

A Study on the Impact of Teachers' Body Language on Students' Affective Commitment to Academic Discipline

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Abstract: Research on how teachers' body language affects students' affective commitment to their academic discipline has largely overlooked grade-level comparisons and cross-cultural perspectives. This study examines the differential impact of Chinese and foreign teachers' body language on foreign-language majors' affective commitment to their academic discipline. This study constructs a dynamic circle linking cultural cognition, teaching behavior, and learning feedback. This paper adopts a mixed method, composed of a questionnaire and interview. Key findings are as followings: (1) Teachers' body language boosts students' concentration, self-confidence and liking for the subject; (2) As students' progress to higher academic years, their attention to teachers' nonverbal cues gradually decreases; (3) Euro-American teachers use nonverbal cues more intensively and frequently than their East-Asian counterparts. The study offers an operational framework for cross-cultural teacher training and affective instruction.

Keywords: Body Language; Affective Commitment to Students' Discipline; Cross-Cultural Teaching

1. Introduction

Body language constitutes a behavioral communication system through which information and emotions are conveyed via nonverbal cues, including facial expressions, gestures, body postures, and spatial proximity. It is an important component of nonverbal communication. As an auxiliary teaching language, body language plays a crucial role in the teaching effectiveness in primary and secondary schools, universities, and various fields of society.

Its functions manifest in three dimensions: cognitive promotion, affective interaction, and cross-cultural adaptation facilitation. In Chinese language classes for international students, "internationalized" body language can facilitate the integration of international students into Chinese society and their understanding of Chinese culture.

Since the mid-20th century, the application of body language in the field of education has gradually attracted attention. Relevant scholars and teachers have expanded research in this field to multiple aspects. In recent years, body language research in higher education has also been progressively expanding, with particular attention paid to research in the field of teaching Chinese as a foreign language (Fan Wanlin, 2018, Wang Tianmiao, 2021)[1][2].

Current research on body language also has limitations. Most studies adopt a teacher-centered perspective, neglecting the impact on students' attitudes and affective commitment to their discipline. Secondly, the research subjects are insufficient, and there is a serious lack of exploration of English major learners in higher education environments. Thirdly, a cross-cultural perspective is missing, and few studies compare and analyze the similarities and differences in the use of body language by foreign teachers and the impact on students.

This study is based on the multi-dimensional functions of body language in foreign language teaching, constructing a dynamic cycle framework of "cultural cognition-teaching behavior-learning feedback". This framework is based on Hofstede's (1980)[3] Cultural Dimensions Theory, integrating Multimedia Learning Cognitive Theory (Mayer, 1997)[4], the Affective Filter Hypothesis (Gregg, K. R., 1985)[5], and the Teacher Expectation Effect (Rosenthal, 1968)[6], forming a systematic model to explain how body language influences students' affective commitment to their discipline.

As a supplement to the Multimedia Learning Cognitive Theory (Mayer, 1997)[4], body language

reduces cognitive load through “dual-channel processing”. Nonverbal symbols such as gestures and expressions are presented simultaneously with language information, enhancing the construction of working memory schemas (such as the gestures used to illustrate grammar rules during the demonstration). Moderate body language can reduce redundant cognitive resource consumption (such as the distraction caused by excessive writing on the blackboard), which conforms to the “consistency principle”. The role of body language in facilitating the memorization of knowledge points[4] aligns with its cognitive optimization function.

According to the Affective Filter Hypothesis (Gregg, K. R., 1985)[5], body language can regulate learning anxiety through three mechanisms. In terms of cultural adaptation, appropriate body language by teachers can reduce uncertainty anxiety. In terms of affective contagion, teachers' body movements can activate students' mirror neuron system, enhancing affective engagement. In terms of safety signals, the body posture of Chinese teachers maintaining social distance can avoid triggering the defensive filtering mechanism.

According to the Teacher Expectation Effect (Rosenthal, 1968)[6], body language as a nonverbal expectation carrier has a reinforcing effect. Frequent eye contact conveys a high expectation signal, which conforms to the “Pygmalion effect”. Teachers achieve implicit expectation classification through spatial proximity (such as approaching and answering a student who made a mistake). The positive body language of teachers in the classroom can enhance students' self-efficacy[6].

