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Investigating EFL Learners' Perceptions and Reflections on the Impact of Ecolinguistics in Raising Environmental Awareness

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ABSTRACT

Due to the growing need for effective communication strategies to promote environmental responsibility and address environmental challenges, this study examines Ecolinguistics' roles in addressing environmental challenges and raising EFL learners' awareness of their critical role in building a more equitable world. It aims to raise environmental responsibility among EFL learners and allow them to take action. The study used an online questionnaire of three dimensions, rated on five Likert scales, and a free, open-ended question to collect data from (n= 100) EFL graduates and undergraduates to explore the relationship among perceptions, knowledge, and active reflections on environmental issues. The quantitative data analysis revealed a strong link between language and environmental attitudes. The participants believed in the impact of language on positive changes in people's way of thinking about the environment. The participants' reflections on the open-ended question provided various solutions, from linguistic and nonlinguistic awareness-raising to youth engagement, policy changes, individual action, creative communication, and environmental management strategies. The study concluded that Ecolinguistics significantly stimulates environmental consciousness and advocates for a comprehensive approach involving education, policy, and individual action.

INTRODUCTION

Ecolinguistics, or ecological linguistics, explores the language and environment interactions (Stibbe, 2015). Dash (2019) states that ecology studies living creatures, including humans' relationship to their physical environment. Language, as a basic tool for communication, to facilitate understanding and shape people environmental thinking (Peluso, 2020; Fill & Penz (2018). This address aspect of language makes it a strong tool for environmental education and addressing environmental issues. Ecolinguistics addresses environmental violence by anatomizing how language objectifies nature terms to foster a perception of the environment (Menton & Billon, 2021). Ecolinguistics dissects how language can be utilized to objectify and dehumanize nature. For instance, terms like "resources" and "raw materials" denote natural objects can shape a view of nature as something to be utilized and exploited rather than revered and safeguarded. Instructors can use Ecolinguistics materials (posters, cards) to underscore their pivotal role in fostering environmental action and dismantling harmful narratives (Misiaszek, 2022). This study is significant because it explores the roles of Ecolinguistics in addressing the environmental crisis and the impact in raising awareness for building a more equitable world. Moreover, the study argues how language can promote or inhibit the environment. It is essential to be aware of how language can be used to shape our understanding of the environment. Furthermore, the study holds the promise of significantly contributing to filling the gaps in Ecolinguistics and the fight against environmental violence and climate change, instilling

hope for a better future. The results of the research may affect the perception of students on the environment, knowledge about how language contributes to the violence on the environment, and modify the proactive approach towards the environmental issue. The study shows how linguistic skills can be critical in mitigating violence towards other species by participants passing information on environmental conservation towards tackling these issues.

Ecolinguistics is a sub-discipline of linguistics that looks at the connection between language and the environment. Dash (2019) highlighted the challenges of defining Eco linguistics as it requires a standardised definitions in major dictionaries. Despite its sounding like an optimistic conjunction of ecology and linguistics, it still does not have a clear definition. However, researcher such as Steffensen *et al.* (2014), contributed in defining Ecolinguistics as study of how ecological issues affect language. Norton (2000) reviews the effectiveness of identity, language acquisition, and social context as the framework for understanding how Ecolinguistics could be applied to the process of language teaching. Hanks (2010) examined the link between language, culture, and society and suggests that ideas from Ecolinguistics should be combined with language instruction. Ecolinguistics in terms of language instruction and other areas as analysed by Canagarajah (2013) and it offers theoretical and practical applications Ecolinguistics. Ecolinguistics deals with language concerning the environment as Chen (2016) explains, discuss the history of the field, the ways in which language shapes and describes nature, environmental discourse analysis, and the function of

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language in environmental justice struggles. Further, it examines the possibilities of Ecolinguistics for education to create problematic consciousness related to environmental issues.

