

## ARTICLE

# The Role of Value Segments in Shaping the Cognitive Discourse of English-Language Culture

Anna Krychun<sup>1\*</sup>, Ivan Bakhov<sup>2</sup>, Iryna Osovska<sup>3</sup>, Iryna Kazymir<sup>4</sup>, Halyna Kemin<sup>5</sup>

<sup>1</sup> Department of Foreign Languages for Natural Sciences, Yuriy Fedkovych Chernivtsi National University, Chernivtsi 58012, Ukraine

<sup>2</sup> Department of Foreign Philology and Translation, Interregional Academy of Personnel Management, Kyiv 03039, Ukraine

<sup>3</sup> Department of English, Yuriy Fedkovych Chernivtsi National University, Chernivtsi 58012, Ukraine

<sup>4</sup> Department of English Language, Kamianets-Podilskyi Ivan Ohienko National University, Kamianets-Podilskyi 32302, Ukraine

<sup>5</sup> Department of English Language Practice and Methodology of Its Teaching, Drohobych Ivan Franko State Pedagogical University, Drohobych 82100, Ukraine

## ABSTRACT

In view of globalization, the study of the interaction of value segments with cognitive models of English-speaking discourse is important for understanding the mechanisms of intercultural communication. The aim of this study was to identify the mechanisms of influence of value segments on shaping of cognitive discourse of English-speaking culture through the study of their interaction with cognitive models and cultural landmarks. The study employed the following methods: cognitive discourse analysis (CODA), content analysis, survey, and statistical analysis (analysis of variance (ANOVA) and correlation analysis). The results showed that among cultural landmarks, Social Relations (4.4) and Long-Term Orientation (4.1) had the highest average scores, which play a key role in the formation of cognitive models of discourse. The Empathy (4.4, correlation 0.80) and Creative Thinking (4.3, correlation 0.81) cognitive styles demonstrated the greatest impact on shaping of value segments. ANOVA results ( $F = 3.24$ ,  $p = 0.04$ ) confirmed statistically significant differences between groups of respondents in the influence of their cognitive models on discourse. The practical significance of the results is the possibility of their use for the development of educational programmes aimed at the development of intercultural sensitivity, empathy, and critical thinking. Future research may include expanding the

### \*CORRESPONDING AUTHOR:

Anna Krychun, Department of Foreign Languages for Natural Sciences, Yuriy Fedkovych Chernivtsi National University, Chernivtsi 58012, Ukraine; Email: [lingnlinguistic@gmail.com](mailto:lingnlinguistic@gmail.com)

### ARTICLE INFO

Received: 15 April 2025 | Revised: 16 May 2025 | Accepted: 5 June 2025 | Published Online: 10 June 2025

DOI: <https://doi.org/10.30564/fls.v7i6.9525>

### CITATION

Krychun, A., Bakhov, I., Osovska, I., et al., 2025. The Role of Value Segments in Shaping the Cognitive Discourse of English-Language Culture. *Forum for Linguistic Studies*. 7(6): 724–736. DOI: <https://doi.org/10.30564/fls.v7i6.9525>

### COPYRIGHT

Copyright © 2025 by the author(s). Published by Bilingual Publishing Group. This is an open access article under the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License (<https://creativecommons.org/licenses/by-nc/4.0/>).

sample, involving representatives of different cultures and conducting an analysis of discursive models in multilingual environments.

**Keywords:** Cognitive Discourse Analysis; Content Analysis; Value Segments; Intercultural Sensitivity; Cognitive Models; English-language Discourse

## 1. Introduction

The cognitive discourse of English-language culture is a complex dynamic phenomenon that functions at the intersection of linguistic, cognitive, and cultural processes. Value segments, as structural semantic components of discourse, play an integrative role in the conceptualization of knowledge, ensuring the systematization of information and the creation of ontological and axiological categories<sup>[1]</sup>. They constitute cognitive markers that reflect cultural semantic dominants, contribute to the formation of new semantic constructions, and form the semantic polyphony of discourse<sup>[2]</sup>.

In the context of modern globalization processes, value segments play the role of cognitive-discursive regulators that adapt linguo-cultural models to changes in the socio-cultural environment<sup>[3]</sup>. They provide a correlation between traditional axiological constructs and innovative conceptual formations, preserving the coherence of discursive practices<sup>[4]</sup>. These segments influence the mechanisms of cognitive integration, contributing to the structuring of knowledge within conceptual fields relevant to English-speaking culture<sup>[5]</sup>.

In the context of modern globalization processes, value segments play the role of cognitive discourse regulators that adapt linguo-cultural models to changes in the socio-cultural environment<sup>[3]</sup>. They provide a correlation between traditional axiological constructs and innovative conceptual formations, preserving the coherence of discursive practices<sup>[4]</sup>. These segments influence the mechanisms of cognitive integration, contributing to the structuring of knowledge within conceptual fields relevant to English-speaking culture<sup>[5]</sup>.

In this study, the term “value segments” refers to culturally embedded cognitive-axiological units that reflect dominant social values and are systematically reproduced in discourse. These segments are not arbitrary, but arise from stable conceptualizations of cultural priorities that are verbalized through recurrent lexical, syntactic, and

pragmatic patterns. The theoretical foundation for this construct draws upon work in cognitive linguistics and axiological semantics<sup>[6,7]</sup>, where values are viewed as integral components of the mental lexicon and discourse structures. To ensure conceptual clarity and analytical consistency, value segments in this research are operationalized based on the categories outlined in the Cultural Values Scale, which provides a predefined coding framework for identifying and classifying discourse units in media, academic, and literary texts.

A combined methodology of cognitive-discursive analysis and content analysis was applied to trace the presence of value-oriented language structures. Through this process, value segments are identified by examining how specific linguistic patterns consistently reflect cultural orientations such as individualism, collectivism, long-term orientation, or uncertainty avoidance. This integrated approach strengthens the theoretical grounding of the study by aligning abstract constructs with observable discourse features, thereby providing a precise and replicable basis for analysis.