This study focuses on English major learners in higher education, including those in English-Japanese/English-Spanish/English-Korean bilingual programs and those in English-French-Spanish trilingual programs. It uses a combination of questionnaire surveys and in-depth interviews to explore the following core questions:

- (1) How does body language affect the students' affective commitment to academic discipline
- (2) What are the differences in the attention of foreign language majors of different academic years to teachers' body language?
- (3) Are there differences in the impact of body language use by Chinese teachers and foreign teachers on foreign language majors?

2. Research Methods

2.1 Questionnaire Survey

2.1.1 Research Subjects

Table 1: Demographic Profile of Survey Participants (N=204)

Category		Number
Total number of people		204
Gender		
	Male	102
	Female	102
Academic Year		
	Freshman	33
	Sophomore	60
	Junior	45
	Senior	66
Major		
	English	33
	English-Spanish bilingual	24
	English-German bilingual	33
	English-French bilingual	30
	English-Korean bilingual	33
	English-Japanese bilingual	36
	English-French-Spanish trilingual	6
Language level*		
	English-Korean-Japanese three languages	9
	A1	13
	A2	25
	B1	57
	B2	74
	C1	30
	C2	5

* The assessment is conducted through self-evaluation and the answers are based on the actual situation. According to the CEFR (European Common Reference Framework), this framework is an international standard used to describe the language proficiency of language learners and categorizes language proficiency into six levels, ranging from A1 (the lowest) to C2 (the highest).

The respondents of the questionnaire were selected from the students of Jilin International University.

To enhance the focus and innovativeness of the study, this study mainly limited the questionnaire respondents to the students majoring in English/Multilingual Studies at Jilin International University. The specific situation is shown in Table 1.

Jilin International Studies University, a private undergraduate institution founded in 1995, is located in Changchun, Jilin Province, China. In the 2020-2025 Soft Science ranking of private language undergraduate institutions in China, it ranked first. It has three first-level discipline master's degree authorization points and nine professional master's degree authorization points. In 2007, it was designated as a key university in Jilin Province. In 2024, the Jilin Provincial Academic Committee determined that this university was a cultivation unit for the doctoral degree "A+" program.

2.1.2 Questionnaire Design

This questionnaire is self-designed and all responses are anonymous. The questions are broadly divided into four modules: the personal information module, the module on the types of teachers' body language usage, the module on the frequency of teachers' body language usage, and the module on the influence of multimedia on the use of body language in the classroom. The types of questions include single-choice, multiple-choice, and the Likert Scale (five-point scale). During the reliability and validity tests, the author divided the questionnaire into two parts: "Student Attitudes and Roles" and "Types of Teachers' Body Language". The KMO value of the "Student Attitudes and Roles" part was 0.865, and that of the "Types of Teachers' Body Language" part was 0.894. During the reliability test, the entire survey questionnaire was used as the analysis object, and the result showed that the Cronbach coefficient was 0.943. Therefore, this questionnaire has good validity and reliability.

2.1.3 Data Collection and Analysis

The questionnaire was filled out online and was distributed randomly using a sampling method. The questionnaires were randomly sent to different academic years within different majors under the School of English (English major, English-Spanish bilingual major, English-French bilingual major, English-German bilingual major, English-Japanese bilingual major, English-Korean bilingual major, English-Japanese-Korean multilingual major, English-French-Spanish multilingual major). Due to differences in enrollment plans and significant fluctuations in student numbers across majors, questionnaires were distributed by academic year. On average, 70 questionnaires were distributed to each academic year, totaling 280 questionnaires. A total of 234 questionnaires were returned. After excluding invalid responses, 204 valid questionnaires were obtained, yielding an effective response rate of 87.2%. The final sample size was 204.

The collected data were analyzed using both descriptive statistics and chi-square tests (cross-tabulation) in SPSS.