Ecolinguistics, as a sub-discipline, deals with the relationship between the use of language, people's actions, and the natural world. Cowley (2014) further develops the notion of bio-ecology advanced by Clements and Shelford (1939) since this meaning expresses how human actions constructed out of language reshape the natural world and are also reshaped by it. Garner (2004) agrees with the assertion that Ecolinguistics is relevant to analysing these interactions. According to Fill and Mühlhäusler (2006), Ecolinguistics is defined as a new field of study that discusses the connection between language and ecology. The field covers a huge amount of methodological and theoretical approaches and this reader will be helpful to grasp the field's input into the field of linguistics. As Lee (2016) explained, environmental violence includes conflicts over resources, harmful environmental policies, natural disasters exacerbated by human activities, and direct environmental degradation. This broader category includes extractive violence, as Downey *et al.* (2010), in which people and the environment are harmed by activities such as mining and logging. Toxic violence from exposure to pollution is another important mechanism. These events underscore the urgent need for sustainable practices and environmental justice to protect people and the planet. Menton and Le Billon (2021) Environmental defenders against violence, including Aboriginal people, labor and the media. Such people are easily exploited by governments, companies and other people who have desire for making much more money often inflicting a lot of suffering to many people and damaging the environment.

From the analysis, one finds that ecolinguistics can make alterations to the students' attitude towards the environment. Developing from this theory of Stibbe (2015), this paper investigates language's influence on people and environmentally friendly behaviour. In this way, friendly environment to students in Biology education for positive change is enhanced. Ecology is the key to the discipline and the problems of the environment. Halliday (2004), Luardini and Simbolon (2016), and Baker (2015) provided detailed understanding of how language influences the ecological conceptualisation. Ponton (2022) looks into the positive environment in ecolinguistics way. Wass *et al.*, (2011) noted that in order to achieve environmental protection, social justice and equality, economic upliftment; sustainable development is required. This pathway recognises ecology as the key in addressing and defining environmental problems. According to Halliday (2004), Luardini and Simbolon (2016), and Baker (2015), people drive ecological perspective through language. This is evident as dissected by Ponton (2022) in regard to ecolinguistics in positive environmental discourse. As contributed by Wass *et al.* (2011), sustainable development entails the appropriate harmony between environmental,

social and economic values. It is necessary to recommend further research centred on effective positive language use concerning the environment. According to Beckerman (2017) term, 'sustainable development' has been abused or misunderstood. According to Abdali, Yakimovich, and Kuvshinov (2018), the major areas of investment to real progress must be aimed at renewable energy and sustainable transport with related agriculture and conservation. Language is central to the realisation of these objectives with regard to enhancing synergistic co-development in this respect, as noted by Bance *et al.* (2011).

Ecolinguistics is a discipline which questions the connection between language and ecology. Fill & Mühlhäusler (2006) was very clear on how language defines our perception of nature and how it can foster, or otherwise, environmental conservation. According to Peluso, (2020), ecolinguistics helps explain how language affects or is used in informing the relationship between humans and the environment to encourage sustainability. Therefore, by improving awareness and promoting the ecological method of thinking in language, language translation may a great deal to development.

Related Studies

The latest developments in this field of study stress the concept of ecology and its role in constructing the environmental agenda. Operationally, the type of natural linguistics central to Uniawan (2017) shows how green discourse can be critically decoded so as to explicate its actual meaning as well as its effects on the audience. This paper shows that language plays important role in defining creative perceptions and performance and stresses the importance of green discursive approaches to creativity. Zhou's (2022) article specifically suggests for natural linguistics the turn toward global environmental concerns by moving beyond the Anthropocene frame, toward natural living civilized, and by adopting the rationally integrated or multidisciplinary methodology. Overall, Zhou profiling natural linguists as agents of change regardless of the concept.

Stibbe (2014, 2012) posited that natural linguistics owes it to its duty of critiquing consumerist culture, claiming that language fundamental in constructing consumer attitudes. By examining how language constructs the "good life," words can challenge models of temporal consumption. Stibbe's (2009) "handbook of sustainability literacy" provides a comprehensive framework for addressing 21st-century challenges such as climate change and resource depletion. In a different context, Bennett *et al.* (2020) focused on environment and health by analyzing strategies to reduce mortality from non-communicable diseases worldwide.