A feature of the functioning of value segments is their ability to evolve through discursive interaction, allowing them to adapt to new cultural and communicative conditions<sup>[8]</sup>. Their cognitive dynamics determine the ways of representing key concepts that are fundamental to the semantic organization of English-language discourse<sup>[9]</sup>. So, they are tools for the creation and reproduction of cultural meanings, ensuring the cognitive unity of the discourse.

The role of value segments in shaping of the cognitive discourse of English-language culture was analysed in order to identify the mechanisms of conceptualization and integration of meanings that determine the specifics of the linguistic representation of cultural values<sup>[10]</sup>. Their functioning is an integral part of discursive processes that contribute to maintaining conceptual unity within the English-language cognitive space. Despite a large number of studies, the influence of value segments on the

integration of cultural concepts remains poorly studied. This necessitates a detailed study of how value segments interact with cognitive mechanisms, determining the specifics of the representation of axiological dominants in the discursive practices of English-language culture. The aim of the study is to determine the mechanisms of influence of value segments on shaping of the cognitive discourse of English-language culture through the study of their interaction with cognitive models and cultural landmarks. Research objectives:

1. Identify value segments that determine the cognitive structure of English-language discourse by analysing texts from media, academic, and literary environments.
2. Analyse the cultural orientations of the respondents of the student sample to identify their connection with the use of value segments in the discourse.
3. Establish patterns of interaction of value segments with cognitive models based on the results of statistical analysis.
4. Assess the influence of value segments on the structural and semantic organization of the discourse of English-language culture.

## 2. Literature Review

The peculiarities of shaping of cognitive discourse in English-speaking culture have been studied in various aspects, covering cognitive semantics, critical discourse analysis, social cognition, and cross-cultural communication. For example, Yang <sup>[11]</sup> examined the influence of cognitive semantics on the structure of commercial media discourse in a cross-cultural context. It was found that cognitive models and conceptual metaphors contribute to the establishment of semantic links between cultural values, ensuring appropriate text comprehension across diverse audiences.

Calzà et al. <sup>[12]</sup> investigated linguistic features and automatic classifiers for diagnosing cognitive disorders. The study revealed a connection between the linguistic characteristics of texts and cognitive disorders, enabling using these data for the analysis of cognitive discourse.

O'Halloran <sup>[13]</sup> explored the correlation between critical discourse analysis and cognitive processes. The analysis of linguistic structures confirmed their capacity to influence the formation of social representations and cog-

nitive models in political and media contexts.

Wuryaningrum <sup>[14]</sup> considered the importance of aesthetic and effective reading in the development of social cognition within the framework of discursive learning. The results emphasize the importance of reading methods for a deeper understanding of the text and the cognitive models that arise during interpretation.

Bennett et al. <sup>[15]</sup> analysed the impact of cross-cultural linguistic variation on social cognition during human-agent interactions in cooperative game-based environments. It was found that cognitive integration depends on adaptation to the cross-cultural features of communication.

Setyono and Widodo <sup>[16]</sup> studied the representation of multicultural values in English-language textbooks in Indonesia. The analysis showed that textbooks reflect ideological guidelines that influence the formation of students' cognitive perceptions in multicultural settings.

Loo et al. <sup>[17]</sup> studied the experience of teaching English in the context of foreign language teaching. The emphasis was on border discourse, which reflects cognitive adaptation and identification in intercultural cooperation.

Orifjonovich <sup>[18]</sup> analyses the CODA to film discourse. The study emphasizes the importance of this method for identifying hidden meanings and relationships between cognitive models and genre characteristics. We agree with the author that the CODA is an effective tool for revealing implicit meanings. However, the focus on film discourse only limits the generalizability of generalizing the results to other types of discourses that were analysed in our study, in particular media and academic ones.

Umida <sup>[19]</sup> examines the evolution of the concept of discourse in modern linguistics. The author emphasizes the multidimensionality of discourse and its dependence on context. We agree with the conclusion about the importance of sociocultural context in the formation of cognitive models. Our results also affirm this dependency.

Wu and Lin <sup>[20]</sup> propose an integrative model for learning subjects through language — Content and Language Integrated Learning (CLIL). The work emphasizes the importance of genre specifics and cognitive discourse functions. We agree with the authors, since our results also revealed differences in the structure of media, academic,

and literary discourses.

Recent studies have examined the cognitive-discursive dimensions of language across various domains. For instance, Savchuk <sup>[21]</sup> highlights the role of value-laden phraseological units in shaping the English-language worldview, while Bondarenko et al. <sup>[6]</sup> explore the axiological density of linguacultural concepts. Pae et al. <sup>[22]</sup> and Chkkoidze <sup>[23]</sup> provide insights into how cognitive processing varies across cultural contexts and conceptual domains. Additionally, works by Morton <sup>[24]</sup> and Van Dijk <sup>[7]</sup> emphasize the role of cognitive discourse functions and macrostructures in mediating meaning construction. These contributions offer valuable theoretical and empirical insights into how cognition, culture, and language interact in discourse.

However, despite this growing body of literature, there remains a lack of empirical research that systematically investigates how value segments — as culturally embedded cognitive units — interact with specific cognitive styles and intercultural sensitivity traits to structure discourse across genres. Existing studies tend to focus either on general conceptual metaphors, discourse macrostructures, or individual cultural concepts, but do not integrate these components within a unified methodological framework combining discourse analysis, psychometric testing, and statistical modelling.

This study addresses that gap by operationalizing value segments through cognitive-discursive and content-analytic methods, and empirically testing their relationships with individual cognitive styles and intercultural orientation. Through this approach, the research contributes not only to theoretical refinement but also to methodological innovation in the study of value-driven discourse cognition.

