

Epistemic and Root Modals in Chinese Students' English Argumentative Writings

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Abstract

This study examines epistemic and root modals produced in Chinese students' English argumentative essays and their pragmatic knowledge of modals. Specifically, the study investigates epistemic modals and five subcategories of root modals used in fifty-five argumentative essays written by twenty-eight intermediate English learners. A test was designed to assess participants' pragmatic knowledge of epistemic and root modals. A *t* test was conducted to examine whether significant difference existed between their knowledge of epistemic modals and that of root modals. In addition, accuracy of epistemic and root modals was examined in syntactic, semantic, and pragmatic levels. Results indicated that participants possessed a strong preference for root modals over epistemic ones in argumentative writings; in the subcategories of root modals, modals that indicate *prediction* and *obligation/necessity* were most frequent. Two error patterns were discerned in terms of semantic accuracy: co-existence of two modals with one expressing certainty, and the frequent use of *prediction* modals in slots where epistemic modals would be more appropriate. In spite of their strong preference for root modals in L2 writing, Chinese ESL learners did not show better pragmatic knowledge of root modals than that of epistemic modals.

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Epistemic and root modals have been greatly investigated in the field of second language acquisition (SLA). In the studies conducted on Chinese EFL/ESL learners, there has been a striking focus on the distributional patterns of epistemic and root modals, leaving accuracy and pragmatic aspects underexplored. An investigation on the semantic accuracy and pragmatic appropriateness of epistemic and root modals used in learners' output will be necessary and meaningful in that it provides information about error patterns of modals production and offers teachers implications regarding the instruction of modals.

Research Questions

1. Are root modals used more frequently than epistemic modals in the argumentative essays of Chinese ESL learners? Under the five subcategories of root modals, which subcategory is used more frequently?
2. Are epistemic and root modals used accurately at the syntactic, semantic and pragmatic levels?
3. Do learners have better pragmatic knowledge of root modals than epistemic modals?

Method

Fifty-six argumentative essays with an average length of 400 to 500 words were collected from twenty-eight participants. Nine central modal verbs were searched for in the essays. For each modal verb, the investigator identified its general modal meaning (root or epistemic) and its specific meaning. The errors of modal use were identified in terms of syntax, semantics and pragmatics.

A test on pragmatic knowledge of modals was designed to test learners' ability to

identify the illocutionary acts performed by modal utterances. The test consisted of twenty items, with ten items designed for root modals and the other ten for epistemic modals. Each item has two sentences. Participants were asked to select the correct illocutionary verb based on their understanding of the pragmatic function of the modal in the first sentence.

Furthermore, reliability of the test was examined through SPSS. The test was found to be highly reliable (20 items; $\alpha = .86$). A *t* test was conducted to examine whether significant difference exists between participants' pragmatic knowledge of root modals and that of epistemic modals.

Results

Research question 1

The data collected from participants' writing indicates that *will* (when conveying the meaning of prediction) appeared with the highest frequency. *Shall* never occurred in participants' essays. Epistemic modals were used much less frequently than root modals. In the category of epistemic modal, *may* was used relatively more than others. Under the five subcategories of root modals, modals of *prediction*, *obligation* and *ability* had a much higher frequency in participants' L2 writing.

Research question 2

With regard to the accuracy of modal use, there were forty-two syntactic errors, seventy-eight semantic inaccuracies, and nineteen pragmatic errors in participants' writing. Two types of inaccurate semantic usage were prominent. First, *will* as a prediction modal was used frequently in slots where an epistemic modal would be more accurate. Second, learners tend to use two modals in one sentence, with one conveying the meaning of certainty, as

shown in the following two examples. Few pragmatic errors were found.

Research question 3

Table 1 presents the results for the *t* test comparing participants' performance on epistemic modals and root modals. The data in table 1 shows that participants scored a little higher on epistemic modals ($M=6.25$, $SD=2.59$) than root modals ($M=5.28$, $SD=2.77$). Yet, no significant difference exists between the two ($t = .78$, $p > 0.05$).

Table 1

Results of t-test and Descriptive Statistics for Performance on the Pragmatic Knowledge Test of Modals

Outcome	Epistemic modals		Root modals		n	95% CI for Mean Difference	<i>t</i>	df
	M	SD	M	SD				
	6.25	2.59	5.58	2.77	26	-0.92, 2.07	0.78*	25

* $p > .05$.

Relevance to PIE

The findings of the present study have important pedagogic implications for PIE classroom. First, more instruction is needed to help learners distinguish the nuanced differences of epistemic modals. Also important is raising learners' awareness to the modals they use in their written output. This could be realized through giving specific feedbacks on the modals used in learners' writings. When giving feedback on learners' L2 writings, not only erroneous use of modals need feedback, modals inappropriate to the register or modals entailing strong face-threatening forces should also be pointed out. Moreover, instructions on the distinction between prediction modals and epistemic modals might be helpful for Chinese ESL students.

Related Readings

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