

The Analysis of the Influence of Ambiguity Tolerance on the Understanding and Inspiration of English Reading

Xinyan Chen

School of Foreign Languages and Literatures, Chongqing Normal University, Chongqing, China

Abstract: *Ambiguity tolerance has a significant impact on English reading, specifically affecting students' reading styles, speed, and accuracy. Students with high ambiguity tolerance tend to adopt holistic reading strategies, achieving faster reading speeds but potentially overlooking crucial details. Conversely, those with low ambiguity tolerance prefer detailed, analytical reading methods, focusing excessively on specifics, which may lead to inefficient reading and potential deviations from the original meaning. Therefore, understanding students' actual ambiguity tolerance and taking measures to cultivate it, while guiding them towards more flexible and efficient reading styles, is crucial for enhancing their reading abilities and comprehensive literacy.*

Keywords: Ambiguity tolerance, English reading, English learning.

1. An Overview of Ambiguity Tolerance

The earliest research on ambiguity tolerance appeared in the field of psychology. In 1948, the American psychologist Frenkel Brunswik (1949) first proposed that ambiguity tolerance was the way that individuals or groups perceive and process ambiguous environmental stimulus information when faced with a series of unfamiliar, complex, or inconsistent cues. Budner (1962) proposed that tolerance of ambiguity is a personality variable, arguing that intolerance of ambiguity refers to the tendency to perceive ambiguous situations as sources of threat, while tolerance of ambiguity tends towards acceptance of ambiguous situations. Norton (1975) argues that intolerance of ambiguity is a tendency to perceive semantically unclear information as either actual or potential sources of psychological discomfort or threat. Ely (1989) was the first scholar to extend the psychological cognitive variable of tolerance of ambiguity to the field of second language acquisition (SLA) and defined ambiguity tolerance as the degree to which individuals or groups accept vague phenomena or things lacking clear definitions. This concept has since been widely studied in the field of SLA, exploring its role in language learning processes and outcomes. According to Chapelle and Roberts (1986), in ambiguous situations, individuals with a high degree of tolerance for ambiguity are able to accept unclear or ambiguous things, whereas those with a low degree of tolerance for ambiguity find it difficult to tolerate vagueness. From the point of H. Douglas (2007), ambiguity intolerance refers to the degree to which you are cognitively willing to tolerate ideas and propositions that run counter to your own belief system or structure of knowledge.

2. The Understanding of English Reading

There are both narrow and broad definitions of English reading comprehension. Narrowly speaking, reading refers to the process of extracting meaning from texts, which include written materials as well as illustrations, but from broadly speaking, however, reading involves extracting meaning from materials beyond just words and charts (Li Erlong, 2011). The reading teaching process can be divided into three models:

bottom-up model, top-down model, and interactive model (Wang Qiang, 2006). From the above definitions, it is evident that the process of reading is inherently an active behavior for the reader, influenced by the reader's psychological factors. The reader's psychological and other emotional factors also impact their interpretation of the text. Furthermore, the reading approach chosen by the reader also shapes their understanding and interpretation of the text. Reading is not merely a passive process of extracting information from texts, but a process that involves active participation by the reader and is deeply influenced by their psychological and emotional factors. The reader's psychological state, emotional tendency, and reading style can all have significant impacts on the way they interpret and understand the text.

3. The Relationship of Ambiguity Tolerance and Understanding of English Reading

The new English curriculum standards introduced by China's Ministry of Education have put forward new educational goals and requirements for English teaching. To enhance the English proficiency of students at different levels, a variety of teaching modes have been adopted in classroom teaching, significantly improving the overall English proficiency of students. However, some students' English proficiency has not yet improved. Therefore, apart from considering the individual differences among students, it is worth exploring other factors that may affect students' English learning proficiency.

In the field of language learning, ambiguity tolerance is regarded as a crucial factor that significantly impacts second language (L2) learning outcomes. It is closely intertwined with personal psychological factors such as adventurousness and creativity, anxiety and emotional stability, as well as confidence and self-efficacy. The close relationship between ambiguity tolerance and these psychological factors underscores its importance. Therefore, in the context of English reading instruction, understanding and fostering individual students' ambiguity tolerance holds significant value. Teachers can help enhance students' ambiguity tolerance levels and thereby promote their language learning

and development by employing various strategies. These include providing diverse learning materials, designing open-ended learning tasks, and creating an inclusive and tolerant learning environment.

4. Current Situation of Ambiguity Tolerance and English Learning

With the in-depth research on ambiguity tolerance, the correlation between ambiguity tolerance and English learning has attracted widespread attention from numerous scholars. Researchers have begun to focus on the relationship between ambiguity tolerance and foreign language learning, aiming to enhance learners' application of linguistic knowledge.