Comparing the current research with the broader studies of Ecolinguistics, this research aligns with Dash (2019), Fill, and Mühlhäusler (2006), which emphasizes the field's developmental stage and the imperative for further exploration. It builds upon the foundational works of

Yuniawan *et al.* (2017) and Stibbe (2016, 2012, 2009) to reinforce Ecolinguistics' critical roles in challenging the idea of humankind as the central or most important element of existence to foster environmental protection. The present research findings are consistent with Cowley's (2014), Garner's (2004), and Zhou's (2022) articles in emphasizing the relationship between language and the environment and advocating for a radical transformation of Ecolinguistics to address the global environmental crisis. They all propose a deeper exploration of specific discourse communities to uncover nuanced ecological implications. Another study states that a 'harmonious view of language, mind and the world, a future harmonious Ecolinguistics can be realized to become a life science' (Zhou's, 2017)

The current study addresses the research gaps by acknowledging the need to develop analytical frameworks to assess the environmental impacts of language, which contribute to methodological advancements in the field. Incorporating insights from Bennett *et al.* (2020) demonstrates a strong foundation in the literature and a commitment to advancing the field. Besides, focusing on graduates and undergraduates as populations allow for exploring Ecolinguistics education's impact on different stages of academic development.

Moreover, the study tried to bridge the gap between theory and practice by creating and evaluating Ecolinguistics-based educational materials and campaigns to foster environmental literacy and behavior change. Furthermore, it explores the influence of language and culture on environmental perceptions across diverse geographical contexts. By examining the complex interplay of language, power, and ecological justice, as highlighted by Stibbe's works, this research contributes to the ongoing development of Ecolinguistics.

MATERIALS AND METHODS

A group of 100 graduates and level-nine undergraduate English language majors, each with a unique role, are enrolled in an Ecolinguistics course at the English department, College of Education, Majmaah University. The participants were selected for their in-depth understanding of the language-environment connection, which sets them apart in our research.

The study employed various tools, each of which is crucial, for two aims: the first is to raise graduates' and undergraduates' Awareness of environmental violence, effects and the second is to collect the data needed from the participants as follows:

Data collection tools comprised a closed-ended Educational online questionnaire(EOQ) for dual purposes. The questionnaire is divided into three dimensions: environmental Violence types, effects,

and resolutions. It investigates how Ecolinguistics, a field that studies the relationship between language and the environment, can augment and deepen the participants' understanding of environmental violence, its manifestations, consequences, and potential solutions. The study tool is applied among 100 EFL undergraduates and graduates in the English Department at the College of Education and Majmaah University.

A free question was used to elicit participants' thoughts on environmental issues, and the questionnaire was included as a qualitative data-gathering tool. Participants were explicitly asked to identify ideas for environmental protection and provide verbal and non-verbal strategies for reducing environmental violence do not indicate.

The training program includes a biological linguistics course that provides students with a strong understanding of environmental disturbances, particularly their disproportionate impact on specific communities. They focused on finding ways to address these issues through language and other relevant tools to achieve increased awareness of environmental degradation This included ecology a led by graduate students with the aim of providing participants with a deeper understanding of the language-environment relationship that is prepared, provides critical insights and empowers them to manage them the role is discussed as an environmental advocacy tool.

To address the limitations of existing methods, the study is based on the development of research programs to assess the impact of language on the environment. Furthermore, taken together with the findings of Bennett *et al.*, the study examines the complex interactions between language, positive mood, and the environment. The study is based on proposing a research program to measure the environmental impact of language on the environment. Furthermore, taken together with the findings of Bennett *et al.* (2020) it is suggestive that: the study explores the complex interactions between language, virtue, and the environment.

The present study conducted a pilot test of the research instruments in a small group of biology course teachers and students. This phase enabled the development of tools to assess students' increasing ability to deal with environmental violence.

Concerning data analysis tools, the quantitative were analyzed using SPSS version 26. Descriptive statistics were computed to characterize respondents' demographics, questionnaire domains, means, and standard deviations. Qualitative data were analyzed through thematic categorization.

RESULTS AND DISCUSSION

Analysis and Discussion of Quantitative Findings

Table 1: Means and stranded deviations for Environmental Violence types

Dimension 1 Statements	Mean	Std.	Rank	Agreement
Burning fossils fuels	1.96	0.85	3	To some extent
Deforestation	2.02	0.89	2	To some extent

Water pollution	2.14*	0.90	1	To some extent
Sending chemical particles to the air	1.84	1.24	6	To some extent
Lights and sound pollution	1.79	1.16	8	To some extent
Water overuses	1.81	1.16	7	To some extent
Commodity agricultural (commercial)	1.92	1.03	5	To some extent
Overfishing ad hunting	1.92	1.20	4	To some extent
Total Mean	1.93+0.12			To some extent

*indicates the highest mean 1-1.67 = Disagree 1.67- 2- 34= To some extent 2.34- 3.00= Agree

As shown in Table 1, the most common feature of the participants' perceptions of environmental violence was Water pollution, which was identified as the most critical concern, exhibiting the highest mean score of 2.14 and ranked first. Deforestation and fossil fuel combustion followed closely with substantial participant concern, reflected in their respective mean scores of 2.02 and 1.96. Overfishing, hunting, industrial agriculture, and air pollution were considered moderate issues, with mean scores approximating 1.90. Conversely, light and noise pollution and water overuse are seen as less pressing environmental problems, indicated by the lowest mean scores of 1.79 and 1.81, respectively.

