, Baloi IC, Mihai LS. (2021). The impact of COVID-19 pandemic on food waste behaviour of young people. J *Clean Prod.* 2021 Apr 20;294:126333. doi: 10.1016/j.jclepro.2021.126333. Epub 2021 Feb 10. PMID: 34720458; PMCID: PMC8541752.
- Burlea-Schiopoiu, A., Puiu, S., Dinu, A. (2022). The impact of food delivery applications on Romanian consumers' behaviour during the COVID-19 pandemic. *Socio-Economic Planning Sciences*, Volume 82, Part A. https://doi.org/10.1016/j.seps.2021.101220.
- Crowley, K., Jackson, R., O'Connell, S., Karunarthna, D., Anantasari, E., Retnowati, A., & Niemand, D. (2022). Cultural heritage and risk assessments: Gaps, challenges, and future research directions for the inclusion of heritage within climate change adaptation and disaster management. *Climate Resil Sustain.*, 1, e45. https://doi.org/10.1002/cli2.45
- Ellis, W., Dietz, WH., Chen, KD. Community Resilience: A Dynamic Model for Public Health 3.0. J Public Health Manag Pract. 2022 Jan-Feb 01; 28(Suppl 1):S18-S26. doi: 10.1097/PHH.000000000001413. PMID: 34797257.
- Georgescu, C.M., Olimid, A.P., Gherghe, C.L. (2022). Euro-Atlantic Security and Institutional Resilience: Analyzing the Conceptual Use and Topical Variations. *Revista de Științe Politice. Revue des Sciences Politiques*, 74, 82-96. https://cis01.ucv.ro/revistadestiintepolitice/files/numarul74_2022/8.pdf.
- Georgescu, C.M. (2014). Europeanization theories revisited through historical institutionalism. EU as a public policy role model for post-communist South-Eastern Europe in the field of security. *Revista de Științe Politice. Revue des Sciences Politiques*, 42, 135-146.
 - https://cis01.ucv.ro/revistadestiintepolitice/files/revista_stiinte_politice_issue_42.pdf

- Jewett, RL, Mah, SM, Howell, N, Larsen, MM. (2021). Social Cohesion and Community Resilience During COVID-19 and Pandemics: A Rapid Scoping Review to Inform the United Nations Research Roadmap for COVID-19 Recovery. *Int J Health Serv.*, Jul;51(3):325-336. doi: 10.1177/0020731421997092. Epub 2021 Apr 8. PMID: 33827308; PMCID: PMC8204038.
- Kaplan, G., Rashid, T., Gasparovic, M., Pietrelli, A., & Ferrara, V. (2022). Monitoring wargenerated environmental security using remote sensing: A review. Land Degradation & Development, 33(10), 1513–1526. https://doi.org/10.1002/ldr.4249
- Karch, M. (2021). How to Use the Ngram Viewer Tool in Google Books. Retrieved from: https://www.lifewire.com/google-books-ngram-viewer-1616701.
- Lăpădat, L., Lăpădat, M.-M. (2021). Manifolds of Communication: Negotiating Social, Political and Economic Constructs. *Revista de Științe Politice. Revue des Sciences Politiques*, 72, 22 30.
- Levasseur, M., Roy, M., Michallet, B., St-Hilaire, F, Maltais, D, Généreux, M. (2017). Associations Between Resilience, Community Belonging, and Social Participation Among Community-Dwelling Older Adults: Results From the Eastern Townships Population Health Survey. *Arch Phys Med Rehabil*. 2017 Dec;98(12):2422-2432. doi: 10.1016/j.apmr.2017.03.025. Epub 2017 Apr 26. PMID: 28455192.
- Manyena, S.B. (2006). The concept of resilience revisited. *Disasters*, 30: 434-450. https://doi.org/10.1111/j.0361-3666.2006.00331.x.
- Mitu, N. E. (2021). Importance of Communication in Public Administration. *Revista de Științe Politice. Revue des Sciences Politiques*, 69, 134-145, https://cis01.ucv.ro/revistadestiintepolitice/files/numarul69_2021/12.pdf
- Moya J, Goenechea M. (2022). An Approach to the Unified Conceptualization, Definition, and Characterization of Social Resilience. *Int J Environ Res Public Health*. 2022 May 9;19(9):5746. doi: 10.3390/ijerph19095746. PMID: 35565141; PMCID: PMC9104618.
- Olimid, A. P., Georgescu, C. M. (2017). Social Agenda and Civic Participation within the European Union Multilevel Governance: A Content Analysis of the EU Legal Documentation (2016). *Revista de Științe Politice. Revue des Sciences Politiques*, no. 55, 42-56. https://cis01.ucv.ro/revistadestiintepolitice/files/numarul55_2017/5.pdf.
- Olimid, A.P., Georgescu, C. M., Gherghe, C. L. (2022). Influences of Covid-19 Crisis on Resilience Theories: An analysis of Community, Societal and Governance Resilience. *Revista de Științe Politice. Revue des Sciences Politiques*, no. 73/2022, 38-51.
- Olimid, A.P., Olimid, D.A. (2022). Sustainable Policies and Resilience during the COVID19 Pandemic: Advances in Humanitarian Aid, Civil Protection and Human Health within the Regulation (EU) 2021/836. Revista *de Științe Politice. Revue des Sciences Politiques*, no. 73/2022, 182-190.
- Otovescu, C., Otovescu, A., Motoi, G., Otovescu, D. (2015). Resources of resilience amonght the urban population. *Revista de cercetare și intervenție socială*, vol. 48, 32-49.
- Păunescu, F.A., Chirițescu, I. M. (2022). The Dynamics of Legal English Lexicon. *Revista de Științe Politice. Revue des Sciences Politiques*, no. 73, 201-211.
- Pîrvu, R, Bădîrcea, R.M., Doran NM, Jianu E, Țenea L, Murtaza F. (2022). Linking Internal Mobility, Regional Development and Economic Structural Changes in Romania. *Sustainability*; 14(12):7258. https://doi.org/10.3390/su14127258. https://cis01.ucv.ro/revistadestiintepolitice/files/numarul73 2022/4.pdf.
- Popay J, Kaloudis H, Heaton L, Barr B, Halliday E, Holt V, Khan K, Porroche-Escudero A, Ring A, Sadler G, Simpson G, Ward F, Wheeler P. (2022). System resilience and