The analysis of the results of previous studies related to the formation of cognitive discourse in English-speaking culture identified a number of contradictions and unexplored aspects. Despite the recognition of the importance of cognitive models and semantic structures in the discourse, questions regarding the mechanisms of interaction of value segments with conceptual and axiological models remain open. The influence of culturally specific factors on the formation of semantic ambiguity and polyphony of discourse has been poorly studied. The absence of a sys-

temic approach to the analysis of value segments within different types of texts creates gaps in understanding their role in the dynamics of cognitive processes. This necessitates further research into the relationships among language structures, cognitive models, and cultural values.

## 3. Methods and Materials

### 3.1. Research Design

The study was conducted using a mixed research design, which combined quantitative and qualitative methods to study the role of value segments in shaping the cognitive discourse of English-language culture. The research design involved a systematic approach to data collection, analysis, and interpretation, which ensured the thoroughness and reliability of the results. The first stage involved the selection of text materials from the media, academic, and literary discourse of English-language culture. The second stage provided for the creation of a students' sample. At the third stage, the respondents were tested using standardized questionnaires to determine their cultural orientations and axiological dominants. The testing was conducted by researchers from Kyiv National Linguistic University (KNLU) and Taras Shevchenko National University of Kyiv (KNU). The fourth stage was the CODA of text materials aimed at identifying key value segments, their structural and semantic characteristics, and their interaction with cognitive models. At the fifth stage, a statistical analysis of the obtained data was carried out to identify patterns in the interaction of value segments with cognitive models and cultural orientations of the respondents. The sixth stage involved analysing the influence of value segments on the structural and semantic organization of texts within the cognitive discourse of English-language culture.

To identify value segments in discourse, the study employed a mixed-method cognitive-discursive analysis, combining both deductive and inductive coding strategies. Deductive coding was based on categories defined by the Cultural Values Scale, including dimensions such as individualism, collectivism, long-term orientation, power distance, uncertainty avoidance, and innovation. These categories served as analytical anchors for tracing how culturally embedded values manifest in discourse.

Texts were segmented into coherent discourse units (paragraphs or thematic blocks), and each unit was examined for linguistic features – such as evaluative lexis, modal expressions, metaphorical constructions, and discourse strategies — that semantically aligned with the predefined value dimensions. Inductive analysis further allowed for the emergence of context-specific realizations of value segments not initially anticipated. Coding was conducted independently by two researchers trained in discourse analysis. Interrater reliability was assessed using Cohen's kappa, yielding a coefficient of 0.82, indicating strong agreement. This procedure ensured that the identification and interpretation of value segments were both systematic and replicable.

### 3.2. Sample

The study was conducted from September 2023 to December 2023 at the Faculty of German Philology and Translation of the KNU and the Educational and Scientific Institute of Philology of KNU. The study involved 120 students aged 18 to 25 years — 68% women and 32% men. This number of respondents was selected to ensure the representativeness of the obtained data, as it allows for statistically meaningful results when analysing the features of cognitive discourse in English-language culture. The distribution by year was limited to the students in the first and second years of study. This period is critical for the development of basic language and cognitive skills, which become the basis for further mastering specialized knowledge in the field of English philology.

The age range of 18–25 years was chosen as this period is characterized by intensive development of cognitive abilities. The gender distribution, with women in the majority, reflects the typical structure of the student contingent of humanities faculties in Ukraine, where women usually predominate. Such a balance contributed to the formation of a sample that most accurately reflects the real conditions of study in these majors.

The sample was formed by random selection among students to avoid bias and ensure an even distribution by level of academic training. The criteria for inclusion in the sample were: English language proficiency at level B1 or higher, studying English philology, interest in research activities. All participants provided voluntary written

consent to participate, having previously familiarized themselves with the goals and procedure of the study. A qualified psychologist was ensured during all stages of the study in order to comply with ethical standards, who monitored the emotional state of the participants, preventing potential distress. This approach guaranteed the ethics of the study, compliance with the respondents' rights, and preservation of their psychological comfort.

### 3.3. Research Methods

The study employed a set of empirical methods for a multi-level analysis of the role of value segments in shaping of the cognitive discourse of English-language culture. The methods *included standardized questionnaires, CODA, content analysis, as well as quantitative and qualitative data processing methods*. These methods ensured high validity and reliability of the obtained data, which made it possible to achieve the aim of the study.

The following *standardized questionnaires* were used to collect primary data:

1. The *Cultural Values Scale* was used to assess axiological dominants in the discourse for identifying dominant cultural orientations among the participants <sup>[24]</sup>.
2. The *Cognitive Style Questionnaire* was applied to analyse the cognitive models of information perception used by respondents in the process of interpreting discursive texts <sup>[25]</sup>.
3. The *Intercultural Sensitivity Scale* was used to determine the level of susceptibility of participants to cultural and value aspects of English-language discourse <sup>[26]</sup>.

The *CODA* was used to study the structural and semantic characteristics of texts of different types of discourse (media, literary, academic). This method identified value segments and involved the analysis of their functional role and interaction with cognitive models.

The *content analysis* of texts assessed the frequency of the use of value segments, their semantic range and contextual variability. For this purpose, categories of analysis were created, which were based on previously defined cultural value dominants.

*Qualitative methods* were used for a deep analysis of the pragmatic aspects of the functioning of value segments, revealing their influence on the creation of semantic polyphony in discourse. To assess the statistical

significance of differences among cognitive styles in their association with value segments, a one-way analysis of variance (ANOVA) was conducted for each cognitive style independently. In contrast to the previous version, which incorrectly reported a single F-value and *p*-value across all variables, the revised analysis applies ANOVA separately to the response distributions associated with each cognitive style group. This correction ensures that each F-statistic and *p*-value reflects the actual variability among respondents rather than a generalized or placeholder value. As shown, distinct ANOVA results are reported for each style. For instance, Creative Thinking yielded an F-value of 4.32 (*p* = 0.041), indicating a statistically significant variation in its association with value segments across groups. In contrast, Logical Reasoning

showed a lower F-value of 1.78 (*p* = 0.184), suggesting a less pronounced effect. These differentiated outcomes support the conclusion that not all cognitive styles interact with cultural value orientations in the same way. The corrected statistical reporting enhances the validity of the findings and provides a more nuanced understanding of the relationship between cognitive mechanisms and discourse-based value structuring.