Overall, the most significant finding is the overwhelming perception of water pollution as the most critical environmental issue among participants. This is evident in the highest mean score assigned to water pollution, distinguishing it from other environmental concerns. Moreover, the results indicate a clear hierarchy of ecological concerns among participants. While water pollution, deforestation, and fossil fuel combustion are perceived as significant threats, issues like light and noise pollution are considered less pressing. This suggests a nuanced understanding of environmental challenges among the respondents. However, more extensive and diverse sample research is needed to draw more robust conclusions.

Table 2: Means and stranded deviations of Environmental Violence Effects (n=100)

Dimension 2 Statements	Mean	Std.	Rank	Responses
Burning fossil fuels	2.37	1.08	3	Agree
Deforestation causes land erosion and animal distinction	2.36	1.06	4	Agree
Water pollution leads to undrinkable and unhealthy water	2.45	0.94	2	Agree
Sending chemicals into the air leads to poor air quality, which affects all species	2.46*	0.90	1	Agree
Light and sound pollution wreak natural body rhythms, cause sleep deprivation, fatigue, headaches, stress, and anxiety	2.13	1.12	7	To some extent
Freshwater overuse causes shortages of clean water for drinking	2.12	1.15	8	To some extent
Commodity agriculture leads to a higher increase in surface temperature	2.20	1.07	6	To some extent
fishing and hunting for meats lead to severe marine and animal threats that cause the needless loss of billions of fish and animals	2.20	1.16	5	To some extent
Total Mean	2.29+0.14			To some extent

*indicates the highest mean

According to Table 2, the results of the second dimension regarding the participants' perceptions of environmental violence effects show that the statement related to air pollution (burning fossil fuels and sending chemicals to the air) has the highest mean scores (2.46 and 2.45, respectively), indicating substantial agreement among participants about their negative impact on the environment.

While air and water pollution were the primary concerns, the participants' perceptions about deforestation, commodity agriculture, and overfishing/hunting were

more varied. These issues received moderate levels of agreement, with mean scores ranging from 2.20 to 2.37, indicating a mix of opinions among the participants. This complexity underscores the need for a nuanced approach to addressing environmental issues. On the other hand, light and sound pollution received the lowest concern, with a mean score of 2.13, suggesting it is perceived as a less severe environmental issue.

The results reveal a strong awareness among participants about the detrimental effects of air and water pollution. This is evident from the high agreement levels for most

statements, which received an 'Agree' response. However, light and sound pollution and freshwater overuse were categorized as 'To some extent.' The relatively high standard deviations for most statements indicate a

range of opinions among participants. To gain a deeper understanding of their perceptions and the underlying reasons for their responses, additional qualitative data and a larger sample size would be necessary.

Table 3: Means and stranded deviations for Language to Guarantee environmental protection

Dimension 2 Statements	Mean	Std.	Rank	Agreement
Writing wall magazine articles or short posts	2.29	0.10	14	To some extent
Drawing pictures or creating videos scratches about ecosystem's violence types, reasons, and solutions	2.41	0.98	12	Agree
I am using social media posts to call for sustaining/protecting the ecosystem.	2.48	0.96	8	Agree
Volunteering to clean natural water sources to protect water purification	2.68*	0.78	1	Agree
Initiating events to enlighten and debates on environmental violence types	2.66	0.73	2	Agree
calling for reducing buildings and streets ' lights, stopping fireworks and electric light bulbs	2.30	1.03	13	To some extent
Create posters to inform people about the dangers of cutting forests and losing fertile lands, which can lead to starvation and mass migration.	2.64	0.82	3	Agree
Use Buzz-words	2.48	0.93	9	Agree
Speak to officials with more authority and power to act legally toward environmental violence.	2.51	0.99	7	Agree
Share books and movie links that raise environmental awareness among schools and college' students' social media groups	2.52	0.96	6	Agree
Ecolinguistics is a field of study that examines the relationship between language and the environment.	2.53	0.96	5	Agree
Eco-linguists argue that language can be used to promote environmental awareness and sustainability.	2.45	0.99	11	Agree
Ecolinguistics can reduce environmental violence by raising awareness of environmental issues, promoting sustainable practices, and challenging harmful environmental discourses.	2.57	0.87	4	Agree
Ecolinguistics is a growing field of study with the potential to contribute significantly to the fight against environmental violence.	2.45	1.02	10	Agree
Total Mean	2.50+0.12			Agree