- neighbourhood action on social determinants of health inequalities: an English Case Study. Perspect Public Health. 2022 Jul;142(4):213-223. doi: 10.1177/17579139221106899. Epub 2022 Jul 8. PMID: 35801904; PMCID: PMC9284076.
- Pope, V., Gitay, H. (2022). Climate resilience and sustainability: Objectives and aspirations. *Climate Resil Sustain.*, 1: e9. https://doi.org/10.1002/cli2.9
- Sorea, D., Csesznek, C., Rățulea, G.G. (2022). The Culture-Centered Development Potential of Communities in Fagaras, Land (Romania). *Land*, 11, 837. https://doi.org/10.3390/land11060837.
- Trivedi, J., Afjal, M., Spulbar, C., Birau, R., Murthy Inumula, K., Mitu, N. E. (2022). Investigating the impact of COVID-19 pandemic on volatility patterns and its global implication for textile industry: An empirical case study for Shanghai Stock Exchange of China. *Industria Textila*, 73(4), 365-376, DOI: 10.35530/IT.073.04.202148.
- Vlăduțescu, Ş. (2021). Fictional reconstruction and social reconstruction of reality. *Annals of the University of Craiova for Journalism, Communication and Management*, 7, 89-92 available at: https://doi.org/10.5281/zenodo.5790268
- Wamsler, C., Lawson, N. (2012). Complementing institutional with localised strategies for climate change adaptation: a South–North comparison. *Disasters*, 36: 28-53. https://doi.org/10.1111/j.1467-7717.2011.01248.x
- Wei, J., Han, Z., Han, Y., Gong, Z. (2022). What Do You Mean by Community Resilience? More Assets or Better Prepared? *Disaster Med Public Health Prep.* 2022 Apr;16(2):706-713. doi: 10.1017/dmp.2020.466. Epub 2021 Mar 17. PMID: 33729123.

Article Info

Received: October 30 2022 Accepted: November 08 2022

How to cite this article:

Olimid, A. P., Georgescu, C.M., Gherghe, C. L. (2022). Data analysis and documentation on Environmental Security and Social Resilience: A Case Study on Policy Theories and Practices. *Revista de Științe Politice. Revue des Sciences Politiques*, no. 76, pp. 34 – 46.