Zhang Qingzong (2004) found that students with high ambiguity tolerance are able to selectively apply learning strategies, whereas students with low ambiguity tolerance are unable to tolerate ambiguity in language learning, and their application of strategies lacks selectivity, demonstrating greater blindness and randomness. Chen Suqin (2007) found that foreign language learners with different levels of ambiguity tolerance exhibit significant differences in the use of reading strategies, including vocabulary selection and attention, summarizing the main idea of a text, and the flexible application of reading skills. Wang Hongyuan and Xia Hongzhong (2008) conducted a study that revealed learners exhibited varying degrees of tolerance of ambiguity in the process of listening comprehension. Wang Yingying and Zhan Bei (2013) studied the learner factors that influence second language acquisition and found that learners' learning styles and psychological characteristics are one of the significant factors that affect the learning process and outcomes of learners. Xiong Songrong (2013) found that students with high tolerance of ambiguity tend to utilize self-monitoring strategies frequently, while those with low tolerance of ambiguity only utilize such strategies occasionally. Chen Xinmiao and Fang Ruifen (2014) examined the tendency of tolerance of ambiguity from the perspective of English reading inhibition, aiming to guide learners to correctly face unfamiliar linguistic phenomena in English reading and promote their English reading ability. Yang Jing's (2014) study found that there is a significant negative correlation between reading anxiety and tolerance of ambiguity, as well as between reading anxiety and foreign language reading performance. However, there is a significant positive correlation between tolerance of ambiguity and foreign language reading performance. Zhang Jing (2017) explored the correlation between tolerance of ambiguity and English learners' reading comprehension ability across different text genres. The results showed that, in general, there is a significant positive correlation between tolerance of ambiguity and reading comprehension performance. When considering different text genres, learners' tolerance of ambiguity has a certain influence on their reading effectiveness. Wang Haiwei (2021) argues that in the process of high school English reading, students' varying levels of tolerance of ambiguity lead to different reactions and measures taken by different students, which subsequently affects their reading performance and reading ability.

5. The Influence of Ambiguity Tolerance on English Reading

The impact of ambiguity tolerance (AT) on English reading comprehension is multifaceted and significant. Ambiguity tolerance refers to the extent to which a language learner can accept and navigate through ambiguous or unclear information in a foreign language. The evidence provided offers valuable insights into how AT influences various facets of English reading, including learning strategies, performance outcomes, anxiety levels, and the efficacy of teaching methodologies.

In the process of English reading, learners inevitably encounter unfamiliar and uncertain phenomena. For instance, when learners encounter the polysemy of words, the complexity of sentence structures, and the incomplete equivalence between English and Chinese, they may have deviations in understanding the text, resulting in ambiguity. At the same time, learners may also encounter some uncertainties and inaccuracies caused by cultural differences when using existing knowledge to guess and predict. Facing these ambiguous phenomena in the reading process, learners may have two different emotional reactions: First, most students will involuntarily feel nervous or uncomfortable; second, students may likely ignore them and let them be, even giving up learning. The first situation belongs to low ambiguity tolerance, while the second situation belongs to high ambiguity tolerance. Both of these attitudes and emotions can have a significant negative impact on reading comprehension.

5.1 The Influence of Ambiguity Tolerance on English Reading Style

The level of ambiguity tolerance significantly determines how learners choose and employ learning strategies, implying that students with different levels of ambiguity tolerance will adopt distinct reading approaches and strategies when engaging in reading activities.

Students with high ambiguity tolerance in foreign language learning are able to selectively apply learning strategies according to different content and tasks. They tend to prefer global or holistic reading strategies, focusing on the main ideas and overall structure of the text, rather than paying excessive attention to the details of words, phrases, or sentences. Therefore, students with high tolerance of ambiguity tend to prefer a top-down reading approach. Before reading, they often make predictions and inferences based on the title, utilizing their prior knowledge and experience. They focus on grasping the overall understanding of the text. Even when encountering obstacles such as unfamiliar words that hinder comprehension, they are more confident in relying on themselves to overcome these reading barriers.

Students with low ambiguity tolerance tend to prefer more detailed or analytical reading strategies, delving deeply into every detail of the text in pursuit of precise explanations of words, phrases, and sentences. They are overly concerned with the specific meaning of each sentence and every word, lacking a grasp of the overarching context and implications within the overall linguistic environment. From this, it can be

concluded that students with low tolerance of ambiguity tend to employ a bottom-up approach in reading, reading word by word and sentence by sentence. When encountering unfamiliar words, they often rely on dictionaries. If faced with complex sentences, they begin to analyze the grammatical structure, resulting in a longer reading time, lower comprehension rate, and a significant deviation from the original meaning of the text. In the reading process, when they encounter situations that do not align with their existing cognitive structures, they fear using new methods to address the issues encountered, thus putting themselves in a difficult position.