2.2 In-depth Interviews

2.2.1 Interview Participants

Table 2 presents the detailed information of the respondents.

Table 2: Basic Information of Interview Participants

	Identity	Gender	Cultural Background	Teaching age	Any experience in teaching abroad?
Interviewee 1	Associate Professor of English	female	China	25 Years	No
Interviewee 2	Foreign English teacher	male	America	34 Years	Yes
Interviewee 3	Foreign English teacher	female	England	3 Years	Yes
Interviewee 4	Lecturer	male	China	1 Year	NO

2.2.2 Interview Outline

The outline of this interview is self-designed. It is structured from four aspects: basic information of the teachers (cultural background, teaching experience), their attitudes towards body language, the design and application of body language, and the teaching objects. This interview investigates the basic usage

of body language by front-line teaching professionals in their daily teaching process from the perspective of teachers.

2.3 Interview Process

The researchers conducted face-to-face interviews with the interviewees, listing the questions in the order specified above and transcribing recordings into written form.

3. Result and Discussion

3.1 Analysis of Questionnaire Results

According to the statistical results, the majority of students believe that the teacher's body language plays a facilitating role in "improving classroom concentration" (3.76/5), "enhancing classroom participation willingness" (3.9/5), "stimulating learning interest" (3.94/5), and "creating an active and lively classroom atmosphere" (3.96/5). In addition, it has a positive effect on "increasing the liking for the subject" (4.34/5), "helping with the memorization of words or knowledge points" (4.13/5), and "reducing the psychological distance between students and teachers" (4.32/5).

One of the contents of the Affective Filter Hypothesis (Gregg, K. R., 1985)[5] states that the degree of tension, unease, and anxiety during the foreign language learning process is inversely proportional to the language learning effect. This hypothesis, together with the results of the questionnaire in this article, jointly indicates that the appropriate body language of the teacher can indirectly reduce negative emotions such as anxiety and frustration, and achieve a learning mode of "adequate internal motivation, high self-confidence, and low anxiety".

Furthermore, in this article, the author mainly focuses on analyzing and studying the relationship between the grade of the survey subjects and their level of attention and attitude towards teachers' body language.

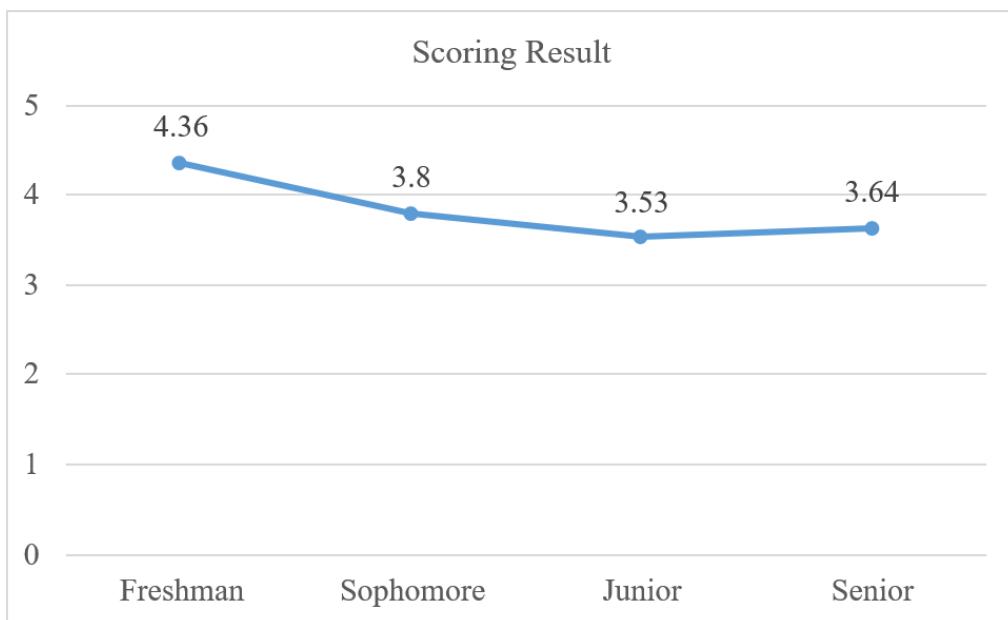


Figure 1 Trend of Overall Evaluation Scores of Teachers' Body Language Among Students of Different Academic Years