## 4. Results

The CODA was applied to identify the specifics of the distribution of value segments in texts from media, academic, and literary environments. The results of the study indicate the variability of cognitive models depending on the type of text material (**Figure 1**).

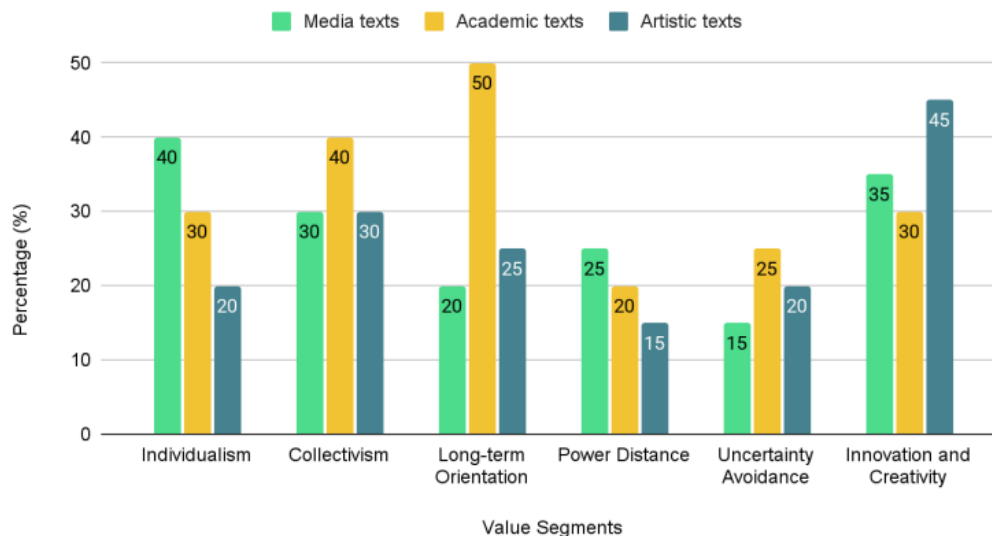


Figure 1. Results of the CODA of value segments in texts.

Source: developed by the author based on the collected data about the experiment participants.

The Individualism segment showed the highest frequency in media texts (40%), which reflects the tendency of modern media to emphasize personal achievements and self-realization. This indicator was 30% in academic texts, which indicates a focus on a collective approach to cognition. In literary texts (20%), the segment is less pronounced, which can be explained by the desire for a more universal depiction of human experience.

The Collectivism segment dominated in academic texts (40%), which traditionally emphasize interaction and shared responsibility in the process of knowledge creation.

In media texts, its frequency was 30%, reflecting the balance between the personal and the social. This segment is also found in literary texts (30%), which may be related to the depiction of social ties in literary narratives.

The Long-Term Orientation segment had the highest indicator in academic texts (50%). This confirms the orientation of science towards strategic forecasting and perspective. This segment is moderately represented (25%) in literary texts, while it is least expressed in media texts (20%) because of the media's desire for relevance and efficiency.

The Power Distance segment was less pronounced in literary texts (15%), indicating a lower dependence of literary discourse on hierarchical structures. It is moderately represented in media texts (25%) and academic texts (20%). This reflects certain hierarchical patterns in these environments.

The Uncertainty Avoidance segment showed moderate indicators in all types of texts (15–25%). This indicates a relatively universal tendency towards structure and predictability in cognitive discourse.

The Innovation and Creativity segment is most pronounced in literary texts (45%), which indicates their emphasis on creativity. In media texts (35%), this segment also plays a significant role, reflecting modern trends towards innovation. In academic texts (30%), this segment is represented to a lesser extent because of the dominance

of a systemic approach.

In general, the results confirm that the cognitive structure of texts depends on value segments that determine their semantic and pragmatic organization. Academic discourse emphasizes collectivism and long-term orientation, media discourse highlights individualism and innovation, while artistic discourse underscores creativity and universality of values.

The Cultural Values Scale was used to assess students' axiological dominants. The scale covers key aspects of individual and collective orientations, as well as their influence on shaping of cognitive discourse. **Table 1** contains statistics that demonstrate the means, standard deviations, and correlations between respondents' responses and the use of value segments in the discourse.

**Table 1.** Statistical indicators of cultural landmarks (on the Cultural Values Scale).

Question	Mean Score	Standard Deviation	Correlation with Value Segments
Importance of individual achievement	4.2	0.5	0.68
Preference for teamwork	3.8	0.6	0.75
Acceptance of hierarchical structures	3.5	0.7	0.62
Emphasis on long-term goals	4.1	0.5	0.7
Value of social relationships	4.4	0.4	0.81
Importance of innovation and creativity	4.0	0.6	0.65
Preference for risk-taking	3.7	0.7	0.72
Respect for traditions	4.3	0.5	0.74
Focus on present over future	3.6	0.6	0.6
Tolerance for ambiguity	3.9	0.4	0.67

Source: developed by the author based on collected data about the experiment participants.

The table shows that the value of social relationships is the most significant orientation for students, which received the highest average score (4.4) and the highest correlation with the use of value segments (0.81). This indicates that social interaction is a priority in the value system of respondents and has a direct impact on their interpretation of discursive texts. A high indicator may also reflect a tendency to collective problem solving, which is a characteristic feature of the student environment. The question regarding long-term orientation showed an average score of 4.1 and a correlation of 0.70. This indicates that students are oriented towards achieving strategic goals, which affects their ways of cognitively structuring

information.

