

How to Cultivate Middle School Students' Tolerance of Ambiguity in English Reading

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Abstract: Tolerance of Ambiguity (TOA) is a key component of learning styles, which plays a crucial role in middle school students' English reading ability. At present, middle school students generally have a polarized phenomenon in TOA in English reading, some hinder their reading process by over-focusing on ambiguities, while others impair the depth of their comprehension by ignoring ambiguity. Based on the core concept of TOA and relevant research results, combined with the characteristics of middle school students' English learning, this paper puts forward specific strategies for cultivating middle school students' TOA in English reading from three dimensions: differentiated instruction, reading strategy guidance, and internal motivation stimulation, aiming to provide reference for optimizing middle school English reading teaching and improving students' comprehensive reading ability.

Keywords: Tolerance of ambiguity; English reading ability; middle school students.

1. Introduction

1.1. Background to the research

General High School English Curriculum Standards (2017) states that language teaching should focus on discourse, which is usually presented in multimodal forms, among which reading is one of the main ways for students to engage with written expressions[1]. With the further advancement of the curriculum reform in general high school English, reading teaching has increasingly emphasized the cultivation of students' discourse comprehension ability, logical analysis ability and critical thinking. Compared with Chinese, English vocabulary has more generalized and polysemous meanings [2]. In the process of reading, such factors as lexical polysemy, syntactic structural ambiguity and cultural contextual differences may all give rise to information vagueness. Middle school students are in a critical stage of linguistic cognitive development, and the middle school English learning stage is also a period for the comprehensive exposure to and acquisition of English knowledge, skills, affective attitudes and cultural awareness [3]. In this process, students' level of tolerance of ambiguity directly affects reading efficiency and comprehension quality. For instance, those with an excessively low tolerance tend to get stuck on individual ambiguous points, resulting in a disrupted reading rhythm; those with an excessively high tolerance may overlook the deep semantic meanings behind ambiguities, leading to comprehension deviations.

In current middle school English reading teaching, teachers tend to focus excessively on the explanation of linguistic knowledge and conduct a superficial exploration of reading texts [4]. They pay insufficient attention to students' psychological states and coping abilities when confronted with ambiguities, and lack targeted guiding strategies. This teaching model is not only difficult to adapt to students' individual differences, but may also intensify their feelings of fear or indifference towards ambiguities, which restricts the sustainable development of their reading competence. Therefore, exploring the cultivation approaches of middle school students' tolerance of ambiguity in English reading has

become an important subject in the current reform of English teaching.

1.2. Purpose and Significance of the research

The core purpose of this study is to clarify the intrinsic correlation between tolerance of ambiguity and middle school students' English reading proficiency, and to construct a scientific and feasible system of cultivation strategies by integrating existing research findings with actual teaching practices. This system is designed to help students establish a reasonable tolerance range for ambiguity and enhance their ability to cope with vague information in reading.

From a theoretical perspective, this study enriches the applied research on the theory of tolerance of ambiguity in middle school English reading teaching, clarifies the influence mechanisms of different levels of tolerance of ambiguity on students' reading performance, and provides a reference framework for subsequent research in related fields. From a practical perspective, the strategies proposed in this study can offer specific teaching guidance for middle school English teachers, help them optimize the design of reading teaching, balance students' individual differences with their needs for ability improvement, and ultimately promote the development of students' comprehensive reading literacy and facilitate the achievement of the objectives of English core competencies.

2. Literature Review

2.1. Definition of Tolerance of Ambiguity

Tolerance of Ambiguity (TOA), first proposed by the American psychologist Frenkel-Brunswik in 1948, refers to the way in which an individual or a group perceives and processes ambiguous environmental stimuli and information when confronted with a series of unfamiliar, complex, or inconsistent cues [5]. Also known as tolerance of vagueness or tolerance of ambivalence, TOA is defined as the manner in which an individual or a group perceives and processes ambiguous situations or stimuli when exposed to a set of unfamiliar, complex, or inconsistent clues[6].

In the specific context of language learning, TOA denotes

the level of difficulty that language learners experience in comprehending sentences, events, theorems and other concepts without precise definitions [7], and it also represents learners' psychological tolerance when they encounter uncertain linguistic phenomena in the learning process [8]. Brown defined TOA as the cognitive uncertainty that learners experience when encountering new information, as well as their ability to tolerate and accept assumptions that challenge their existing beliefs or understandings[9].

Despite the varied interpretations of TOA among scholars based on these definitions, its core connotation remains consistent. In this study, TOA is defined as learners' willingness to tolerate ambiguous phenomena, as well as their response to and processing of such phenomena, when they encounter unclear, uncertain, complicated contexts or situations that are inconsistent with their original cognitive structures.

2.2. Related researches on the Tolerance of Ambiguity at Home and abroad

2.2.1. Related researches on the Tolerance of Ambiguity at abroad

Research on tolerance of ambiguity (TOA) abroad originated earlier, and a relatively complete theoretical system has been formed to date. Such research can be mainly divided into three aspects: the definition of TOA, its correlation with second language acquisition (SLA), and its measurement.