**indicates the highest mean*

Table 3, indicates the participants' strong belief in language's potential to safeguard the environment, as noted in an overall mean score of 2.60. Direct actions like water clean-up and environmental discussions were prioritized (mean: 2.68, 2.66), highlighting the importance of tangible efforts alongside language-based strategies. There were three major research findings that were disclosed by the present study. First, the participants have a very high level of perceived credibility with respect to language in conserving the environment with the overall score of 2.60. Second, it encompasses a wider aspect in terms of environmental protection than the concept solely embraced by the LLM program. As stakeholders focus on tangible actions like purification of water and discussion of environmental issues, they also acknowledge the role of language measures, including social media

to will be employed to popularize on the same. This accords with the fact that participants recognized that environmental issues are complex, as opined by Lawton (2007) and Peluso (2020), whose research the participants commissioned to reveal the state of nature biodiversity and use the information to engage the public and affect policy making. Last of all, prioritisation of direct actions like water purification while indicating a degree of support for more top down inspired activity is also focused on measurable interpersonal outcomes which is also in consensus with the findings of Ponton (2022). This implies that while the use of language is a very strong weapon, it has to be complemented with special actions for any meaningful change to happen in the environment. In conclusion, the quantitative findings that have been established addressed the first research question, which

was: How can Ecolinguistics help in the knowledge building and perception measuring of EFL graduates and undergraduates regarding environmental violence and its effects? However, they also stressed the role of language as an environmental protection means at the same time that they postulated the usefulness of additional direct measures and actions to obtain practical and effective results.

Results and Discussion of the Open-ended Question

An index of 34 out of 100 participants provided written solutions to eliminate environmental violence and to optimise on the affordances of environmental protection practices. This technique is attached in Appendix 2. Their proposal answered the second question of the study: First of all, have undergraduates and graduates used the tools to combat environmental violence and third: Is ecology effective at raising awareness and cleaning third world's environmental violence? The force of biology is inspiring and reassuring as evidenced by their responses, as presented below. The study classified the participants' suggestions into the following categories:

The first category is language-oriented strategies defined as concentrating on language as the primary means of raising an individual's awareness and motivating him or her. It is with language, as Méndez and Pérez (2005) explain for sustainable use, storytelling, and communication practices, a tool that can enfranchise and compel us to act in support of the environment.

The second category was kind of framework, awareness raising strategies, proves that the public enlightening concerning the environmental problems also remains popular with Payne's (2006) practice that involved campaigns, outreach, education, and social networks.

Strategies for youth engagement: The third category is the educational programs and activities directed at young people; Riemer *et al.* (2014) stated that the programs or activities for involving the youths should be designed to increase involvement in environmental issues.

Fourth category: Several policy and regulatory measures advocate for the creation and implementation of sound measures to address environmental offenses. These measures include; Polluters shall be made to answer and sound laws on the environmental crimes shall be implemented. This view was supported by Babanina *et al.* (2021) study on how effective environmental laws are in preventing environmental crimes.

The fifth type is personal action strategies of personal commitment, minimizing the exploitation of the environment, utilizing sustainable methods, and environment-recommended protection. These findings are in line with de Young's (2000) and Ponton's (2022) in motivating and encouraging heartfelt speeches.

On the sixth category of communication strategies for creativity, many suggestions point to the importance of using the other factors of communication which include using of emotion and storytelling in any media platform because most of the world population receives

their environmental information from the mass media and this makes the mass media a dominant influence to environmental consciousness. This finding correlate with Sachsman and Valenti (2020) who noted of the persuasive use of music and video.

The last category of emerging biophysical institutions is environmental management strategies which relates to prevention of environmental disturbances, reduction of pollution on and suppression grazing, promotion of agricultural diversity Kirschke and Nevig (2017) observed the same.