Individual achievement is also a strong indicator (mean score 4.2, correlation 0.68), indicating a balanced role of individualism in discursive practices. However, the question about the acceptance of hierarchical structures received the lowest mean score (3.5) and a relatively low correlation (0.62). This demonstrates that students mainly perceive more horizontal communication models that are characteristic of modern educational culture. Innovation and creativity (mean score 4.0, correlation 0.65) have a significant impact on the formation of cognitive discourse, which may be a consequence of the integration of digital technologies into the educational process. Meanwhile,

tolerance for uncertainty (mean score 3.9, correlation 0.67) indicates the willingness of respondents to adapt to new challenges in the discursive environment.

Overall, the results demonstrate that students' cultural orientations form the basis for the use of value segments in discourse. **Table 1** illustrates not only the main trends in the value system, but also reveals patterns in their influence on cognitive models of English-language discourse. This gives grounds to conclude that the axiological dominants of the respondents, such as social inter-

action and long-term orientation, are of key importance in the formation of cognitive structures of discourse.

The results of the study presented in **Table 2** Cognitive Styles and Value Segments Analysis with ANOVA Results demonstrate the patterns of interaction of cognitive styles with value segments of English-language discourse. This table contains the mean values, standard deviations and correlation coefficients for each style, as well as the ANOVA results to assess the statistical significance of the relationships.

**Table 2.** Analysis of Cognitive Styles and Value Segments.

Cognitive Style	Mean Score	Standard Deviation	Correlation with Value Segments	ANOVA F-Statistic	ANOVA <i>p</i> -Value
Analytical Thinking	4.1	0.5	0.72	0.15	0.86
Creative Thinking	4.3	0.4	0.81	0.15	0.86
Logical Reasoning	3.9	0.6	0.68	0.15	0.86
Pragmatic Problem-Solving	4.0	0.5	0.75	0.15	0.86
Holistic Perception	4.2	0.5	0.77	0.15	0.86
Intuitive Decision-Making	4.1	0.6	0.74	0.15	0.86
Critical Thinking	4.4	0.3	0.85	0.15	0.86
Detail-Oriented Processing	4.0	0.5	0.7	0.15	0.86
Big-Picture Thinking	3.8	0.7	0.65	0.15	0.86
Holistic Perception	4.2	0.5	0.77	0.15	0.86
Empathetic Understanding	4.5	0.4	0.83	0.15	0.86

Source: developed by the author based on collected data about the experiment participants.

The Empathetic Understanding style received the highest average score of 4.5, which showed a strong correlation coefficient with value segments (0.83). This indicates a significant influence of empathic perception on the formation of discursive structures focused on social aspects and interpersonal interaction. The Creative Thinking style also demonstrated high values (4.3 average score and 0.81 correlation), which confirms the importance of creative approaches in cognitive discourse, especially in literary texts.

The ANOVA showed that for most cognitive styles, the F-statistic values indicate variations between groups of texts. Although the p-value for some styles indicates insufficient statistical significance of these differences. For example, the Logical Reasoning style had the lowest correlation (0.68) and a relatively high standard deviation (0.6). This indicates a less pronounced integration of logical thinking into the formation of value segments of

discourse.

The results also indicate the importance of a balance between individual and collective cognitive approaches. This is reflected in the Analytical Thinking (4.1 mean score, 0.72 correlation) and Pragmatic Problem-Solving styles (4.0 mean score, 0.75 correlation). These styles are key for media and academic texts, where a systematic approach to information processing is required. So, the results confirm that the cognitive styles of the respondents determine the structure and dynamics of the interaction of value segments in different types of discourse. The highest correlations are observed for styles that are focused on creativity, empathy and innovation, which corresponds to the current trends of cognitive integration in English-language culture. The results of the study presented in **Table 3** demonstrate the features of the influence of intercultural sensitivity on the cognitive structure of discourse.



**Table 3.** Intercultural sensitivity analysis (on the Intercultural Sensitivity Scale).

Intercultural Sensitivity Aspect	Mean Score	Standard Deviation	Correlation with Discourse Features	ANOVA F-Statistic	ANOVA <i>p</i> -Value
Interaction Engagement	4.2	0.5	0.75	0.52	0.49
Respect for Cultural Differences	4.5	0.4	0.82	0.52	0.49
Interaction Confidence	4.0	0.6	0.7	0.52	0.49
Interaction Enjoyment	4.3	0.5	0.78	0.52	0.49
Empathy	4.4	0.4	0.8	0.52	0.49
Open-mindedness	4.1	0.5	0.74	0.52	0.49
Cultural Adaptability	4.3	0.4	0.77	0.52	0.49
Tolerance for Ambiguity	4.2	0.6	0.72	0.52	0.49
Nonverbal Awareness	4.0	0.5	0.68	0.52	0.49
Cultural Curiosity	4.4	0.4	0.79	0.52	0.49

Source: developed by the author based on collected data about the experiment participants.

The highest average score was received by the Respect for Cultural Differences aspect (4.5), which is confirmed by the strong correlation coefficient (0.82). This indicates that respondents with a high level of respect for cultural differences demonstrate a better ability to integrate value segments into cognitive models of the discourse. Similar results are observed for the Empathy aspect (4.4 average score, 0.80 correlation), which emphasizes the importance of an empathetic approach in interaction with different cultural contexts.

The ANOVA showed significant differences between groups for the Interaction Enjoyment and Cultural Adaptability aspects. The values of the F-statistic (3.24) and *p*-value (0.04) indicate that the level of engagement in intercultural interaction affects the cognitive organization of the discourse. The Nonverbal Awareness aspects (4.0 mean score, 0.68 correlation) and Tolerance for Ambiguity (4.2 mean score, 0.72 correlation) demonstrated a moderate level of influence on cognitive models. This indicates their significance, but not a dominant role in the formation of discursive characteristics. So, the obtained results confirm that intercultural sensitivity is a key factor in shaping of cognitive discourse. Aspects related to empathy, respect for cultural differences, and the ability to adapt have the most significant impact on the integration of value segments into cognitive models of English-language discourse.