As shown in Figure 1, students' scoring results of teachers' body language exhibited a significant (or marked) decline from the freshman (4.36/5) to junior year (3.53/5), with sophomore ratings at 3.8/5. Although a slight recovery to 3.64/5 was observed in the senior year, this increase was not significant compared to the junior year scores. In conclusion, as students' progress to higher academic years, their overall evaluation of the teacher's body language tends to decline.

The author takes academic year as variable one (X), and the teacher's body language and attitude as variable two (Y), and a cross-analysis is conducted between the two.

Table 3: Cross-Tabulation and Chi-Square Test of Academic Year between Attitudes and Attention to Teachers' Body Language

Title	Options	Academic Year				Total	χ^2	p
		Freshman	Sophomore	Junior	Senior			
According to your actual feelings, what is your attitude towards the teacher's body language?	Reject	0(0.00)	0(0.00)	0(0.00)	3(4.55)	3(1.47)	21.249	0.012**
	Generally	3(9.09)	24(40.00)	21(46.67)	39(59.09)	87(42.65)		
	Like	15(45.45)	24(40.00)	24(53.33)	3(4.55)	66(32.35)		
	Strongly Like	15(45.45)	12(20.00)	0(0.00)	21(31.82)	48(23.53)		
Total		33	60	45	66	204		
Do you pay attention to the teacher's body language usage in class?	Rarely	6(18.18)	6(10.00)	0(0.00)	12(18.18)	24(11.76)	17.500	0.041**
	Sometimes	6(18.18)	24(40.00)	15(33.33)	33(50.00)	78(38.24)		
	Often	12(36.36)	27(45.00)	30(66.67)	9(13.64)	78(38.24)		
	Always	9(27.27)	3(5.00)	0(0.00)	12(18.18)	24(11.76)		
Total		33	60	45	66	204		

* p<0.1 ** p<0.05 *** p<0.01 **** p<0.001

Through the chi-square test (cross-analysis), the differences in the responses to “What grade are you?” and “According to your actual feelings, what is your attitude towards the teacher’s body language?” and “Do you pay attention to the teacher’s body language usage in class?” were studied. The results showed that students of different grades exhibited significant differences in their attention to the teacher’s body language ($\chi^2 = 21.249$, $p = 0.012 < 0.05$). The “your grade” sample also showed a significant difference in response to “According to your actual feelings, what is your attitude towards the teacher’s body language?” ($\chi^2 = 17.500$, $p = 0.041 < 0.05$), and both showed a significant negative correlation, as detailed in Table 3.

Based on this negative correlation, it can be explained by John Sweller’s cognitive load theory (1988)[7]: High-density external information can significantly reduce the information processing capacity of recipients. This study found that as the grade increases and the difficulty of professional knowledge increases, when the internal cognitive load is too high, students may prioritize the allocation of limited attention to semantic processing (Sweller, 2011)[8], such as the understanding of specific knowledge points, or the practice and application of the learned knowledge, and the attention to the teacher’s body language may decrease.