Learners with moderate ambiguity tolerance tend to leverage their existing knowledge and experience to assist in comprehension, judgment, and analysis during reading. On the other hand, they also resort to reference books for accurate understanding when necessary, achieving a balance between reading speed and quality.

5.2 The Influence of Ambiguity Tolerance on English Reading Speed

During the process of English reading, there are many ambiguous phenomena that can affect readers' reading speed to varying degrees. These ambiguities mainly include lexical ambiguities and ambiguities in sentence comprehension. Lexical ambiguities refer to phenomena such as polysemy, unfamiliar meanings of familiar words, unfamiliar words, and homophones. Ambiguities in sentence comprehension refer to the possibility that a sentence may have two or more interpretations due to differences in tone and other aspects.

When faced with these ambiguous phenomena in the cognitive process, students with low ambiguity tolerance, due to their inability to tolerate vagueness and uncertainty, tend to experience anxiety and tension during reading. This can interfere with the reading process, occupy limited cognitive resources, and distract attention from the cognitive process. At the same time, they tend to focus their attention on one or a few linguistic points rather than analyzing the language material in its entirety. This fragmented attention prevents them from focusing on the actual reading process itself, reducing their reading comprehension ability and thus affecting their reading speed. Students with high ambiguity tolerance adopt different reading strategies and methods based on their reading purpose and material, grasping the article as a whole and quickly skimming to summarize its main content in order to achieve the best understanding in the shortest time. In terms of reading skills application, students with low ambiguity tolerance may utilize techniques such as prediction, speed reading, and word meaning guesswork less frequently, leading to inefficient reading. Conversely, students with high ambiguity tolerance are more likely to excel at utilizing these skills to enhance their reading speed.

5.3 The Influence of Ambiguity Tolerance on English Reading Accuracy

The varying degrees of ambiguity tolerance among students lead them to adopt different reading modes, methods, and strategies, which subsequently influence their reading speed and comprehension accuracy. Students with a high level of

ambiguity tolerance tend to be more lenient towards fuzziness and may adopt methods such as rapid skimming, predicting, and summarizing to grasp the general content of the text within a short period. They pay less attention to the detailed understanding of words, phrases, and sentences, preferring to grasp the text from a holistic perspective. As they rely more on their own knowledge and experience to make predictions and inferences, students with a high level of ambiguity tolerance may overlook ambiguous parts in the text and fail to delve deeply into their exact meanings in a specific context. This often leads to partial or misunderstandings of the text, thus reducing the accuracy of reading comprehension. Conversely, students with a low level of ambiguity tolerance tend to pursue precise understanding of vocabulary and sentences and excel at analysis. They are inclined to read word by word and sentence by sentence, digging deep into the meanings behind ambiguities, and often seek help from authoritative resources. These behavioral characteristics contribute to improving their accuracy in reading comprehension.

6. The Implication of Ambiguity Tolerance on English Reading

From the preceding analysis, it is evident that an excessively high or low level of ambiguity tolerance is detrimental to English reading comprehension, while a moderate level of ambiguity tolerance can enhance both the speed and quality of reading. Based on this observation, we can draw the following implications:

6.1 Comprehensive Assessment of Students' Ambiguity Tolerance

Ambiguity tolerance is a ubiquitous linguistic phenomenon that frequently emerges in students' daily lives and learning processes. To effectively enhance high school students' English reading ability and performance, teachers must first recognize the importance and value of ambiguity tolerance in English reading learning. Teachers should have a comprehensive understanding of students' psychological and cognitive states, thus a profound understanding of students' levels and states of ambiguity tolerance is crucial, including grasping the overall situation of students' ambiguity tolerance and their individual differences. Based on this understanding, teachers can increase their sensitivity to ambiguity tolerance in the teaching process and gradually integrate this awareness into students' daily lives and learning, thereby subtly influencing students.

6.2 Enhancing Students' Ambiguity Tolerance

Research has shown a significant positive correlation between students' ambiguity tolerance and their English reading performance and ability. This indicates that students with higher levels of ambiguity tolerance tend to achieve better scores in reading tests and demonstrate stronger reading skills. However, it is commonly observed that students generally have a low overall ambiguity tolerance, especially when they encounter texts with a large number of unfamiliar vocabulary and grammatical structures, often resulting in feelings of anxiety and uneasiness. Enhancing students' ambiguity tolerance is crucial as it can help them better handle

uncertainty, incompleteness, and complexity in the reading process, thereby reducing tension and anxiety and further improving their reading performance and ability. Therefore, teachers not only need to assess students' tolerance for ambiguity but also take measures to strengthen this ability during the teaching process. Through daily teaching activities, teachers can continuously emphasize the importance of ambiguity tolerance and adopt corresponding strategies to enhance students' levels of ambiguity tolerance.