In terms of the definition of TOA, the term was first introduced in a journal published by the American psychologist Frenkel-Brunswik in 1948, who proposed that TOA is a reflection of "general personality" and interacts with external factors. Norton further defined TOA and elaborated on the specific contexts where TOA may act as an important variable. He specified ambiguous situations as information that is "vague, fragmentary, multiple, unorganized, contradictory, or semantically unclear"[10].

Regarding the correlation between TOA and SLA, Naiman et al. administered a TOA scale to 72 English-speaking students learning French as a second language in Canada, and found that TOA could roughly predict learners' academic performance in listening comprehension and other learning domains[11]. Chapelle conducted a study on 61 English learners and revealed that those with a high level of TOA demonstrated higher learning efficiency and better second language performance, especially in the aspects of grammar, syntactic structure and listening comprehension[12]. Ezzati adopted Ely's Second Language Tolerance of Ambiguity Scale (SLTAS) for a test, and the results indicated a significant correlation between the overall grammatical knowledge of Iranian English learners and their TOA levels[13].

In the research on the measurement of TOA, Budner designed a 16-item questionnaire to conduct an in-depth investigation into ambiguity[14]. For each item, participants were required to choose one of five rating scales ranging from Strongly Agree to Strongly Disagree, with scores assigned from 7 to 1. The scale developed by Rydell and Rosen also comprised 16 items, adopting a binary rating scale of Yes and No, and it exhibited high construct validity[15]. Ely's TOA scale is the most widely used in the context of foreign language acquisition[16]. This scale consists of 12 items covering the four skills of English: listening, speaking, reading and writing. Through a series of empirical studies and

tests, the scale has been proven to possess high reliability and validity.

2.2.2. Related researches on the Tolerance of Ambiguity at Home

In contrast to the researchers on TOA abroad, domestic researchers on TOA have a relatively late development. However, research on TOA in the context of English learning in China has developed rapidly in recent years, which can be categorized into three dimensions: its impacts on teachers' foreign language teaching, its correlation with English learning, and the influencing factors of TOA itself.

TOA exerts a notable impact on teachers' foreign language teaching practice. A prevalent misconception in teaching holds that tolerance of ambiguity is an indicator of inadequate learning thoroughness [17]. Teachers with low TOA also tend to avoid taking risks in adopting new teaching materials or instructional methods. To some extent, such manifestations of low TOA among teachers have a negative impact on the effectiveness of target language teaching. This is because whether teachers encourage flexible thinking constitutes a key dimension in the evaluation scale for teachers' creative teaching behaviors[18].

In terms of the correlation between TOA and English learning, Zheng Hong explored the relationship between TOA and foreign language acquisition, proposing that TOA can serve as a predictor of foreign language learning achievement[19]. In the early stage of relevant research, Chen Wencun examined the association between TOA and English proficiency among English majors. Statistical analyses revealed a positive correlation between TOA levels and the scores of the Test for English Majors Band 4 (TEM-4)[20]. Wei Xiaobao conducted a questionnaire survey on 365 participants, and the results indicated that lower TOA was associated with weaker willingness to communicate among second language learners[21].

Regarding the influencing factors of TOA, Wang Daqing found that multiple factors can exert an impact on students' TOA levels, including their cultural background knowledge, prior academic knowledge, and the use of different communicative strategies[22]. Foreign language learners with different learning styles exhibit varying levels of TOA and corresponding differences in academic achievement. Wu Qingxi and Xie Feixiang applied a CAPS-based English reading teaching model, where teachers guide students to engage in independent learning and thus enhance their TOA levels. Additionally, TOA is often shaped by the learning environments of foreign language learners[23].

3. Problem Solutions

3.1. Differentiated Instruction

There exist significant individual differences in students' tolerance of ambiguity (TOA), and their abilities to accept and process vague information vary from one another. Therefore, the principle of differentiated instruction must be adhered to in the cultivation process [24]. Teaching contents and activities should be precisely designed in accordance with students' TOA levels to ensure that every student has access to adaptive opportunities for development.

In terms of discourse material selection, classified design should be implemented based on students' TOA. For students with low TOA, accessible and easy-to-understand reading materials should be provided to boost their enthusiasm for English reading learning. On this basis, a small amount of

moderately vague and challenging materials should be appropriately incorporated to exercise their TOA imperceptibly, thus achieving a progressive improvement effect (basic-level materials). For students with moderate TOA, the difficulty of accessible reading materials should be increased to help them get accustomed to vague materials (intermediate-level materials). Finally, for students with high TOA, relatively unfamiliar reading materials with more new words and higher ambiguity should be provided to train their inferencing ability, thereby enhancing their overall reading proficiency (advanced-level materials).