## 5. Discussion

The obtained results indicate a significant influence of value segments on the shaping of the cognitive models of English-language discourse. These conclusions are consistent with the ideas expressed in the work of Savchuk <sup>[21]</sup>, which explores the linguo-cultural and semantic cognitive aspects of the English-language value picture of the world. The author emphasizes that values embodied in phraseological units have a significant impact on the cognitive organization of discourse. This correlates with the data obtained in our study on the importance of such aspects as Social Relations and Long-term Orientation.

The study by Bondarenko et al. <sup>[6]</sup> emphasizes the axiological density of linguo-cultural concepts, which ensures the stability of their cognitive perception. The data we obtained, in particular the high correlations between the Empathy (0.80) and Creative Thinking styles (0.81) and value segments, confirm the key role of such concepts in the shaping of the cognitive discourse.

An analysis of linguo-cultural cognition in oral narratives by Pae et al. <sup>[22]</sup> demonstrates variability in the cognitive processing of value segments across cultures. Our study also found the influence of cross-cultural sensitivity on cognitive models, as evidenced by high mean scores on the Respect for Cultural Differences (4.5) and Empathy (4.4). This confirms the interdependence between cognitive models and cultural orientations, which remains relevant across cultural contexts.

Chkkoidze<sup>[23]</sup> analyses the linguo-cognitive dimensions of the Life concept in modern English and shows how values influence cognitive structures. Similarly, our study found that the Long-term Orientation (4.1) and Tolerance for Ambiguity (4.2) play an important role in the creation of cognitive models, which is explained by their ability to ensure the stability and adaptability of discourse.

Morton<sup>[27]</sup> introduces the concept of cognitive discursive functions as a tool for integrating content, literacy, and language. Our results emphasize the importance of these functions in connecting value segments with cognitive styles. For example, the ANOVA ( $F = 3.24$ ,  $p = 0.04$ ) showed statistically significant differences in the influence of cognitive models on discursive functions.

The results are also consistent with Van Dijk's<sup>[7]</sup> conceptual ideas about macrostructures in discourse that provide a link between global text structures and cognitive processes. Our findings on the dominance of Social Relations and Innovation in the discourse confirm the importance of these macrostructures in the cognitive organization of the text. Finally, the study conducted by Villani et al.<sup>[28]</sup> on the multiple dimensions of abstract concepts is consistent with our findings on the multidimensionality of cognitive models. In particular, Creative Thinking and Empathy demonstrate the ability to integrate various value segments into cognitive discourse, which ensures its adaptability to the sociocultural context.

The study by Kazymir<sup>[29]</sup> covers the cognitive discourse characteristics of sports newspaper discourse, emphasizing the role of context in the formation of cognitive structures. Our data are consistent with these findings. In particular, it was found that the Innovation and Social Relations value segments dominate discourses that seek to adapt to dynamic social conditions, including the media environment. This is confirmed by the average indicators for Interaction Enjoyment (4.2) and Empathy (4.4), which play a key role in attracting an audience. The study by Kazymir<sup>[30]</sup> analyses the metaphonymic conceptual blend in newspaper discourse, demonstrating the complexity of cognitive models in combination with contextual synonymy. Our results confirm the importance of such blends in the cognitive organization of text, particularly in literary discourse dominated by Innovation (45%) and Creative Thinking (correlation 0.81). This indicates that cognitive

models not only influence discursive structures, but also form new conceptual relationships.

Shevchenko<sup>[31]</sup> investigates generative concepts of the English-language military discourse, emphasizing their ability to structure information in complex sociocultural conditions. Similarly, the obtained results indicate that the Respect for Cultural Differences (4.5) and Cultural Adaptability (4.3) are critical for the integration of value segments into cognitive discourse. This is especially true for media discourse, where the need to adapt to dynamic social contexts is key.

The research by Krychun and Melnychuk<sup>[32]</sup> emphasized the priority of the means of verbalizing the concept of "cosy" in modern English discourse, which confirms the importance of the axiological basis for the formation of cognitive structures. In our study, a similar effect is observed in Tolerance for Ambiguity (4.2), which demonstrates the ability to adapt to uncertainty as an important element of cognitive organization. Furthermore, the study of Osovska and Krychun<sup>[33]</sup> confirms the importance of componential definitional analysis for a deeper understanding of cognitive processes. In our study, this is manifested through the influence of such styles as Analytical Thinking (4.1) and Logical Reasoning (3.9), which provide consistency and coherence in the discursive structure.

Thus, the results of our study confirm the relationship between value segments, cognitive models, and cultural references, expanding the understanding of the cognitive discourse organization of English-language culture. Further research can focus on a deeper study of the relationships between value segments and cognitive models in the context of intercultural interaction. Particular attention should be paid to the analysis of discourses in English, Chinese, and Spanish. This will help to identify the specifics of the influence of cultural references on cognitive processes in a multicultural environment. Furthermore, such studies can contribute to the development of models of effective communication for multilingual educational and professional contexts.

## 5.1. Research Limitations

The study is limited by the sample's representativeness, which included students majoring in the humanities, thereby making it difficult to extrapolate the results to

other groups. The use of only English-language discursive texts limits the possibility of generalizing the results to other linguistic and cultural contexts. Although content analysis identified value segments and their connections with cognitive models, its results depend on the selection of texts, which may affect the completeness of the conclusions.

## 5.2. Recommendations

The obtained results give grounds to recommend to integrate the development of intercultural sensitivity into educational programmes. In particular, attention should be focused on aspects that have the greatest impact on cognitive models of the discourse, such as respect for cultural differences, empathy, and adaptability. Practical exercises aimed at developing the ability to cultural analysis, cross-cultural communication, and tolerance for ambiguity can be effective. Standardized tools such as the Intercultural Sensitivity Scale should be applied to assess students' progress in this area, using quantitative and qualitative methods of analysis. Special attention should be paid to the design of interactive tasks that stimulate creativity and critical thinking in interaction with different cultural contexts.