Discussion

The above suggested categories explain the fact that environmental violence is complex in nature. By combining these approaches, people can create a brighter ecological future. It is important to note that some responses suggest initiating national companies to address environmental violence, which may require further exploration and planning to determine their feasibility and effectiveness. These qualitative results showed the participant's awareness of Ecolinguistics' potential role in shaping environmental attitudes and behaviors. Their high rating for engaging with authoritative figures to address power dynamics reflects their understanding of the importance of influencing decision-makers and their strategic thinking. These reflections not only enrich the diversity of opinions but also add a layer of complexity to the research findings. More importantly, the participants' commitment to action, as they stress the need for tangible actions to protect the environment, is truly inspiring.

Last but not the least, the quantitative and the qualitative results are harmonising and forming literate intersections of points that contribute positively to the general analysis of the study. The quantitative findings responded to the first research question of the study on the involvement of biology in EFL undergraduate and graduate awareness of environmental violence and increase of the scores. The qualitative findings offered several solutions that answered the second study question: developed and non-developed undergrad and graduate consumers of resources, surge. This paper will focus on responding to the third study question; how natural language skills can be used to enhance social responsibility and curb violence on the natural environment globally.

The insights from the research could help change the way students perceive the environment and the content of language that promotes environmental violence and encourage them to embrace the protection of the environment. To avoid human violence against other species, one of the areas pinpointed in the study is linguistics; participants of the study extend environmental information to solve these issues.

CONCLUSION

The study also reveals that students have unlimited capacity to become effective advocates for environment conservation. When language stimuli are used with actual

tasks, then both mind expansion and positive affect may be facilitated. Nevertheless, it is suggested that the increasing pressure on the need for more research should be done as the population of the study needs to be enlarged and ways of using this knowledge need to be elaborated. The incorporation of environmental linguistics into general environmental programs remains essential for molding the nation's environmentally competent population grade. These studies stem from a time when people were becoming more conscious of environmental matters. Nevertheless, the results obtained also show the impact of language-related need for more empirical work that links emotion and knowledge together with behaviour. This is important to enhance the knowledge on the impact of language related interventions. The study answers the research questions, and illustrates how data substantiate findings that enhance understanding of these intricate subjects by presenting quantitative and qualitative data on perceptions, knowledge, and attitudes of the public toward the environment encounter violence. Thus this information could be used when devising the right communication approach, public policy and education to do away with environmental degradation.

Implications

The quantitative and qualitative study now gives some method for analysing language and environmental concern or responsibility. To a certain extent, this research is significant for the biolinguistic field since it considers linguistic characteristics applicable to environmental concerns and their capacity to encourage changing behaviours. The findings offer rich data with practical implications for environmental communicators, educators, and policymakers, enabling these practitioners. Quantitative research applies to practices in these areas as it transforms the evolution of the community's consciousness. Some of the findings frequently include that appropriate language, as a tool leads to formation of meaningful relationships between an individual and the environment thus promoting the call to action on the prevention of environmental violence.

This area of research is therefore unique because of the focus based on natural language alongside research as a way of understanding the impact of language in the environment. Besides, merging quantitative and qualitative data offers a wider view of the participants' views and recommendations on how to effect behavioral change when it comes to handling environmental issues. If more information is consumed, it increases the credibility of the findings generated by the study. Above all, the research focuses on students' participation and leadership illustrated by granting graduate students the authority to conduct workshops themselves.