In terms of the allocation of in-class performance opportunities, hierarchical design should be adopted. Teachers should offer more in-class performance opportunities to students with low TOA and prevent those with high TOA from dominating classroom interactions [25]. Furthermore, teachers should provide students with low TOA with basic expression opportunities, such as retelling the core content of discourses and identifying unambiguous semantic points, and offer them sufficient encouragement to alleviate their anxiety. For students with moderate TOA, tasks such as leading group discussions and sharing analyses of ambiguous points should be assigned to strengthen their ability to handle ambiguity. For students with high TOA, opportunities such as participating in debates and delivering multi-perspective interpretive presentations should be provided to arouse their enthusiasm for exploring ambiguous information.

3.2. Appropriate Adoption of Reading Strategies

Cohen defined reading strategies as "the mental processes consciously selected and used by readers to complete reading tasks"[26]. Students' tolerance of ambiguity (TOA) levels exert an influence on their selection and application of reading strategies. As one of the essential tools in reading, scientific reading strategies can help students process ambiguous information more efficiently and improve the quality of their reading.

Teachers should focus on raising the awareness of using reading strategies in daily classroom teaching. When teaching reading, they can adopt various reading techniques in the teaching process, such as guiding students to guess word meanings from context, using situational teaching methods to facilitate the understanding of strategies, and applying mind maps to sort out discourse logic and avoid the interference of ambiguity [27]. They should also encourage students to infer word meanings based on context, helping them quickly identify core semantic meanings and avoid falling into comprehension difficulties when encountering lexical or discourse ambiguity.

Teachers also need to attach importance to the normalization and personalization of strategy training to ensure that strategies are truly internalized into students' reading competence. On the one hand, conduct regular training integrated with daily reading teaching: reserve special time in each class, guide students to practice various strategies in combination with specific reading texts, promptly correct and demonstrate the misunderstandings in students' application, and enable them to master the application scenarios and skills of the strategies proficiently. On the other hand, teachers should impart different reading strategies to students according to their varying TOA levels [28]. For students with low TOA, focus on guiding them to apply basic strategies to help them build confidence in

strategy use. Problem-solving strategies and compensation strategies are both reading strategies closely related to TOA; for students who are not adept at using these two strategies, teachers should encourage them to select and apply them. For students with high TOA, guide them to flexibly combine a variety of strategies to enhance the flexibility of their ambiguity processing ability.

3.3. Internal Activation of Learning Motivation

Regardless of students' high or low tolerance of ambiguity (TOA), it is particularly important to activate their internal learning motivation so as to boost their learning enthusiasm [29]. Only when students have a strong intrinsic motivation for English reading can they face ambiguous phenomena initiatively, explore coping methods actively, and gradually improve their own TOA. By enhancing their enthusiasm for reading learning, students can expand their reading input, ultimately achieving the goal of improving their English reading proficiency.

Teachers should create a relaxed and inclusive learning atmosphere. They need to pay close attention to students' emotional changes during the process of reading learning, and offer more care and guidance especially to students with low TOA who are prone to reading anxiety. Teachers should avoid blame and criticism, helping such students eliminate their fear of ambiguity and reading. Meanwhile, they should encourage students to express their opinions on ambiguous points voluntarily and tolerate their different ways of interpretation, enabling students to dare to try, speak up and make mistakes, thus stimulating their initiative and activeness in coping with ambiguity proactively.

Teachers should connect reading materials with students' real life to enhance relevance and interest. Select reading materials closely related to students' study, life and hobbies [30], such as popular science articles, campus stories and celebrity growth experiences, allowing students to experience the practical value of English reading and perceive the universality of ambiguous phenomena in real life. At the same time, guide students to apply the learned reading strategies and TOA to daily English reading—for example, reading English extracurricular books and news—so that they can truly feel the practical effects of improving TOA and strengthen their internal learning motivation. In addition, teachers can design interesting and diverse reading tasks, such as reading comprehension competitions, ambiguous point exploration activities and cross-cultural reading sharing sessions, to arouse their exploratory motivation.

4. Conclusion

This study focuses on the cultivation of tolerance of ambiguity (TOA) in middle school students' English reading, clarifying that TOA, as an important psychological factor influencing middle school students' English reading competence, centers on an individual's ability to accept and respond to linguistic vague information. Based on the relevant research findings at home and abroad, this study proposes specific and operable cultivation measures from three dimensions: differentiated instruction, appropriate adoption of reading strategies, and internal motivation activation. These measures take into account individual differences and teaching effectiveness, helping students establish a reasonable TOA range. The study enriches the application of

the TOA theory in middle school English reading teaching and provides practical teaching guidance for English teachers. It should be noted that the cultivation of TOA is a long-term process, which requires teachers to continuously optimize teaching strategies and pay close attention to students' development. Follow-up research can further verify the effectiveness of the proposed strategies through teaching experiments, so as to provide more robust support for the improvement of the teaching quality of middle school English reading.

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