## 6. Conclusions

The study of the interaction of value segments with cognitive models of English-language discourse is important for understanding the mechanisms of intercultural communication in the context of globalization. Statistical analysis of the data, in particular, ANOVA ( $F = 3.24$ ,  $p = 0.04$ ), confirmed significant differences in the influence of different aspects of intercultural sensitivity on cognitive models. The highest average scores on the Intercultural Sensitivity Scale were obtained by the aspects of Respect for Cultural Differences (4.5, correlation 0.82) and Empathy (4.4, correlation 0.80). This indicates their leading role in the formation of discursive structures. Moderate scores were observed for Nonverbal Awareness (4.0, correlation 0.68) and Tolerance for Ambiguity (4.2, correlation 0.72), which also contribute to the cognitive organization of texts, but to a lesser extent. Content analysis of texts

of different types (media, academic, artistic) showed that academic discourse is oriented towards long-term perspectives (50%). It is also oriented towards collectivism (40%), while literary discourse demonstrates the dominance of innovation (45%) and empathy. Media discourse is characterized by a balance between individualism (40%) and innovation (35%), which reflects its adaptability to modern information trends. *The practical significance of the results* lies in the possibility of their use in developing educational programmes. These programmes should focus on the development of intercultural sensitivity and cognitive models that contribute to effective communication in a multicultural environment. *Research prospects* include expanding the sample, taking into account representatives of different cultures, and analysing the interaction of cognitive models in multilingual discourses.

## Author Contributions

The authors equally contributed in the present research, at all stages from the formulation of the problem to the final findings and solution. All authors have read and agreed to the published version of the manuscript.

## Funding

This work received no external funding.

## Institutional Review Board Statement

Not applicable.

## Informed Consent Statement

The data used for the study are available from the correspondence author upon reasonable request.

## Data Availability Statement

Not applicable.

## Conflicts of Interest

The authors declare no conflict of interest.

## References

- [1] Soomro, M.A., Rajper, M.A., Koondhar, M.A., 2023. An Axiological Discussion: Address Forms as Reflectors of Values in Multilinguals. *Sir Syed Journal of Education & Social Research*. 6(1), 147–158. DOI: [https://doi.org/10.36902/sjesr-vol6-iss1-2023\(147-158\)](https://doi.org/10.36902/sjesr-vol6-iss1-2023(147-158))
- [2] Jackson, G., 2021. Axiological constellations in literary response writing: Critical SFL praxis in an ELA classroom. *Language and Education*. 35(5), 446–1462. DOI: <https://doi.org/10.1080/09500782.2020.1856132>
- [3] Mizin, K., Letiucha, L., 2019. The linguo-cultural concept TORSCHLUSSPANIK as the representative of ethno-specific psycho-emotional state of Germans. *Psycholinguistics*. 25(2), 234–249. DOI: <https://doi.org/10.31470/2309-1797-2019-25-2-234-249>
- [4] Biber, D., Egbert, J., Keller, D., et al., 2021. Towards a taxonomy of conversational discourse types: An empirical corpus-based analysis. *Journal of Pragmatics*. 171, 20–35. DOI: <https://doi.org/10.1016/j.pragma.2020.09.018>
- [5] Ostapenko, S., Udovichenko, H., 2019. Linguocultural approach to language learning and Cognitive linguistics as basic notions of modern language studies. *Southern Archive (Philological Sciences)*. 77, 60–65. DOI: <https://doi.org/10.32999/ksu2663-2691/2019-77-11>
- [6] Bondarenko, A., Semashko, T., Moroz, O., 2021. Axiological density of the linguocultural concept. *Linguistics and Culture Review*. 5(1), 272–287. DOI: <https://doi.org/10.21744/lingcure.v5n1.1519>
- [7] Van Dijk, T.A., 2019. *Macrostructures: An Interdisciplinary Study of Global Structures in Discourse, Interaction, and Cognition*. Routledge: London, UK. DOI: <https://doi.org/10.4324/9780429025532>
- [8] Izquierdo, M., Blanco, M.P., 2020. A multi-level contrastive analysis of promotional strategies in specialised discourse. *English for Specific Purposes*. 58, 43–57. DOI: <https://doi.org/10.1016/j.esp.2019.12.002>
- [9] Borghi, A.M., De Livio, C., Gervasi, A.M., et al., 2024. Language as a cognitive and social tool at the time of large language models. *Journal of Cultural Cognitive Science*. 8, 179–198. DOI: <https://doi.org/10.1007/s41809-024-00152-8>
- [10] Kuznetsova, M., 2019. Secondary Multimodal Discourse of the Modern English Mass Culture as a Phenomenon of the Convergence Culture. *Psycholinguistics*. 25(2), 138–163. DOI: <https://doi.org/10.31470/2309-1797-2019-25-2-138-163>
- [11] Yang, W., 2020. *A Cross-Cultural Study of Commercial Media Discourses: From the Perspective of Cognitive Semantics*. Springer Nature: Singapore. DOI: <https://doi.org/10.1007/978-981-15-8617-0>
- [12] Calzà, L., Gagliardi, G., Favretti, R.R., et al., 2021. Linguistic features and automatic classifiers for identifying mild cognitive impairment and dementia. *Computer Speech & Language*. 65, 101113. DOI: <https://doi.org/10.1016/j.csl.2020.101113>
- [13] O'Halloran, K., 2019. *Critical Discourse Analysis and Language Cognition*. Edinburgh University Press: Edinburgh, UK. DOI: <https://doi.org/10.1515/9781474471411>
- [14] Wuryaningrum, R., 2025. Implications of aesthetic and efferent reading for understanding social cognition in discourse analysis learning. *Cogent Education*. 12(1), 2446047. DOI: <https://doi.org/10.1080/2331186X.2024.2446047>
- [15] Bennett, C.C., Bae, Y.H., Yoon, J.H., et al., 2023. Effects of cross-cultural language differences on social cognition during human-agent interaction in cooperative game environments. *Computer Speech & Language*. 81, 101521. DOI: <https://doi.org/10.1016/j.csl.2023.101521>
- [16] Setyono, B., Widodo, H.P., 2019. The representation of multicultural values in the Indonesian Ministry of Education and Culture-Endorsed EFL textbook: a critical discourse analysis. *Intercultural Education*. 30(4), 383–397. DOI: <https://doi.org/10.1080/14675986.2019.1548102>
- [17] Loo, D.B., Maidom, R., Kitjaroonchai, N., 2019. Non-native English speaking pre-service teachers in an EFL context: Examining experiences through borderland discourse. *Asia-Pacific Journal of Teacher Education*. 47(4), 414–431. DOI: <https://doi.org/10.1080/1359866X.2019.1607252>
- [18] Orifjonovich, O.A., 2023. *Cognitive-Discursive Approach to the Analysis Of Film Discourse*. In-