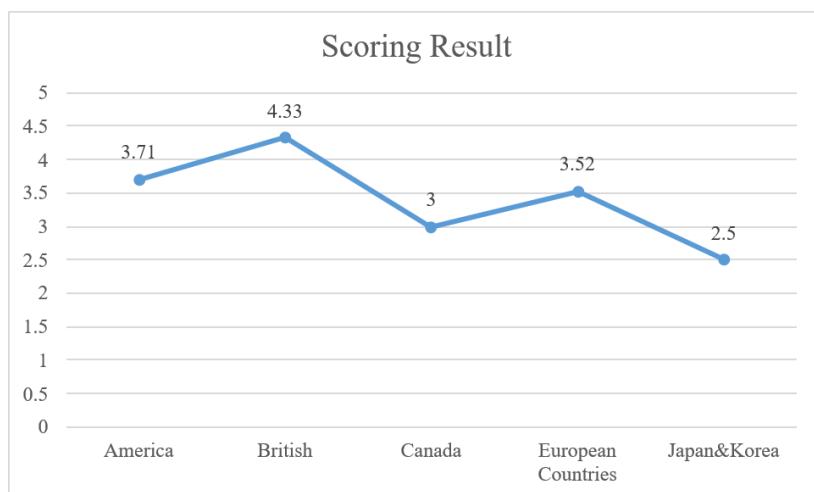


Figure 2 Scoring Result on the Frequency and Intensity of Body Language Use among Foreign Teachers from Different Countries

According to Figures 2 and 3 (Body Language and Frequency of Use by Foreign Teachers), it can be seen that teachers from the United States (3.71/5), the United Kingdom (4.33/5), Canada (3.0/5), and other European countries (3.52/5) have significantly higher usage of body language and frequency compared to foreign teachers from Japan and South Korea (2.5/5).

This phenomenon may be attributed to differences in historical and cultural backgrounds and educational systems across countries, which have led educators to develop different teaching methods.

Therefore, the differences in the frequency of teachers' body language usage are not due to experimental randomness or personal preferences, but are deeply influenced by the underlying logic of different cultures. Hofstede's (1980)[3] cultural dimensions theory can well explain this phenomenon. The cultural dimensions theory includes six aspects: avoidance of certainty, individualism and

collectivism, masculinity and femininity, long-term orientation and short-term orientation, self-indulgence and restraint. European and American countries, represented by Britain and the United States, advocate individualism and emphasize affective expression and participation. Therefore, teachers in these countries tend to use extensive body language and rich gestures and facial expressions. China, Japan, and South Korea all belong to the East Asian region and have a high degree of cultural similarity. During the Song Dynasty, the Japanese Edo period, and the Korean Joseon period, the cultural thoughts of these three countries were all influenced by "Mencius". After years of integration with local cultures, China, Japan, and South Korea formed distinctive "localized" Confucian thoughts, still belonging to the "Han Cultural Circle", fundamentally different from Western culture (Wang Yan, 2020)[9]. Consequently, these cultural traits foster a more restrained and formal use of body language in the classroom. These cultures emphasize collectivism, high power distance, and high uncertainty avoidance.

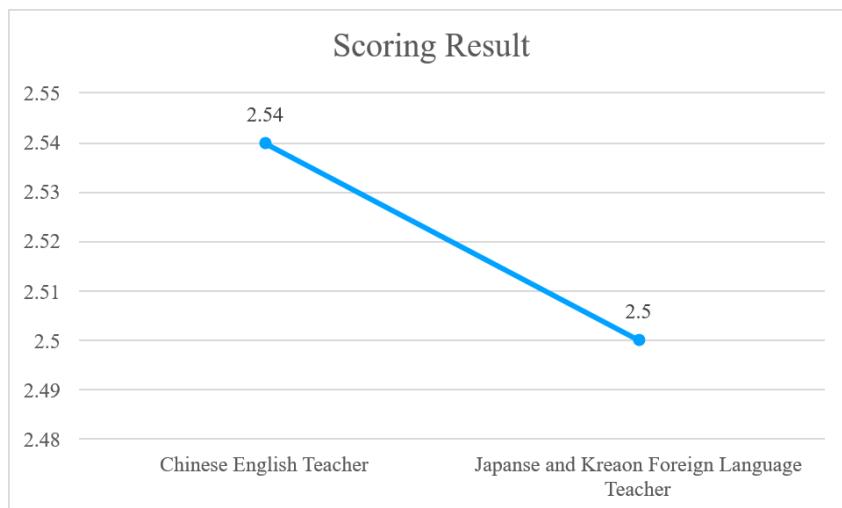


Figure 3 Scoring Result on the Frequency and Intensity of Body Language Use between Chinese English Teachers and Foreign Language Teachers from Japan and South Korea

This gave rise to an implicit, standardized, and rigorous body language usage pattern, more inclined towards lecture-based classrooms. Therefore, the types of body language used are fewer and the frequency is lower.