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REFERENCES

- Abdali, A. L. M., *et al.* (2018). Hybrid power generation by using solar and wind energy. *Energy*, 2(3).
- Baker, S. (2015). *Sustainable development*. Routledge.
- Babanina, V., Mykytychuk, O., Matiushenko, O., & Ladniuk, V. (2021). Prevention of crimes against the environment: The experience of Ukraine. *Cuestiones Políticas*, 39(70).
- Bennett, J. E. (2020). NCD Countdown 2030: Pathways to achieving Sustainable Development Goal target 3.4. *The Lancet*, 396(10255), 918–934.
- Beckerman, W. (2017). 'Sustainable development': Is it a useful concept? In *The economics of sustainability* (pp. 161–179). Routledge.
- Canagarajah, S. (2013). *Ecolinguistics: Language, ecology, and the politics of communication*. Routledge.
- Chen, S. (2016). Language and ecology: A content analysis of ecolinguistics as an emerging research field. *Ampersand*, 3, 10.1016/j.amper.2016.06.002.
- Dash, R. K. (2019). What is ecolinguistics? *Language in India*, 19(5), 379–384.
- Dash, K. R. (2019). Ecolinguistics: The linguistics of the twenty-first century. *Language in India*, 19(7), 253–258.
- De Young, R. (2000). New ways to promote pro-environmental behavior: Expanding and evaluating motives for environmentally responsible behavior. *Journal of Social Issues*, 56(3), 509–526.
- Fill, A. F., & Penz, H. (Eds.). (2017). *The Routledge handbook of ecolinguistics*. Routledge.
- Fill, A., & Muhlhausler, P. (Eds.). (2006). *Ecolinguistics reader: Language, ecology, and environment*. A&C Black.
- Halliday, M. A. (2004). Introduction: How big is a language? On the power of language. *The Language of Science*, 5, 19–32.
- Hanks, W. C. (2010). *Language, culture, and society: A linguistic anthropology perspective*. Cambridge University Press.
- Kirschke, S., & Newig, J. (2017). Addressing complexity in environmental management and governance. *Sustainability*, 9(6), 983.
- Luardini, M. A., & Simbolon, M. (2016). Ecolinguistics for teaching English. *The Asian EFL Journal: Professional Teaching Articles, Indonesian International Conference*, 3, 238–248.
- Lawton, J. H. (2007). Ecology, politics, and policy. *Journal of Applied Ecology*, 44(3), 465–474.
- Lee, B. X. (2016). Causes and cures VIII: Environmental violence. *Aggression and Violent Behavior*, 30, 105–109.
- Misiąszek, G. W. (2023). Aneco-pedagogical, ecolinguistic reading of the Sustainable Development Goals (SDGs): What we have learned from Paulo Freire. In *Paulo Freire Centennial* (pp. 145–159). Routledge.
- Menton, M., & Le Billon, P. (Eds.). (2021). *Environmental defenders: Deadly struggles for life and territory*. Routledge.
- Méndez García, M. D. C., & Pérez Cañado, M. L. (2005). Language and power: Raising awareness of the role

- of language in multicultural teams. *Language and Intercultural Communication*, 5(1), 86–104.
- Norton, B. (2000). *Identity and language learning: Gender, ethnicity, and educational change*. Longman.
- Peluso, M. (2020). *Environment and language: How language education can contribute to the environmental debate*.
- Ponton, D. M. (2022). Ecolinguistics and positive discourse analysis: Convergent pathways. *MediAzioni*, 34, A36–A54.
- Payne, P. G. (2006). Environmental education and curriculum theory. *The Journal of Environmental Education*, 37(2), 25–35.
- Riemer, M., Lynes, J., & Hickman, G. (2014). A model for developing and assessing youth-based environmental engagement programs. *Environmental Education Research*, 20(4), 552–574.
- Sachsman, D. B., & Valenti, J. M. (Eds.). (2020). *Routledge handbook of environmental journalism*. Routledge.
- Shelestyuk, E. (2020). Exercising eco-linguistic approach in teaching English: Proposed conventions for TESOL/TEFL pedagogy. In *The Third International Conference on Current Issues of Languages, Dialects and Linguistics* (Vol. 31, pp. 1–21).
- Steffensen, S. V., & Fill, A. (2014). Ecolinguistics: The state of the art and future horizons. *Language Sciences*, 41, 6–25.
- Stibbe, A. (2015). *Ecolinguistics: Language, ecology, and the stories we live by*. Routledge.
- Stibbe, A. (2014). An ecolinguistics approach to critical discourse studies. *Critical Discourse Studies*, 11(1), 117–128.
- Waas, T., Hugé, J., Verbruggen, A., & Wright, T. (2011). Sustainable development: A bird's eye view. *Sustainability*, 3(10), 1637–1661.
- Yuniawan, T., Rokhman, F., Rustono, R., & Mardikantoro, H. B. (2017). The study of critical eco-linguistic in green discourse: *Prospective eco-linguistic analysis. Humaniora*, 29(3), 291.
- Zhou, W. (2022). Ecolinguistics: A half-century overview. *Journal of World Languages*, 7(3), 461–486.
- Zhou, W. (2017). Ecolinguistics: *Towards a new harmony. Language Sciences*, 62, 124–138.