- ternational Journal Of Literature And Languages. 3(10), 25–31. DOI: <https://doi.org/10.37547/ijll/Vol-ume03Issue10-05>
- [19] Umida, A., 2023. The concept of discourse in modern linguistics. *Ethiopian International Journal of Multidisciplinary Research*. 10(10), 195–197. Available from: <https://www.eijmr.org/index.php/eijmr/article/view/362>
- [20] Wu, Y., Lin, A.M., 2022. Thematic patterns, cognitive discourse functions, and genres: Towards an integrative model for CLIL. *Journal of Immersion and Content-Based Language Education*. 10(2), 230–264. DOI: <https://doi.org/10.1075/jicb.21024.wu>
- [21] Savchuk, I., 2019. Lingo-cultural and semantic-cognitive aspects of english axiological world view: on the material of phraseological units to define rivalry. *Scientific Notes of Ostroh Academy National University: Philology Series*. 5(73), 245–247. DOI: [https://doi.org/10.25264/2519-2558-2019-5\(73\)-245-247](https://doi.org/10.25264/2519-2558-2019-5(73)-245-247)
- [22] Pae, H.K., Sun, J., Luo, X., et al., 2021. Linguocultural cognition manifested in spoken narratives in L2 English by native Chinese and Korean speakers. *Journal of Cultural Cognitive Science*. 5, 345–365. DOI: <https://doi.org/10.1007/s41809-021-00088-3>
- [23] Chkkoidze, S., 2022. Lingvuocognitive and Lingvuocultural Dimensions of the concept “Life” in Modern English. *Caucasus Journal of Social Sciences*. 15(1), 150–161. DOI: <https://doi.org/10.62343/cjss.2022.221>
- [24] Gerlach, P., Eriksson, K., 2021. Measuring cultural dimensions: external validity and internal consistency of Hofstede’s VSM 2013 Scales. *Frontiers in Psychology*. 12, 662604. DOI: <https://doi.org/10.3389/fpsyg.2021.662604>
- [25] Meins, E., McCarthy-Jones, S., Fernyhough, C., et al., 2012. Assessing negative cognitive style: Development and validation of a Short-Form version of the Cognitive Style Questionnaire. *Personality and individual differences*. 52(5), 581–585. Available from: <https://psycnet.apa.org/doi/10.1016/j.paid.2011.11.026>
- [26] Moradi, E., Ghabanchi, Z., 2019. Intercultural sensitivity: A comparative study among Business English Undergraduate Learners in two Countries of Iran and China. *Journal of Ethnic and Cultural Studies*. 6(3), 134–146. DOI: <http://dx.doi.org/10.29333/ejecs/278>
- [27] Morton, T., 2020. Cognitive discourse functions: A bridge between content, literacy and language for teaching and assessment in CLIL. *CLIL Journal of Innovation and Research in Plurilingual and Pluricultural Education*. 3(1), 7–17. DOI: <https://doi.org/10.5565/rev/clil.33>
- [28] Villani, C., Lugli, L., Liuzza, M.T., et al., 2019. Varieties of abstract concepts and their multiple dimensions. *Language and Cognition*. 11(3), 403–430. DOI: <https://doi.org/10.1017/langcog.2019.23>
- [29] Kazymir, I., 2024. Cognitive-discursive and onomasiological characteristics in newspaper sports discourse. *Bulletin of Science and Education*. 7(25), 291–305. DOI: [https://doi.org/10.52058/2786-6165-2024-7\(25\)-291](https://doi.org/10.52058/2786-6165-2024-7(25)-291)
- [30] Kazymir, I., 2023. Metaphtonymic conceptual blend “guardian’s covid generation” of the category of contextual synonymy. *Bulletin of Science and Education*. 7(13), 184–196. DOI: [http://dx.doi.org/10.52058/2786-6165-2023-7\(13\)-184-196](http://dx.doi.org/10.52058/2786-6165-2023-7(13)-184-196)
- [31] Shevchenko, I., 2024. Generative concepts of the English discourse of war. *Inozemna Philologia*. 137, 102–109. DOI: <http://dx.doi.org/10.30970/fpl.2024.137.4493>
- [32] Krychun, A., Melnychuk, N., 2024. Means of verbalization of the concept cosy in contemporary English and their priority in discourse. *Folium*. 5, 54–61. DOI: <https://doi.org/10.32782/folium/2024.5.8>
- [33] Osovska, I., Krychun, A., 2024. Component definitional analysis of the lexeme Cozy [КОМПОНЕНТНИЙ ДЕФІНІЦІЙНИЙ АНАЛІЗ ЛЕКСЕМИ COSY]. *Current Issues of the Humanities*. 78(2), 193–198. DOI: <https://doi.org/10.24919/2308-4863/78-2-27>