6.3 Expanding Reading Volume and Deepening Vocabulary and Linguistic Knowledge Accumulation

In reading courses, teachers should actively encourage and motivate students to engage in extensive reading practices by selecting and recommending a diverse range of reading materials. By exposing students to texts with different topics and genres, they can cultivate their interest and habits in reading while also helping them accumulate valuable vocabulary and linguistic knowledge. Having a broad vocabulary and profound linguistic knowledge can significantly reduce the frequency of encountering ambiguity during the reading process. Additionally, teachers should focus on improving reading skills by developing a series of targeted reading skill training. This allows students to comprehensively enhance their reading ability in various dimensions, including vocabulary comprehension, contextual analysis, sentence structure, paragraph reasoning, text summary, and test-taking strategies.

6.4 Enhancing Students' Skills in Inferring Word Meanings from Context

English teachers should broaden students' cultural background knowledge to mitigate the negative impact of different cultural differences on reading comprehension. This can be achieved by introducing or replacing unfamiliar vocabulary or ambiguous elements in regular reading materials to exercise students' ability to infer word meanings in specific contexts. Additionally, teachers need to demonstrate to students how to utilize cues such as definitions, contrastive relationships, causal relationships, roots, and affixes to guess the meanings of unfamiliar words, thereby reducing ambiguity in reading. Simultaneously, teachers should integrate more linguistic knowledge and cultural background introductions into their regular teaching, guiding students to make effective predictions and word meaning guesses based on their existing knowledge.

6.5 Implementing Differentiated Instruction to Accommodate Students with Different Levels of Ambiguity Tolerance

For students with a high tolerance for ambiguity, English teachers should focus on cultivating their attention to linguistic details, critical thinking, and so on. On the other hand, for students with a low tolerance for ambiguity, teachers need to strengthen their ability to conduct overall analysis and summary.

Foreign language learning is essentially a process of constantly encountering and dealing with ambiguity. Since a foreign language is not completely equivalent to the native

language in terms of pronunciation, vocabulary, grammar, and pragmatics, learners often face a high level of uncertainty, which can lead to anxiety and discomfort, weaken learning confidence and motivation, increase emotional filtering, and ultimately affect learning outcomes. Therefore, foreign language teachers should take into account students' individual differences, adopt a tailored approach, and utilize various methods to reduce students' anxiety, stimulate their interest in learning, and improve learning outcomes. This includes encouraging students to read widely to enhance their tolerance and understanding of ambiguity; teaching them effective reading techniques and strategies to eliminate ambiguity; and cultivating correct reading habits and cross-cultural communication skills. Furthermore, teachers should guide students to maintain an appropriate level of ambiguity tolerance during the reading process, avoiding excessive or insufficient tolerance, to facilitate continuous progress in English learning.

6.6 Appropriate Application of Reading Strategies

As one of the crucial tools in the reading process, the effective application of reading strategies is vital for enhancing reading comprehension. Therefore, teachers should emphasize the importance of reading strategies in regular classroom instruction and integrate diverse reading techniques into their reading instruction. Students should develop the flexibility to adjust their reading strategies based on the level of ambiguity in the text. For instance, they can use skimming and scanning techniques for texts with less ambiguity, while employing a more analytical approach for texts with higher levels of ambiguity. Students' level of ambiguity tolerance significantly impacts their choice and utilization of reading strategies. For instance, teachers can teach students how to infer word meanings from context, utilize situational teaching methods, and employ mind mapping strategies. Based on students' varying levels of ambiguity tolerance, teachers should guide them to apply suitable reading strategies and cultivate the habit of using these strategies consistently during reading. For students who are less adept at utilizing reading strategies, teachers should specifically encourage them to use reading strategies to improve their reading efficiency and comprehension.

7. Conclusion

This study has analyzed the relationship between ambiguity tolerance and English reading and concluded that ambiguity tolerance is a crucial factor affecting English reading, and the two are closely interconnected. In the process of English teaching, teachers must give sufficient attention to ambiguity tolerance and regard enhancing students' ambiguity tolerance as a core task. Teachers should first have a clear understanding of the current state of students' ambiguity tolerance and take measures based on their actual situations to strengthen students' awareness of ambiguity tolerance and reduce their anxiety and tension during reading. At the same time, teachers should also emphasize the cognition and application of reading strategies to promote the continuous improvement of students' English reading ability.

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