3.2 Analysis of Interview Results

From the analysis of the types and purposes of body language usage, Chinese teachers tend to use eye contact, smiles, and appropriate slight gestures to convey positive expectations signals in the classroom, which helps to narrow the psychological distance while maintaining a good social distance, avoiding making students feel "offended". Foreign teachers, on the other hand, tend to actively stimulate the classroom atmosphere by using their entire bodies: using hands to indicate time, such as past, present, and future; eye contact during name calling; and changes in pitch during teaching - for example, using tennis balls to throw and catch to attract students' attention, inviting students to imitate daily activities, and conveying the expectation of "encouraging participation and allowing for trial and error".

From the perspective of the individualization of body language, although Chinese teachers have not specifically designed teaching body language, their rich teaching experience will enable them to summarize a suitable teaching style for themselves. Foreign teachers place great emphasis on interaction and communication between teachers and students as well as students' participation, using teaching aids and changes in pitch to attract students' attention, and paying attention to their specific positions in the classroom.

From the perspective of body language and its usage purpose, Chinese teachers tend to use appropriate body language to impart knowledge and enhance communication between teachers and students, serving the traditional teaching model's pursuit of efficiency in knowledge transmission. Foreign teachers believe that the teacher's body language can enhance teamwork and reduce the gap between teachers and students. Foreign teachers tend to adopt the social constructivist teaching philosophy (Vygotsky, 1977)[9], regarding body language as a tool to "build teamwork and eliminate the gap between teachers and students", while Chinese teachers adopt the traditional teaching mode.

Behind the differences in classroom body language between Chinese and foreign teachers, the Teacher Expectation Effect (Rosenthal, Jacobson, 1968)[6] always plays a hidden driving role, and body language is the core carrier of nonverbal expectations, which can significantly enhance the influence of expectations on students. The frequent eye contact used by Chinese teachers is essentially a high expectation signal to convey "I am paying attention to you and believe you can understand", which aligns with the core logic of "expectation shapes individual behavior" in the "Pygmalion effect". Students, under the continuous eye attention, will more actively conform to the teacher's expectations, enhancing their classroom engagement. Students perceive "my performance is recognized and my ability is trusted" from the teacher's body language, and thereby more firmly believe that they can complete the learning task. This psychological change is the key process by which the teacher's expectations are transformed into students' self-expectations through body language.

4. Conclusion

This study, through conducting interviews and questionnaires, found that students' attention to body language was significantly negatively correlated with their academic year. Moreover, there were significant differences in the types, kinds, and frequencies of body language used by Chinese and foreign teachers. Through analysis, it was found that these differences were closely related to the cultural background of the teachers. Teachers from similar cultural backgrounds tended to use body language in highly similar ways.

The interview results more clearly reflected the differences between the body language of the two parties - different purposes, scenarios, and types. Foreign teachers hoped to use body language to motivate students and enhance teamwork awareness, while Chinese teachers wanted to use body language to bridge the distance with students. From the perspective of the types of use, foreign teachers tended to mobilize the whole body, while Chinese teachers used more eye contact and facial expressions.

This study constructed an integrated framework of "cultural cognition - teaching behavior - learning feedback", systematically revealing how body language influences the affective commitment of foreign language majors to their academic discipline, verifying the negative correlation with academic year and the cultural differences between Chinese and foreign teachers, addressing the gap in research on foreign language majors in higher education, and providing empirical evidence for cross-cultural teacher training and affective teaching.

Subsequent research can adopt a longitudinal tracking design to track the same group of students for 4 years and establish a dynamic evolution model of body language preferences. Secondly, subsequent research can conduct cross-cultural experiments, design virtual teacher experiment and systematically manipulate body language parameters (such as frequency of smiles, gesture amplitude). Finally, further research can adopt big data analysis, collect videos from MOOC platforms, and use computer vision to analyze the relationship between body language patterns and scoring.

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